Public Document Pack





Joint Transport Committee Overview and Scrutiny Committee

Thursday, 25th March, 2021 at 10.00 am

Meeting to be held via Microsoft Teams

Live-stream available via: https://youtu.be/FvhZZktKg0w

AGENDA

	— : — : -	
		Page No
1.	Apologies for absence	
2.	Declarations of Interest	
3.	Minutes of the Meeting held on 17 December 2020	3 - 6
4.	COVID-19 Transport Response and Recovery	7 - 16
5.	Transport Revenue Budget Monitoring Report	17 - 32
6.	The North East Transport Plan Consultation and Feedback	33 - 368
7.	Joint Transport Committee Overview and Scrutiny Work Programme	369 - 376

Contact Officer: Melvyn Mallam-Churchill

Tel: 0191 433 2149

E-mail: melvynmallam-churchill@gateshead.gov.uk







JOINT TRANSPORT COMMITTEE, OVERVIEW AND SCRUTINY COMMITTEE DRAFT MINUTES FOR APPROVAL

Thursday 17 December 2020, 10am

Meeting held virtually via Microsoft Teams

Present:

- D Taylor-Gooby Chair
- A Clark Vice Chair
- C Carson Nexus
- E Goodman NECA
- E Reynard Gateshead Council
- G Armstrong NECA
- G Morton Gateshead Council
- M Kearney Nexus
- P Darby NECA
- P Meikle Transport North East
- S Gwillym Durham County Council
- T Hughes Transport North East
- M Mallam-Churchill Gateshead Council (Minutes)

Councillors:

- Cllr D MacKnight Sunderland City Council
- Cllr G Roughhead Northumberland County Council
- Cllr I Patterson Gateshead Council
- Cllr J Eagle Gateshead Council
- Cllr J Kelly Sunderland City Council
- Cllr O Avery Newcastle City Council
- Cllr M Gannon Gateshead Council (Guest)

1. APOLOGIES FOR ABSENCE

Apologies for absence were received from the following:

- Cllr A Batey Durham County Council
- Cllr G Castle Northumberland County Council
- Cllr G Stone Newcastle City Council
- Cllr M Clarke Durham County Council
- Cllr R Crute Durham County Council
- Cllr R Glindon North Tyneside Council
- Cllr R Manchester Durham County Council
- Cllr S Graham North Tyneside Council
- Cllr W Samuel North Tyneside Council

2. DECLARATIONS OF INTEREST

Cllr Eagle noted his employment with Nexus as a declaration of interest. The Committee were advised he has been given dispensation to be on this Committee.

RESOLVED:

(i) The declaration of interest was noted.

3. MINUTES OF THE PREVIOUS MEETING HELD ON 26 OCTOBER 2020

Ahead of reviewing the minutes of the previous meeting the Chair expressed thanks on behalf of the Committee to Cllr Alan Smith of South Tyneside Council and passed on condolences to his family and colleagues.

RESOLVED:

(i) The meeting was not quorate therefore the meetings of the previous meeting could not be approved as a correct record.

4. NORTH EAST TRANSPORT PLAN - UPDATE

The Committee received a report providing an update on the North East Transport Plan. From the report it was noted that the Plan has been developed to set out transport's role in the region to 2035.

It was highlighted that the region requires an initial estimated £6.1 billion of capital investment which will grow as further schemes are developed. The Committee were advised that the Plan's vision is 'Moving to a green, healthy, dynamic and thriving North East'; the report also provided an overview of the Plans objectives.

It was reported that consultation feedback of the Plan will be brought to a future meeting for information. Appended to the report was a copy of the Plan for the Committees information.

A comment was made that the Plan presented to the Committee was ambitious. The Committee also noted that the region has a lot to offer and that partnership work should continue to improve connectivity between cities. The Committee were also advised that plans are underway to develop a regional partnership of transport.

An additional comment was made noting that improvements to the A1 would strengthen the link between the region and travel to Scotland.

Cllr Martin Gannon joined to call and provided a verbal update on the consultation as Chair of the Joint Transport Committee.

The Committee advised officers that they would like to see improvements made to the LNER mainline in addition to improvements to the East Coast mainline.

RESOLVED:

(i) The Committee noted the updated provided in the report.

5. TRANSPORT REVENUE BUDGET PROPOSALS 2021/22 – BUDGET CONSULTATION

The Committee received a report providing an update on the JTC Budget Proposals for 2021/22 and future years as part of the budget consultation process.

An overview of the report was provided advising that a report on draft 2021/22 Budget had been presented to the JTC in November 2020. It was reported that the information presented to the Committee today formed part of the consultation process on the budget.

A query was raised regarding the Durham County Council bus stations budget; Eleanor Goodman advised that the £677k reported represented expenditure to the end of September. The Committee were also advised that this will mostly be offset by income from departure charges at the bus stations which are charged to operators at the year end. It was also confirmed that the forecast to the end of the year is £159k, slightly lower than the budget of £177k.

RESOLVED:

(i) The Committee noted the information and updates contained within the report.

6. MONITORING METRO PERFORMANCE

The Committee received a report providing an update on Metro Performance in 2020/21 with focus on fleet reliability and train crew availability from 1 April – 7 November 2020.

It was reported that the Tyne and Wear Metro celebrated it's 40th birthday in 2020 and provided a cause for celebration. It was further reported that the age of the system and some of the infrastructure means that there are reliability problems. It was highlighted from the report that Nexus has been renewing the system infrastructure since 2010 and that there will be a full fleet renewal by the end of 2024.

The Committee were provided with a summary of data showing Metro performance and the impacts of the Covid-19 pandemic. It was highlighted that as a result of

reduced demand and reduced driver availability the Metro service frequency was reduced.

It was noted that passenger patronage has fluctuated throughout the pandemic in response to local and national restrictions but that customer satisfaction scores are stable.

A query was raised on the notice period required by drivers who choose to leave their post; it was noted that some drivers face clawback of education costs if they leave their post within a two-year period of qualifying. Officers advised that this was the case and was written into driver employee contracts. It was also highlighted that this clawback has not had to be done yet for any driver.

The Committee asked whether officers knew the reason that drivers were leaving their roles with Metro. It was advised that there is no specific reason; it was also stated that Metro receives thousands of applications when a driver role is advertised which suggests Metro is an attractive place to work.

The Committee wished to note their thanks to all Metro staff and officers for their service and hard work during a very difficult time.

RESOLVED:

(i) The Committee noted the report.

7. JOINT TRANSPORT COMMITTEE FORWARD PLAN AND SCRUTINY WORK PROGRAMME

The Committee received an overview of the Joint Transport Committee Forward Plan and Scrutiny Work Programme for 2020/21.

The Committee highlighted that taxi and private hire vehicle providers have missed out on the Governments support scheme for the self-employed during the pandemic; it was asked whether this matter could be raised at a national level.

RESOLVED:

(i) The Committee noted the work programme

8. DATE OF NEXT MEETING

The next meeting is scheduled for 25 March 2021 at 10am.





North East Joint Transport Committee Overview and Scrutiny Committee

Date: 25th March 2021

Title: Covid-19 – Transport Response and Recovery

Report of: Managing Director, Transport North East

Executive Summary

This report sets out how transport patronage in the North East has been affected by the challenges of Covid-19 and the impacts for service providers.

It outlines some of the possible long-term consequences for transport operators, even once lockdown ends, due to lifestyle changes that may affect future travel patterns (such as continued home working for at least part of the week), and the plans that have been developed to regain lost patronage and secure a stable future.

Appendix A shows the latest data comparing current levels of bus, Metro and road traffic with pre-pandemic levels.

Recommendations

The North East Joint Transport Committee Overview and Scrutiny Committee is invited to consider and comment upon the information presented within the report.

Guiding Principles for Scrutiny Members

The below are the key guiding principles to support the Overview and Scrutiny Committee Members in reading the report in advance of the meeting to:

- Consider any added value that Scrutiny can bring; and
- Promote effective discussion and consider the information in the report.
- 1. The impact the matter has on individuals in the community and across the JTC area.
- 2. Focus on the efficiency and effectiveness of the proposals, next steps and any potential changes.
- 3. Consideration of any risks that may occur.
- 4. Scrutiny focusing on any performance management or quality assurance.

1. Background Information

- 1.1 On 16th June 2020 an OSC briefing paper outlined some early data covering the impact of Covid-19 on our region's transport network and the challenges it posed for the future. It highlighted the impact of lockdown and social distancing, the financial consequences for transport operators (for example, the Metro was suffering a shortfall in revenue of £900,000 per week) and the emergency funding government had put in place.
- 1.2 Although there was some recovery in patronage as restrictions were relaxed last summer, ever-tighter restrictions introduced over the autumn and winter periods, culminating in the current lockdown, have resulted in further falls in usage. The Prime Minister's statement on 22nd February 2021 to the House of Commons on the roadmap for easing lockdown restrictions in England points the way forward for public transport but there is considerable uncertainty about when or whether patronage might return to pre-Covid levels.
- 1.3 At the time of writing this report, Metro weekly patronage was 79% lower than typical pre-pandemic levels, while bus patronage had fallen by 66%. Northern Rail advise that, across the north as a whole, passenger levels have fallen by 85% compared to pre-Covid demand. As a comparator, typical weekday traffic flow in Tyne and Wear has fallen by only 20% and in Durham by 23%, suggesting that, for some of those journeys still taking place, there had been a modal shift from public transport to car. More positively, cycling volumes have approximately doubled from the equivalent period in 2019.
- 1.4 The graphs in Appendix 1 illustrate the passenger figures for bus and Metro, as well as traffic volumes in Tyne and Wear and County Durham, the latter based on data provided by the respective Urban Traffic Management Control centres.
- 1.5 Once lockdown restrictions begin to be lifted, it is clearly important to try to recover lost public transport patronage and to reverse the shift to private motoring. Promoting alternatives to car use is an essential part of our plans to de-carbonise the region and tackle areas of air quality exceedance. Very low levels of usage and farebox revenue will also make it difficult to sustain existing service levels, which will severely impact residents reliant on public transport.
- This report sets out details of recovery plans for bus, Metro and local rail services in the region. These plans have been developed in what is a fluid situation and a crucial factor will be to what extent and for how long, social distancing restrictions continue as these limit the capacity of the network. Even if such restrictions are eased, passengers may be reluctant for some time to return to heavily loaded services. There have been reports that government is considering a national campaign to encourage people to return to public transport, which would clearly assist if this were to take place.

2. How regional transport is planning to recover from Covid

2.1 Bus

- 2.2 Since March 2020, despite a large reduction in patronage, the region's bus network coverage has been retained in order to provide necessary connectivity for workers in key services or for people making essential journeys, although frequencies on many routes have been reduced so overall service levels are at approximately 80% of pre-crisis levels.
- 2.3 In response to a request from the Department for Transport (DfT), the region's three Travel Concession Authorities (Northumberland, Durham and Nexus) agreed to maintain concessionary travel reimbursement and supported service payments at budgeted levels, to help provide a stable level of funding to the local bus market in the face of the sudden and acute reduction in ridership caused by the pandemic. However, this funding alone is not sufficient to cover bus operators' losses during the pandemic and so the DfT has made available an emergency "Coronavirus Bus Service Support Grant" (CBSSG) to cover the balance of funding.
- 2.4 The DfT has now updated its position and advised that, during the current lockdown period, authorities can revise concessionary travel reimbursement down to match agreed reductions in service levels with bus operators charging any subsequent increased losses to the CBSSG fund. As a result, the three TCAs are actively reviewing their concessionary payments and are discussing a consistent approach across the JTC's area. The JTC will be asked to approve ring-fencing of the savings in concessionary travel reimbursement to support the bus network recovery process. The savings will be limited to a maximum of three months' worth of reimbursement as the region's bus operators intend to return to 100% of service levels on 12th April to coincide with Step Two of the Government's roadmap for easing lockdown restrictions.
- Operators have worked flexibly to assist the region in addressing the challenges of Covid with mutual ticket acceptance during periods of reduced service levels and lower capacity, and dedicated buses/stops to serve vaccination centres. Investment has continued, with the region's first full Zero Emission Electric Buses introduced, and there have been measures to improve integration, including the carriage of cycles on some long-distance services.
- 2.6 Moving forward, the Government's long-awaited National Bus Strategy was due to be published on 11th March. This will set out plans for bus network recovery once "Stay at Home" guidance and social distancing come to an end.
- 2.7 It is expected that interim transition funding will be made available for up to a year while authorities work closely with operators through voluntary partnerships to maintain the network and develop Bus Service Improvement Plans that will underpin a move towards Enhanced Partnerships or Franchising with greater local accountability for services.

- 2.8 To move this process forward, JTC agreed in December that a partnership would be formed with local bus operators in order to work together, both to overcome the immediate challenges presented by Covid-19 in the short-term, and to improve the bus network for our communities in the longer term through the development of Bus Service Improvement Plans.
- 2.9 Local Bus Boards are being established in each of the seven constituent local authorities, in order to improve the engagement between local elected members and the bus operators and to provide localised input into the Joint Network Planning Exercise that is to take place.

2.10 Metro

- 2.11 As with bus operators, Metro has suffered a large fall in patronage since March 2020 but has continued to cater for key workers and essential journeys during lockdown periods. The government has provided emergency grant called Light Rail Revenue Restart Grant (LRRRG) to cover operating losses until the end of financial year 2020/21.
- 2.12 Nexus market research suggests that, when restrictions are lifted, on a "do minimum" basis patronage is likely to recover to around 60% of pre-pandemic levels. A further 15% of patronage could potentially be regained if extra measures are taken to promote public confidence in the safety and security of the system, addressing those passengers who are still worried about the risks from Covid, or have other concerns (such as anti-social behaviour).
- 2.13 This leaves 25% of patronage that may be lost due to structural changes in society that reduce people's need or ability to travel more home working, loss of high street retail stores and lower incomes due to higher levels of unemployment. There will be a need to attract new journeys, predominantly from car, to replace trips, mainly commuter journeys, that are no longer going to be made.
- 2.14 Metro's recovery plans are therefore built around three themes.

Reassurance – convincing customers that the system is safe to use with increased and visible cleaning, greater staff presence and a clampdown on anti-social behaviour

Flexibility – making sure that the service reflects changing customer needs, with new digital ticketing products, more partnership working with local bus operators and a possible shift in emphasis from intensive weekday peak services to catering for local leisure trips

Attracting new customers and targeting new markets – Encouraging customers to switch from car use and widening the catchment area of stations by providing better walking and cycling access to/from the station. Existing investment plans (eg, the new Metro fleet) will also assist by making the service more reliable and appealing

- 2.15 Even while the above plans are implemented, it is estimated that, in addition to the £27.1m Metro Rail Grant provided by DfT in 2021/22 to support Metro operations, further Covid-related support of around £20m per annum will be required across each of the following three financial years.
- 2.16 Metro is already a highly efficient service and many of its operating costs are fixed. Moreover, Metro fares are relatively high relative to local income. There is therefore very little scope to address the funding shortfall through service cuts or fare rises and such measures would be counter-productive, leading to further reductions in patronage which would worsen the financial position.

2.17 Local rail

- 2.18 The latest rail dashboard, for the week ending 7th February 2021, shows patronage across the Northern Rail network to be 14.2% compared with the same week last year. For TransPennine services, the equivalent figure was 7.5%.
- 2.19 Rail operators face the same challenge as bus and Metro operators to restore confidence that it is safe to travel and to find new markets to replace lost commuter journeys or business trips that have been replaced by online meetings.
- 2.20 Research by the Rail Delivery Group found that almost half of the sample were less inclined to return to public transport until a significant proportion of the population have been vaccinated. The rapid rollout of the vaccination programme will clearly assist in this regard, and Northern Rail advise that their Commercial Team are working on offers to encourage use and campaigns to help rebuild confidence.

3. Reasons for the Proposals

3.1 This report sets out details of planned measures to help public transport provision in the region recover from Covid and regain lost patronage. This will help to stabilise the financial position of the transport sector, tackle climate change and poor air quality and contribute to the north-east's economic recovery.

4. Alternative Options Available

4.1 This report is presented for information and therefore no alternative options are presented.

5. Next Steps and Timetable for Implementation

Work will continue in partnership with transport operators and government agencies to implement recovery plans and encourage a safe return to public transport once "stay at home" messaging is lifted.

6. Potential Impact on Objectives

6.1 Growth in public transport patronage will assist in making the case for new investment, which will in turn support economic growth, contributing to the Strategic Economic Plan aspiration for more and better jobs. More usage of bus, Metro and rail services is also essential to help deliver the North East Transport Plan objective for carbon-neutral transport across the region.

7. Financial and Other Resources Implications

7.1 This report is for information only and there are no direct financial, human resources or ICT implications at this stage. Any such implications arising as recovery plans are developed will be discussed and agreed by JTC at the appropriate time.

8. Legal Implications

8.1 This report is for information only and there are no specific legal implications at this stage.

9. Key Risks

9.1 There are a number of key risks attendant upon the Covid recovery process in terms of transport.

The first is that passenger volumes remain low due to a combination of continued concern about safety and reduced commuter / retail / business travel due to lifestyle changes such as increased home working and shopping. This risk will be addressed through communications reinforcing the safety and convenience of public transport.

The second key risk is that government support is insufficient to stabilise the financial position of transport operators, resulting in damaging cuts to services. This risk is being mitigated by close engagement with the Department for Transport to emphasise the need for transitional support while the industry recovers.

The third key risk is that cases of Covid-19 do not decline as expected resulting in delays to the implementation dates of the Steps in the Government's roadmap or even a further lockdown. This is to a large extent outside the control of transport operators although they will continue to promote public health advice to reduce the risk of fresh outbreaks.

10. Equality and Diversity

10.1 A significant proportion of the region's population do not own a car. A comprehensive and affordable public transport network is essential for their quality of life and to enable them to access key services.

11. Crime and Disorder

11.1 There are no specific crime and disorder implications arising from the proposals in this report.

12. Consultation/Engagement

12.1 Public consultation and customer engagement have helped to provide awareness of the challenges in recovering public transport patronage and the best methods of doing so.

13. Other Impact of the Proposals

13.1 Environmental

Reversing the shift from public transport to car use that we have seen during the pandemic is essential to help the region improve air quality and achieve its goal for carbon neutrality.

14. Appendices

14.1 Appendix 1 – Current Bus, Metro and traffic volumes compared to pre-pandemic levels.

15. Background Papers

15.1 None.

16. Contact Officers

16.1 Tobyn Hughes, Managing Director, Transport North East Tobyn.hughes@nexus.org.uk

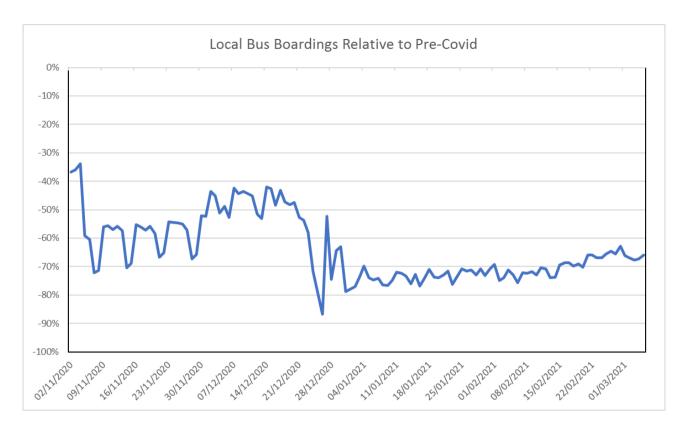
17. Sign off

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

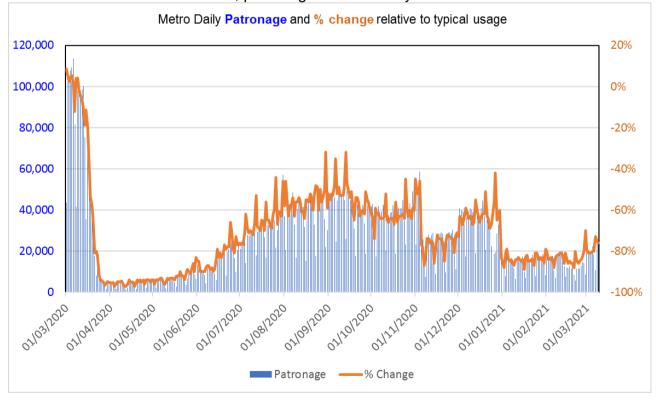
18. Glossary

N/A.

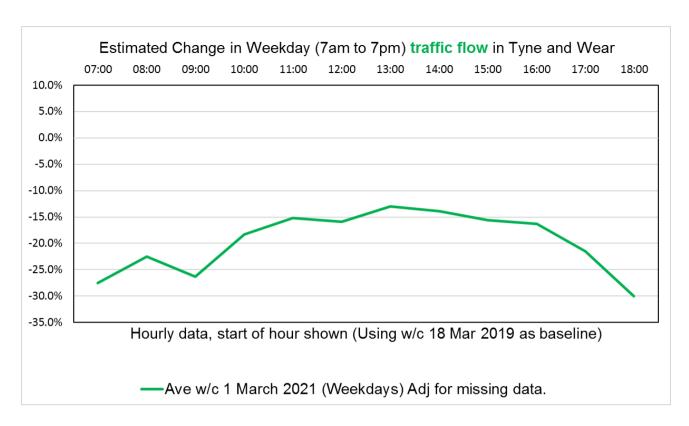
Appendix 1 – Current Bus, Metro and traffic volumes compared to pre-pandemic levels



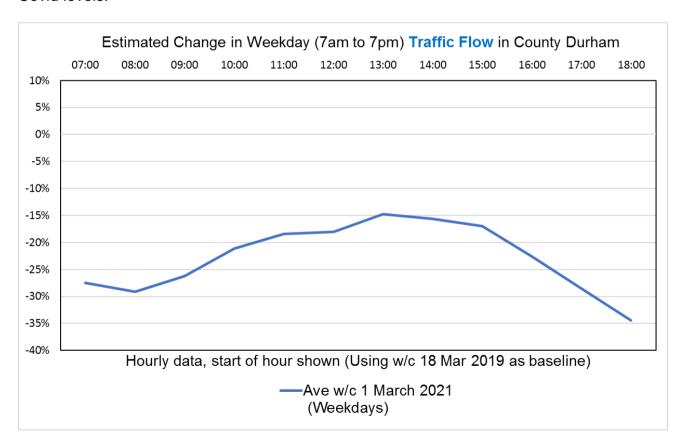
Comments: Over the seven days from 27/02 to 05/03, estimated bus patronage was down by 66% relative to pre-Covid. In the last full week (21/11 to 27/11) before the easing of the November lockdown restrictions, patronage was down by 57%.



Comments: Over the seven days to March 9th, estimated patronage was down by 79% relative to typical usage. (Data for the last two days are provisional.)



Comments: Estimated weekday traffic flow is down by 20% (w/c 01/03) relative to pre-Covid levels.



Comments: Estimated weekday traffic flow was down by 23% (w/c 01/03) relative to pre-Covid levels.





North East Joint Transport Committee Overview and Scrutiny Committee

Date: 25 March 2021

Subject: Transport Revenue Budget Monitoring Report

Report of: Chief Finance Officer

Executive Summary

The Transport Revenue Budget Monitoring Report attached at Appendix 1 was considered by the Joint Transport Committee on 16 March 2021 and is presented here for the information of the Overview and Scrutiny Committee.

Recommendations

The Overview and Scrutiny Committee is recommended to note the report.

Guiding Principles for Scrutiny Members:

The below are the key guiding principles to support the Overview and Scrutiny Committee Members in reading the report in advance of the meeting to:

- consider any added value that Scrutiny can bring
- promote effective discussion and consider the information in the report
- 1. The impact the matter has on individuals in the community and across the North East Combined Authority
- 2. Focus on the efficiency and effectiveness of the proposals, next steps and any potential changes
- 3. Consideration to any risks that may occur
- 4. Scrutiny focusing on any performance management or quality assurance

1. Background Information and current context

1.1 The Transport Revenue Budget Monitoring Report attached at Appendix 1 was considered by the Joint Transport Committee on 16 March 2021 and is presented here for the information of the Overview and Scrutiny Committee.

2. Proposals

2.1 Appendix 1 provides a copy of the latest update on the Transport Revenue Budget which was presented to the JTC on 16 March 2021.

3. Reasons for the Proposals

3.1 This report is presented to the Overview and Scrutiny Committee for information.

4. Alternative Options Available

4.1 This report is for information.

5. Next Steps and Timetable for Implementation

The transport revenue budget will be monitored for the remainder of the financial year and the outturn position reported following the year end.

6. Potential Impact on Objectives

6.1 There are no impacts on objectives arising from this report which is for information.

7. Financial and Other Resources Implications

7.1 The financial implications are set out in detail within the body of the report. The report is for information and provides the Joint Transport Committee Overview and Scrutiny Committee with an updated forecast of expenditure against the budget approved in January 2020 and revised in January 2021. There are no financial decisions arising from this report.

8. Legal Implications

8.1 There are no legal implications arising from this report.

9. Key Risks

9.1 Financial risks associated with the authority's activities, and actions taken to mitigate these, will be factored into strategic risk management processes for the Joint Transport Committee.

10. Equality and Diversity

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

11. Crime and Disorder

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

12. Consultation/Engagement

12.1 The Revenue Budget for 2020/21 was subject to a period of consultation and engagement as part of the approval process. Detailed budget proposals are subject to consultation as appropriate, which is organised by the relevant delivery body.

13. Other Impact of the Proposals

13.1 There are no other impacts arising from this report.

14. Appendices

14.1 Appendix 1: report to Joint Transport Committee 16 March 2021

15. Background Papers

15.1 JTC Budget 2020/21 - https://northeastca.gov.uk/wp-content/uploads/2020/01/JTC-21.1.2020-Public-Agenda-Pack.pdf

16. Contact Officers

16.1 Eleanor Goodman

NECA Finance Manager

E-mail: eleanor.goodman@northeastca.gov.uk

Tel: 07546 653402

17. Sign off

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







North East Joint Transport Committee

Date: 16 March 2021

Subject: Revenue Budget Monitoring Update

Report of: Chief Finance Officer

Executive Summary

This report provides the North East Joint Transport Committee (JTC) with an update on the forecast outturn position in relation to the 2020/21 Transport Revenue Budget.

The report covers all areas of the revenue budget including the Transport Levies and grants to Durham, Northumberland and Nexus, Transport Strategy Unit and the Tyne Tunnels revenue account.

The forecast outturn position for the year shows that expenditure is expected to be within the revised budget against all budget heads.

Where grants are paid to other organisations for the delivery of transport service (i.e. Durham, Northumberland and Nexus), the grant is fixed for the year but the report provides details of how the grant will be applied by each organisation to the provision of public transport services.

Durham County Council and Nexus are currently forecasting small overspends against the grants from the JTC, which will be managed within those organisations. Northumberland County Council is forecast a slight underspend, which will be retained by the council.

The Tyne Tunnels account is forecasting a break-even position for the year.

The Transport Strategy Unit is forecasting a small underspend against the budget for the year which will mean a lower than budgeted use of reserves being required to support expenditure in year.

Recommendations

The North East Joint Transport Committee is recommended to note the report.

1. Background Information

1.1 At its meeting held on 21 January 2020, the JTC agreed a Transport levy budget for 2020/21 of £82.800m. This report presents an update on the forecast outturn position based on the position as at the end of January 2021 for Durham, Northumberland and for the Tyne Tunnels and to Period 10 covering the four-week period to 2 January 2021 for Nexus.

2. Proposals

2.1 Transport Revenue Budget Summary

The table below summarises the forecast outturn position against the net Transport Levy budget (i.e. the net cost to the JTC after external income) for 2020/21. The levies and grants to Durham, Northumberland and Nexus are fixed for the year, but details of how the grant will be applied by each organisation to the provision of public transport services is set out in more detail in the following sections.

Table 1: Transport Levy Budget

	Original Budget	Revised Budget	Spend to Date (January 2021)	Forecast to Year end
	£000	£000	£000	£000
Total Transport Levies				
Grant to Durham	15,456	15,456	12,880	15,456
Grant to Northumberland	6,224	6,224	5,187	6,224
Grant to Nexus	59,000	59,000	49,167	59,000
Retained Transport Levy Budget	2,120	2,120	488	2,114
NET	82,800	82,800	67,722	82,800
Contribution (to)/from JTC reserves	0	0	(1,278)	(6)

Durham

- 2.2 The projected outturn for 2020/21 shows a budget overspend of £124,000 for the year against the revised forecast presented to the JTC in January 2021. The main reasons for this are:
 - Bus Shelters £26,000 over budget due to additional costs of providing bus shelters in respect of business rates increases and repairs and maintenance;
 and
 - Passenger Transport Information £61,000 over budget due to additional software costs that are being incurred in year.

2.3 The following table provides a detailed breakdown of expenditure for Durham: Table 2: Durham County Council

	2020/21 Original Budget	2020/21 Revised Budget	Spend to Date (January 2021)	2020/21 Forecast to Year end	Variance (Forecast vs Revised Budget)
	£000	£000	£000	£000	£000
Concessionary Fares	11,932	11,932	7,684	11,932	0
Subsidised Services	2,556	2,564	1,970	2,590	26
Bus Stations	177	159	799	170	11
Bus Shelters	19	82	93	108	26
Passenger Transport Information	88	61	88	122	61
Staffing	684	685	571	685	0
Share of JTC Transport Costs	10	10	0	10	0
Net Expenditure	15,466	15,493	11,205	15,617	124
JTC Levy	(15,466)	(15,466)	(12,888)	(15,466)	0
(Surplus) / Deficit for the year	0	27	(1,683)	151	124

2.4 The projected overspend at the year-end will be met by Durham County Council.

Northumberland

- 2.5 The projected outturn shows an underspend of £109,000 for Concessionary Fares and Subsidised Bus Services. The main reasons for this are:
 - Following the Covid-19 outbreak, the majority of supported services within Northumberland continued to operate, albeit for the most part at reduced frequency. He Council continued to pay operators at full contracted prices with the exception of some seasonal services that had been due to commence from 5 April when these services were suspended until the resolution of the Covid-19 crisis or such point when it was deemed fit to resume. Some of these services have now commenced operation. These supported services include instances of services running commercially at popular/peak times, but where support is given to maintain journeys at other times, for example early mornings or late evenings. This will result in a forecast underspend of £69,000 in the current financial year.
 - Northumberland County Council also makes payments to operators under the Government's English National Concessionary Travel Scheme (ENCTS) which entitles pass holders to free off-peak travel after 9:30am on local bus services.

Patronage using the scheme was significantly reduced due to the introduction of the Government's lockdown policy in response to the Covid-19 outbreak. The Council is continuing to reimburse operators at pre-pandemic levels to ensure the viability of routes and operators is maintained, in line with the Cabinet Office Procurement Policy Note 2/20 – Supplier Relief due to Covid-19, for at least the period of the outbreak to enable the resumption of socially necessary services afterwards. This will result in a forecast underspend of £40,000 in the current financial year when compared to the original budget, but the forecast remains in line with the revised budget.

2.6 The following table provides a detailed breakdown of expenditure in Northumberland:

Table 3: Northumberland County Council

	2020/21 Original Budget	2020/21 Revised Budget	Spend to Date (January 2021)	2020/21 Forecast to Year end	Variance (Forecast vs Revised Budget)
	£000	£000	£000	£000	£000
Concessionary Fares	4,811	4,772	3,891	4,772	0
Subsidised Services	1,230	1,230	846	1,161	(69)
Bus Services	25	24	32	24	0
Passenger Transport Information	25	25	0	25	0
Staffing	133	133	111	133	0
Share of JTC Transport Costs	10	10	0	10	0
Net Expenditure	6,234	6,194	4,880	6,125	(69)
JTC Levy	(6,234)	(6,234)	(5,195)	(6,234)	0
(Surplus) / Deficit for the year	0	(40)	(315)	(109)	(69)

2.7 The projected underspend at the year-end will be retained by Northumberland County Council.

Tyne and Wear - Nexus

2.8 Period 10 monitoring covers the four-week period to 2 January 2021, during most of which time the region was under tier 3 restrictions. Metro patronage at the end of period 10 was around 35% of pre-covid levels but has since fallen to around half that level due to the introduction of the third national lockdown in January.

2.9 **Metro**

Metro revenue to the end of Period 10 was £10.852m which is a reduction of

£26.211m against budget. This represents losses in Metro fare revenue of £25.559m and Metro commercial revenue of £0.652m. In percentage terms, this denotes a loss against pre-Covid expected revenues on Metro of 71%. Investment income remains at £0.260m, which is a shortfall of £0.300m against the budgeted position.

- Additional costs of £0.738m that are attributable to Covid-19 include cleaning, PPE, IT equipment, IT licenses and additional signage. These additional costs have however been more than offset by savings of £1.114m, of which £0.892m relates to traction energy usage, £0.156m savings in bank charges, £0.038m reduced compensation charges, £0.016m card stocks and £0.011m relating to vehicle fuel.
- 2.11 Nexus have also seen non-Covid-19 related savings of £0.328m on traction energy due to favourable prices being obtained together with £0.200m net salary savings arising from vacancies across the establishment and £0.304m funding received from the Coronavirus job retention scheme.
- 2.12 Government funding in the form of Local Rail Revenue Restart Grant (LRRRG), totalling £39m, has been committed in the current financial year to cover the impact of Covid-19 and sustain services to 31 March 2021. The overall net losses on Metro to the end of Period 10 are therefore £25.304m which is 100% covered by the support received from DfT (subject to an ongoing audit). At this point in time, given the level of LRRRG received exceeds fare and commercial revenue losses, it is likely that an element of this emergency grant support will not be required, although every effort is being made to ensure LRRRG is fully maximised.

Bus

- 2.13 In line with government guidance, Nexus continues to support the local bus market by providing funding to commercial operators at budgeted levels despite the impact on services being delivered and patronage carried. This is particularly true in the case of ENCTS where, of the £26.730m payments made to the end of period 10, it is estimated that £16.908m or 64% is effectively supplier relief and not a reimbursement of provision, for which Nexus places reliance on PPN20/02, PPN20/04 and recent Cabinet Office guidance to continue to justify.
- 2.14 Government has confirmed ongoing additional support (LACBSSG) to cover net losses on secured bus services, this funding is open ended with a 10-week notice period. NECA received confirmation that the region's submission to 18 January 2021 has been approved, this includes the Nexus claim covering 100% of our net losses to date.
- 2.15 The impact on Bus revenue to the end of Period 10 is a reduction of £1.078m against budget. Revenue losses include £0.949m fare revenue, £0.101m departure charges, £0.018m bus punctuality monitoring and £0.009m across other miscellaneous headings.

¹ Government funding of £39m committed to 31 March 2021, with £1.026m allocated to the prior year.

- 2.16 Additional costs of £0.052m that are attributable to Covid-19 include PPE, IT equipment, IT licenses and additional signage. The additional costs have been more than offset by cost savings of £0.111m in respect of taxi card provision being reduced.
- 2.17 There are other non Covid-19 cost savings totalling £0.080m which are in relation to the decline in the take up of the taxi card scheme generally year on year. This brings the overall net loss for bus to £0.940m which is 100% covered by the support received from DfT (subject to audit).
- 2.18 Renewal of existing secured services contracts have seen increases of around £0.348m in 2020/21 (full year effect £0.450m). This pressure can be funded inyear from the Better Bus Fund allocation for 2020/21. The Nexus Director of Finance and Resources has included provision in the 2021/22 budget to cover anticipated increases in secured service contract renewals.
- 2.19 The Department for Education (DfE) has confirmed that the region will receive £5.4m grant funding to provide additional bus and special needs services to the end of the spring term. Nexus costs for the autumn term to 18 December 2020 are £0.770m and will be met in full from this grant.
- 2.20 The Government announced at the beginning of January that during the current lockdown schools would only remain open for pupils of critical workers and vulnerable children. In line with DfT communication received on 18 January scholars services are continuing for such pupils, with social distancing wherever possible. The Interim Head of Commercial is also working with operators to reduce services wherever possible to meet demand. At this time Nexus costs for the current Spring half term are estimated at £0.179m and will be met in full by DfE funding.

Other

- 2.21 Other revenue losses to the end of Period 10 amount to £0.295m and include Ferry fare revenue, replacement passes, loss of retail sales commission and other Covid related expenditure.
- 2.22 Nexus expects £0.183m of these losses to be funded by the Ministry of Housing, Communities and Local Government (MHCLG).
- These other losses are currently forecast to increase to £0.450m across 2020/21. MHCLG is calculated on a percentage basis and it is anticipated to cover £0.280m (62%) of such losses.

Summary of Nexus position

2.24 The following table sets out the summary as at the end of period 10, together with the forecast to the year end:

Table 4: Nexus Summary

	Actı	ual to Perio	d 10	Forecast to Year End			
	Budget	Forecast ²	Variance	Budget	Forecast ³	Variance	
	£m	£m	£m	£m	£m	£m	
Metro	2.156	2.156	0	2.840	2.840	0	
Bus Services	11.296	11.296	0	14.885	14.885	0	
Other	31.324	31.436	0.112	41.275	41.445	0.170	
Net Position	44.776	44.888	0.112	59.000	59.170	0.170	
JTC Grant	44.776	44.776	0	59.000	59.000	0	
Variance	0	0.112	0.112	0	0.170	0.170	

2.25 The above forecast assumes that the current emergency support for all revenue streams continues to 31 March 2021.

Retained Levy Budget

This budget relates primarily to activity inherited from the former Tyne and Wear Integrated Transport Authority (TWITA) as well as some cost such as external audit and service level arrangements which relate to the whole JTC area. Most of the budget relates to financing charges on historic supported borrowing debt. Additionally, there is budge provision to pay for support services, other supplies and services and a repayment to the Tyne Tunnels account for the use of reserves in 2013/14 to pay off the Tyne and Wear Pension Fund deficit. Expenditure for the year is forecast to be £2.114m compared with the budget of £2.120m as a result of minor budget variances.

Tyne Tunnels

2.27 The Tyne Tunnels are operated as a ringfenced account, so all costs associated with the tunnels are fully met from toll income and Tyne Tunnels reserves, with no call on the levy or other public funding. The forecast position for the year is in line with the updated position reported to the January 2021 JTC meeting and shows the offer of support to TT2 for the introduction of the Tyne Pass Scheme which will be repaid with interest by TT2 over the life of the concession to 2037. Details are set out in the table below

² Including £25.303m Metro, £0.940m Bus, £0.70m scholars and £0.183m other revenue emergency funding for Covid-19

³ Including £36.5m Metro, £1.3m Bus, £1.3m scholars and £0.280m other revenue emergency funding for Covid-19

Table 5: Tyne Tunnels Revenue Account

	2020/21 Original budget	2020/21 Revised budget	Spend to Date (January 2021)	2020/21 Forecast to Year end	Variance (Forecast vs Revised Budget)
	£000	£000	£000	£000	£000
Tolls Income	(28,441)	(18,714)	(17,181)	(20,650)	(1,936)
TT2 Contract Payment	21,653	11,900	11,611	13,933	2,033
TT2 Advance (Tyne Pass)	0	6,670	0	6,670	0
Employees	62	69	53	69	0
Historic Pension Costs	53	50	38	50	0
Premises	0	15	1	16	1
Support Services	100	113	74	113	0
Supplies and Services	45	42	1	15	(27)
Financing Charges	6,816	6,815	0	6,747	(68)
Interest/Misc. Income	(50)	(50)	(3)	(53)	(3)
Repayment from former TWITA reserves	(240)	(240)	(240)	(240)	0
(Surplus)/Deficit on Tyne Tunnels account	(2)	6,670	(5,646)	6,670	0

2.28 Major variances are accounted for as follows:

- Tolls income the forecast for tolls income has increased by £1.936m compared to the revised budget, but £7.791m below the original budget. This is due to a higher than forecast level of traffic flows during the late autumn period before the reintroduction of the Covid-19 lockdown on 5 January.
- Contract payments to TT2 are calculated with reference to the traffic using the tunnel. The forecast is therefore £2.033m higher than the revised budget due to the increase in traffic flows mentioned in the point above, but £7.720m less than the original budget.

Transport Strategy Unit (TSU)

2.29 The Transport Strategy Unit (TSU) supports the JTC, providing relevant information to support policy choices and to deliver policies at a regional level. The TSU's activities include developing and maintaining the Transport Plan, coordinating and preparing bids for external funding, providing input tot the LEP's strategies and plans on transport, maintaining a project pipeline and assurance framework, preparing responses to transport consultations and policy-making opportunities by government and other external agencies, providing input into Transport for the North (TfN) pan-Northern policies and plans and managing relationships with other authorities (whether local, combined, national or sub-

national) with whom the JTC may share a common interest.

- 2.30 The TSU is funded through a top slice of the Local Transport Plan (LTP) Integrated Transport Block grant which is awarded to the JTC plus contributions from the Transport Levies which are retained to support JTC activity centrally and external contributions to fund specific posts and activities. A series of studies looking at the feasibility of various local rail expansion proposals was commenced by Nexus in early 2020. The lead responsibility for these studies has now transferred to Transport North East (TNE), contracts are being novated to facilitate this and the budget established by Nexus is being transferred to TNE to fund completion of this work.
- 2.31 The forecast outturn for the year is likely to be within budget when compared to the revised budget agreed at the JTC in January 2021. There is a variance of approximately £4.3m forecast against the Covid-19 grants line, resulting from lower than originally anticipated costs claimed by the local authorities and Nexus on supported bus services (reimbursed by LACBSSG grant from DfT) and Home to School transport (reimbursed by grant from DfE). Any unused grants will either be rolled forward to be used in the next financial year or returned to the relevant awarding body where appropriate.
- 2.32 The forecast position is summarised in the table below:

Table 6: Transport Strategy Unit

	2020/21 Original Budget	2020/21 Revised Budget	Spend to date (January 2021)	2020/21 Forecast Outturn	Variance (Forecast vs Revised Budget)
	£000	£000	£000	£000	£000
Gross Expenditure					
Employees	721	684	564	697	13
Transport Plan and Strategy Work	50	108	69	97	(11)
TSU Research and Development	120	91	24	71	(20)
TSU Travel and Miscellaneous	16	3	0	1	(2)
TSU IT / Equipment / Accommodation	10	19	0	19	0
TSU Contingency	10	0	0	0	0
Go Ultra Low – Revenue	0	156	77	100	(56)
TCF Tranche 1 and Tranche 2 Programme Management	0	194	99	208	14
Covid –19 grants	0	17,550	9,339	13,211	(4,339)
Bus Covid Recovery Project	0	80	0	80	0

Total Expenditure 927 18,885 10,172 14,484 (4,401	Total Expenditure	927	18,885	10,172	14,484	(4,401)
-------------------------------------------------------------	-------------------	-----	--------	--------	--------	---------

	2020/21 Original Budget	2020/21 Revise d Budget	Spend to date (Januar y 2021)	2020/21 Forecast Outturn	Variance (Forecast vs Revised Budget)
Gross Income					
LTP funding - TSU	(500)	(500)	0	(500)	0
LGF funding - TSU	(95)	(56)	(33)	(34)	22
Retained Transport Levy	(129)	(129)	(129)	(129)	0
External funding for specific posts	(148)	(168)	(142)	(175)	(7)
ERDF grant – Go Ultra Low – Revenue	0	(156)	(39)	(50)	106
OLEV Grant income	0	0	0	(50)	(50)
TCF Grant income	0	(194)	(99)	(208)	(14)
Covid-19 grants	0	(17,550)	(9,339)	(13,211)	4,339
Total Income	(872)	(18,753)	(9,781)	(14,357)	4,396
Use of Reserves					
JTC Unallocated reserve	0	(80)	0	(80)	0
Regional Transport Team Reserves	(5)	(2)	0	3	5
Go Smarter legacy funds - Other	(50)	(50)	0	(50)	0

3. Reasons for the Proposals

3.1 This report is for information, to enable the JTC to fulfil its role of monitoring transport budgets on behalf of the two combined authorities.

4. Alternative Options Available

4.1 This report is for information.

5. Next Steps and Timetable for Implementation

5.1 The transport revenue budget will be monitored for the remainder of the financial year and the outturn position reported following the year end.

6. Potential Impact on Objectives

6.1 There are no impacts on objectives arising from this report which is for

information.

7. Financial and Other Resources Implications

7.1 The financial implications are set out in detail within the body of the report. The report is for information and provides the Joint Transport Committee with an updated forecast of expenditure against the budget approved in January 2020 and revised in January 2021. There are no financial decisions arising from this report.

8. Legal Implications

8.1 There are no specific legal implications arising from this report which is for information.

9. Key Risks

9.1 Financial risks associated with the authority's activities, and actions taken to mitigate these, will be factored into strategic risk management processes for the Joint Transport Committee.

10. Equality and Diversity

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

11. Crime and Disorder

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

12. Consultation/Engagement

12.1 The Revenue Budget for 2020/21 was subject to a period of consultation and engagement as part of the approval process. Detailed budget proposals are subject to consultation as appropriate, which is organised by the relevant delivery body.

13. Other Impact of the Proposals

13.1 There are no other impacts arising from these proposals.

14. Appendices

14.1 None

15. Background Papers

JTC Revenue Budget report January 2020JTC Revenue Budget report January 2021

16. Contact Officers

16.1 Eleanor Goodman, NECA Finance Manager, Eleanor.goodman@northeastca.gov.uk, 07546 653402

17. Sign off

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

18. Glossary

DfE - Department for Education

DfT – Department for Transport

ENCTS - English National Concessionary Travel Scheme

JTC - Joint Transport Committee

LRRRG - Light Rail Revenue Restart Grant

MHCLG - Ministry of Housing, Communities and Local Government#

TWITA - Tyne and Wear Integrated Transport Authority



Agenda Item 6 NORTH OF TYNE COMBINED AUTHORITY

Overview and Scrutiny Committee

Date: 25th March 2021

Subject: North East Transport Plan

Report of: Managing Director, Transport North East

Executive Summary

Following the public consultation on the draft North East Transport Plan, which ended on 14th January 2021, work has been undertaken to analyse the responses received. Joint Transport Committee (JTC) members have considered the insights raised and put forward solutions and the draft Transport Plan has been amended accordingly.

A draft 'Your consultation feedback, our response' document has been produced to summarise the feedback received and set out the actions proposed to address the feedback.

The updated Transport Plan is attached to this report as Appendix A, with changes to the consultation document highlighted in Yellow for ease of reference.

Appendix B sets out the 'Your consultation feedback, our response' document, which acknowledges feedback given during consultation, and how the document has evolved to its final version as a result.

The Integrated Sustainability Appraisal has also been updated and is attached as Appendix C.

Recommendations

Overview and Scrutiny Committee is recommended to note that the North East Transport Plan will be formally published on the Transport North East website subject to agreement at JTC on 16th March 2021.

1. Background Information

1.1 Following approval from JTC in November 2020, the Transport Plan was consulted on from 19 November until 14 January. Almost 3,400 responses to the consultation were received. The responses were broadly supportive but did raise a number of themes which have been addressed in an amended version of the Plan.

2. North East Transport Plan - Key amends

- 2.1 The insights raised during the consultation and proposed solutions were considered by members and the draft Transport Plan has been amended accordingly.
- The updated Transport Plan is appended to this report and all sections of new or updated text are highlighted. The updated Transport Plan can be found on our website: transportnortheast.gov.uk

The following key amends have been made to the Transport Plan:

- The benefits of road schemes to all users have been better articulated in the plan, emphasising that all schemes in the plan must be rigorously tested against our assurance framework and be evidenced to support all of the objectives of the Transport Plan, including our decarbonisation ambitions;
 - Proposals to collaborate with North East employers, potentially to develop a "green travel pledge". This would celebrate and support businesses that promote employees using public transport or active travel for business and initiatives such as mileage claims for cycling;
 - Proposals to develop schemes which support our tourist industry with improved, sustainable access to tourist sites, especially in rural areas;
 - Revised narrative which explains that LA7 authorities could work together to ensure we have access to the latest thinking and best practice in design to inform their own planning policies areas;
 - The need for Government to fund the plan, if we are to consider performance targets to enhance the KPIs in the plan;
- 2.4 The 'What our users think' section of the Transport Plan has also been updated to include the feedback we've received from our Big Transport Conversation research project.
- 2.5 Air quality Management Areas have been considered throughout the Plan. By increasing the volume and proportion of journeys made by low-carbon, sustainable transport types, the region is confident this will bring about improvements in air quality across the region, with a focus on areas that exceed target levels.
- 2.6 Climate related issues in regional transport is highlighted throughout the narrative; through the Plan's vision and objectives, the region clearly commits to implementing policies and projects which assist in reducing climate change.

'Your consultation feedback and our response' report

2.7 A summary of the consultation feedback has been set out in a 'Your consultation feedback, our response' document. The document can be found in Appendix B of this report.

Integrated Sustainability Appraisal (ISA)

2.8 The ISA has been updated to incorporate the revisions which have been made to the Plan following the consultation. The purpose of this ISA is to evaluate the impact of the Plan on factors such as environment, health and accessibility. The ISA is appended to this paper and will be published alongside the Transport Plan.

3. Reasons for the Proposals

3.1 This report is for information. Members are requested to note that the final North East Transport Plan will be published on the Transport North East subject to approval at JTC on 16th March 2021.

4. Alternative Options Available

4.1 This report is for information only.

5. Next Steps and Timetable for Implementation

5.1 Following agreement by JTC, the Plan will be published on the Transport North East website.

6. Potential Impact on Objectives

Objectives agreed by JTC are included within the Transport Plan. The Plan contains the steps necessary to achieve these objectives and therefore the publication of the Plan will have positive implications.

7. Financial and Other Resources Implications

7.1 No specific financial implications arising from this report. The North East Transport Plan includes proposed / required investment totalling £7billion to achieve the aims and ambitions of the JTC. The costs of undertaking the consultation was met from the 2020/2 budgets provided.

8. Legal Implications

8.1 As local transport authorities, the North East Combined Authority and the North of Tyne Combined Authority are required, through the Joint Transport Committee, to produce a local transport plan (section 108, Transport Act 2000). Legal officers have reviewed the Plan and ISA to ensure that they are legally compliant.

9. Key Risks

9.1 No risks identified.

10. Equality and Diversity

10.1 The Transport Plan is intended to positively address equality and diversity issues within the region by enhancing transport provision for all users. The ISA document seeks to independently verify this.

11. Crime and Disorder

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

12. Consultation/Engagement

12.1 All local authorities across the NECA and NTCA areas have been engaged in the development of the plan to date, with further informal engagement with transport operators and other interested parties.

13. Other Impact of the Proposals

13.1 No specific impacts.

14. Appendices

14.1 Appendix A- North East Transport Plan

Appendix B- 'Your consultation feedback and our response' report

Appendix C- Integrated Sustainable Appraisal

15. Background Papers

15.1 Agenda Item 4 "The North East Transport Plan" Joint Transport Committee, 16th March 2021

16. Contact Officers

16.1 Rachelle Forsyth-Ward, Strategic Transport Advisor, rachelle.forsythward@transportnortheast.gov.uk

17. Sign off

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

18. Glossary

ISA- Integrated Sustainability Assessment

JTC- Joint Transport Committee

LA7- 7 North East local authorities

NECA- North East Combined Authority

NTCA – North of Tyne Combined Authority





North East Transport Plan 2021-2035

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

Contents

North East Transport Plan	1
Contents / Foreword	2
Executive summary	3
What is the North East Transport Plan?	4
What this Plan covers	5-6
Our vision and objectives	7
North East England – our region	ε
Мар	8
Our environment	9-10
Our economy	11-14
Our health and social inequalities	15-16
Our geography and people	17-18
Our transport network and travel habits	19-22
Safe, secure network	22-24
Where we are now	25
easures of success (Key Performance Indicators)	26-27
ur transport network	29-48
What do our users think?	28
Our transport network	29
Making the right travel choice	30-32
Active travel	33-34
Public transport: travelling by bus, ferry and on demand public transport	35-37
Private transport: travelling by car and using road infrastructure	38-4
Public transport: travelling by local rail and Metro	42-44
Connectivity beyond our own boundaries	45-47
Research, development and innovation	48
Implementation of the Plan	49-61
Our call to action	49-50
Shovel ready schemes – delivery plan	51-52
Schemes for delivery in the next five years – requiring funding to be accelerated – delivery plan	53-56
Schemes for development and delivery in the next ten years – delivery plan	57-58
Schemes for development and delivery beyond ten years – delivery plan	59-60
How we will deliver this Plan	61-62
Rural benefits of the Plan	63-64
This Plan is supported across our region	65
Changes you will start to see	66
Conclusion	67
Appendix 1 – Delivering the Transport North East Programme	68-69

Foreword

On behalf of the North East Joint Transport Committee (NEJTC), I am delighted to present the North East Transport Plan.

This is the first regional Transport Plan which sets out our collective ambitions up to 2035. Through its delivery, we will create a modern transport network of which we are all proud.

Our schemes are ambitious and are so far worth £6.8 billion, an amount which will grow as further schemes are developed over the lifetime of the Plan. We believe this to be a fair share of national transport funding which should be allocated to our region from Central Government to 2021-2035.

These projects will help to protect our environment by providing attractive carbon-neutral sustainable transport for people across the North East. Our plans will also significantly fuel regional economic growth which will help to boost job creation.

Our region not only has the passion to drive forward this exciting plan, we also have the existing transport assets to provide a strong foundation upon which we can build. Here we set out how we will deliver this game-changing system, including greener travel options which will greatly improve the physical and mental health of people across the North East.

As we reflect on the significant challenges our region has faced in 2020, I am pleased now to turn to the future and consider how transport across the North East will look and feel in 2035. Developing our network is key to unlocking our green transport ambitions. It will boost our economy, increase connectivity across the North East and help us to overcome long-standing health, social and economic inequalities.

Following extensive discussions and debates during the public consultation, we've listened to feedback and we have shaped this final version of the Plan further. We received almost 3,400 responses from people from right across our region and beyond.

It was clear that people agree strongly with the Plan's vision and objectives, especially our environmental ambitions; and some people asked to us to be even bolder.

We've listened and introduced new initiatives into the Plan, for example plans to work with employers to promote sustainable transport use, and commitments to see how sustainable transport can support tourism, especially in rural areas. We are clear that all regionally promoted transport schemes must be assessed rigorously to ensure they contribute positively to our objectives with a focus on schemes which grow the proportion of people travelling using sustainable transport types. We will build on our existing assets deliver a more seamless, coordinated and integrated transport system right across the region.

On behalf of the NEJTC I would like to thank the public, our partners and stakeholders for playing their part in the development of this strategic Transport Plan. Now we must turn this Plan into real, tangible actions to achieve our vision of 'moving to a green, healthy, dynamic and thriving North East'.



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

Executive summary

This is our first region-wide Transport Plan for the seven local authority areas in the North East, covering two Combined Authorities, brought together by the North East Joint Transport Committee:

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

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

This North East Transport Plan sets out the transport priorities for our region up to 2035.

Home to two million people, our region is distinct and diverse. It consists of urban and rural communities all with a rich history and positive people who want to intribute to moving our country forward.

his mixture of urban, suburban and rural

mommunities results in a range of transport

challenges, from rural isolation in more remote areas

poor air quality and congestion in parts of our

cities, along with pockets of 'transport poverty' across
the entire region.

We already have a well-established integrated public and sustainable transport system which makes a real difference to people's everyday lives, allowing them to get to work, to visit friends and family, to the shops, and to get to essential services such as schools and hospitals.

This Plan will show that our region has the potential to improve it further to expand its reach, capability and quality.

In some areas of our region, the existing network needs to be improved and expanded so that it better connects the people and communities which it is supposed to serve, leaving no one and nowhere behind. Creating one, total network with integration at the heart is key. Solving our transport challenges will go a long way to enable the region's long-standing health, social and economic inequalities to be overcome.

Recent years have seen rising levels of car use and ownership in the region and reductions in

the use of public transport, cycling and walking, resulting in congestion and poor air quality. However, the Covid-19 pandemic lockdowns in 2020 gave us cleaner and quieter towns, cities and neighbourhoods. We will work to sustain some of the benefits this afforded and this Plan will help take us towards carbon neutrality.

Ultimately, our approach recognises that different communities across the North East have different transport needs and will need different transport solutions. For example, the role of the car and of public transport is very different in rural and urban communities.

Those transport links need to be fast, reliable, resilient, accessible and affordable. They must have the capacity we need and, crucially, be sustainable. **Better integration is also key**.

This is our Plan for how we will rectify our wider regional and transport challenges and grasp future opportunities by 2035.

We already have the foundations to launch a worldclass sustainable transport network. This Plan builds on our existing assets and gives us the framework to enable us to deliver a more seamless, co-ordinated and integrated transport system across the region.

The Plan sets out our priorities and forms the basis for bids and requests for funding for transport investment in the North East up to 2035.

This Plan is for the whole of the North East. It recognises the different needs of communities. It considers why we travel and how those trips are made and how journeys can be improved. Our Plan is for everyone, young and old and for people traveling to, from, and within North East England.

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

The objectives of the Transport Plan are:

A Carbon-neutral transport

Overcome inequality and grow our economy

Healthier North East

Appealing sustainable transport choices

Safe, secure network.

Implementation Plan

We have an ambitious but deliverable timeline which will lead us towards delivering our vision and achieving our objectives by 2035. We have clearly set out the timeline showing our priorities and ambitions in our Delivery section of this Plan and this will be accompanied by an Implementation Plan.

A programme of schemes has been developed and this will be managed as a live programme with regular updates to the schemes and evidence that underpins them to ensure that the region can continue to address our challenges and grasp opportunities. Our Plan is divided into the following timescales:

- Shovel-ready schemes
- Schemes for delivery in the next five years requiring funding to be accelerated
- Schemes for development and delivery in the next 10 years
- Schemes for development and delivery beyond 10 years

We have set schemes across seven work programmes consistent with our Policy Areas:

- · Making the right travel choice;
- · Upgrading North East active travel infrastructure;
- Public transport: travelling by bus, ferry and on demand public transport;
- Public transport: travelling by local rail and Metro;
- Private transport: travelling by car and using road infrastructure;
- Maintaining and renewing our transport network;
- · Connectivity beyond our own boundaries.

We have complied a Technical Appendix, available on request, containing all of our data sources and evidence used.

The Integrated Sustainability Appraisal (ISA) also accompanies this Plan. The appraisal seeks to identify any impact of our programme on key factors.

Delivering this Plan, achieving our vision and objectives will support a shift to a more sustainable and healthier way of life in the North East, through lowered emissions, better air quality and travel choices.

- Easier access to education, skills, and higher value jobs
- Health levels at least equal to other regions in the UK
- Better connections from the North East to national and international destinations
- A transport network with improved environmental credentials including more sustainable journeys, better air quality and reduced carbon output
- A safer and more reliable integrated transport network, which is more intuitive for customers, with a sustainable cost base
- Direct job opportunities in the transport and infrastructure sectors
- Enabling new development and housing sites and improving accessibility to existing communities.

This Plan will deliver profound and lasting improvements that will shape the North East and its people for decades to come.

To 2035, our region requires an estimated £6.8 billion of capital investment, an amount which will grow as further schemes are developed over the lifetime of the Plan.

We believe this to be a fair share of national transport funding which should be allocated to our region from Central Government from 2021-2035.

What is the North East Transport Plan?

The North East Transport Plan is the first comprehensive Transport Plan for the region, bringing together the seven local authorities in North East England: Durham, Gateshead, Newcastle upon Tyne, North Tyneside, Northumberland, South Tyneside and Sunderland.

A single Plan giving a truly regional focus is a step forward for the North East. Travel patterns in our region are complex but 95% of our population live and work within our seven local authority areas and travel behaviour isn't constrained by administrative boundaries.

This Plan sets out the region's transport priorities up to 2035. If successfully delivered, (the projects and policies in the Plan will help protect our environment by providing Ottractive carbon-neutral sustainable transport for people across the region. Our plans will also significantly fuel regional economic growth which will help to boost job creation. It will move us to a green, healthy, dynamic and thriving North East.

The Plan is centred on connecting people to good employment opportunities, generating economic growth, while enabling the region and its people to move to healthier and greener more sustainable ways of travel.

The improvements we have identified have been agreed by the region and will be delivered by a number of organisations through the range of programmes and schemes set out in the Implementation section of this Plan.

We will use this Plan to communicate opportunities for investment and improvements to our transport network. The Plan is our bedrock for bids and requests for funding inward transport investment to the region from Central Government and other sources. This is the long-term transport strategy for our forward-looking region.

Making journeys is good

Covid-19 accelerated the demand, ambition and delivery of both digital transformation and mobility but we want to encourage people to make trips around the North East. We travel to school, to work, to shop, to care for others and to socialise with friends. For businesses, the ability to travel enables the opportunity to acquire, move and sell products and goods. Doing so benefits local economies of communities which make up our region. Transport can also enable social connectivity to people who are isolated and can enhance independence and opportunity. It is also the key to tackling inequality and deprivation by facilitating access to jobs and leisure. High-quality and integrated transport links can also help promote and strengthen tourism, leisure and regional development. Making journeys of course leaves an impact on our environment and plays a big role in our health and wellbeing, so how we choose to travel is important. That is why connecting people to opportunities using greener. healthier and sustainable transport options is key to this Plan.

Why is transport important?

Transport is a means to an end, a way of being able to do the things that make up our lives and enables our region and its people to keep moving. It enables physical connectivity between people and jobs, businesses and workers, and businesses to suppliers and customers. Within our region, it's important that our population of two million residents can reach work, education and healthcare and visit friends and loved ones. Links to and from other regions and to other countries are also fundamental for facilitating economic growth and trade.

Well-coordinated transport investment and land use planning can foster social mobility (OECD 2018), and collectively lead to better economic performance of specific areas as businesses are located closer together.

£42-50m

For example, if the economies of Ashington, Blyth and Newcastle are brought 'closer' together through restored passenger rail links, there will be an increase in the level of interaction between the two, resulting in economic growth of £42m-£50m in both areas.

Successful delivery of the Plan will lead to the North East having a world-class sustainable transport network. Carrying out our Plan and achieving our vision and objectives will lead to better outcomes for our region's residents. businesses and visitors and overcome our long-standing challenges:

We have a growing population but one that is ageing over time (2m people, average age 43.7).

There are major health and income based inequalities. A high percentage of economically inactive people in the region are long-term sick (North East: 28.5%, UK 22.1%)

Plans for substantial housing growth need to be supported by good public and sustainable transport connections: 109,555 new homes planned by 2036.

Average productivity per head in our region remains 16% below the output for England. This has an impact on the potential competitiveness and resilience of our businesses. (GVA) terms)

- Gross Value Added output rising but challenged by external pressures with a persistent productivity gap GVA of £20,338. This is below the national average of £24,181.
- We have fewer businesses per head and fewer jobs in high skilled occupations than other areas.
 - Analysis by IPPR North suggests that in 2019, planned Government spend on transport in London was £3,636 per person, over seven times more than the £519 per head in the North Fast
- A range of transport issues has led to a contrast between rural isolation in our remoter areas and poor air quality and congestion in parts of our cities.
- Commuting to workplaces is dominated by car travel, so congestion is a significant issue on our roads, which affects public transport access and attractiveness, reduces productivity and increases inactivity and vehicle emissions.
- Public transport use is falling over the longterm, despite an increase in bus use in 2019 as a result of investment by bus operators.
- Transport contributes a significant proportion of carbon emissions and we have an air quality problem in our region.
- Cars are our region's most used form of transport and car ownership in the North East is increasing, leading to more traffic congestion and vehicle emissions.

What this Plan covers

The North East Transport Plan provides the strategic framework to enable us to deliver an improved, more seamless, co-ordinated and integrated transport system across the region.

It is a strategy document setting out how we will improve our transport network to achieve our vision and objectives.

It is not intended to include operational information such as detail or decisions about transport timetables, specific routes or services. We have set out a helpful table which clearly highlights what is in Plan and what is available elsewhere, for each form of transport, based on our policy areas:

- Active travel
- Public transport: travelling by bus, ferry and on demand public transport

private transport: travelling by car and using road finite transport.

○Public transport: travelling by local rail and Metro
<a>○

Transport type	What this Plan covers	What you'll find elsewhere
Active travel	How Active travel contributes to our region's transport network, future development and policy aims.	Information on pop up cycle routes, local cycling and walking improvement plans, and Rights Of Way Improvement Plans (Local Authority websites).
Public transport: travelling by bus, ferry and on demand public transport	How buses, the Ferry and 'on demand' public transport contribute to our region's transport network.	Details of, and decisions about, specific ferry and bus services, fares, ticketing, timetables and routes: NEBus is the bus operators' association which encompasses the providers of services across the North East. (Nexus website).
Private transport: travelling by car and using road infrastructure	How roads contribute to our region's transport network and their future development.	Local Highway management and investment proposals. Highway Asset Management Plans and Traffic Asset Management Plans. Highway Design Standards. Parking standards and car park CCTV. Roadworks management (Local Authority websites). Tyne Tunnel Toll information.
Public transport: travelling by local rail and Metro	How Metro and local rail contribute to our region's transport network and their future development.	Details of, and decisions about, specific services, times fares and ticketing. (Northern trains and Nexus website).
Connectivity beyond our own boundaries	How our national and global gateways contribute to our region's transport network for both passengers and freight. How we will work with partners to strengthen connections from destinations in our region to everywhere in the UK and beyond.	Details of, and decisions about, specific routes and port and airport operations. (Newcastle Airport, Port websites, Main Line railway services, flight and sailing schedules).

What this Plan covers

Interaction with other policies and strategies

The North East Transport Plan provides the strategic framework to enable us to deliver an improved, more seamless, co-ordinated and integrated transport system across the region.

This Plan also sets out how transport in the North East can help support our region's wider goals of creating and sustaining 100,000 more and better jobs in a growing and decarbonised economy, where social and health inequalities are greatly reduced.

This document also builds on Connected North East – Our Blueprint, published in October 2020, which sets out how a connected North East can increase the prosperity, quality of life and health of the region by uniting the potential of digital and transport.

Working with partners

 Θ

will also work closely with Nexus (the Passenger Transport executive) and with the North East Local Enterprise Partnership. We will work collaboratively with Transport for the North, to achieve improvements in transport connectivity across the wider north that will help to re-balance the national economy.

The Plan is therefore closely aligned and interfaces with the North East Local Enterprise Partnership (LEP) Strategic Economic Plan (SEP) and Local Industrial Strategy (LIS), Central UK Government strategy, as well as all relevant policies and Plans of Transport for the North (TfN), the region's two Combined and seven Local Authorities, and Nexus.

Our upcoming Transport Strategies and Policies

Over the coming years, we will also publish a series of detailed strategies and policies which will act as daughter documents aligned to this Plan.

They will set out strategic aims further, using this Plan as a guide, and will provide further detail and evidence with recommendations to help us accomplish our vision and objectives.

The below table sets out our planned strategies and policies which we will bring forward.

This list isn't exhaustive, we may choose to launch research pieces to develop our thinking and latest evidence ahead of strategy and policy documents.

Over the coming years, we will take a flexible approach to providing transport strategy, planning and delivery for the North East, using this Plan, its vision and objectives to guide us.

We will provide regular updates and detail on how to get involved on our Transport North East website: transportnortheast.gov.uk

Strategy / Policy	What it will cover?	Year Planned
North East Rail and Metro strategy	A refreshed North East Rail and Metro strategy detailing how we will deliver passenger and freight rail improvements the region needs, helping to make the network bigger and better, more accessible and useable for all.	2021/22
Zero Emission Vehicle Policy	A policy to further develop and expand the North East's Electric Vehicle charging network, and to increase the number of plug-in vehicles licensed across the region and investigate other clean fuel alternatives including hydrogen.	2021/22
TNE Engagement Strategy	A new strategy to set out how we will engage to deliver our objectives including working with communities and organisations, to get people involved.	2021/22
Bus Strategy	A policy direction for buses in our region, produced collaboratively with our region's bus operators.	2021/22
Active Travel Strategy	A strategy setting out how we will work with Local Authorities and stakeholders in the region to increase the uptake of active travel, considering targets, and deliver infrastructure that is safe, appealing, well designed, and accessible for all.	2022/23
Road Infrastructure and Zero Emissions Strategy	A regionwide strategy for the future management, safety, maintenance and improvement of the North East's strategic, major and key road networks for all users. This will also set out how we will support sustainable, low-carbon travel around and through the region, including rural areas, making alternative fuels a realistic and attractive option.	2022/23
Customer Experience Strategy	We intend to produce a strategy which develops a high-level accessibility standard for the region, setting out a framework for ideas around journey experience; access to stations and the public transport network; safety and security on the public transport network and using active travel; access to essential services, healthcare and education.	2022/23
Ticketing, Pricing, and Information Strategy	Explore how integrated transport and ticketing could be improved, including looking at potential policies to tackle barriers to transport, such as transport poverty, affordability and information provision.	2022/23

North East Transport Plan

Our vision and objectives

The vision and objectives for the Plan set the standard of what we want to achieve and where we want to be by 2035.

The Vision

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

The Objectives



Carbon neutral North East

We will initiate actions to make travel in the North East net carbon zero, helping to tackle the climate emergency declared by our two Combined and seven Local Authorities, addressing our air quality challenges, and helping to achieve the UK's net zero by 2050 commitment.



Overcome inequality and grow our economy

The Plan is aligned with the North East LEP's long term goals to first return the region to pre-Covid-19 GDP and employment levels and then to move forward in pursuit of the economic ambitions set down in their Strategic Economic Plan (SEP).



Healthier North East

The North East has the lowest life expectancy of all the English regions. The Plan will help achieve better health outcomes for people in the region by encouraging active travel and getting people to travel by more sustainable means, improving air quality, helping our region to attain health levels at least equal to other regions in the UK.



Appealing sustainable transport choices

We will introduce measures which make sustainable travel, including cycling and walking, a more attractive, greener, and easy alternative to getting around.



Safe, secure network

We will improve transport safety and security, ensuring that people are confident that they will be able to feel safe and secure when travelling around the North East.

Policy areas



Makina the right travel choice

We will enable people to make greener and healthier travel choices whenever they can and ensure our sustainable network takes everyone where they need to go at a price they can afford.

We must ensure all our actions improve transport across the region and deliver to the objectives of this Plan so we are greener, more inclusive, healthier, safer and our economy thrives.



Page 45

Active travel

We will help more people use active travel by making the cycle network better across the North East. This will include being flexible in how we use road space to help cyclists and pedestrians.



Public transport: travelling by bus, ferry and on demand public transport

We will improve bus travel and attract more passengers with new rapid bus corridors. This will include changing how road space is used to help buses move more quickly.

We will take action to continue to support the Ferry and develop potential improvements where possible.

We must help more people to reach the sustainable transport network with more 'on demand' solutions.



Private transport: travelling by car and using road infrastructure

We must make our roads flow better for goods and essential car journeys

We must strengthen use of cleaner, greener cars, vans and lorries.



Public transport: travelling by local rail and Metro

We must invest in Metro and local rail to extend and improve the network.

We will take action to drive our partners to make travelling and moving goods around our region more efficient and greener.



Connectivity beyond our own boundaries

We must work with partners to make movement of people and goods to and from our region, more efficient and greener. We must work with partners to strengthen connections from destinations in our region to everywhere in the UK and beyond.



Research, Development and Innovation

We will embrace new technologies to meet our transport objectives and set innovation challenges to industry creating new opportunities with our network as the testbed.

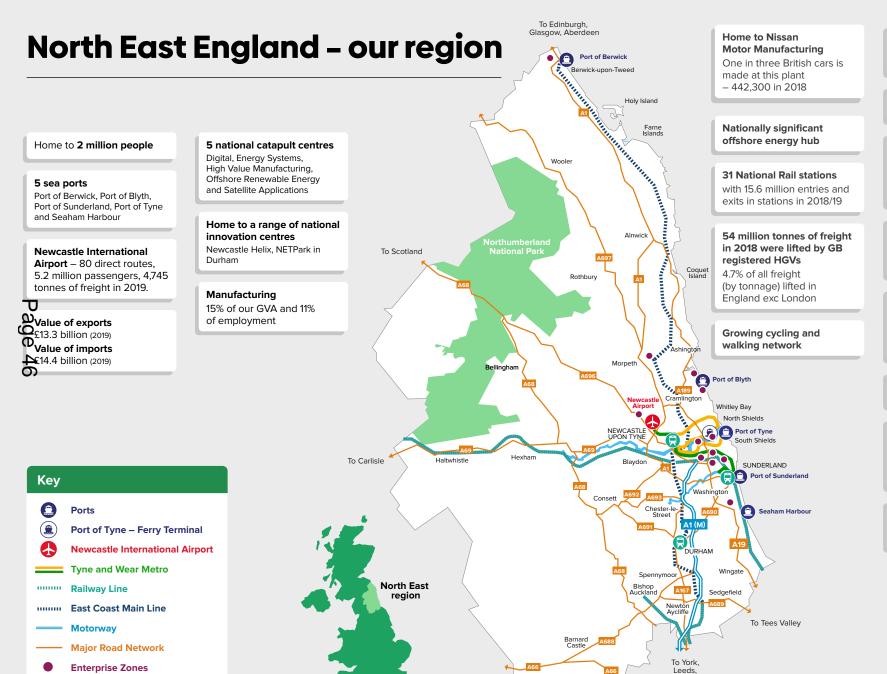
Overarching policy areas

We will strive to integrate within and between different types of transport, so that each contributes its full potential and people can move easily between them.

We must constantly seek funding opportunities to deliver our Transport Plan obiectives.

We will take action to make travel in the North East net carbon zero and improve transport safety and security.

We must ensure that we work with partner organisations to drive new, quality roles and



Shields Ferry

400,000 passenger journeys a year

Two UNESCO World Heritage sites

Tyne and Wear Metro

60 stations 89 trains 36m passenger journeys in 2018/19

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

28% of households do not own a car – the highest proportion outside of London – shrunk by 9% since 2002/03

162.4 million bus passenger journeys in 2018/19

Home to the largest purpose built datacentre campus in the UK

Stellium Data Centers, Cobalt Business Park, North Tyneside

Four universities

Manchester, Midlands, London 80,000 students, 17,000 international students

Our environment

Carbon Neutral North East

In recent years there has been a general increased awareness of the need to take action on climate change. In June 2019 the UK Government became the first major global economy to pass a law that requires the UK to achieve 'net zero' greenhouse gas (GHG) emissions by 2050.



All seven local authorities and both Combined Authorities have declared climate emergencies.

How can transport help?

Transport can play a significant role in providing solutions to achieve the UK's net-zero carbon emissions commitment by 2050. This will require further development and use of low carbon technology. It will also require helping people to make the right travel choice for their journey.

early 2020, the UK Government announced a consultation on ringing forward the end to the sale of new petrol and diesel cars Ond vans from 2040 to 2035, or earlier if a faster transition appears **N**asible. The Independent Committee on Climate Change (CCC) ncluded that this is required for the UK to end its contribution to climate change by 2050.

Over the coming years, there will need to be substantial investment in new fleets of cars, buses, and other road vehicles as well as trains, together with the necessary infrastructure (including electric vehicle charging points and railway electrification) for them to operate.

This means that interventions are required in the North East to create a sustainable transport network that is attractive throughout our region and beyond for both existing and potential users.

If we do not address our carbon emissions from transport, then the locations of emission exceedance in several urban communities 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.

Over the period to 2035, we need to focus on a decarbonised future and this Plan will take us towards carbon neutrality.

Air Quality

The North East has air quality hotspots in cities and towns. We face environmental directions from Government to improve air quality in parts of the region as soon as possible.

Although 92% of days were classed as 'low emissions' on the Air Quality Index in the North East in 2019, it is estimated that poor air quality is responsible for around 360 deaths each year in Central Tyneside alone.

The region has the following air quality management areas:

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

Some of the measures we have included in our AQMAs are:

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

The aim of these management areas is to improve air quality for a continued period. If this could be achieved, then the AQMA in question could be revoked on the grounds that air quality has improved sufficiently that it is no longer a concern.

To compound this issue, people in the North East of England live shorter lives and have shorter healthy life expectancy. Peak-hour congestion, particularly at city centre river crossings, is leading to poor air quality and unreliable bus journeys.

We need to increase the volume and proportion of journeys made by low-carbon, sustainable transport types. This will bring about improvements in air quality across the region, with a focus on areas that exceed target levels.

While 28% of households in the North East **do not own a car** – the highest proportion outside of London – this has shrunk from 37% in 2002/3. The proportion of households owning two or more cars has increased from 20% to 32% over the same period.

Most current vehicles on our roads significantly contribute to carbon emissions. Dominance of the private car for commuting trips is a significant challenge for the region that we must address.

Commuting data suggests that rural residents are more dependent on a car than people living in urban areas and make less use of buses largely as a result of service provision and levels of density.

Congestion

Our region has significant road congestion problems. High proportions of car and van use in the region results in road corridors into the centres of Durham, Newcastle, Gateshead and Sunderland being regularly congested, especially at peak times and particularly at city centre river crossings.

However, car use is continuing to rise and remains the most common mode of transport for commuting. As with the rest of the UK, recent decades have seen rising levels of car use and ownership in the North East.

Demand for higher levels of car ownership in the coming years suggests increased future traffic congestion if alternative provision is not made.



Road transport contributes 37% to the North East's carbon emissions the most out of any sector.

The North East is the lowest ranked region for transport CO2 emissions per person outside London. This gives us solid foundations on which to build a greener and more sustainable transport network.

Our environment

Overall carbon emissions per capita – 5.8 tonnes per person per year (2017).

We are the third highest region in England for carbon emissions per capita as a result of having higher than average per capita emissions from industrial, commercial, public and domestic sectors.

Cleaner fuels

The rise of cleaner fuels, in particular electric, will continue over the next decade following legislation to end the sale of all new petrol and diesel cars by 2030; and, the region has a clear opportunity to accelerate and assist in the uptake of these vehicles. Currently there are almost 3,000 registered electric vehicles in our region, over 800 chargers and through programmes such as Go Ultra Low North East are confident that the adoption of these vehicles will grow. Other pectors including the bus and logistics industries are also investing this area. A cleaner vehicle fleet results in potentially improved for quality and a more efficient energy sector. Government has an amounced that through a £5billion fund, initiatives including at least 1000 new Zero Emission Buses will be funded to make greener travel the convenient option, driving forward the UK's progress on its net zero ambitions.

However, an increase in the uptake of electric vehicles will not enable us to achieve our objectives alone, as it will not fully resolve health impacts, make efficient use of road space or improve road safety.

Electrification is not the only potential solution. Some vehicles including heavy goods vehicles and off-road vehicles may consider alternative fuels eg hydrogen to be the best solution going forward to meet the objectives. It is vital that, to meet the net zero greenhouse gas emissions targets by 2050, the transport sector explores and implements several different technology solutions.

The future

The North East has been at the forefront of decarbonisation and developing low-carbon solutions for our transport network, with successes in offshore wind technologies and electric vehicles. The North East Automotive Alliance (NEAA) is an internationally significant automotive cluster that brings together regional organisations on workstreams including advanced propulsion. Transport operators are also 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 (funded through the Government's Ultra Low Emission Bus Fund). Our new Metro fleet will be 32% more energy efficient, saving tonnes of carbon. Over the coming years, we are extremely well placed to explore the connections between zero emission transport, advanced propulsion and energy systems to improve our region's environment.

The timelines associated with the ending of all new petrol and diesel cars and vans highlight that it is imperative that the region has an accessible and fit for purpose EV charging network, which meets the needs of our residents, including those drivers who do not have access to off-street parking and those in rural areas where there may be increased barriers to installing EV charging infrastructure. We commit to partnership working with local authorities, NELEP, universities and businesses to ensure that a holistic approach is taken in the future direction of EV charging.

The region will investigate the opportunities relating to other alternative fuels. Hydrogen has a role to play in decarbonising transport, however innovative solutions and pilot test beds need to be explored in order to roll out hydrogen to its full potential. The region has a wealth of knowledge and experience in piloting new and innovative solutions and will work with partners in the relevant industries to investigate the practicalities of becoming a Transport Hydrogen Hub. We will also look to work with the National Centre for Data and the Newcastle University Centres for Research and Excellence to ensure that essential data is compiled which can be utilised to assist in the future deployment of hydrogen.

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.







This Plan will address these challenges and embrace the opportunities, taking the North East towards carbon neutrality, achieving our objective of **Carbon Neutral North East.**

Our economy

Our economy, measured by GVA levels (total and per capita), is performing below the national average, with a significant productivity gap and we have a smaller than average private sector economy.

In 2018, the GVA per head of the North East was £20,617 – well below the GVA per head of England excluding London (£25,346) and England as a whole (£29,356).

Our economy

The North East economy was historically dominated by mining and manufacturing. Our region's traditional heavy industries such as coal mining and shipbuilding ceased by the early 21st century, leaving us with an unemployment rate higher than many other areas despite our best efforts to take advantage of new economic opportunities.

Thile manufacturing remains an important part of the regional aconomy, it has diversified over recent decades. This has led to a corong service sector including education, financial, professional and Qusiness services, transport and logistics, and construction.

have key assets in the energy sector, including offshore energy and subsea technologies, regional energy, and demonstration and innovation. We are home to a world-leading clinical research sector that supports a growing health and life sciences sector.

We have plans to build on our manufacturing strengths with the development of the International Advanced Manufacturing Park (IAMP) in Sunderland and South Tyneside near Nissan's car plant close to the A19. Providing infrastructure to bring businesses here is a key element of our Plan.

In recent years, a vibrant digital community with a combination of start-up, high growth and established businesses across a wide range of specialisms has been established.

But above all, our region has significant employment in the public sector across both local services and Central Government back office and shared services.

Wages

Within the North East, the median gross weekly wage for a full-time employee also varied by local authority of residence and workplace:

Wages and salaries (62%) and income from self-employment (5%) accounted for a smaller percentage of total household income in the North East region in 2018/19 than across England as a whole (63% and 10%, respectively). In contrast, pension income and benefits accounted for a larger proportion of household income than across England.

It is also important to note that the employment rate also differed widely in different parts of the region:

Authority	Employment rate
Newcastle	67%
Northumberland	74%
North Tyneside	78%
Gateshead	76%
South Tyneside	70%
Sunderland	72%
County Durham	72%

The above figures were recorded to the period July 2019 – June 2020.

Many of the long-standing economic challenges and inequalities that the region has always been vulnerable to have re-emerged as a result of the Covid-19 pandemic. It took until 2016 for North East employment to return to 2008 levels following the last recession – the speed of this recovery must be faster and transport can play a key role.

Economic inactivity

23.4% of the North East's working age population (16-64) were not in work or actively seeking employment in the year to June 2020 (economically inactive).

This was above the England excluding London rate of 20.2%.

Public/private sector employment challenges

There is a gap between the North East and other regions on private sector employment density.

In 2018, North East private sector employment per head of working age population was 0.52. For England excluding London the figure was 0.62.

In March 2020, there were 53,530 private sector enterprises in the North East LEP area. This is equivalent to 325 private sector enterprises for every 10,000 adults in the North East. If the North East LEP area had the same rate of private sector enterprises per head as England excluding London, there would be an additional 26,000 enterprises.

Productivity challenges

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

- A lower proportion of the population that is in employment
- · A lower level of productivity.

GVA per hour worked in the North East LEP in 2018 was £29.94. This is below the rates for England (£35.57) and England excluding London (£32.74) It is the third lowest GVA per hour among the eight core city LEP areas.



Average productivity in our region remains **16% per head below the output for England**. (GVA) terms)

Our economy

Our places

Transport investment can be transformational in the way that people choose to live and work across the region. The region already has ambitious plans to grow and develop through the provision of new housing and commercial development.

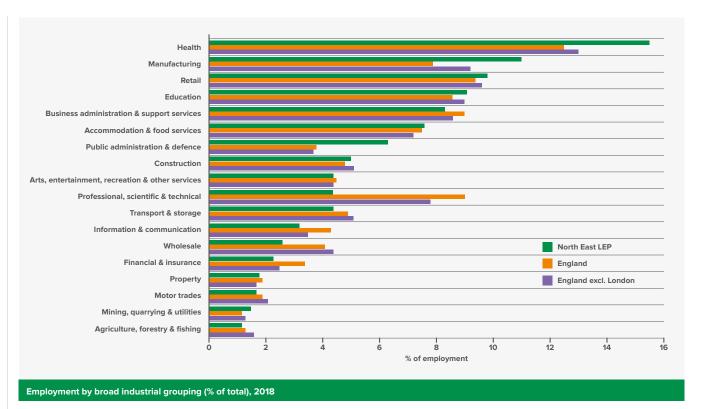
We believe central Government is currently considering its guidance in this area. Collectively, LA7 authorities are able to work together to ensure we have access to the latest thinking and best practice in design to inform their own planning policies. This can dovetail with work which will take place regionally associated with quality walking and cycling to encourage active travel and improved public health, public transport network planning, EV charging and any future car share, bike hire or micro mobility projects.



Approximately 110,00 new homes planned in the region by 2036



Addressing these challenges and embracing the opportunities will allow us to **overcome inequality and grow our economy**, by creating a faster, more attractive and affordable transport system.



The six largest employing sectors in our region are responsible for

over three-fifths of employment.While broadly similar to the national picture, our region has some

key differences:A higher percentage of employment in the North East is in

- manufacturing, health, public administration and defence
- A smaller percentage of employment in the North East is in professional, scientific and technical activities, wholesale, information and communication, financial and insurance.

The largest employing sectors in the North East are:

₹	Health	15.5% of total employment
∞	Manufacturing	11% of total employment
	Retail	9.8% of total employment
	Education	9.1% of total employment
A	Business administration and support services	8.3% of total employment
•	Accommodation and food services	7.6% of total employment

Key sectors

The North East LEP's Strategic Economic Plan (SEP) identifies four areas of strategic importance, where our region has a distinct opportunity to improve its economic competitiveness:



Digital



Advanced manufacturing



Health and life sciences



Offshore, subsea and energy technology





Digital

Our vibrant digital community is one of the most productive and fastest developing in the UK, across industry and public services. A combination of start-up, high-growth and established businesses exist across the region.

PROTO, an emerging technology centre, located in Gateshead, is home to some of the region's most innovative businesses. The Digital Catapult Centre in Sunderland provides localised and tailored services to drive digital adoption across the North East.

In the near future, the North Atlantic Optical Fibre Loop cable will link Stellium Datacenters in North Tyneside - the largest purpose-built datacentre campus in the UK - to mainland Europe, giving the region faster and more reliable digital connectivity and interconnecting national and international networks.

As well as this, our schools, colleges and universities are leading the development and uptake of digital skills.

The Covid-19 pandemic accelerated the demand, ambition and delivery of digital transformation, and has presented our region with significant opportunities as well as considerable challenges.



PROTO in Gateshead – an emerging technology centre home to some of the region's most innovative businesses



Advanced manufacturing

Across the North East, advanced manufacturing and engineering are globally focused with strong clusters in automotive manufacturing. Manufacturing accounts for 15% of our GVA and 11% of employment.

Nissan Motor Manufacturing UK, based in Sunderland, employs over 6,000 people and supports over 27,000 supply chain jobs, 75% of which are in the North East. IAMP is designated a Nationally Significant Infrastructure Project (NSIP) by the UK Government and has the potential to deliver over 7,000 new jobs over the next 10-15 years.



Nissan UK and IAMP – connecting these major employment sites to our public and sustainable transport network is a key element of our Plan.

Our economy



Health and life sciences

Our region is home to pharmaceutical manufacturing and world health and life science innovation. In combination with the NHS and our universities, this is our largest sector.

The Newcastle Campus for Ageing and Vitality is Europe's largest multidisciplinary site focused on ageing and the National Innovation Centre for Ageing will drive innovation delivery in this area.





Offshore, subsea and energy technology

There are huge economic, social and environmental opportunities for the North East to contribute to new solutions that provide clean, secure and accessible energy. Our assets are categorised into three key areas: regional energy, offshore energy and subsea technology, demonstration and innovation.

The Port of Blyth is a nationally significant offshore energy hub. In 2017, Northumberland generated the second highest amount of electricity from onshore wind of any English local authority.

A March 2020 research study found that the total number of jobs created in and supported by the supply chain for offshore wind could reach 8.600 in the North East by 2025.



Port of Blyth in Northumberland – the second largest port in the region by turnover and a nationally significant offshore energy hub

Key insight

These sectors are critical to harnessing future growth, and our transport networks have a role to play in facilitating that potential, by moving people and goods. Improving connections from our major employment sites to our public and sustainable transport network is also a key element of our Plan.

Urban events, rural getaways

On average, between 2017 and 2019, 3.4 million trips were taken each year to the North East. These equated to 1.06 million nights per year and the annual value of these trips was £656 million.

The Great North Run brings 43,000 participants and supporters to our region each year. The logistics of the event rely heavily on our transport network and it is a key contributor to our visitor economy in our urban areas.

Our rural economy, particularly in Durham and Northumberland, places a significant reliance on tourism. In 2018, tourism made up 11.8% of Northumberland's economy, 2.7% higher than the national average, and it contributes £665 million to the economy, underpinning an estimated 1,500 jobs.

The growth in 'staycations' and people seeking holidays in more remote outside spaces also benefitted rural tourism in the North East in 2020.

Transport will play a key role in enabling the recovery and growth of the region's tourism sector.

To ensure that it does, we will work with all partners and stakeholders such as individual tourist attractions, public transport operators, tourist boards and local communities to support and grow the region's tourism offer. This won't be limited to urban areas of the region, we also intend to support rural tourism.

We will also work with partners to explore ticketing initiatives and work with transport operators and tourism venues to promote sustainable travel.

We will consider future schemes which could improve interchange and integration between rail, bus and coaches, at rural stations, linking tourism assets.

Our health and social inequalities

Deprivation and Inequality

Pockets of health and income inequalities are seen across the North East, with deprivation being largely concentrated in urban areas.

Public transport provision is also poor in some of our more deprived urban areas. The 2019 Index of Multiple Deprivation (IMD) concluded that all areas of Tyne and Wear have above average levels of multiple deprivation.

Accessible public transport which allows people to reach employment, education and training opportunities outside of their immediate area can help to reduce these disparities.

In the map to the right, the darkest shaded areas are within the most deprived 10% in England, with the next darkest within the second most deprived 10%. The lightest shading shows areas among the least deprived 50%. Some of the most deprived areas in the North East border some of the least deprived areas, highlighting disparities.

Transport and socio-economic inequality are linked. Inequalities the provision of transport services are strongly linked with here people live, and the associated differences in access to mployment, healthcare, education, and local shops. Our 'Making the right travel choice' policy pages (30-32) details 'Transport (noverty' and affordability.

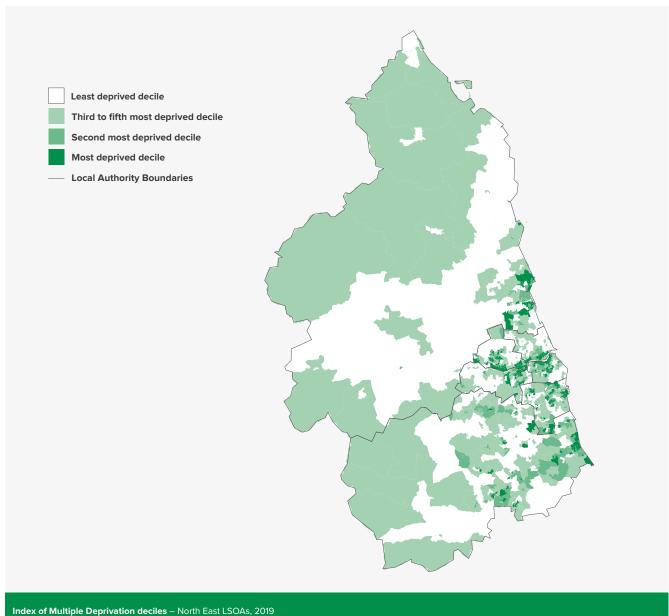
Index of Multiple Deprivation

The Index of Multiple Deprivation (IMD) combines information from seven different measures to present an overall measure of deprivation:

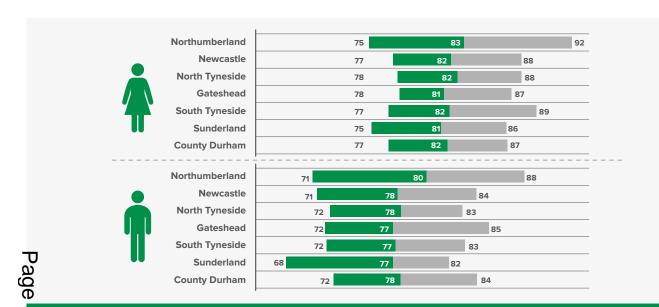
- Income Deprivation
- Employment Deprivation
- Education, Skills and Training Deprivation
- · Health Deprivation and Disability
- Crime
- · Barriers to Housing and Services
- · Living Environment Deprivation

The latest release is 2019. The map shows lower layer super output areas (LSOAs). They are the most used small area geography for statistics.

The shading clearly identifies pockets of deprivation across the North East in both rural and urban areas. Improved connectivity can allow people to access more and better jobs, stimulate increased inward investment, bring businesses closer together, and can help promote social inclusion if targeted in deprived areas.



Our health and social inequalities



Life expectancy at birth – median, minimum and maximum values within North East local authority areas, 2013-2017

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**.

Life expectancy at birth in the UK in 2017 to 2019 was 79.4 years for males and 83.1 years for females.

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

Life expectancy

Estimates of life expectancy at a local authority level are similar across the North East LEP area. However, this conceals major differences within each local authority which can be seen using small area (MSOA) data. There are gaps of nine years or more

between highest and lowest life expectancy for both males and females in all seven North East local authorities. The largest range is in Northumberland in both cases.

Disability

The incidence of disability is higher in the North East region than England, with 28% of the North East population having a disability in 2018/19, compared to just 21% across England. A person is considered to have a disability if they have a long-standing illness, disability or impairment which causes substantial difficulty with day to-day activities. We want to ensure that our transport network leaves no one behind and is accessible to all.

It is also important to recognise that people's needs and experiences vary between the type of area they live in, for example urban or rural. People also experience particular barriers to mobility and access such as people with a disability or injury, elderly people and people with hidden disabilities and conditions. We want to help eliminate barriers to using transport across the region.

Therefore, in order to ensure that this Plan is for everyone, we

will work with stakeholders such as public transport operators and disability groups across the region to ensure that the region's transport infrastructure, services and information are accessible, regardless of people's age and mobility.

Our Integrated Sustainability Appraisal (ISA) will also assess Equalities and Health impacts of our programme. See pages 49-50 Our call to action for further details on scheme assessments.

Household poverty

Between 2016 to 2019, 19% of people in the North East region were living in households with below 60% of median household income before housing costs. This compares to 17% across England as a whole.

If housing costs are included, in the North East region 35% of children, 24% of working age people and 14% of pensioners lived in households in poverty, compared to, respectively, 31%, 21% and 16% for England as whole.

Quality of employment opportunities

In the last quarter of 2019, 47,000 individuals in the North East region were employed on a zero-hours contract. This is equivalent to 3.9% of those in employment – the second highest rate amongst English regions.

In 2018, the Low Pay Commission estimated that about 74,500 employees in the North East were paid at or below the National Living Wage (NLW) or equivalent for their age group. This is 9.6% of all employees, a higher percentage than England (6.9%) and England excluding London (7.5%).

An estimated 20,000 jobs in the North East region were paid below the National Minimum Wage (NMW) or equivalent in 2019, about 1.9% of the total. This is the highest percentage of any English region.

Free school meals

In the North East, almost a quarter of pupils are eligible for free school meals, the highest proportion of any English region.



Addressing these challenges and embracing the opportunities will allow us to **overcome inequality and grow our economy**, creating a faster, more attractive and affordable transport system.

Our geography and people

The North East is diverse, comprising a mix of urban and rural communities with a proud heritage and flexible economy that make our region an attractive place to live, learn and do business.

Located between Scotland, Cumbria, the Tees Valley, North Yorkshire and the North Sea, it consists of seven council areas in two Combined Authorities:

- The North East Combined Authority (comprising Durham, Gateshead, South Tyneside and Sunderland)
- The North of Tyne Combined Authority (comprising Newcastle, North Tyneside and Northumberland)

Our mix of urban, suburban and rural landscapes results in complex demands for travel and is reflected in our varied transport challenges, from rural isolation in our remoter areas to poor air quality and congestion in parts of our cities.

Our cities, towns, villages and countryside are home to a wide range of leisure, cultural, sporting and historical attractions, including two HESCO World Heritage sites (Hadrian's Wall and Durham Cathedral and Castle). The region also boasts miles of unspoilt coastline as Cyell as Northumberland National Park.

The North East is well connected to the UK, Europe and the rest of world by rail, sea, road and air through key gateways for freight and passengers including mainline rail stations, five sea ports and Newcastle International Airport.



Our people

But above all, it is our people that make our region unique. The North East is home to just under two million people who want to contribute to moving our country forward.



Two million people



Diverse urban / rural mix



Ageing population

	Population 2019	Rural* %	Urban* %
County Durham	530,094 (27%)	45	55
Gateshead	202,055 (10%)	8	92
Newcastle	302,820 (15%)	2	98
North Tyneside	207,913 (10%)	4	96
Northumberland	322,434 (16%)	46	54
South Tyneside	150,976 (8%)	0.4	99.6
Sunderland	277,705 (14%)	1	99
North East	1,993,997		

^{*} Based on Rural Urban Classification (2011) of Local Authority Districts in England

Key insight

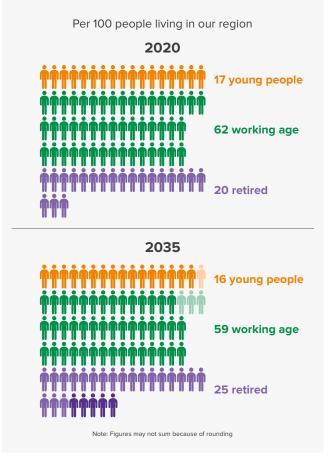
Our Plan considers different solutions for different communities across our region as we map out how to develop the North East transport network and grow our economy by 2035.

Population

Age profile

The proportion of the population that are of working age (aged 16 to 64) in the North East is 62.8%, similar to that of England 62.6%.

However, we have a larger proportion of our population aged 50 to 64 and 65+ and a smaller proportion of people aged 0 to 15 and 25 to 49 compared to the national average. This means that our population is ageing and the infographic below shows that by 2035 more of our residents are expected to be of retirement age and fewer will be of working age.



Our geography and people

Skills

The working age population of the North East has a lower qualifications profile than England as a whole. A higher proportion of those aged 16 to 64 have no qualifications and fewer are qualified to degree-level or above (NVQ Level 4 or above). However, the North East has made progress on this since 2014, with the percentage of people with higher level qualifications increasing and the percentage with none decreasing.

Education

The region's academic sector includes four major universities: Durham, Newcastle, Northumbria and Sunderland.

In 2018/19, North East universities had almost 90,000 undergraduate and postgraduate students.

The North East has nine further education colleges:

Bishop Auckland College

Derwentside College

Teast Durham College

Gateshead College

Newcastle College

- New College Durham
- Northumberland College
- Sunderland College
- Tyne Coast College

Apprenticeships

In 2018/19, there were 16,990 apprenticeship starts in the North East.

Over 80% of North East apprenticeship starts were in one of four subject areas:

- · Business, administration and law (32%)
- · Health, public services and care (22%)
- Engineering and manufacturing technologies (16%)
- Retail and commercial enterprise (11%)

Although the North East is home to just 3.6% of England's working age population, the proportions of apprenticeship starts in 2018/19 were higher:

- 4.3% of all apprenticeships in England
- 4.5% of intermediate apprenticeships
- 4.3% of advanced apprenticeships
- 4.1% of higher apprenticeships

In particular, the North East had:

- 6.3% of all apprenticeship starts in construction, planning and the built environment
- 5.8% of higher apprenticeship starts in engineering and manufacturing technologies
- 4.5% of higher apprenticeship starts in information and communication technology



We will use transport to improve health and wellbeing outcomes for local people, enabling the North East to attain health levels at least equal to other regions in the UK, achieving a **Healthier North East**.





















The infographics on this and the following pages show a range of facts and information about our transport network.

Integration

Our region currently has the basis of a fully integrated public transport network. Presently, our ticketing offer does include some products that allow interchange between different operators and types of transport. However, the complex range of brands, fare offers and timetables has significant limitations – for example not all the tickets valid on different forms of public transport in Tyne and Wear currently extend across the whole of our region. In addition, some types of ticket still exist only in paper versions rather than using smarter forms of payment, while timetables at important interchange points are not coordinated.

New technology has also helped make comprehensive information more easily available but it could be utilised to a greater extent.

herefore, by 2035 we want to create a properly integrated and fficient public transport network across the whole of our region, cluding simpler ticketing and payment, easily available and accurate travel information and seamless interchange between different forms of transport.

This won't be just limited to some transport types, our ambition is to create a one, total network approach, aligning different types of transport together. We want to create a transport network where walking, cycling, bus, rail and Metro are integrated to better connect all our of our communities.

Therefore, by 2035 we want to create a properly integrated and efficient public transport network across the whole of our region, including simpler ticketing and payment, easily available and accurate travel information and seamless interchange between different forms of transport.

Car occupancy by journey purpose and car sharing to work 2017/18

Car occupancy 2017/18









Commuting:



Overall: 1.6

of commuters car share



Congestion on our region's Strategic **Road Network and how it compares**

Strategic Road Network:

congestion = average delay

(seconds per vehicle mile)

Ranked 5th out of nine English regions for congestion Yorkshire and The Humber best, London worst

Of the LA7, five exceed national average congestion Sunderland and County Durham below average

1% improvement in LA7 between 2017 - 2018 Compared to 2% worsening in North East

12.1 seconds of delay per vehicle mile in LA7 Compared to the best, Harrow at 3.8 seconds and the worst. Sandwell at 48.2 seconds

Over last 10 years:

1.2 mins slower commute

0.5 miles longer commute

8 roads

A1(M) A194(M) A66 A184 A696

The distance, time and cost of our travel

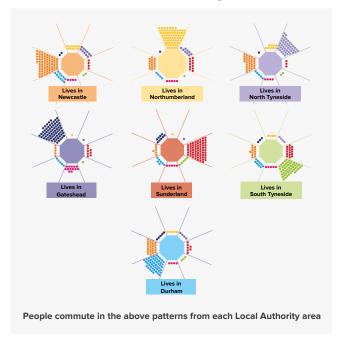


Average spend per person on all transport reasons and modes:

£1,487 pa Average spend on all transport as a proportion of median income



Travel to work - within, to and from our region





Travel to work – what transport we use

	Car driver	60.5%
广	Walking	10.5%
	Bus	10.2%
'n	Car passenger	6.9%
A	Home	3.9%
M	Metro	3.3%
\$₽	Bicycle	1.7%
	Train	1.1%
?	Other	0.9%
\triangle	Taxi	0.7%
Å	Motorcycle	0.4%

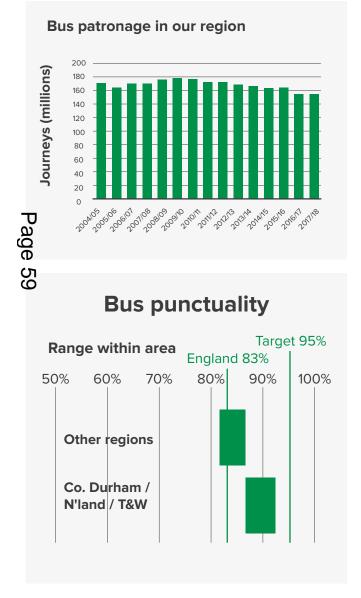
Method of travel to work - all transport modes (Source: Census 2011)

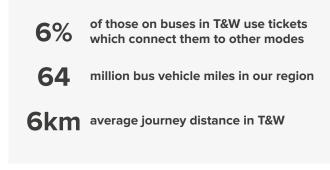
Note – the low % share of the Metro is a result of it operating within Tyne and Wear only. This table shows the total number of travel to work journeys across the entire region.

Method	Number of people
Private transport Car, taxi, motorcycle	595,000
Public transport Bus, Metro, Train	127,000
Active travel Walking, cycling	106,000
Other & home Other, work at home	41,000

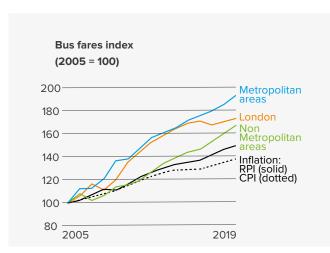
20 North East Transport Plan

Travel by bus – journeys, punctuality and how fares have risen







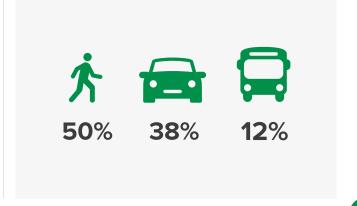


Travel to education – time, distance, numbers travelling and how



304,000 + 88,000

School age University students during term time



Travel by Metro and local rail – stations, costs, passenger numbers and what passengers want

On the Metro, the 5 most popular stations to commute to are:

Monument, Central, Haymarket, Gateshead, Regent Centre

And the 5 most popular starts to commute from are:

South Gosforth, Gateshead, Heworth, Monument, Central

ingle Metro ticket for a journey from South Gosforth to Gateshead of 3.8 miles costs £1.55 with a pop card, compared to £2.40 for a comparable journey in London between Elephant and £4.60 on national rail between Kings Cross Harringay.

Metro passengers want to see improvements in the punctuality of trains and ticket cost; and like the fair treatment, effectiveness of signage and the condition of the lighting and escalators in Metro stations.

5% of Metro journeys included use of a car to get to Metro



Tyne and Wear Metro

36 million passenger trips per year

60 stations

77.5km of electrified track

New trains arriving from 2023



Local Rail

5 million passenger trips per year

31 stations

1980s diesel powered trains



34,800 daily commuting trips

within the North East in 2018



Appealing sustainable transport choices We will introduce measures which make sustainable travel, including cycling and walking, a more attractive, greener, and easy alternative to getting around.



Safe, secure network

Safe, secure networks means people being able to travel as much as they want, whenever they choose, however they wish and to wherever they decide to go, without worries about being involved in an accident or becoming a victim or witness of crime.

A transport network needs to be safe and secure. In addition to

Active travel

high quality roads and public transport the walking and cycling conditions should also be safe in order to encourage active travel. Several studies have found that concerns about safety are a barrier to active travel. In addition to a lack of time, perceived dangers from traffic are a barrier for schoolchildren contemplating active travel to and from school. Older children travelling without an adult also have concerns about personal safety, including strangers, bullies and busy traffic. Environmental factors such as poor lighting, secluded areas or woodland on the journey exacerbate these Tears. Other studies have found that people from deprived areas pnsider safety to be a barrier to walking for travel or leisure and that women are constricted by perceived dangers from the external Phyironment. Traffic is an issue for older people and people with pbility impairments, who also mention that narrow pavements and stacles such as parked cars on pavements impact on safety and cycle tracks and bus lanes create hazards.



86% of respondents to an insight survey feel more footpaths should be built alongside current roads and 81% feel the same for cycle paths.

(Source Nexus 2020)

Public transport

Perceptions of Safety on Buses

In our region 88% of bus passengers are very or fairly satisfied with their personal safety when on a bus. This is higher than the national figure of 81%.

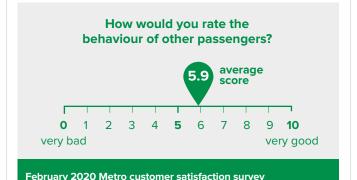
Perceptions of Safety at Railway Stations and on Trains

Nationally 73% of rail users rated personal security whilst using stations as good, rising to 75% when on board a train.

When we categorised passengers by journey purpose, commuters were more concerned about personal safety than were other passengers.

National Results by Journey Purpose	Station	Train
Commuter	69	70
Business	76	78
Leisure	76	79
Long distance	80	83
Regional	74	74
By operator		
CrossCountry	83	83
Grand Central	78	88
London North Eastern Railway	79	88
TransPennine Express	79	81
Northern	68	71

Source: National Rail Passenger Survey, Spring 2020



If extra staff were available on the Metro, which of the following would you like the staff to do?

94% Keep trains free of anti-social behaviour

Meep stations free of anti-social behaviour

Tackling anti-social behaviour is seen as a priority

Perceptions of safety on the Metro 2019 survey

Security when using public transport

This refers not only to actual incidents of crime, but also whether people believe they may be victims of, or witnesses to, crime while travelling. A number of surveys have identified that crime and fear of crime limits the use of public transport, second only in many surveys to reliability and accessibility, so that reducing the fear of crime could increase patronage by three percent at peak and ten percent at off peak times. The benefits of concentrating resources on tackling perceptions of crime on our transport network rather than actual crime are borne out by indications that the gap between perceived and actual risk is more marked on public transport than for general patterns of fear of crime.

The region's main bus operators have invested in safety measures including onboard CCTV and a vehicle location system using mobile technology is also used on many buses which immediately pinpoints the location of any bus or incident in real time, improving response times and passenger support.

Crime rates on the Metro remain low and Nexus works closely with the police to limit anti-social behaviour on the system. Nexus spends £1m a year on dedicated police patrols for Metro, and have stepped up patrols in the evening to provide customers with reassurance and to ensure that more staff and police are visible on the Metro in recent years.

North East Transport Plan — 23

Safe, secure network

Road safety

This will remain a challenge as long as anyone is killed or injured on our roads – there can never be an acceptable level or number of road accident casualties, so zero must always be our target. Despite good progress in reducing serious accidents on our road network compared to other parts of the country, we need to determine how to tackle our child (0-15) casualty rates, which are higher than the rest of England, with children in deprived communities at particularly higher risk.

In addition, pedestrian injuries still make up a high proportion of the number of people killed or seriously injured on our roads, while cyclists and Powered Two-Wheeler (PTW) riders are involved in more accidents than their respective share of the general traffic.

Total Road Casualties by Year and Severity NE LA7 area

7	,				
	Year	Fatal	Serious	Slight	Total
σ	2011	48	589	5,389	6,026
	3 2015	56	628	5,037	5,721
	2016	46	659	4,308	5,013
	2017	50	682	3,615	4,347
	2018	40	688	3,453	4,181
	2019	58	744	3,135	3,937
	2020	46	523	2,144	2,713

Walking, cycling and powered two wheelers (PTWs)

Evidence suggests that concerns about safety when walking or cycling are a significant deterrent factor. Among cyclists and potential cyclists, concerns about negotiating roads, the risk from other traffic and potential cycle theft appear to be prominent, while the most significant concern regarding walking was the possible threat from other people in a poorly supervised urban environment. The security of parked bicycles, Motorcycles and PTWs can also be a concern.

Although there has been a slight drop in the number of cyclist injuries between 2014 and 2019, the number remains too high.

Pedestrian Casualties by Year and Severity

Year	Fatal	Serious	Slight	Total
2014	18	142	519	679
2015	10	166	482	658
2016	10	164	495	669
2017	19	156	450	625
2018	16	180	426	622
2019	14	202	406	622
2020	12	116	300	428

Cyclist Casualties by Year and Severity

Year	Fatal	Serious	Slight	Total
2014	2	76	394	472
2015	1	80	371	452
2016	2	79	303	384
2017	3	85	275	363
2018	1	74	276	351
2019	2	80	273	355
2020	3	93	282	378

Motorcycle Casualties by Year and Severity

Fatal	Serious	Slight	Total
6	105	257	368
13	121	248	382
6	127	213	346
7	120	160	287
5	123	143	271
8	124	130	262
8	103	91	202
	6 13 6 7 5	6 105 13 121 6 127 7 120 5 123 8 124	6 105 257 13 121 248 6 127 213 7 120 160 5 123 143 8 124 130

(Source: North East England Road User Casualty Dashboard)

'Casualty' is defined as a person killed or injured in an accident. Casualties are sub-divided into killed, seriously injured and slightly injured.

Casualty rate per Billion Vehicle Miles by road user type

- NE LA7 area

Road user	2019	2018	2017	2016
Pedestrian	61	64	66	73
Pedal Cyclist	5,898	5,745	5,546	5,946
Motorcyclist	4,639	4,462	4,866	6,764
Car Occupant	310	327	354	428
Bus Occupant	1,398	2,060	1,929	2,633

Rate of Casualties per 100,000 Population and road user type

- NE LA7 area

Road user	2019	2018	2017	2016
Pedestrian	31	31	31	34
Pedal Cyclist	177	175	183	193
Motorcyclist	131	134	145	174
Car Occupant	120	127	134	159
Bus Occupant	86	125	120	136
Total per 100,000	197	210	219	253

Vulnerable road users (defined as pedestrians, pedal cyclists and motorcyclists) are the most at risk. These groups have much higher casualty rates per mile travelled, in comparison with the other road user groups.

This could partly explain why people are reluctant to cycle and is why we need to segregate pedestrians and pedal cyclists from cars where possible to improve road safety for vulnerable road users.

What can we learn from elsewhere?

Rating systems are available that can give an indication of service quality for cycling and for pedestrians. For cyclists this can include motor vehicle traffic volumes and speeds and the proportion of heavy vehicles. While for pedestrians, in addition to vehicle traffic speeds and volumes, pavement and path conditions and the perceived separation between pedestrians and motor vehicle traffic can be included.



In order to achieve our **Safe, secure network objective** we need to improve the safety and security, and perceptions of our region's transport system, so our residents are confident that wherever, whenever and how often they travel they can do so without fear.

Where we are now

Many of the long-standing social and economic challenges and inequalities that the region has always been vulnerable to re-emerged in 2020 as a result of the effects of the Covid-19 pandemic. We must acknowledge and address these challenges and inequalities so that we can move forward and deliver our vision and 2021 will be the point from which we start to rebuild.

Furlough

267,000 people in the North East had been furloughed at some point between March and July 2020 – **32% of our workforce**.

Unemployment

The working age **employment rate was 74.6%**, the lowest among the nine English regions May to July 2020.

Claimant count

In August 2020, almost **91,000 people in the North East LEP were claiming unemployment benefits**, an increase of over 36,400 since March 2020.

orking from home

(a) estimated that 27% of the region's workforce were working from the pome in late 2020. Post Covid-19 rates of working from home will back but certainly not to where they were and this is likely to be ong term change.

Tourism

Many businesses in the region's rural areas (e.g. self-catering accommodation, campsites, restaurants, cafes) recouped some of the income lost during early 2020. The growth in staycations and people seeking holidays in more remote outside spaces has benefitted rural tourism in the North East. By contrast, hotels and hospitality businesses in urban areas are operated at low levels of capacity. For example, in Newcastle the occupancy rate for city centre hotels was approximately 30% in summer 2020, compared to 70% in a normal summer. Low occupancy rates are a result of a lack of tourist visitors, as well as a downturn in the corporate and wedding markets.

Environment

Early 2020 gave us cleaner and quieter towns, cities and neighbourhoods. Over the coming years, we want to sustain and improve on some of the benefits this has afforded us.

Recovery

Despite the severity of the impacts felt earlier in the year, there are signs of recovery. Economic recovery in the region is expected to vary widely between sectors. For example, the arts, culture and hospitality sectors are expecting huge job losses, business closures and a recovery that will take many years. Other sectors, such as construction, are already well on the road to recovery. Transport will play a key role in enabling the region's recovery.



It took until 2016 for North East employment to return to 2008 levels following the last recession – the speed of this recovery must be faster.



Transport emissions per capita = 1.7 (tonnes CO2)

the best performing region outside of London.

Digital connectivity

2020 brought a reduction in personal mobility never seen before and changed behaviours. Covid-19 sharply accelerated the demand for internet connectivity when going online was the only way to access healthcare, education and employment opportunities.



In 2020 there has been regular reporting of **poor internet connectivity in parts of the region** – a persistent problem for North East people and businesses.



Only 2.5% of households in the North East have access to 'fibre to the premises' (FTTP), compared with 18.6% of UK households.

High streets - retail footfall

North East retail footfall has been in decline since 2015 and Covid-19 has impacted this further with a decline of 66% in June 2020 compared to last year. One of the key reasons for visiting the high street less is shop closures; as shops close, fewer people visit the high street making it less economically viable for remaining shops to trade.



Regional retail footfall

June 2020 – down 66% compared to June 2019 July 2020 – down 53% compared to July 2019



For example, if the economies of Ashington and Newcastle are **brought 'closer' together** through restored passenger rail links, there will be an the increase in the level of interaction between the two, resulting in economic growth for both areas.

Key insight

The region must meet these opportunities and challenges head-on by 2035, enabling an ambitious and productive North East in the 2030s.

Measures of success (Key Performance Indicators)

We have developed a set of Key Performance Indicators that are designed to monitor the overall progress of our Plan with respect to our five key objectives. In this respect they can be thought of as a cross-cutting set of indicators showing the direction of travel that our region needs to achieve to deliver our Plan's vision and objectives.

Sustainable travel



Sustainable journeys:

33%

Journeys made by public transport, walking & cycling

Key insight

Covid-19 has reduced the demand for public transport but greatly increased walking and cycling. Prior to Covid-19, one in three journeys were made sustainably; by public transport, walking or cycling. Because sustainable travel is greener and healthier, we want to maximise use of sustainable forms of transport to help achieve net zero and reduce demand on health services.

Target: Increase journey share



Public transport accessibility



Accessibility:

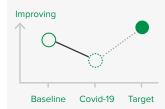
45%

People within 25 minutes of key employment, education and retail sites by public transport

Key insight

Excellent accessibility to an integrated public transport network that enhances employment and education opportunities is vital in the Covid-19 recovery. We will increase the proportion of people within 25 minutes of key employment and education sites, reducing journey times and increasing productivity.

Target: Increase accessibility



Climate action



CO2 emissions per capita:

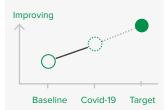
1.7 tonnes

CO2 emitted per person annually using transport

Key insight

Ranking the lowest for transport CO2 emissions per capita outside London, the North East has solid foundations on which to build the greenest transport network. This is crucial in addressing the climate emergency and achieving net-zero carbon emissions.

Target: Greener travel



Take-up of ultra-low emission vehicles (ULEVs)



0.34%

Proportion of licensed vehicles in our region that are classed as ultra-low emission (end of 2019)

Key insight

Since the end of 2015 the proportion of ULEVs in our region has doubled.
Accelerated take-up of ULEVs is an essential component for meeting net zero carbon emissions from transport.

Target: Increased adoption of ULEVs



Air quality



For 2019, the highest, median, hourly nitrogen dioxide reading was 26.9 ug/m3

occurring in the morning traffic peak

Key insight

The impact of measures to combat Covid reduced traffic levels and, consequently, reduced levels of nitrogen dioxide. For the first nine months of 2020, median levels were down by about a third. The expected fall in economic activity and an expected rise in home working will reduce transport emissions. Government support to encourage a switch from car to active travel will also reduce emissions.

Target: Improved air quality



Network performance



In terms of efficiency, in 2019 our regional network scored

71.8%

Key insight

Efficiency can improve if peak speeds improve or if free flow speeds fall. The latter may occur if speed limits are reduced or restrictions limiting speeds are introduced.

The impact of measures to combat Covid has reduced traffic levels and changed travel patterns. The most likely outcome is that network performance has improved.

Target: Improved network performance



North East Transport Plan

Measures of success (Key Performance Indicators)

Motor vehicle traffic



Estimated vehicle miles per head in our region in 2019

5,077

U Wey insight

Estimated vehicle miles per nead nationally and in the North East peaked in 2007. Obefore declining in 2008 due to the economic downturn. However, vehicle miles per head in the North East reached 5.077 in 2019, an 11% rise since 2007. Although this may fall due to the economic impact of Covid-19, without successful interventions and alternatives, motor vehicle mileage per head will likely recover and follow an upward trend in the years ahead.

Target: Managing motor vehicle mileage



Road safety – numbers killed and seriously injured.



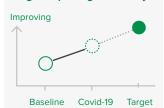
Numbers killed and seriously injured, three year rolling average (2016-17 to 2018-19).

778

Key insight

Travel patterns during the first national lockdown in 2020 were different to pre-lockdown trends, this has contributed to large differences between the casualty reductions seen by different road user groups. However, the change has led to a reduction in all severities of injury.

Target: Improving road safety



Road safety – number of slight injuries



Number of slight injuries, three year rolling average (2016-17 to 2018-19).

3,275

Key insight

The trend in the number of slight injuries has fallen recently.

Target: Improving road safety



Monitoring and evaluation

To ensure that our Plan's policies and interventions are helping to meet our objectives, we will monitor and evaluate the performance of our Key Performance Indicators and use the data to enable us to adjust our approach if necessary. Performance will be reported to the Joint Transport Committee at key points.

Individual projects will be required to submit Monitoring and Evaluation Plans within the business cases at stage gates of the framework.

These projects should undertake a detailed impact assessment of the transport, employment and economic impacts of investment in line with DfT guidance. Results will help us better understand the overall plan's performance against the KPIs. To make best use of our local and national data assets the Transport North East Strategy Unit will continue to work in partnership with:

- The seven local authorities in our region;
- Nexus:
- The Transport Accident and Data Unit (TADU);
- The North East Regional Road Safety Resource;
- The North East Local Enterprise Partnership;
- Our two Urban Traffic Management Control centres (UTMCs);
- Central Government Sources:
 - Department for Transport;
 - -the Department of Business, Energy and Industrial Strategy;
 - -the Office for National Statistics; and
 - -Public Health England;
 - Government Office for Science
- · Transport for the North; and
- Public Transport Operators.

Targets

During the consultation period for this plan, questions were raised as to why no firm targets were set for KPIs. Funding has yet to be guaranteed from Government and other sources for the schemes which will deliver improved performance in the KPIs. Once funding is received, we will consider what targets can be introduced for these measures.





What do our users think?

Ultimately, the people of the North East are at the centre of our Plan. To enable us to know what we are doing well and where there is room for improvement, we have listened to the people who use our transport network.

Their experience of using the North East's transport network is fundamental to the development of this Plan.

Their feedback informs our decisions on where change is required and ensures that the schemes we include in our implementation section are the right ones, addressing people's concerns and aspirations.

December 2020 we held 'The Big Transport Conversation' and asked the people of the North East tell us what they wanted to see from transport in the Cuture. We found that there are four key themes that per important to our residents when travelling across the region:

- · Connectivity and ease of movement
- · Health, wellbeing and safety
- Sustainability
- · Value for money.

Connectivity

Connectivity is very important to people of the North East and our Big Transport Conversation participants told us that better public transport connectivity is needed, particularly in rural areas.

There was a feeling from both The Big Transport Conversation and the Transport Plan consultation participants that new developments and neighbourhoods could be designed so that they are less car reliant.

Health, wellbeing and safety

Some of our Big Transport Conversation respondents told us that they liked some of the temporary active travel schemes that were introduced in 2020 and would like to see us encourage more active travel.

Our residents also told us that they want to feel safe when travelling on public transport and using stops and stations. Perceptions of safety whilst cycling was a key concern amongst our consultation and Big Transport Conversation participants. These findings were supported by a 2019 Sustrans survey on cycling in Gateshead, Newcastle and North Tyneside which found that 65% of men and 69% of women surveyed felt cycle safety needs to be improved. Our participants told us that they wanted to see more off-road cycle routes.

Sustainability

The environment was a key theme in responses to both the Plan consultation and the Big Transport Conversation. Requests were made for hydrogen vehicles to be considered and for more electric vehicle charging infrastructure, particularly for those without access to off street parking.

Value for money

The Big Transport Conversation told us that our residents feel that public transport fares are expensive and it is perceived to be cheaper to travel by car. Respondents also felt that an integrated public transport network across the region would provide better value for money.

In summary

We received almost 3,400 responses to our consultation which provided us with details of what our users truly require from their transport network. The themes from the consultation responses align with those from the Big Transport Conversation. However, a theme which came out strongly in the consultation was that many respondents felt that the Plan was too road focussed with too many new roads or road schemes. This was countered by many other responses asserting that the plan was "anti-car".

The feedback received through the Big Transport Conversation and consultation has helped to shape the final version of the Transport Plan and provides assurance that the schemes in our programme are the right ones for our people and our region.

All of the quotes below are from The Big Transport Conversation, 2020

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

55-64, Northumberland

'I find the waiting times for public transport make journey times so much longer, especially the lack of coordination between the various companies.'

65-74, Sunderland

'I would also like to see more talk and infrastructure around Hydrogen... This will not happen until the infrastructure is in place.'

Male, 35-44, Northumberland

'We really need to improve public and sustainable transport in rural Northumberland as we are being over-run with visitors, cars and new residents.'

55-64, Northumberland

'Motorists and cyclists should not interact on the roads. Cyclists should have designated space wherever possible, to separate them from motorists and pedestrians.'

65-74, Newcastle

'I would like to see more electric cars on the road because it stops air pollution and also helps stop climate change.'

Male, Under 13, Sunderland

'I'd like more ideas to explore and travel round the amazing North East, in an environmentally friendly way. Routes to see amazing sights, in a way that will help the environment and get fit and healthy at the same time.'

Female, 35-44, Durham



"Quick journey times compared to travelling by road."

Metro user (2018 Nexus Household Survey)

Our transport network

Over the following pages, we will introduce and discuss our current transport network and the issues that need to be addressed to enable us to deliver a world class transport network for the North East. For each component which brings together our transport network, a visionary policy statement which outlines where we want our network to be by 2035 will be set out. In the meantime, the table below shows the relationship between our Policy Statements, Policies and Objectives.

Policy statement	Policy area	Objectives it will achieve
We will help people make greener and healthier travel choices whenever they can and make sure our sustainable network takes everyone where they need to go, at a price they can afford.		<u>* 4 9 4 9</u>
We will ensure all our actions improve transport in the region and relate to the objectives of this Plan so that we are greener, thriving, inclusive, healthier and safer.		
We will help more people use active travel by making the cycle network better across the North East. This will include being flexible in how we use road space to help cyclists and pedestrians.	<u> </u>	<u>* # 9</u>
We will initiate actions to make travel in the North East net carbon zero and improve transport safety and security.		
We will improve bus travel and attract more passengers with new rapid bus corridors. This will include changing how road space is used to help buses move more quickly.	<u> </u>	
We will work with our partners to make travelling and moving goods around our region more efficient and greener.		<u> </u>
We will take action to continue to support the Ferry and develop potential improvements where possible.		
We will help more people reach the sustainable transport network with more 'on demand' solutions.		
We will make our roads flow better for goods and essential car journeys.	<u> </u>	
We will strengthen the use of cleaner, greener cars, vans and lorries.	<u> </u>	
We will invest in Metro and local rail to extend and improve the network.		
We will work with partners to make movement of people and goods to and from our region greener and more efficient.	学点	
We must work with partners to strengthen connections from destinations in our region to everywhere in the UK and beyond.	学点	<u> </u>
We will embrace new technologies to meet our transport objectives and set innovation challenges to industry creating new opportunities with our network as the testbed.		<u>* 4 8 4 8</u>
We will strive to integrate different types of transport, so that each contributes its full potential and people can move easily between them.		
We will constantly seek funding opportunities to deliver our Transport Plan objectives.		
We will take action to make travel in the North East net carbon zero and improve transport safety and security.		<u>* 4 9 4 9</u>
We will ensure that we work with partner organisations to drive new, quality roles and innovate in the transport sectors.		

Policies



Making the right travel choice



Active travel



Public transport: travelling by bus, ferry and on demand public transport



Private transport: travelling by car and using road infrastructure



Public transport: travelling by local rail and Metro



Connectivity beyond our own boundaries



Research, Development and Innovation

Objectives



Carbon neutral North East



Overcome inequality and grow our economy



Healthier North East



Appealing sustainable transport choices



Safe, secure network

North East Transport Plan



Making the right travel choice

Central to this Plan is our ambition to provide solutions to help people make greener travel choices where it is appropriate to do so and at a price they can afford.

In our region, with 56% of commuting trips under 10km and 37% under 5km, there is a significant opportunity to encourage shifts to active, sustainable and public transport types across the region, particularly in urban areas.

In 2018/19 there were 1,016 trips per person per year made in the North
East. Of these, 442 were car journeys. (NUTS1 region)

Over the coming years, we have a significant opportunity to influence how people access public and sustainable transport across the region with better quality links.

We want to get more people in the North East to use sustainable travel types, such as walking, cycling and public transport, and encourage more sustainable travel patterns to achieve all of the Plan's objectives. People want public and sustainable transport infrastructure and services to be good enough that they offer a credible alternative to the use of their cars for some trips.

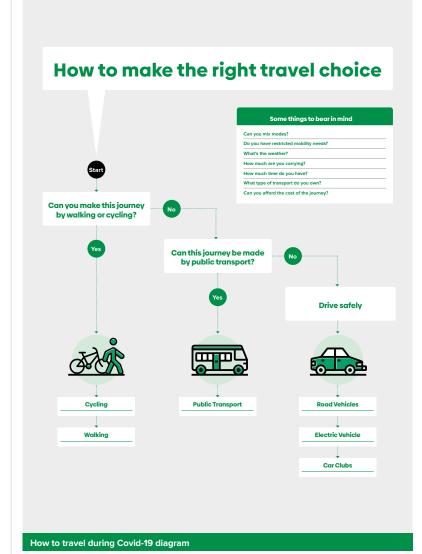
Why?

The reason behind why we want to do this is a simple one. If we can effectively help people make the most sustainable transport choice when it is viable, it will be the most cost-effective way of achieving the North East Transport Plan's vision and objectives. Transitioning the number of journeys people make onto more sustainable and public transport types will drive our economy and improve our environment.

Transport underpins our daily lives and we specifically want to encourage people to make trips around the North East. Travelling to school, to work, to shops, to care for others and to socialise with friends improves our prospects, health and wellbeing, as well as benefiting the communities and local economies that make up our region.

Helping people to make the right travel choice – Decision tree

We want as many journeys in the region as possible to be made in a sustainable way; this means people in our region stopping to thing about their travel choices before a journey gets underway. It is a "hearts and minds" exercise which encourages people to use alternatives to the car and enjoy the benefits of doing so, whilst essential road journeys for which there is no alternative can be improved as there will be fewer cars on the road.



Work is the catalyst to many journeys; and therefore we must work with businesses in our region to help them consider how they move employees around where alternatives to road journeys exist and as they newly come online during the currency of this Plan. We say more about this later in this section.

Background

The reasons why people make the travel and transport choices they do is often complicated and dependent on several factors and circumstances. which can change on a journey-byjourney basis. People's travel choices are also repetitive and often undertaken out of habit rather than journeys being thought through on a regular basis to take differing circumstances into account. It is also important to recognise that people's needs and experiences vary between the type of area they live in, for example urban or rural. We are aware that there are a variety of factors that influence a person's travel choice. For example, a person may be making a journey of under two miles but is required to carry several heavy items of shopping and therefore needs to use a car. The same person may make the same journey to the shop the following day, but as they are only buying a few items which can be easily carried, they decide to walk. For some journeys, people may be travelling alone or with others. People may or may not have a disability. Our decisions are influenced by what mode is available (or what we believe is available) and how it suits our circumstances.

Making the right travel choice

People may be persuaded to walk or cycle instead of using the car for a shorter journey in good weather, during the daytime in an area we know and where a footpath or cycleway is clearly marked. However, we are less likely to do so at night, when it is raining or in an unfamiliar location. To achieve our objectives, we must encourage and enable people to make more journeys by sustainable alternatives to the car and work to change attitudes towards public and sustainable transport. Our approach recognises that different parts of the North East have different transport needs and require different transport solutions, especially given the mix of urban and rural communities in our region. We recognise that the car will be the most suitable option for some journeys, and so we will investigate strengthening the role of carpooling and car clubs as a viable alternative when other sustainable hodes are not a realistic option.

we want to provide people in the North East with he information and awareness necessary to enable he m to move away from using the private car to re sustainable transport types when there is an alternative available for their journey that meets their circumstances.

Ensuring sustainable choices are available and accessible to everyone

People's own specific needs affect their decisions of when they choose whether to travel, and how to get there. For example, people experience particular barriers to mobility and access such as people with a disability or injury, elderly people and people with hidden disabilities and conditions.

We want to make the North East's sustainable transport more inclusive, helping to overcome barriers. We therefore commit to working with stakeholders such as public transport operators and disability groups across the region to ensure that the region's sustainable transport choices are available and accessible to benefit everyone, leaving no one behind.

	Car driver	60.5%
广	Walking	10.5%
	Bus	10.2%
	Car passenger	6.9%
A	Home	3.9%
Ä	Metro	3.3%
\$₽	Bicycle	1.7%
	Train	1.1%
?	Other	0.9%
	Taxi	0.7%
6	Motorcycle	0.4%

Method of travel to work – all transport modes (Source: Census 2011)

Note – the low % share of the Metro is a result of it operating within Tyne and Wear only. This table shows the total number of travel to work journeys across the entire region.

Transport Poverty

Transport poverty is also an important factor to consider. While transport disadvantage and social disadvantage are not the same, they do interact, resulting in transport poverty. Transport poverty refers to households and individuals who struggle or are unable to make the journeys that they need. This can be the result of low income, poor availability of public transport and needing a long time to access essential services. The impacts of transport poverty are worst for disadvantaged people in rural areas according to a recent Transport and Inequality Evidence Review for the Department for Transport. In the North East, the average weekly household expenditure on

transport was £72.40 for 2017-19. With the average weekly wage in our region being £532.50 for the same period, this means that the average North East household spends on transport 13.6% of a gross weekly wage.

Affordability

Pricing and affordability can also be a barrier to sustainable transport. People may consider that the cost of a ticket on public transport is too expensive, or may own a car and want to get maximum use out of it and cannot afford not to use it. Our upcoming Ticketing, Pricing, and Information Strategy, will provide policy recommendations linked to the Plan and look to identify ticketing and pricing solutions that make sustainable travel a feasible option for everyone in the region.

How do people travel in the North East currently?

Understanding why and how people make journey choices will enable us to transform our transport offer in a way which has never been done before in the North East. Travel patterns are complex but data shows 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. This only represents trips taken for work purposes, which is around 15% of all trips.

Accelerated by the Covid-19 pandemic, there has been an increase in the numbers of people working from home permanently or homeworking a few days a week. This means that the region must adapt to the rapidly changing economy and ensure that sustainable travel is an attractive and feasible option.

As with the rest of the UK, recent decades have seen rising levels of car use and ownership in the North East. However, car ownership in the North East is lower than all other English regions outside of London and so sustainable public transport remains important.

In future, sustainable public transport will have an even more important role to play, if car ownership reduces in the future because of changing travel habits.

Sustainable travel to work

We've already seen in the section Our transport network and travel habits that before Covid-19 we made around 595,000 journeys to work by private transport every year. This is more than twice the number of journeys to work made by all other forms of transport combined and results in peak time traffic congestion and consequent vehicle emissions, poor air quality, environmental damage and land take for car parking space together with on-street parking and obstruction.

We've also already explained that the reasons for choosing a particular means of transport to work is not just the choice of individual employees. Where employment is located, what travel choices are available, the facilities offered by each workplace and the cost and availability of travel are all vital factors influencing this choice.

We therefore want to work with employers across the region to promote and encourage sustainable travel among their staff, including helping with measures such as:

- Campaigns promoting the benefits of sustainable travel
- Incentives for employers who provide workplace facilities for cyclists (including showers and secure bike storage)
- Discounted public transport tickets and reward schemes for employees who use sustainable forms of transport.

Making the right travel choice

Where we want to be

We want to continue to expand the number of people who can use sustainable transport for their journeys. Central to this is to make it as easy as possible to travel sustainably. We recognise that the car will be the only option for some journeys and is likely to continue to be the most popular form of transport in the region. Through various interventions over the coming years, we will work towards enabling people in the North East to consider transitioning to more sustainable transport modes when there is an alternative available for the right journey circumstances. Due to our region's diverse urban and rural mix. there will need to be different solutions and expectations to successfully encourage shifts way from private cars to more sustainable diansport types. For those people who don't have ternative travel solutions to the car, we will Deliver transport solutions which will broaden the opportunity for people to make more sustainable transport choices. Information and ticketing

Over the coming years, improvements to deliver mobility options that are right for the customer, are easily accessible to all and are available in one comprehensive offer to ensure that customers can choose multiple types of transport modes will be developed. By blurring the lines between public and private transport, connectivity will be improved for all. Although in some of our rural areas transport options are more limited, by providing an information solution that embraces

solutions are central to achieving this.

Key insight

Flexible information and payment options need to align with changing travel habits, particularly as home working and shopping become ever more prevalent.

all forms of transport options, including car clubs, carpooling, the location of electric vehicle charge points, and park and ride facilities, it will be easier for people to make a clear decision on their doorto-door journey regardless of their location. By implementing solutions that showcase existing transport infrastructure that a person has at their disposal, we can be confident the package of projects which are set out later on in the Plan are ones that will encourage more people out of their cars. Our region has access to vast amounts of data from different sources; providing developers access to this through an open data protocol will enable innovative and bespoke solutions to be developed by businesses. Through this innovative partnership, transport planning and application developers can unite to create a truly revolutionary regional product. Information provided to people needs to be comprehensive and include specific journey costs, up-to-date iourney times and their environmental footprint to enable travellers to make informed decisions. Providing real-time information and live updates is also central to any information solutions, such as informing people of congestion and major disruptions. Information solutions could allow people to think through their journey choices before reaching straight for the car keys.

In a competitive market, businesses use loyalty schemes to retain their customer base through incentive offers. A regional survey undertaken by Nexus highlights how popular loyalty schemes are within the region and should be considered as a method to encourage the shift away from the private car to more sustainable modes of transport. A fares and ticketing offer that is reflective of changing travel habits and offers the best value for money is fundamental to our region. In these challenging economic times, products that are simple and affordable will open and expand labour markets by enhancing access to opportunity. Customers should feel confident that they will receive a best price promise, meaning

that a smart travel system will charge a customer the best fares possible for the journeys they have made. A survey undertaken by Price Waterhouse Cooper highlights that there is "obvious need to make pricing more "reasonable" especially when compared with the cost of a journey made in the car".

We recognise that enabling transformative change in the way people travel in our region will not be easy. Therefore, to help people transition to a sustainable alternative, we will establish a dedicated Regional Behaviour Change Team. This will look at how we can ensure people in our region can make the right travel choice and that we make the right interventions by 2035 to migrate people over to more sustainable transport types. The team will also consider:

- Information and ticketing solutions
- · Education in schools
- Marketing and information campaigns
- · Gamification incentives
- Engagement with local communities and employers
- Perceived and actual barriers to public and sustainable transport use
- –Why do people just not want to use public transport?
- -Travel poverty and affordability
- Current car club and carpool provision and where commercial models are not viable, investigate potential solutions to overcome this.

Integration



We will be bringing forward a Ticketing, Pricing, and Information Strategy to explore how integrated transport and ticketing could be implemented in the region. Our region currently has the basis of a fully integrated public transport network. Presently, our ticketing offer does include some products that allow interchange between different operators and types of transport. However, the complex range of brands, fare offers and timetables has significant limitations – for example not all the tickets valid on different forms of public transport in Tyne and Wear currently extend across the whole of our region. In addition, some types of ticket still exist only in paper versions rather than using smarter forms of payment, while timetables at important interchange points are not coordinated. New technology has also helped make comprehensive information more easily available but it could be utilised to a greater extent.

Therefore, by 2035 we want to create a properly integrated and efficient public transport network across the whole of our region, including simpler ticketing and payment, easily available and accurate travel information and seamless interchange between different forms of transport.

This won't be just limited to some transport types, our ambition is to create a one, total network approach, aligning different types of transport together.

Policy Statement

We will enable people to make greener and healthier travel choices whenever they can and ensure our sustainable network takes everyone where they need to go at a price they can afford.

We must ensure all our actions improve transport across the region and deliver to the objectives of this Plan so we are greener, more inclusive, healthier, safer and our economy thrives.



Active travel

Our growing cycle network has had £60m investment in recent years and encompasses rural and urban areas, with 16 routes that are part of the National Cycling Network. In some urban parts of our region, cycling to work has increased by 2.5 times in 6 years. The public supports measures to increase space for socialising, cycling and walking on high streets, which also benefits retailers.

Active travel means walking, cycling or journeys by wheelchair. Whilst we frequent Walking and cycling, our network should be occessible to everyone, and we will design it as such. Active travel journeys can be for any reason and includes instances where they are part of a journey involving other forms of transport, typically public transport.

We already have significant active travel assets in our region, but we want to grow the numbers of people using the cycling and walking tunnels and expand our active travel network across the region.

Our growing cycle network in our region includes 16 routes that are part of the National Cycling Network, while the Tyne Pedestrian and Cyclist Tunnels first opened to the public back in 1951.

The region's walking and cycling network has had around £60m investment over recent years both from local funding and from Government. This investment has begun to change how we view active travel and we work closely with partners including Living Streets and Sustrans to build on these successes, while taking into account the needs of all pedestrians including anyone with sensory impairments or other disabilities.

Our climate is no worse than places with higher levels of cycling



Lowest average December temperatures

Everyone benefits when more people cycle

In Central Tyneside alone, cycling:



Takes up to

16,000 cars off the road every day



Prevents

277 serious long-term health conditions



Saves

9.400 tonnes of greenhouse gas emissions



And creates

£58.8 million in economic benefit

We also need to support Councils in our region with two vital documents.

The first is their Local Cycling and Walking Infrastructure Plan (LCWIP). An LCWIP complements the Government's Cycling and Walking Investment Strategy and means a long-term approach to developing local cycling and walking, LCWIPs form a vital part of the Government's strategy to increase the number of trips made on foot or by cycle.

The second is their Rights of Way Improvement Plan (RoWIP). These set out how improvements made by Councils to their public rights of way network will provide a better experience for walkers, cyclists, people with mobility problems, horse riders, horse and carriage drivers and anyone using motorised vehicles such as motorbikes.

of Central Tyneside residents think there are too many people driving in their neighbourhood

support increasing space for socialising, cycling and walking on high streets

57% agree with closing streets outside schools at peak times

Evidence also shows support for reallocation of space to walking, cycling and socialising and measures to restrict traffic, including around schools at peak times.

of an insight survey feel more footpaths should be built alongside current roads and 81% feel the same for cycle paths

56%

of Central Tyneside residents want more spent on walking provision and 49% on cycling provision

We also know there are still many barriers to people cycling and walking. In our region currently, especially in rural areas, communities are isolated if roads lack even a pavement. Higher speed limits also deter people from walking and cycling. Matters are then made worse if any cycling and pedestrian infrastructure that is in place is in poor condition.

Living Streets emphasise that fears over personal safety can be a major barrier to walking. They point out that perceptions of risk will be interpreted differently according to the individual and in different places; women, for instance, may vary their walking routes away from guiet streets according to the time of day. Meanwhile, subways with blind corners and no clear entrance and exit points can make people feel trapped, while graffiti, litter and vandalism may also increase fears. On the other hand, suitably designed street frontages as part of the public realm will help to maximise natural surveillance and provide reassurance. It is also important that streets are well lit, with vegetation located and maintained to ensure maximum visibility.

Keeping active and a better pedestrian environment can contribute to both mental and physical health and our economy.

> Keeping active can reduce the risk of early death by as much as

and of major depression by

26%

and as a direct result of improvements to the pedestrian environment retail turnover can increase by

North East Transport Plan

Active travel

Our starting point

Covid-19 has seen a considerable increase in walking (37%) and cycling (15%) in our region between April and July 2020, with increases in cycling up to and over 100% at some locations. Sustrans suggest that people in the North East already felt positively about cycling as a form of transport and from March 2020 there were positive increases in walking, cycling and cycle sales. A further welcome development is that families have been more active outdoors together, and indications from recent Tyne and Wear surveys indicate that individuals and families expect to walk more when the pandemic restrictions are lifted.

response to this, we received £2.2m from the rest tranche of the Government's Active Travel und (ATF) which has been used to reallocate road space towards active travel. This funding activered over 30 emergency schemes in the legion and drove an upsurge in cycling and walking activity during the Covid-19 pandemic. This was supported by an additional £9m of funding awarded to our region through Tranche 2 of the same Fund, which delivered schemes to further reallocate road space to pedestrians and cyclists.

We will build upon Department for Transport developments such as 'Gear change' and the Cycling and Walking Investment Strategy to move closer to where we want to be long-term, with an even better active travel offer including not only infrastructure but behaviour change measures. Because so much active travel takes place near where people live, any initiative where everyone has been involved in its design will naturally be more popular.

However, by July 2020, 35% of insight panel respondents said they were shopping online instead of travelling to the shops, leading to less walking and cycling.

Maintaining existing and new infrastructure remains a concern. Cycling UK emphasises that: potholes, ruts, loose surfaces and ice make walking and cycling uncomfortable, and can cause serious, sometimes fatal injuries. Addressing our maintenance backlog could cost as much as £490m.

Micromobility

Micromobility refers to a range of small, lightweight vehicles which include bicycles, E-bikes, electric scooters, and electric pedal assisted bicycles. The rise of micro-mobility is evident in our region and the UK as a whole. As previously highlighted, a percentage of journeys made in our region are under 5km which are currently being made by the private car. These journeys could be replicated by these micro modes and potentially reduce congestion, air pollution and carbon emissions, whilst improving health, making our street space more attractive, and supporting the local economy. The region will work with partners to investigate the roll-out of these micro-mobility modes and integrate them to the wider transport network.

Where we want to be

We know that facilities for active travel are a vital component of our region's transport network.

We will work with partners to deliver the improvements to the relevant Key Performance Indicators (see page 26) by investing in a series of measures to make active travel an attractive option for short journeys for anyone able to make use of this method of transport.

For this to happen, walking and cycling need to be perceived to be a safe and enjoyable means of everyday travel. Like many other policies in this Transport Plan, delivery of this can only be by a partnership, involving local and Central Government, walking and cycling advocacy groups and local communities.

Our aim is for there to be no fatalities or serious injuries on the regions' road network by 2025.

This means addressing the problems set out here so that active travel can achieve the Plan's vision and objectives In designing infrastructure and solutions, we will make full use of guidelines such as the Government's Cycle infrastructure design guideline document (LTN 1/20), which shows how to deliver high quality cycle infrastructure.

Our developing cycling network requires further investment to deliver its full potential, economically, environmentally and as a way of improving health.

Therefore, communities should lead on how space is best used in their localities, so they feel confident that actual and perceived safety issues have been addressed.

We need to ensure that our towns, cities and neighbourhoods enable safe and easy walking for all, with adequate space, good design, crossings, lighting and signage so that walking becomes the natural choice for short everyday journeys and combines with public transport for longer travel.

In the early 1970s, improving public health in Finland became a priority.

A programme including promoting active travel meant that in four decades, there has been an increase in life expectancy of almost 11 years for men and 9 years for women.

On a wider scale, we also need the funding to create a grade-separated regional cycle network, and maintain it in excellent condition, that links both urban and rural communities, is designed to a common standard and has a strong, identifiable brand; this will mean cyclists do not conflict with other road users and can travel longer distances including to link into bus, Metro and rail services.

We've already said that maintenance is essential. We will look at targeting investment in maintenance activities and work with partners to ensure they get the financial resource to ensure that maintenance is completed at pace to maintain reliability, resilience and drive up the safety of the region's network.

This includes ensuring that maintenance issues can be easily reported by stakeholders. We will also secure funds for strategic maintenance activities that cannot be undertaken through existing budgets.

We will encourage highways authorities to repair footpaths / cycle ways before repairing roads.

We will always design infrastructure schemes to include cycling and walking.

The rest of this Plan contains work programmes aimed at transforming our urban and rural environment, to achieve what we have said in this section.

Policy Statement

We will help more people use active travel by making the cycle network better across the North East. This will include being flexible in how we use road space to help cyclists and pedestrians.



Public transport: travelling by bus, ferry and on demand public transport

Buses

Public transport, including the bus network, is instrumental in enabling economic growth. It enables people to get to work, school, shopping, health appointments and everything else that is vital. Without it, a great swathe of our population could not travel as they do now, leaving them isolated, or dependent on cars.

Our region's reliance on buses is demonstrated the 162.4million bus passenger journeys in 018/19, making buses our region's most-used rm of public transport.



Only 68% of North East households own a car, compared to 74% nationally

2019/20 saw bus operator investment delivering results with a notable increase in passenger numbers in some parts of our region, in contrast to a long-term decline over previous years and the national picture. This investment has seen new vehicles that feature emissions controls, passenger real time information announcements, wi-fi and charging sockets, and new depot facilities to ensure effective, up-to-date maintenance. As a result, the October 2019 Transport Focus survey showed overall bus passenger satisfaction in our region remaining high at 91%.



Bus journeys by purpose



89% of bus services are commercially operated.

The vast majority (89%) of all the bus mileage in our region is operated on a commercial basis, whilst the remaining is subsidised by the local transport authorities.

These subsidised services cater for passenger demand that is enough to demonstrate a need, but not sufficient to sustain a commercial bus service so extra public sector financial support is required. The bus network varies across our region; in large towns and cities it is much sparser at night-time and on Sundays than during the daytime, while many smaller towns have fewer buses and our smallest rural villages perhaps only one per week or sometimes none at all. Customer facilities range widely from high quality city centre interchanges to bus stops with only a flag and perhaps a timetable display.

Coaches are part of our tourist offer and have a role in school transport in Northumberland and Durham, together with educational activities.

Our region's bus and coach sector employs around 8,000 people, which makes a further vital contribution to our economy.

We want to upgrade and improve our Park and Ride offer and increase the use of existing facilities in our region to encourage more people to continue their journeys by bus. This is fully explained in the Roads section on page 37.

Our starting point

The Covid-19 national lockdown's immediate impact was a dramatic fall in patronage on all public transport, with corresponding service reductions. Coordination between our local bus operators and our two Combined Authorities has been constructive throughout the Covid-19 pandemic, with agreement about which services are most needed, different bus companies accepting each other's tickets and joint contributions to a face covering awareness week. We are working to build on this close cooperation to help improve our local bus network further. The network is returning to pre-Covid levels, although we need to remember that passenger numbers could remain low both because of concerns about Covid-19 and lifestyle changes with less travel. In July, 35% of participants in a transport insight panel said they were shopping online instead of travelling to the shops, and over half said they working from home more. Over a third of participants intended to use public transport (not just buses) less when things return to normal. If this trend continues it will have a major impact on bus usage, given that the table earlier shows that 27% of bus travel is for shopping. There is also a positive point to emerge: consistently from April to July, around 75% of participants said bus operators had responded well to the pandemic, which hopefully bodes well for the future.

As regards the transport decarbonisation agenda, the region's bus operators continue to equip their fleet with better technology and accompanying maintenance regimes to reduce emissions. Whilst welcome progress has occurred, only around 32% of the commercial bus fleet in our region will have the latest "Euro VI" standard engines by the end of 2020.

Where we want to be

We know how important buses are to our transport network and therefore to so many people. We also know there are parts of our region with little or no access to a bus and the survey quoted above, if applied to our region, suggests too many of our region's population don't see buses as an attractive form of travel. Tackling these issues needs partnership between all the Authorities in our region, our bus operators and Central Government.

Our immediate task is to secure the survival of our region's bus network in at least its present form. To do this, very significant levels of on-going funding from Central Government are needed in the short term for the bus network, so it does not stop playing its vital role in the life of our region of firstly serving anyone who relies on buses to get around and secondly driving car users away from their vehicles.

Public transport: travelling by bus, ferry and on demand public transport

As well as this, we must also help buses travel faster and more reliably around our region. This will mean dealing with the many traffic "pinch points" in towns and cities across our region, including lack of capacity for buses at river crossings, that particularly affect buses and make journey times longer and more uncertain, which deters passengers and increases bus operator costs. But tackling these piecemeal, although important, is not the full answer. Major investment is needed in long-term solutions, including radical new rapid bus corridors offering faster, more reliable journeys through bus priority schemes such as bus lanes, together with lower fares, greener vehicles and better frequencies. These step changes will help overcome the less than excellent image that bus services have in the minds of many in our region.

We must also address the sparsity of transport in our rural and other isolated areas, where different solutions are needed such as demand responsive transport.

T When improvements such as bus priority on the road network, tegrated ticketing, better information, incentives to change travel Phoices and greener vehicles are all combined, people won't see buses as slow, expensive and inconvenient. Instead, buses will play **b** even greater part in enabling economic growth, achieving better and more equal outcomes for communities, and contributing to healthy and vibrant places to live and work in our region.

As well as all these measures, we will encourage all the Councils in our area to take active steps to make bus travel more appealing than using a car.

Policy Statement

We will initiate actions to make travel in the North East net carbon zero and improve transport safety and security;

We will improve bus travel and attract more passengers with new rapid bus corridors. This will include changing how road space is used to help buses move more quickly;

We will work with our partners to make travelling and moving goods around our region more efficient and greener.

The Shields Ferry

The Shields Ferry links North and South Tyneside for pedestrians and cyclists in a way that nothing else can. Taking just 7 minutes to cross the river Tyne, it carried 374,529 passengers in 2019.

Background

Operated by Nexus, the Ferry runs up to every 30 minutes during the day and serves as an important connection for work, leisure and tourism. There are two vessels, one in use and one kept as a spare.



Satisfaction with the ferry service is particularly high, with overall satisfaction rated a score of 9.4 out of 10 and value for money rated 9.5 out of 10.

Our starting point

Like all other forms of public transport, the ferry experienced an immediate fall in patronage as a result of the Covid-19 lockdown. The service was severely curtailed but is now getting back to the pre-Covid timetable. However, although usage has been rising, by September 2020 it was still only around 53% of the pre-Covid level and is likely to remain so into 2021.

Where we want to be

If the ferry is going to continue to be an important part of the region's sustainable transport network, it is vital that passenger numbers are increased and the ferry made more sustainable through a reduction in its emissions, with new, greener vessels. We will support Nexus in delivering their Ferry Strategy action plan published in 2019.

Policy Statement

We will take action to continue to support the Ferry and develop potential improvements where possible.

"On demand" public transport

Promoting existing public transport alone will not encourage car users away from their vehicles. Getting to and from a station or bus stop, and the accompanying information to support that choice, is a vital part of the journey, otherwise the only option is to rely on a car.

Background

Integrated public transport on demand feeds into the wider public transport network at "hub" points – major bus stops and stations, Metro and rail stations and interchanges. Available options may depend on location; for instance, anyone living in or wanting to visit isolated (particularly rural) areas of our region may find that distance and lack of alternatives makes them reliant on a car. By 2035, we want to provide more demand responsive transport options for people, leaving no one and nowhere behind when it comes to transport provision. We also want to replicate successful examples elsewhere of on demand transport as an alternative to secured bus services, which would offer a more flexible service for isolated communities while allowing us to reallocate funds to other public transport in our region.

Where we want to be

Our current public transport network cannot serve all parts of our region and all times of day equally well. To serve anyone without a car, and to encourage others to make the switch away from cars, a combination of existing and radical new solutions is needed. Investment is needed, particularly to provide our rural and other isolated communities, and the people who want to visit them, with financially and environmentally sustainable options, together with good, integrated information on what is available. In addition, night workers now account for nearly 15% of employees in the wider North East (including Tees Valley) which is the highest proportion of anywhere in Britain. These workers play a crucial role in our nation and our region. On demand services have great potential here and we could offer advice about setting them up. For example, a factory may want to organise bespoke transport around shift times using (with the employees' consent) a database of everyone committed to paying for transport together with their home addresses. Employees

Public transport: travelling by bus, ferry and on demand public transport

would then be confident of having door-to door transport, which would also overcome concerns about walking to or from bus stops late at night. Similar services for schools could be accompanied by an app activated by school bus passes, assuring parents of their children's safe travel to school. Therefore, we also need a range of on demand services to close the gap between everyone's travel origins and destinations. By 2035 we will have in place technology solutions for journey planning, booking and payment catering for all forms of transport which are currently being trialled to deliver efficient, integrated public transport on demand across our region leaving no one and nowhere behind when it comes to transport.

Taxis also have the potential to play a big role in any on demand solution, and we say more about what else they do in the next section.



We have nearly 9,000 licensed Hackney Carriages and PHVs in our region, with each of our seven Councils having its own taxi policies that suit local needs.



To improve the environmental and air quality footprint of our taxi fleet, external funding has been received from the Office for Zero Emission Vehicles (OZEV) to install charging facilities specific to the taxi trade.

In this Plan, we use the term "Taxis" to cover both Hackney Carriages and Private Hire Vehicles. The differences between the two are:

- A Hackney Carriage can use a designated rank, can be flagged down in the street and can be pre-booked. Most large stations, transport interchange and town and city centres have ranks for Hackney Carriages.
- A Private Hire Vehicle can only be pre-booked.

Taxis provide flexible, on-demand transport, available round the clock. They make a vital contribution to the night-time economy of villages, towns and cities. They also cater for a cross-section of the community whose travel needs are not catered for by existing sustainable transport, such as anyone who needs a door-to-door journey.

Taxis are also valued providers of school transport (particularly for

Children with Special Educational Needs and Disabilities) for each of the seven Councils in our region.

We estimate that each year, households across our region make around 21million taxi trips and spend a total of about £64m on taxi fares (giving an average taxi fare of around £3), all of which means income for taxi firms and individual drivers, many of whom are self-employed. Given the nature of many of the journeys made by taxi, even if the existing public transport network ran at high frequency 24 hours a day, 365 days per year, there would still be a vital need for taxis.

We've already mentioned taxis and one of the roles they can play. Given their high profile, especially in the urban core where congestion and emissions may be highest, we want to see a green taxi fleet in our region with a switch to low/zero emission vehicles for which we intend to provide more and better charging infrastructure. External funding has already been received from the Office for Zero Emission Vehicles (OZEV) to install charging facilities specific to the taxi trade; we've already got 10 electric vehicle charging points especially for taxis and we want to increase the number of taxis powered by electricity and other sustainable fuels.

Coaches



Coach travel plays a vital role in transporting people to, from and around our region every day. One coach can keep perhaps 28 cars, or one mile of

traffic, off the roads, contributing to savings in carbon and nitrogen oxide emissions, particularly if it has the latest Euro VI engine.

Coaches provide an environmentally sustainable way for people on holidays and short breaks to visit our region's many attractions.

In doing so, they support our tourism industry, contributing to the around 75 million visitors a year who spend £2.4 billion in our region and Tees Valley. They play a crucial role in taking children to school every day, enable social clubs, societies and other groups to enjoy visits and days out, take sports teams and their supporters to games and ensure people can still get where they need to go during rail engineering works.





Policy Statement

We will initiate actions to make travel in the North East net carbon zero and improve transport safety and security;

We will help more people reach the sustainable transport network with more 'on demand' solutions; and

We will work with our partners to make travelling and moving goods around our region more efficient and greener.



Private transport: travelling by car and using road infrastructure

The North East's road network is instrumental in enabling economic growth and unlocking opportunities for people. Roads also enable connections to new housing and employment developments. We aim to grow the proportion of people travelling using sustainable modes, to improve road safety, to reduce congestion, and to meet climate change targets. Regionally promoted road schemes will be subject to rigorous environmental and other tests to confirm their delivery and roads must work for all road users such as cars, buses, cyclists and pedestrians. We intend to publish a Road infrastructure and Zero Emissions Strategy which will build on this. Schemes which cannot prove their net benefit to helping the region achieve its transport vision and objectives are therefore less likely to be prioritised regionally.

Our current network is divided as described below:

Road Network

Description

Features

T Strategic Road

(D Network (SRN)

National A Roads and Motorways form part of the SRN managed by Highways England. Examples include the A1, A19, A66 and A69 within the region.

The SRN in the region has a combined length of 1,511 miles. The network provides the region with the important national and pan Northern connectivity for goods and people as well as for intra-regional journeys.

76



Major Road Network (MRN) The MRN as defined by Department for Transport and Transport for the North comprises the most economically important and high flow routes that support the Strategic Road Network (SRN) and link to economic centres.

The roads that make up the MRN remain Local Authority controlled and maintained

The MRN in the region comprises 3,389miles. This network can be characterised by routes that connect major centres, ports and airports and centres of industry to the strategic road network as well as those routes that provide relief to the Strategic Road Network.

Local Highway Authorities are responsible for the operation and management of this network with investment strategies coordinated by Transport North East and Transport for the North.



Key Road Network (KRN) The KRN in the region is the network which represents the regionally economically important movement routes and supports the function of the MRN and SRN. The KRN routes typically have a strategic function around routes that carry large numbers of people and goods, congestion corridors, 10 or more buses per hour in urban areas or six in rural locations.

Local Highway Authorities are responsible for the operation and management of this network with investment strategies and in part Urban Traffic Management functions coordinated by Transport North East.



Local Roads

Local Roads form the vast majority of the region's network and are

The Local Road Network across the region comprises of 7,341miles across the region. These roads are managed by fundamental to everyday journeys. Local Highway Authorities across the region

Combined Effect

The Road network across the region interfaces with every journey we make from door to door on a daily basis.

This Plan will place effective strategies across all road typologies around delivering a safe, well maintained network that provides journey reliability.

We equally must ensure that the environmental credentials of road use from the vehicles that use it and the infrastructure that carries them deploys the most sustainable solutions.



North East Transport Plan

Private transport: travelling by car and using road infrastructure

Our road network accounts for 88% of all commuter journeys per day across the region and provides substantial connectivity for passenger and freight movement, in both rural and urban areas. The North East has a combined road network length of 12,241 miles enabling cars, freight vans, lorries, buses, taxis, and cyclists to get around our region. Around 10 billion vehicle miles were driven in 2019.

It needs to operate more efficiently - for example, there is significant scope to improve the flow of vehicles: 100% efficiency means that all traffic is flowing without any hold-ups or delays, but our network currently operates at 71.8% of this. While our Urban Traffic Management Centres have significant assets, from connected signals, Variable d react to information, there is clearly more that the done.

ar ownership in the North East

As with the rest of the UK, recent decades have seen rising levels of car use and ownership in the North East, albeit in our region it remains lower than elsewhere.

Congestion

Our region has significant road congestion problems including on arterial routes and into the centres of Durham, Newcastle, Gateshead and Sunderland. Congestion on the local road network can lead to impacts on the Strategic Road Network, with extra short journeys on the SRN (i.e. for a small number of junctions) prevalent on the A1 and A19. Data from TomTom shows journeys take on average an extra 15 minutes in the peak period in Newcastle and Sunderland. This results in lost time to the economy and has negative road safety and sustainability implications such as poor air quality. This can impact on the reliability and therefore attractiveness of bus services. Congestion in our region is estimated to cost around £400 per driver per year according to Inrix.

Percentage of North East households ¹	2002/03	2018/19
With no car or van	37%	28%
With one car or van	44	40
With two or more cars or vans	20	32
Cars/vans per household	0.86	1.10

The busiest link in the region is on the A1 Western Bypass between junctions 73 (Bells Corner) and 74 (A69), and it saw an annual average daily flow in 2019 of 104.999 vehicles.

On sections of our network including the A1 Western Bypass we are reaching the limits of where we can reasonably upgrade the road to address capacity constraints and this is in the forefront of our planning. Congestion is also worsened by our geography. Around the and other opportunities but cannot easily This is also the case in Sunderland. South and affecting junctions on our road network and causing congestion and delays.

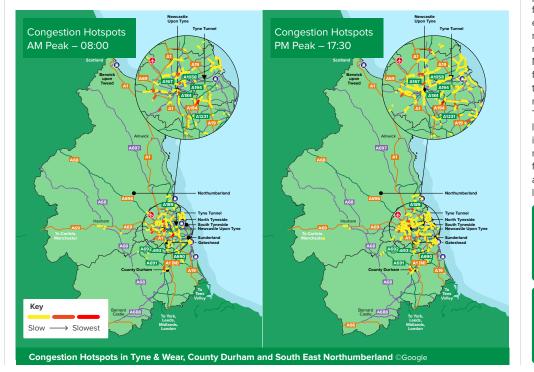
riverbanks of the Tyne and the Wear, some communities are spatially close to employment reach them. This can result in deprived urban communities becoming isolated from nearby jobs and training. In Durham, East-West linkages often involve vehicles routing through the city centre. North Tyneside and South East Northumberland.

Environment

Road transport significantly contributes to poor air quality. It is estimated that poor air quality is responsible for around 360 deaths each year. To deal with this. Councils in Newcastle. Gateshead and North Tyneside have been working together to develop proposals for improving air quality. These proposals will result in a "Category C" charging Clean Air Zone covering Newcastle city centre that affects non-compliant buses, coaches, taxis (both Hackney Carriages and Private Hire vehicles), heavy goods vehicles and vans. The original date for implementation of January 2021 has been postponed due to Covid-19.

Maintenance

Good maintenance of all roads, cycleways and pavements is essential to keep traffic and people flowing. It is also crucial to our economy and environment. Around 2% of the region's principal road network and 5% of the non-principal road network requires urgent maintenance attention. Maintenance requirements can often be different for rural locations, due to climate impacts and the remote and exposed nature of some of the network, rather than because of traffic volumes. This can impact on the safety of the network and leave communities isolated. Structural integrity is a key consideration of this Plan, with the need to maintain assets to avoid catastrophic failures. Many such assets were built in the 1960s and 1970s and are reaching the end of their life expectancy.





Road transport contributes the most out of any sector to carbon emissions (37% across our region)



North East Transport Plan

Private transport: travelling by car and using road infrastructure

Heavy Goods Vehicles are disproportionate contributors to pollution, representing less than one tenth of all vehicles but roughly 40% of their carbon emissions

Park and ride

The region has an established Park and Ride offer with our current sites providing over 4,300 spaces at:

- 30 Tyne and Wear Metro stations
- Three sites in Durham city centre (bus-based)
- Newcastle Great Park (bus-based)

19 National Rail stations across the area.

Park and Ride provision removes car traffic from when and city centres where congestion and collution are highest. It therefore helps improve quality and enhances our economy by tackling engestion. 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. The research found that people choose to use Metro Park and Ride due to the cost and lack of parking near their destination.

Durham's Park and Ride sites are aimed at reducing congestion in the city centre. Demand for these is high and the sites benefit from single payment options and buses into the city every 10 minutes. Newcastle's Great Park site, located just off the A1, is an operator-led facility that offers free parking and buses into Newcastle every 15 minutes.

We want to upgrade and improve our Park and Ride offer and increase the use of existing facilities in our region to encourage more people to continue their journeys by public transport.

Car Clubs

Within the region, car clubs play an active role in

enabling people to make a journey by car without owning their own vehicle. Car club vehicles are located in a whole host of areas including rural communities, inner city locations where parking is restricted and near railway stations and public transport hubs . This helps to reduce the number of car journeys made on our roads, in turn reducing congestion and helping to tackle climate change.

Zero Emission Vehicles

As we emerge into a new era of energy generation and use, the region has a clear opportunity and advantage to accelerate the uptake of cleaner fuels. As of 2020, there were 2,960 registered electric vehicles (EVs) and over 800 public chargers in our region. Sales of new EVs are expected to grow globally from 2.5 million in 2020 to 11.2 million in 2025, reaching 31.1 million by 2030. We managed a regional Go Ultra Low (GUL) programme from 2018 to March 2021 to encourage the uptake of Ultra low LEVs. This included the UK's first electric vehicle charging station in Sunderland (opened in 2019) and a network of 11 rapid charging hubs to support the uptake of Ultra Low Emission Vehicles. The region is also investigating opportunities to ensure that the existing EV charging estate (many of which were installed in 2012) continues to perform. Other forms of fuels such as hydrogen, Liquid Petroleum Gas (LPG) and completely new technologies are being investigated through organisations such as Integrel and the North East Automotive Alliance. We can use this work as a catalyst for change in the region.

Motorcycles and powered two wheelers (PTWs)

According to the North East's latest "method of travel to work" data, Motorcycling is the lowest transport mode of choice for commuters (0.4%). However, it is likely that they are more often used as a leisure activity and Motorcycles do make more efficient use of road space. Our Active Travel policy section details micromobility.

The Tyne Pass project will introduce barrierless charging which is due to be put in place at the end of 2021. This scheme will bring benefits to the region in terms of reduced carbon emissions and the creation of new local jobs.

Freight Consolidation Centres
The greatest impact of freight
transport may be felt in the
last mile of the journey, where goods
are being delivered to congested town
and city centres with safety concerns
due to limited road space. Freight
consolidation hubs and low carbon
last mile freight deliveries enable
goods to be dropped at the edge of
the urban core, consolidated and then
to make the final part of the journey
on fewer, greener vehicles.

Road Safety

Every incident across our road network, no matter how minor or severe, is one too many. Across a three-year rolling average (2016-17 to 2018-19), 778 people were killed or seriously injured on the region's roads. Safety of all road users is a priority. Our Safety Camera Partnerships with the two Police Forces across the region, in conjunction with the monitoring work undertaken by our Councils and Traffic Accident and Data Unit, provide the ideal platform to take decisive action.

Tyne Tunnels

Our Tyne Road Tunnels are an important part of the region's transport network and before the Covid-19 pandemic average use was 55,000 vehicles per day or 16.7m journeys per year.

Urban Traffic Management Control and Intelligent Transport Systems

Over the past decade, the region has invested heavily in our Urban Traffic Management Control Systems (Tyne and Wear and Durham) which aim to provide key information to enhance reliability and efficiency on the network. This includes information of car parks and for 750,000 vehicles per day on the network through cameras, Variable Messaging Signs (VMS) and Real Time Information (RTI). The centres deal with 3, 000 incidents per year. The Tyne and Wear UTMC currently has 276 signals (junctions and pedestrian crossings) connected to UTMC, with plans for another 142 connected in the months to come. In Durham 138 signals are connected to the system that can be controlled. The centres have further camera, VMS and real time monitoring equipment. The region has developed an ITS Strategy group which is developing plans for improving the efficiency of the road network.

Our Starting Point

The Covid-19 crisis generated a dramatic fall in vehicle traffic across our region. At the end of March 2020, weekday traffic had reduced by 60% leading to a reduction in congestion and an improvement in air quality. Road traffic volumes in the region have increased rapidly as lockdown restrictions have eased but, in October 2020, we remained circa 13% below expected road use on the region's network. In September 2020, occupancy of our 10 Park and Ride sites, which are on our Urban Traffic Management and Control (UTMC) system, was down by 78% when compared to the same period in 2019.

During the first national Lockdown (March and April 2020) use dropped to approximately 17,000 vehicles per day, which is 30% of normal levels.

In July 2020, 36% of participants in a Nexus insight panel said they were now "extremely" concerned about Covid-19, and over half said they would be working more from home. Although this is only a

Private transport: travelling by car and using road infrastructure

snapshot in time, it could well reflect what people may be thinking now, with a resultant impact on their travel patterns. Despite this, by the summer months traffic was gradually increasing before the local Covid-19 restrictions put in place from mid-September 2020 saw levels drop off again. Traffic is currently at 74% of normal levels.

The performance of the tunnel can impact on many surrounding routes including river crossings in central Newcastle and the Strategic Road Network. The region monitors the performance of the crossing to ensure it is maximizing its potential in an important North/South link in the region.

Car Parking levels on weekends in September 2020 were down by over 30% compared to the same period last year, demonstrating lower footfall in some of our major retail centres and the impact the virus on the leisure and hospitality sectors.

Within the overall reduction in traffic, travel
Datterns have changed, including a reduction in
traditional peak-time volumes.

Aitudes towards the improvements in air quality as a result of the lockdown are also noteworthy: nearly half the respondents to the July 2020 insight panel we've just mentioned felt we should build on this improvement, and 71% believe the improvements should at least be maintained.

We've already explained the importance of maintenance, and a well-maintained transport network should contribute to the reduction of accidents and incidents. Once a road network is brought into good condition, money can be saved by not having to do more costly reactive maintenance in response to faults.

Road maintenance across the region is typically funded through the Highways Maintenance Block, Highways Maintenance Challenge Funding and specific pothole actions. However, the March 2020 Annual Local Authority Road Maintenance (ALARM) survey identified a huge maintenance backlog in our region that may cost around £700 million to deal with. Without a major injection of

We want to keep everyone safe when travelling across the region's road network. The UK ranks highly in Europe for Road Safety with road fatalities dropping 39% from 2007-2017. Our performance has since plateaued, and we must take action to improve road safety working with all partners delivering safer people, safer vehicles and safer roads

funds, this situation is set to get worse as Councils spend more money on other highway assets, such as bridges, cycleways and drainage work, will cope with the increased incidence of extreme weather events.

Where we want to be

We will ensure continued recognition that our road network is a central part of our region's transport network and is funded accordingly. Successful working with partners to deliver targeted improvements to network efficiency through investing in a series of measures on the Key Road and Major Road networks. Network management concerns are addressed by implementing measures to enable real-time decisions to be taken across the road network, supported by strong management policies to maximise its effectiveness.

We aim to reduce the number of fatalities or serious injuries on the region's road network. Partnership working to understand patterns of incidents and the likely cause, to inform how we can prevent them. We will take decisive action on the environmental performance of the road network (given road transport is responsible for most transport pollutants), including addressing the harmful pollutants associated with road use. We will ensure the Plan and the schemes that we promote in the region clearly play their part in improving the region's air quality. Consideration

will be given to all measures to improve the environmental performance of the road network, including but not limited to investing in durable road infrastructure, increased Electric Vehicle charging coverage and supporting a transition towards alternative fuels including but not limited to Hydrogen. There will be proper allowance for any climate emergency measures that may be needed.

Our upcoming Roads infrastructure and Zero Emissions Strategy will build on the themes and aspirations which we have set out in this section, including recommendations for road freight. We will also publish a Zero Emission Vehicle Policy prior to the publication of the Strategy which will set out in more depth our aspirations to support the roll out of zero emission vehicles across the North East as well as the expansion of the region's EV Charging infrastructure to meet rising demand over the coming years.

We will investigate opportunities to advance the role of car clubs in our region especially in those areas where there is currently no viable commercial business model; these areas are often where a car club facility would be most beneficial.

We'll maximise the opportunities provided by investment in the road network. This includes reducing severance, ensuring the network works for all users and addressing environmental concerns around noise, air quality and flooding. We will also deliver digital connectivity upgrades to make the network ready for connected and autonomous vehicles at scale, implementing the recommendations of the National Infrastructure Commission.

We will work with partners to ensure they get the financial resource for targeted maintenance investment to complete maintenance at pace. This will ensure reliability and resilience and drive up the safety of the region's network.

Another part of our Plan is to make sure there are effective measures in place for maintenance

issues to be easily reported by stakeholders. Alongside this, we want to achieve cross-industry working so that statutory assets can be managed and maintained in a coordinated way. A further key focus will be securing funds for strategic maintenance activities that cannot be undertaken through existing allocations. UTMC and ITS infrastructure plays a vital part in managing the region's transport network through information, controlling signal timings and assessing the speed and performance of the road network. We want to maximise the potential of this infrastructure investment by putting in place the resources to act on data gathering and provision, appropriate strategies across the region and develop consistent multi-modal information feeds for all road and public transport users.

We will ensure the Tyne Tunnels operate and are maintained and to formulate plans for 2037 when the Concession ends. The Planning may start from 2030 as to what shape the next model will take. Where infrastructure development solutions are the right approach the region will plan to ensure these do not adversely impact on the existing network and its users and surrounding communities. This includes where there are competing priorities for space. We will work with all partners and stakeholders to ensure that strategic priorities are achieved as established elsewhere in this Plan and the optimum solution is found ahead of the formal development of a scheme and consents being sought.

Policy Statement

We must make our roads flow better for goods and essential car journeys.

We must strengthen use of cleaner, greener cars, vans and lorries.

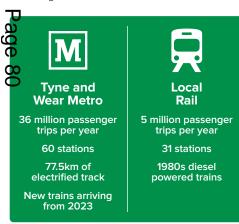


Public transport: travelling by local rail and Metro

We want to integrate and expand the reach of Metro and local rail into more communities, benefiting more people's lives across the region.

Background

Our Metro and local rail network plays a significant part in supporting the North East's economy, contributing up to £224 million each year. There are 533 route km of rail lines in the North East and our ambition is to improve, expand and integrate our network.



Over the past 40 years, the rail network in the North East has developed in two very different ways.

Much of the local rail network in Tyne and Wear was converted into the Metro system. It has continued its role at the heart of the local economy by transporting tens of thousands of people by rail to work, education and other activities each day.

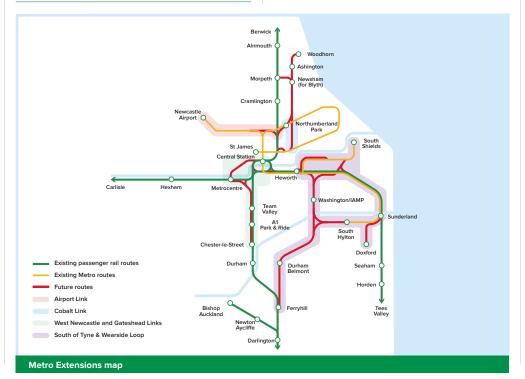
The remainder of the local rail network has continued through decades of closures and cutbacks, maintaining some connectivity but characterised by poor-quality trains and low service frequencies.

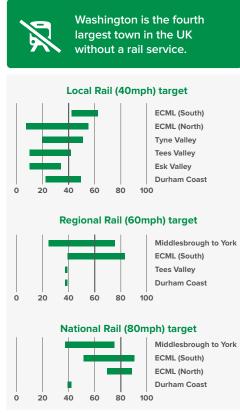
Rail connectivity remains a challenge to some of the more remote rural and deprived urban areas of the region.

There are large areas and communities in the region that do not benefit from rail services at all because there are no local routes or stations, or they are hampered by the limitations of existing services.

Our view is that we can make much more of our region's railways. In recent years, we opened a new local rail station in Horden, County Durham.

Over the coming years we want to expand the reach of local rail and Metro into more communities, benefiting more people's lives and unlocking access to opportunities such as restoring passenger services on the Northumberland Line and reopening the Leamside Line. We are already progressing schemes for delivery such as restoring passenger services on the Northumberland Line and removing constraints on the Metro network (Metro Flow project).





Key insight

We have enormous potential to exploit under-used and disused railway assets and alignments across the region. Network extensions and service improvements could alleviate road congestion, providing sustainable access for all.

Public transport: travelling by local rail and Metro

These aspirations are expressed in a Metro and Local Rail Strategy, which is to be refreshed in 2021.

Every journey made on our local rail and Metro network is worth £8.50 to our region's economy through the wider benefits it delivers. The case for improvement and expansion is simple: the more people who travel, the greater the benefits to the North East.

Tyne and Wear Metro

The Metro opened in 1980 and has been part of everyday life in our region ever since. In 2019, Metro carried 36 million passenger trips per annum to and from 60 stations along 77.5km of track. The 89 Metrocars in the current fleet allow that to run 450 trains each day with a three-minute peak frequency. All stations are accessible level access, ramps or lifts.

Currently, a full Metro train has the potential to take 119 cars off the road network. Metro also plays an important role in multi-modal journeys, where passengers use two or more modes of transport.

In 2015, the Metro became the only UK railway outside London with network-wide pay as you go smart ticketing. Accountability to Tyne and Wear's residents is ingrained in the timetable, pricing and station location. Metro also has multi-modal ticketing with other types of transport such as the Shields Ferry and buses.

Large parts of the region are not served by the Metro, including several major employment and retail sites, such as Team Valley, Doxford Park and Metrocentre. Gateshead, for example, has only five stations to cover an area of 88 sq km in size

In recent years, the Metro has experienced reliability and resilience problems due to ageing

infrastructure and fleet, as well as capacity constraints. The existing infrastructure limits the frequency of the service and, as a result, impacts on the reliability and resilience of Metro.

There are still single-track sections on the network in South Tyneside. However, in early 2020, the region was successfully awarded funding to dual the remaining sections through the Metro Flow

M 25% of homes in Tyne and
Wear are within walking
distance of a Metro station.

project, which will increase the frequency of trains and improve reliability and allow quicker recovery from major disruptions.

From 2023, 42 new trains carrying 600 passengers each will be introduced, which will transform performance and passenger experience and deliver huge energy savings. The new trains will cut Metro's high-voltage power consumption by 30% while providing Metro's

Key insight

Current lack of service integration:
Our Metro and Rail networks continue
to operate essentially separately

passengers with modern features including wi-fi, charging points, air conditioning and a step-change in accessibility. Having a new train fleet makes the case for expansion stronger – the new trains will be more flexible, meaning that new routes are possible.

Each month, Metro produces a 'How Metro is performing' document measuring train punctuality, station facilities, information, cleanliness, security, ticketing and staff availability. Metro overall satisfaction was scored 7.9 out of 10 in August 2020.

Local Rail

In contrast to the Metro, the local rail network has not had the same focused investment, is not aligned to the local economy and previously lacked a clear plan for its long-term future. There are 533 route km of rail lines in the North East, however, only 31% of our lines are currently electrified, meaning that local rail trains operating across the region are diesel-powered.

Investment in services and trains has lagged behind the rest of the North. Although the troublesome 'pacer' trains have gone, they have been replaced with similar-aged trains that are only somewhat more reliable. In 2019, they were refurbished with improved seating, at-seat power, fully accessible toilets, free wi-fi, digital customer information screens, sustainable lighting and improved CCTV. Despite this, the trains are showing their age and lag behind modern passenger needs and expectations.

There are 31 local rail stations in the region ranging from remote rural stations to major intercity stations. The level of passenger facilities varies considerably. The local stations carry five million passengers per annum around the North East each year.



Public transport: travelling by local rail and Metro

Local rail services presently comprise:

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

There are large areas of the region that do not represent from train services at all because there are local routes or stations, or which are hampered to the limitations of existing services.

The earliest and latest arrivals and departures e also often outside the minimum standards of the Transport for the North's Long-Term Rail Strategy (LTRS) of reaching key economic centres before 7:00 and leaving them after 23:00. This is not conducive with modern-day life both for early morning work requirements and late-evening social requirements. The nighttime economy is a key part of the North East economic make-up.

The majority of local train services in the North East only offer hourly services at best. An hourly service reduces the convenience of train travel when compared to the private car.

The journey times, frequency and average speeds for local rail services in the North East are not comparable with the private car. Currently, a car is faster than a direct train to travel from Newcastle to Middlesbrough in Tees Valley.

Our starting point

Metro travel was significantly impacted by the Covid-19 lockdown and April 2020 saw passenger levels fall by 95.5% in comparison to the same month in 2019. In mid-2020, the system was operating at a loss of approximately £0.9m per week, excluding costs associated with making the system Covid secure. However, passenger numbers have started to climb to a higher level (albeit to around 30%) than the local rail services.

Local and regional train operators quickly moved to introduce emergency 'key worker timetables' in late March and early April 2020. Use was considerably down according to onboard train staff's ad hoc train counts from late March 2020. There were low numbers onboard local rail services in the North East (between 0 and 9). As with Metro, numbers have started to return but at a slower rate.

The uncertainty of the shape of the UK recovery from the Covid-19 pandemic, together with government messaging about only using public transport where essential, makes passenger projections and forecasts uncertain. Getting passengers back on the network safely is our first priority.

Where we want to be

For the North East to be able to integrate and expand the reach of Metro and local rail into more communities, achieving full devolution of local rail services is our number one priority.

The potential for further rail devolution from Central Government to the North East to specify and manage the operations of our current local rail network in line with the Tyne and Wear Metro, will enable the region to deliver a responsive, integrated and accountable rail network with improved services and reach. The region already benefits from partial devolution through Transport for the North (TfN) but this is not far enough to realise the full benefits of a truly integrated North East public transport system.

We aim to get more people travelling by local rail and Metro in the region. Part of our approach could be to improve 'turn up and go' local rail service frequencies (similar to Metro) where demand exists. Improving cycling and walking links to and from stations and bike storage at stations will encourage rail users to start and finish their journeys using healthy travel types.

We want to see eventually the electrification of the whole of our rail network in the region and/or explore new technologies offering lower or zeroemissions trains on regional and local routes, such as hydrogen and battery. We will successfully withdraw the ageing 1970s-built Metrocar fleet and replace it with new trains, transforming the passenger experience and delivering huge energy savings.

We want to deliver new stations on existing lines and reopen routes, such as the Northumberland Line and the Leamside Line, alongside Metro network extensions to widen access to jobs and training, grow the economy and reduce deprivation.

The North East was the birthplace of passenger railways almost 200 years ago, so it is appropriate that we acknowledge our proud heritage and focus on how rail will meet our region's unique challenges and opportunities of the future.

We will ensure that people feel safe using our network on trains and in stations. Personal safety and security must also be a top priority so that our railways become genuinely inclusive and accessible.

The successful delivery of this Plan will drive up passenger experience and satisfaction which we will monitor through improved punctuality, reduced delays and overall performance upgrades to the region's local rail and Metro network.

Policy Statement

We must invest in Metro and local rail to extend and improve the network.

We will take action to drive our partners to make travelling and moving goods around our region more efficient and greener.





We will shortly be refreshing our Metro and Local Rail Strategy which will build on what we have set out in this section of the Plan. The Strategy will make clear recommendations on how to expand, improve and integrate local rail and Metro services across the region.



Connectivity beyond our own boundaries

Our excellent transport networks connect us to the rest of the UK and global markets.

Background

National and international links from the region are already strong but we want to support and enable them to grow further, resulting in a positive impact on our economy. Our transport links are our national and global gateways, moving people and goods in and out of the North East. However, growth must be sustainable and carbon-neutral where possible.

Dad and rail links to the rest of the UK and to the drom our ports and airport are within the remit our Plan. However, international connections are outside of our remit.

83

Ports Port of Tyne – Ferry Terminal Newcastle International Airport Tyne and Wear Metro City Train Stations Railway Line East Coast Main Line Motorway Major Road Network Enterprise Zones



National Rail connectivity

We are served by the East Coast Main Line (ECML) which connects us to London and Edinburgh, as well as the other main cities in the North and Midlands. The ECML is vital to our economy and approximately 15 million passengers from the North East travel on the line each year. The line currently combines long-distance, regional, local and freight traffic on the same two tracks. Over the last five years, punctuality of services on the line has been declining, with fragile infrastructure and other trains the main cause of delays. The ECML through the region is also used by 12 slow-moving freight trains each day, which prevent high-speed passenger trains from reaching maximum speeds of 125mph. This has an impact on passenger satisfaction, with only 79% of passengers rating punctuality as satisfactory or good. The potential for new and existing freight paths on the ECML is increasingly constrained without extra capacity and investment.

Sunderland has strong rail connections to London, with journeys taking 3 hours 45 minutes. However, the station, which is located in the city centre, is in urgent need of redevelopment.

As shown in the following table, the majority of train entries and exits in the North East are through Newcastle Central Station.

Durham	23.2%
Newcastle	73.2%
Sunderland	3.6%

The region's current rail freight market is subdued following structural changes in heavy industry and the decline of coal. Most freight traffic currently uses the Durham Coast Line. However, there are still operations on the constrained ECML network between York and Newcastle. The three main operators are DB Schenker, Freightliner and GB Railfreight. Strong growth is forecast in the

Connectivity beyond our own boundaries

intermodal market (where two or more modes of transport are used to transport goods) via domestic and international container services. North of Newcastle, rail freight flows mostly comprise a mix of container traffic, cement and nuclear cargos. Biomass has taken up many of the paths formerly used by coal trains. Unlike other parts of the United Kingdom, the north-east lacks a Strategic Rail Freight Interchange (SRFI) where goods can easily be transferred between road and rail.

Key insight

We want to grow the number of both freight and passenger train paths on the ECML in our region but we will need additional capacity and tracks.

Reopening the Leamside Line and developing a Strategic Rail Freight
Interchange for the region will enable this.

Strategic Road Network

The region's 201 miles of Strategic Road Network, which includes the A1, A19, A66 and A69, provide vital links to the rest of Britain and play a key role in the transportation of freight. In 2018, 54 million tonnes of freight was lifted by Great Britain-registered heavy goods vehicles in the region, 37% of which was transported out of the North East.

North East ports

Our five seaports handled 6.4 million tonnes of freight in 2019, 2.5% of all freight handled in England excluding Thames and Kent.

The Port of Tyne is a Trust Port with three car terminals. It plays a key role in ensuring that Nissan can transport their cars from their Sunderland plant to markets across the globe. The Port also handles biomass, which is transported by rail to Drax power station. In addition to the handling of freight, the

port also operates a passenger terminal. Just over 600,000 ferry passengers travelled through the port in 2019, about 12% of passengers to English ports outside of the Thames and Kent region, a 6% increase since 2014, in contrast to a 5% decrease in the comparator area.

The Port of Blyth is a Trust Port offering a handling, storage and distribution service. The port is rail-served via the Northumberland line. The Offshore Renewable Energy Catapult is based in the port and provides a national research and development platform for offshore wind, wave and tidal.

The Port of Sunderland is the UK's second largest municipally owned port, handling approximately 600,000 tonnes per annum and providing deep water berths and dry docking facilities. Rail access to the port was restored in 2015.

There are also two smaller commercial ports in the region; the Port of Seaham, which offers 900 metres of berth for ships up to 8,000 tonnes handling fish, general goods, containers, timber and dry bulk cargoes; and the Port of Berwick which primarily handles cargoes linked to the agricultural industry.

Newcastle International Airport

Newcastle International Airport, the second largest airport in Northern England, is our global gateway. It connects our region to the rest of the world, with over 80 direct routes in 2019, including daily flights to seven international hubs, including Heathrow, Dubai, Amsterdam and Paris. In 2019 5.2 million passengers used the airport, 6.6% of all passengers in English airports outside of the five in London. The airport is predominantly used for international travel, with 22% of passengers travelling on UK domestic flights in 2019.

Our airport plays a key role in the freight industry and handled 4,745 tonnes in 2019. While this was a 7% increase on 2014, it is just 1% of freight handled by English airports outside of London.

Our starting point

In 2020, international and long-distance national travel was heavily suppressed as a result of the Covid-19 pandemic. Road traffic volumes fell, rail services were reduced and flights from the airport were reduced and, in some cases, suspended. As we navigate the challenges and changes that 2020 presents, we will support our existing transport assets so that passenger numbers recover and focus on outcomes that deliver benefits for freight.

Long-distance rail travel demand was massively suppressed from March 2020. Domestic rail passenger journeys were down 95% and Network Rail stations' daily footfall was down 94% compared with the same period in 2019. Open access operators such as Grand Central, which operates in the North East, suspended operations entirely. LNER on-train capacity was just 19% of normal to comply with social distancing. Rail travel on Fridays and weekends was and remains high, likely because of strong leisure travel on the ECML.

Road traffic flows through the region in 2020 are 15% lower than the previous year. This results in improved journey times and reduced congestion.

The pandemic has also had an impact on the transportation of freight by sea, with tonnage carried by the Port of Tyne and Port of Sunderland in 2020 down on the previous year. However, during the early stages of the pandemic the Port of Blyth was distributing 3 million essential consumer products to our supermarkets per day.

	Port of Sunderland Tonnage	Port of Tyne Tonnage
2019 Q1	0.203244	1.074798
2019 Q2	0.228328	1.378904
2020 Q1	0.171276	0.918792
2020 Q2	0.2217451	0.978956

There were no passenger flights from Newcastle International Airport during May 2020 and since then growth has been suppressed by quarantine policies. Recovery to pre-Covid levels is expected to take a number of years.

Where we want to be

Investing in and supporting the transport assets that enable us to connect with the rest of the world has never been a higher priority for the North East. Quality infrastructure will make for reliable, fast journeys with 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.

We continue with our ambitious plans for more, faster and better rail connectivity to the rest of the UK and we will continue to work closely with the Government to seek maximum benefits for our region. We are pressing Government for urgent investment in the ECML over the period 2024-34 (particularly to provide four tracks in the North East), together with a connection to HS2 and development of the Northern Powerhouse Rail Network, to ensure our region is a strong part of our nation's rail network and does not get left behind. We strongly support

Connectivity beyond our own boundaries

construction of the eastern leg of HS2 which we view as complementary to investment in the East Coast Main Line and development of Northern Powerhouse Rail. All three schemes, supported by our station gateway sites programme, are essential for this region and, if not achieved, the separation between the North East and the rest of the UK will only be exaggerated, with negative economic consequences as businesses locate away from the North East in favour of places with better connections.

It is crucial, however, that the link from HS2 to the ECML is built, and that the ECML between York and Newcastle receives a major upgrade between now and the opening date for HS2b/ NPR— if the programme is not delivered in full then we are concerned that a truncated HS2 Phase 2b may port negative economic impacts.

Paking sure that freight can travel sustainably rail is also an important element of our Plan. This means ensuring a fair allocation of network pacity and delivering additional capacity where equired including facilities for transfer of goods between road and rail.

We will publish a new North East Rail and Metro strategy and work with partners to identify how rail freight can benefit the region and what assets and interventions need to be realised to enable it.

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

Additional road capacity is essential to help freight traffic continue to move efficiently; the National Infrastructure Commission has highlighted that increasing road congestion costs the freight industry £3.7 billion annually. Moreover, due to drivers' hours regulations and the fact that diversionary routes are not always suitable for large vehicles, congestion and disruption on the road network can have a more serious effect for freight vehicles than for other types of traffic. The trend towards home deliveries of goods, accelerated by the pandemic, is also leading to growth in freight traffic that could add to further congestion if not addressed.

The A1 is our main road link to Scotland and is vital to our economy. However, sections of the route north of Newcastle are single carriageway, which results in congestion, longer journey times, resilience and safety concerns. Highways England are progressing plans to upgrade the route to dual carriageway as far as Ellingham in Northumberland. We are fully supportive of this and want to see the dualling extend to the Scottish Border and beyond together with important servicing, information and safety upgrades.

We will support our seaports and airport to grow their markets in a sustainable way that minimises greenhouse gas emissions.

This Plan supports the future development of Newcastle Airport and is aligned with its target to become a Net Zero Airport by 2035, including plans for solar energy and electric vehicles.

The region has an ambitious proposal for a 'virtual free trade zone' which would boost international trade, employment and economic growth for our region.

We will ensure improved sustainable access to our airport and seaports to minimise congestion and environmental impacts, including the provision of electric vehicle infrastructure and enhanced public transport.

Key insight

Our Ports and Airport have published their own strategic plans setting out their long term visions which are centred on growing the North East's economy. These include the Port of Tyne's 'Tyne 2050' and Newcastle International Airport's 'Masterplan 2035'. Our Transport Plan is fully aligned with these plans. Highways England are working on Route Strategies and we will feed in information.

Policy Statement

We must work with partners to make movement of people and goods to and from our region more efficient and greener.

We must work with partners to strengthen connections from destinations in our region to everywhere in the UK and beyond.





Research, Development and Innovation

Technological advancement is inevitable during the timescale of this Plan. Our region, well placed through its academic, clean energy and advance manufacturing sectors, can influence this evolution, potentially using its transport assets as a test bed.



eCargo bike - North Tyneside Photo credit: John Millard

Background

Transport offers challenges to solve and opportunities to grasp. Zeroing emissions, reducing fares, improving information, promoting active travel and making journeys safer are just some of the opportunities it offers to innovators.

Continuous change in customer preferences, transport technology and development mean we need to adopt the best innovations available elsewhere and develop new transport products and services of our own, not just to improve our transport network, but to boost economic growth by selling them worldwide. This process must be customer-oriented, so we must produce what is needed, not try to make people have what we can produce.

Our starting point

Regional assets such as the National Innovation Centre for Data, National Innovation Centre for Ageing and PROTO provide us with

outstanding capability in the field of analytics, enabling us to identify transport challenges to solve.

Sectors such as digital transformation and promoting clean energy give us aptitude to develop solutions and manufacture products which will be applied to evolve new methods of work.

Our network is the backdrop to live trials. A flavour of these currently underway include a connected and autonomous project led by Sunderland Council, which will trial the use of 40 tonne trucks to deliver assembly at the Nissan plant as part of a proof-of-concept, and the Metro ticketing application in which customers will be able to store their tickets and season tickets on their mobile. The trial will also enable customers to tap in and out of the stations making their journeys much easier. In North Tyneside, small businesses are benefiting from a fleet of electric cargo bikes to deliver their products to communities.

Industry continues to demand evolved technology and innovators speak openly of the possibilities that may come online during the currency of this Plan.

"There has never been a better time to create a faster, more dependable and environmentally friendly method of transporting medical supplies."

(quoted in The Independent 17.10.20)

Drones have already transform a range of industries and activities, especially deliveries. Already a reality for shoppers in parts of Asia, the service is set to be worth £42 billion in the UK alone by 2030. The US-based Aerospace Industries Association suggests that drones will be used for short-haul, low altitude freight deliveries outside cities from 2025; long-haul cargo flights by the mid-2030s and then passenger flights by 2040.

Hyperloop is a proposed mode of passenger and freight transport, comprising a sealed tube or tubes through which a 'pod' containing passengers, freight or both would be propelled substantially free of air resistance or friction. The concept aspires to travel at airline or hypersonic speeds while being very energy efficient, drastically reducing travel times with virtually no atmospheric pollution.



Where we want to be

We want to embrace new technologies, whether they are developed here or further afield. This Transport Plan should also provide opportunities for North East innovators to accelerate us towards our objectives.

Working with the North East LEP, we consider launching a series of innovation challenges once the Transport Plan is live, which could include:

- How do we get the cost of power to our network down, understand what the market-led solutions are, and where the public sector need to step in;
- Effectively implementing 5G as an enabler for transport;
- What can we do about street lighting as a solution for personal security as well as road safety in an affordable and eco way;
- How do we empower people to use the transport solution that is already there.

Policy Statement

We will embrace new technologies to meet our transport objectives and set innovation challenges to industry, creating new opportunities with our network as the testbed.

Our call to action

We must deliver schemes and initiatives if we are to achieve the objectives of this Plan.

This section of the Plan sets out our emerging proposals for interventions on our region's transport network. It contains a mix of potential projects. Some are pan regional, designed to touch every corner of the North East; many are targeted, place specific physical interventions. They are aligned to specific work packages, derived from the policy pages earlier in this Plan.

For the most part, they will be recognised as transport schemes; however, investment in these projects will produce significant benefits to society, the economy and environment, and these benefits are identified in the outcomes section.

Themes are assessed against their ability to meet the Plan's objectives and a range of reasonable deternatives to meet the Plan objectives and Design is presented in the Integrated Sustainability oppraisal (ISA) which accompanies this Plan. The appraisal seeks to identify any impact of our programme on factors including biodiversity, water and soil, the historic environment, landscape, air quality and noise, climate change and flood risk, population, human health, equalities and rurality. Mitigations will be found where necessary to ensure that the impact of this Plan remains overwhelmingly positive.

The ISA demonstrates that the plan has the potential to lead to a range of significant positive environmental and socio-economic effects for the North East region.

Our transport programme is managed as a live programme of interventions. All of these interventions have been initially tested to ensure that they are consistent with Transport Plan objectives and that they have a degree of deliverability. But that is not the end of the process: they will all be subject to more rigorous testing and appraisal and will only be delivered where they have demonstrated through detailed business case development so that they can

appropriately contribute towards the delivery of the objectives. If schemes cannot contribute towards objectives and don't support the Transport Plan, they will not be taken forward for delivery through this plan.

Individual business cases will further test each scheme's contribution towards climate change targets as well as their role in improving inclusivity, economic growth, appealing sustainable choices, a safer and more secure network and a healthier region, as well as the ultimate need and value for money of the project. We will continue to monitor and act on this basis. This has been tested and is presented in our Integrated Sustainability Appraisal (ISA) which accompanies this Plan. As the programme will be managed in a live and dynamic way, there will be continued opportunities for members of the public to influence the inclusion of schemes and through reporting and our website we will publicise when changes to the programme have been made. This process is set out in more detail in the delivery brochure as Appendix 1 of this Plan.

The interventions selected demonstrate a plan to deliver our vision and objectives. Individually they will be subject to further scrutiny, consent and assurance processes. As such there will be further opportunities for comments on the individual components of this Plan.

We have set out the programme of interventions into seven work packages to be delivered by 2035:

- · Making the right travel choice;
- Upgrading North East active travel infrastructure;
- Public transport: travelling by bus, ferry and on demand public transport;
- Public transport: travelling by local rail and Metro;
- Private transport: travelling by car and using road infrastructure;
- Maintaining and renewing our transport network;
- · Connectivity beyond our own boundaries.

Vision and objectives

What is our vision?

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

What are our objectives?

<u>∦</u> 0

Carbon neutral North East



Overcoming inequality and grow our economy



Healthier North East



Appealing sustainable public transport choices



Safe, secure network



Vision and objectives

What options might we consider to deliver our vision and objectives?

- Encouraging people to make journeys by sustainable means
- Encouraging active travel through behaviour change initiatives
- Delivering affordable services
- Expanding the reach of the active travel, public transport and road networks
- · Reducing adverse environmental effects

- · Reducing accidents
- Increasing speed, frequency and reliability of the public transport network and highways
- Reducing severance of major infrastructure projects
- Understanding demand associated with future travel scenarios
- Working with partners to connect people and places to the wider North, UK and internationally



How we will monitor success? Our Key Performance Indicators

What options might we consider to deliver our vision and objectives?

- Increase sustainable transport mode share
- Increase accessibility of public transport
- Improve greener journeys by reducing carbon output per capita
- Increase the take up of ULEVs

- · Improve air quality
- Improve network performance
- · Managing motor vehicle mileage
- · Improving road safety



Outcomes we can achieve

What options might we consider to deliver our vision and objectives?

- · Easier access to education, skills, and higher value jobs
- Health levels at least equal to other regions in the UK
- Better connections from the North East to national and international destinations
- A transport network with improved environmental credentials including more sustainable journeys, better air quality and reduced carbon output
- A safer and more reliable integrated transport network which is more intuitive for customers with a sustainable cost base
- Direct job opportunities in the transport and infrastructure sectors
- Enabling new development and housing sites and improving accessibility to existing communities

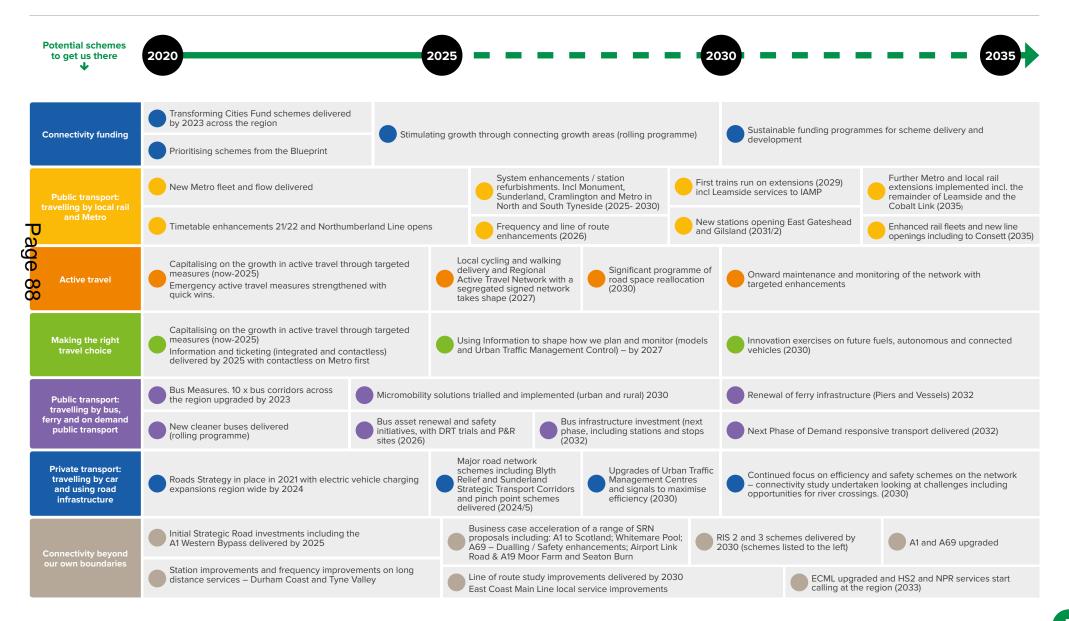
Our call to action-timeline (strategic interventions)

We have an ambitious but deliverable timeline shown below which will lead us towards delivering our vision of moving to a green, healthy, dynamic and thriving North East and enable us to meet our objectives.

This timeline of interventions demonstrates the dates we can achieve and informs our development and delivery

planning. This is subsequently expanded through the delivery maps on pages 51-60.

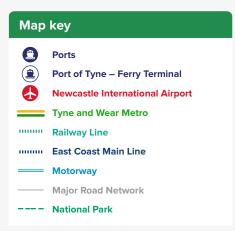
This programme is live and will be regularly updated through changes to the Implementation Plan which will be developed to accompany the final plan in March 2021.

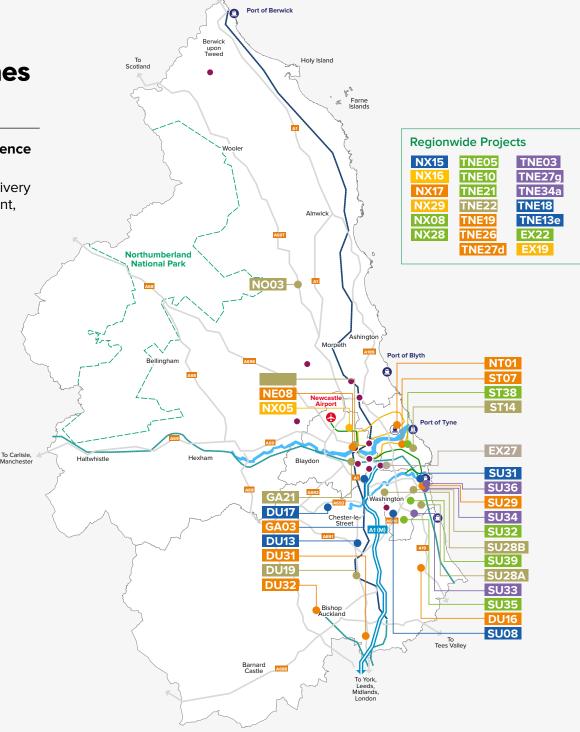


Delivery of these schemes can commence at short notice

This map is illustrative and scheme delivery is subject to business case development, approvals and funding.

Page 89





Shovel ready schemes - delivery plan

Scheme No	Scheme name
EX22*	Rationalise local rail and Metro fares and ticketing
NX08	Enhancing Public Transport passenger information
NX28	Bringing contactless payment to Metro
ST38	Delivery of School Streets approach - focus on reducing car trips and improving the environment
SU32	Installation of environmental monitoring systems at traffic junctions
SU35	Creation of a digital Smart City Parking System and Smart Car Parking (Entry/Exit monitoring) to improve network reliability, reduce traffic emissions and inform commuter choice.
SU39	Dynamic route management - providing journey time data from multiple sources
UNE05	Go Smarter to School - sustainable travel projects
CTNE10	Comprehensive ticketing and information package - including single smart transport payment system
ONE21	Regional Transport Model and Monitoring package
DU16	Improvements to the national Cycle Network Route 1 in County Durham
DU31	Local Cycle Walking improvements in Newton Aycliffe, Chester-le-Street and Durham City
DU32	Stockton and Darlington railway active mode route connecting to Shildon and Witton Park
GA03	Small scale cycling improvements (Gateshead)
NE08	Newcastle Urban Core Pedestrian and Cycling Improvements
NT01	Improvements to cycling and walking routes in North Tyneside
NX17	New cycle parking hubs at Metro and bus stations
TNE19	Delivering the residual Transforming Cities Fund ask
TNE26	Permanent solutions for emergency active travel measures
TNE27d	Sponsoring cycle training in schools
ST07	Strategic Transport Corridors: All user improvements along strategic corridors in South Tyneside

SU29	Improving strategic links between University of Sunderland and Sunderland city centre
SU33	New 'Bus, Cycles & Electric Vehicles only' lanes across Wearside
SU34	Conversion of A690 'No Car Lane' to 'Bus, Cycles & Electric Vehicles only'
SU36	Smart Bus infrastructure including bus shelter information and other improvements
TNE03	10 strategic bus corridors delivered
TNE27g	Roadside marketing and on vehicle branding
TNE34a	Decarbonising Public Transport
EX19*	Improved facilities at information at North East stations
NX05	Regent Centre Interchange Upgrade
NX29	Delivery of North East Connect and improving calling patterns of local rail services
DU13	Active mode and capacity improvements at A688 junctions
DU17	Active mode connectivity, public transport reliability and capacity improvements at A693 Stanley
NX15	Creating Electric Vehicle charging points across Nexus car parks
NX16	Installing solar panels at Nexus infrastructure
SU31	Enforcement of 'engine idling' at taxi ranks and bus stops
TNE18	Electric Vehicle Infrastructure – Repair and improve current infrastructure. It's in disrepair. Consider gaps in the network (Particularly those without access to home charging)
TNE13e	Creation of a North East road strategy
DU19	Burnigill Bank ECML Maintenance
GA21	Highway structures major maintenance
NE24	Tyne Bridge and Central Motorway Major Maintenance
NO03	Critical rural road maintenance Programme (countywide)
ST14	Highway Maintenance Backlog
SU28A	Reducing the highway maintenance backlog

Key

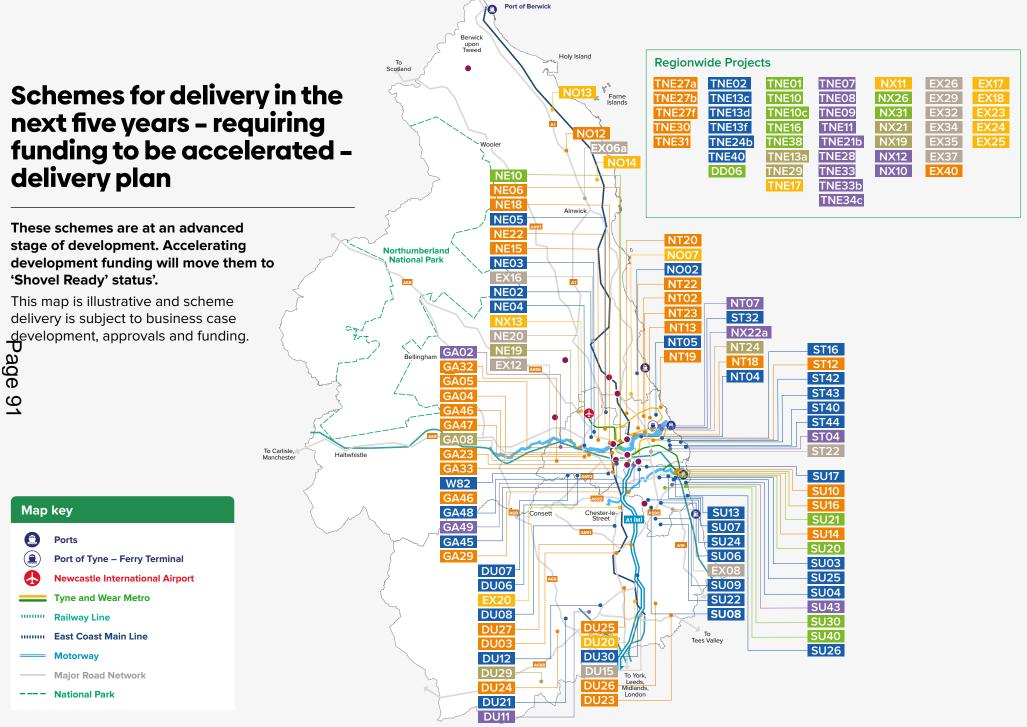
1	Helping people to make the right travel choice	
2 Upgrading North East Active Travel Infrastructure		
3	Bus, ferry and first and last mile	
	Local rail and metro	

5	Road infrastructure		
6	Maintaining and renewing our transport network		

7 National and international connectivity

SU28B	Upgrading existing traffic signals in Sunderland
TNE22	Revenue and Maintenance Funding for Metro, Bus, Rail, Ferry and Highways
EX27*	A194 White Mare Pool Interim Measures to improve flow

*Where schemes are being delivered by external parties including Network Rail and Highways England, Transport North East will seek to positively influence the design and delivery of the projects to ensure they align with Transport Plan objectives.



Schemes for delivery in the next five years – requiring funding to be accelerated – delivery plan

	Scheme No	Scheme name
	DD06	Regionwide Infrastructure Mapping Application
	NE10	Newcastle Smart Corridors
	NX26	Development of a Multimodal smart ticketing solution for the region
	NX31	New payment technologies for Metro
	SU20	Sunderland City Centre ANPR cameras
	SU30	Energy Generation and Storage Projects in Sunderland
	SU40	Temperature monitoring road sensors
	TNE01	Regionwide Travel behaviour change package
	TNE10	Regionwide mapping and realtime information package for pubic transport
-	TNE10c	Upgrades to the two Urban Traffic Management Control for command and control of the network
2	TNE16	Customer Experience Strategy
Ì	TNE38	Innovation Challenge Fund for Smart Places
1	3003	Walking and cycling improvements in Durham City Centre
	DU23	A689 Sedgefield to Wynyard active mode route improvements
	DU24	Bishop Auckland to Barnard Castle active mode route improvements
	DU25	Great North Cycle Route improvements in County Durham
	DU26	A177 cycling improvements, linking Coxhoe with Net Park
	DU27	Belmont to Newton Hall active mode route improvements
	EX40*	Upgrades to active travel routes to all NE rail stations
	GA04	Gateshead Central Integrated Transport Improvements
	GA05	Blaydon station to town active travel link
	GA23	Gateshead Local Cycling and Walking investment proposals
	GA29	Portobello to Washington footbridge access improvements
	GA32	High Spen to Greenside cycle route

GA33	Upgrading the National Cycle Routes in Gateshead
GA46	New Derwent Walking and Cycle Crossing at Metrogreen
GA47	Derwent Cycle Route Improvements
NE06	Cycle City Ambition 3 programme to invest in corridor improvements
NE15	Low Traffic Neighbourhoods (Citywide)
NE18	Central Newcastle - Walking, Cycling and Public Transport improvements
NE22	Delivery of local walking and cycling improvements across Newcastle
NO12	Northumberland LCWIP
NT02	Access improvements to A19 employment corridor for all road users
NT13	A191 all user improvements
NT18	Improving Wallsend town centre public realm delivery and improve accessibility for all users
NT19	Improving Whitley Bay town centre public realm delivery and improve accessibility for all users
NT20	Local cycle and walking improvements across North Tyneside
NT22	Improvements to strategic cycling and walking routes in North Tyneside phase 2 (A192 and A1058)
NT23	Improvements to strategic cycling and walking routes in North Tyneside phase 3 (A186, A193 and B1318)
ST12	Improved Cycling Links to Tyne Pedestrian Tunnel
SU10	Improving Strategic Cycle Networks in Sunderland
SU14	Vaux-Stadium Village Footbridge
SU16	Stadium Village - St Peters Subway
TNE27a	Targeting an increase in active travel across the region. Active travel strategy leading to a active travel grid of improvements
TNE27b	Access to Active Travel Equipment scheme
TNE27c	Active Travel Ambassadorial Programme
TNE27e	Improved mapping and promotion of the Active Travel network
TNE27f	Active Travel Evaluation

Key		
1	Helping people to make the right travel choice	
2	Upgrading North East Active Travel Infrastructure	
3	Bus, ferry and first and last mile	
	Local rail and metro	
5	Road infrastructure	
6	Maintaining and renewing our transport network	
7	National and international connectivity	

TNE31	Integrating health and transport planning with active travel prescriptions
TNE30	Accessibility Audits Fund
DU11	Bishop Auckland bus station and car park, including sustainable building measures
GA02	All user improvements on this important corridor (A695) along the Tyne Valley
GA49	A195 Bus Lane
NT07	North Shields regeneration (Public Realm improvements)
NX10	Increased Park and Ride at Public Transport stations (Metro, Rail, Ferry and Bus)
NX12	Upgrade and refurbishments of bus infrastructure including stations and stops, systemwide
NX22a	Ferry Asset Renewal Programme - North Shields
ST04	Traffic Signal Improvements in South Tyneside
SU43	Chester Road bus corridor
TNE07	Next Generation Stations programme to upgrade our interchanges
TNE08	Park and Ride Strategy
TNE11	Coach Action Plan

^{*}Where schemes are being delivered by external parties including Network Rail and Highways England, Transport North East will seek to positively influence the design and delivery of the projects to ensure they align with Transport Plan objectives.

North East Transport Plan

Schemes for delivery in the next five years – requiring funding to be accelerated – delivery plan

	TNE21b	Prioritising Public Transport through Intelligent Traffic Systems - Regionwide			
	TNE28	Delivery of a North East Bus Partnership			
	TNE33 TNE33b	Bus Infrastructure Measures			
	TNE34c	Demand Responsive Micromobility Transport trials			
	DU20	Reopening of Ferryhill Line and Stillington Line to passenger services to Teesside			
	EX17*	Expanding the number and role of Community' stations			
	EX18*	Delivering a North East Rail Concession			
	EX20*	Increasing local rail frequency in Durham			
	EX23*	Introducing earlier and later local rail services systemwide			
	EX24*	Small scale local rail reliability measures networkwide			
	EX25*	Local rail diesel fleet replacement – regional			
_	U IO07	Northumberland Line - Opening			
Š	NO13	Belford Station			
	NO14	Enhanced service between Berwick and Newcastle			
	SIX11	Small Metro Station Upgrades systemwide			
	NX13	Airport Metro Station Refurbishment			
	TNE17	Freight Gauge Clearance			
	DU06	Delivery of improved active travel infrastructure, signals upgrades and measures to improve road safety on the A692 in Durham and Gateshead			
	DU07	Delivery of improved active travel infrastructure, signals upgrades and bus capacity on the A694 in Durham and Gateshead			
	DU08	Corridor based improvement works along A167 in Durham and Gateshead to deliver improved access to housing development by sustainable modes, enhanced active travel infrastructure, bus lane extensions and signals upgrades			
	DU12	Eastern Sustainable Access Corridor			
	DU21	Environmental, road safety, and air quality benefits within Toft Hill			

DU30	Bowburn Industrial Estate Sustainable Access Corridor
GA45	A195 Follingsby Roundabout Improvements
GA48	Small Scale Highways Improvements
NE02	Maintaining and renewing our transport network project
NE03 Ponteland Road Corridor sustainable and housing improvements	
NE04 Scotswood Bridgehead accessibility improvem in Newcastle	
NE05 Rotary Way junction upgrade and cycling improvements	
NT04	North Bank of the Tyne Enterprise Zone accessibility improvements
NT05	Corridor improvements to facilitate improved access for all road users (A192 Foxhunters to Tynemouth Pool)
NO02	Delivering improved all user connections to Blyth to reduce congestion, improving bus journey time reliability, and creating the space for high quality segregated cycle corridors
ST16	Commercial Road Multi-Modal Corridor Improvements
ST32	A185 upgrade to support the Port of Tyne
ST40	Multi-Modal Improvements between Testo's and Boldon Asda junctions
ST41	A194 Strategic Transport Corridor
ST42	A194 Multi-Modal Corridor Improvements
ST43	A1018 Multi-Modal Corridor Improvements
ST44	A183 Multi-Modal Corridor Improvements
SU03	Sunderland Strategic Transport Corridor SSTC4 - Upgrades to Wessington Way / A19 junction
Sunderland Strategic Transport Corridor (SSTC5) I to the City	
SU06	A690 all user highway improvements
SU07	St Michael's Way/High Street West journey time improvement and congestion pinch-point relief to improve road safety, bus priority and improve pedestrian safety

SU08 A182 Route Action Plan including congestion pinchpoint junction schemes; including a suite of b cycle and pedestrian improvements.				
SU09	A182 Route Action Plan including congestion pinchpoint junction schemes			
SU13	Riverside' Multi Storey Car Park. – A new modern parking facility to incorporate EV infrastructure and satellite mobility-hub facilities in order to support the Riverside Sunderland regeneration scheme			
SU17	Continued improvements to access the IAMP area including off-road cycle facilities to accommodate expected increase in traffic and stimulate economic development			
SU21	Queen Alexandra Bridge (A1231) / Camden Street Gyratory improvements. To provide congestion relief and bus priority.			
SU22	Hetton Downs Access Road. Improving connectivity for local residents and supporting new mixed-use residential development			
SU24	Penshaw / Philadelphia / Sedgeletch Link Road – supporting economic development and addressing gaps in the strategic cycling network			
SU25	Queen Alexandra Bridge southern bridgehead junction. Simplification of existing arrangements to improve pedestrian and cycle crossing facilities			
SU26	Toll Bar Bus priority improvements			
TNE02	Air Quality systems upgrade in Tyneside			
TNE13c	Integrate taxi services with other public transport provision			
TNE13d	Addressing Severance of the Road network through targeted approaches			
TNE13f	Increased Lorry Parking and Servicing opportunities across the region			
TNE24b	Using technology to improve connectivity to our Ports and Airport			
TNE40	Freight consolidation			
W82	W82 Access to the HGV Compressed Natural Gas (CNG) facilities in Gateshead.			

North East Transport Plan

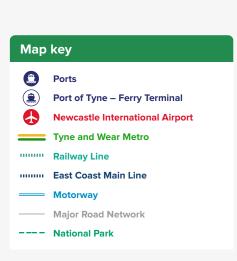
Schemes for delivery in the next five years – requiring funding to be accelerated – delivery plan

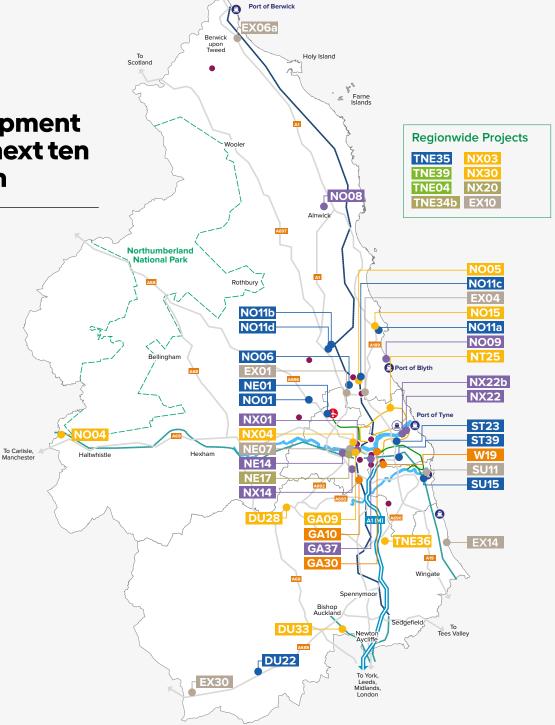
	DU29	Reopening of Whorlton Bridge to NCN 165 and local connectivity				
	GA08	Traffic signals repair across Gateshead				
	NE19	Flood and Climate Resilience (Newcastle citywide)				
	NX19	Metro Essential renewals (post 2025)				
	NX21	Upgrade of Switchgear at Nexus Substations				
	NT24	A193 Wallsend Road Bridge deck replacement and repairs				
	TNE13a	Creation of a North East road strategy for all users				
	TNE29	Hotspot funding to improve conditions for pedestrians and cyclists				
	DU15	Road safety, capacity and pedestrian connectivity improvements at J60 A1(M)				
	EX06a*	A1 Dualling to Ellingham				
2	D _{X08*}	A19 junction improvements and capacity upgrades in North Tyneside, Sunderland and County Durham				
2	EX12*	Tyne Valley journey time improvements				
Ć	OEX12*	Improving Rail Connectivity in Northumberland				
4	EX26*	Integrated and Smart Ticketing project				
	EX29*	Ports and Airports Access Strategy				
	EX32*	Addressing the severance of major infrastructure working with infrastructure providers; 1b) Continuing to mitigate the impacts of major infrastructure schemes through a clear package of designated fund schemes				
	EX34*	Autonomous vehicle tests on the strategic network				
	EX35*	Enhancing the Electric Vehicle offer on the strategic road network				
	EX37*	Ensuring targeted investment in digital connectivity when making physical alterations to works				
	NE20	A696/A167 and Airport Junction upgrade				
	ST22	A19 Southbound Lane Gain / Lane Drop				



These ambitious schemes require development funding to bring them to an advanced stage and move to delivery.

This map is illustrative and scheme delivery is subject to business case development, approvals and funding.





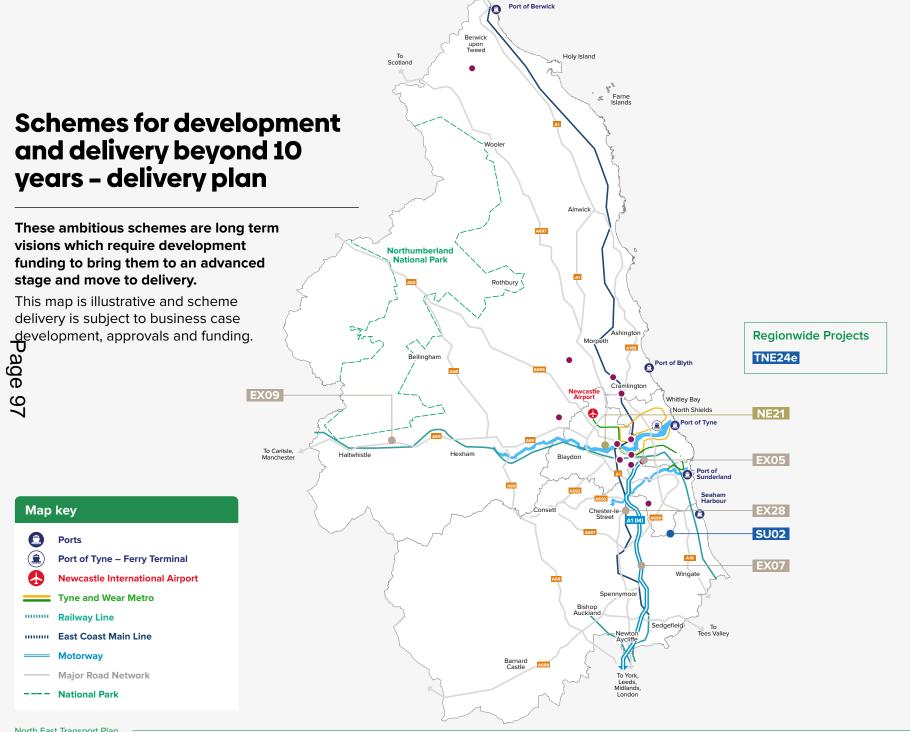
Schemes for development and delivery in the next ten years - delivery plan

Scheme No	Scheme name			
TNE04	Regional Intelligent Transport System Package			
TNE39	Regional Autonomous Vehicles testbed			
GA10	West Tyneside cycle route (bridge over ECML)			
GA30	Bill Quay pedestrian link to a future Metro Station			
W19	New Bridges to remove severance e.g. Blaydon / Newburn, A194M/Follingsby, A1 Coalhouse			
GA37	Heworth Interchange refurbishment			
NO08	New Alnwick Bus Station			
NO09	New Blyth Bus Station			
NE14	Scotswood Road Bus Priority			
NX01	Gateshead Interchange Refurbishment			
NX14	Team Valley Bus based park and ride			
UNX22	Ferry asset renewal programme			
NX22b	Ferry - Royal Quays Landing study			
O U28	Public transport connectivity improvements between Consett and Tyneside			
DU33	Darlington to Weardale/Crook rail service			
GA09	East Gateshead Station			
NO04	Gilsland Railway Station			
NO05	Cramlington Station improvements			
NO15	Future extensions for the Northumberland Line			
NT25	Murton Gap - New Metro stations in North Tyneside			
NX03	Upgrading Heritage Stations on Tyne and Wear Metro			
NX04	Monument Metro Station Refurbishment			
NX30	New Metro Stations			
TNE36	Metro and Local Rail Enhancements and Extensions			
DU22	Environmental, road safety, and air quality benefits within Barnard Castle			
NE01	Airport access upgrades to facilitate housing growth and the onward success of the airport			
NO01	Facilitating growth of Ponteland, improving public and active travel capacity and addressing congestion			

NO06	Delivering improved all user connections on this route (A1068 Fisher Lane) between South East Northumberland and Tyne and Wear		
NO11a	Facilitating growth of Newbiggin and Ashington, improving public and active travel routes, capacity and addressing congestion		
NO11b	Facilitating growth of Morpeth, improving public and active travel routes, capacity and addressing congestion		
NO11c	Facilitating growth of Cramlington, improving east west public and active travel capacity and addressing congestion		
NO11d	Facilitating growth of Cramlington, improving public and active travel capacity and addressing congestion		
ST23	A185 / Howard Street Multi Modal Corridor Improvements		
ST39	A184 Multi-Modal Corridor Improvements		
SU15	Kier Hardie Way All user improvements		
TNE35	Future Fuels Innovator		
NE17	Skinnerburn Road Maintenance		
NX20	Metro Signalling System upgrade		
TNE34b	A regional energy Package		
EX01*	Upgrades to Seaton Burn/Fisher Lane A1/A19 Junctions		
EX04*	Upgrades to Moor Farm Junction		
EX06b*	A1 Dualling to Scotland		
EX14*	Durham Coast Line (route upgrade and service improvements)		
EX10*	High Speed Gateways in the region		
EX30*	A66 Dualling		
NE07	Newcastle Station : High Speed Ready		
SU11	Sunderland Station capacity improvements and track layout improvements		

Key				
1	Helping people to make the right travel choice			
2	Upgrading North East Active Travel Infrastructure			
3	Bus, ferry and first and last mile			
4	Local rail and metro			
5	Road infrastructure			
6	Maintaining and renewing our transport network			
7	National and international connectivity			

^{*}Where schemes are being delivered by external parties including Network Rail and Highways England, Transport North East will seek to positively influence the design and delivery of the projects to ensure they align with Transport Plan objectives.



Schemes for development and delivery beyond 10 years - delivery plan

Scheme No	Scheme name
SU02	Coalfield regeneration route – improving access for industry and business
TNE24e Invetsigating a new Strategic River Crossing	
EX05*	Whitemare Pool Slip Road Improvements
EX07*	A1(M) Barton to Chester-Le-Street widening (J56-J57 and J60-J63)
EX09*	A69 route improvement, potential dualling and/or climbing lanes and targeted junction improvements (including the B6351 Hexham west junction)
EX28*	Major upgrade to the East Coast Main Line
NE21	New PT Route delivered to the West of Newcastle

Кеу			
1	Helping people to make the right travel choice		
2	Upgrading North East Active Travel Infrastructure		
3	Bus, ferry and first and last mile		
	Local rail and metro		
5	Road infrastructure		
6	Maintaining and renewing our transport network		
7	National and international connectivity		

*Where schemes are being delivered by external parties including Network Rail and Highways England, Transport North East will seek to positively influence the design and delivery of the projects to ensure they align with Transport Plan objectives.

How we will deliver this Plan

The North East region has a well-developed governance structure and associated assurance process in place to agree and deliver transport policies, strategies and investment opportunities. This regional programme is ambitious but deliverable in order to achieve the Plan's vision and objectives. Realising this programme will involve partnership working to ensure the Plan also supports the achievement of objectives nationally, regionally and locally.

We will deliver the programme in collaboration with Central Government and its delivery agents, msport for the North, the National Infrastructure mommission, transport operators, our constituent cal authorities, the North East LEP, businesses, the third sector, and crucially local people.

Governance

These existing structures will be deployed to deliver the Transport Plan. This governance structure and assurance process has successfully delivered our Local Growth Fund monies held by the North East Local Enterprise Partnership (LEP) and is being used for our successful Transforming Cities Fund submission. Fundamental to decision-making for devolved funding from TCF are the new political arrangements in the region with two Combined Authorities and transport matters decided across the two combined authority areas by a Joint Transport Committee. The way in which we will deliver this plan is outlined in Appendix 1, Delivering the Plan.

Sequencing and prioritisation

A set of interventions has been developed which sit within work programmes demonstrating that delivering strategically and at scale has substantial benefits. The programme has been designed to be flexible to respond to potential funding opportunities. To ensure the Plan demonstrates a robust pipeline, the interventions selected were initially appraised against the Plan's vision and objectives to ensure strategic fit. The interventions that form part of the pipeline for the Plan have to be developed to Stage 0 in accordance with the region's assurance framework. This ensures a consistent level of detail is available for all schemes.

Sequencing has been developed into a series of five-year blocks over the lifetime of this Plan, linked to stages of development through the region's Transport Assurance Framework. Crucially, where there is evidence around the need for a project to be developed in a certain timeframe to realise wider benefits, this has been reflected in the framework

The North East has a track record in selecting and prioritising projects which balance objectives around the economy, environment and society. It is important that the Plan is flexible to respond to funding opportunities and as such a prioritisation process has been designed incorporating the assessment against the vision and objectives that can be deployed based on the fund that is available.

Costs

The main source of funding for transport is from Central Government. Previous rounds of the Local Growth Fund (LGF) and Transforming Cities Fund show how the region can deliver significant packages of investment.

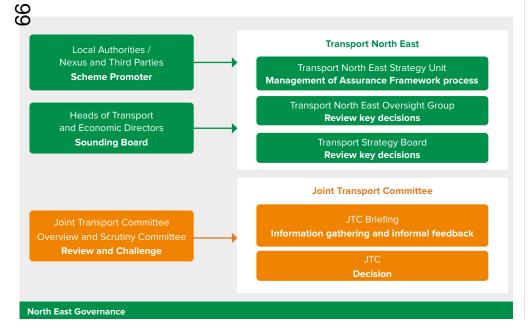
A pipeline shows that the region is committed to delivering a significant change in the transport and connectivity network to benefit the whole region. A £100m fund over the first five years of this programme will set us on our way.

The following funding is required:

- Revenue funding to keep the North East's public transport network operating, highways and structures in good condition, and subsidising services for those who need it;
- Long term capital funding to invest in new infrastructure and make improvements to the current network.

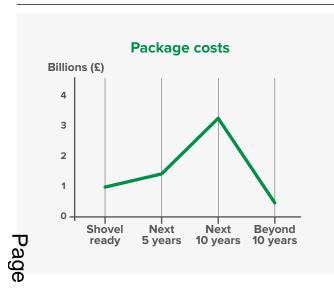
The Plan will be refreshed on a regular basis. The exact costs will vary and will need to be carefully monitored. Based on our latest estimates, a funding requirement of $\pounds 6.8$ billion worth of capital investment would fund the entire regional programme. This will grow as further schemes are developed over the lifetime of the Plan. We believe this to be a fair share of national transport funding which should be allocated to our region from Central Government in the period 2021-2035.

This funding requirement includes schemes that can be promoted and delivered by the region and excludes investment on Network Rail and Highways England infrastructure. It includes the request over the next five years which was established in the Connectivity Blueprint.



North East Transport Plan

How we will deliver this Plan



- unding and delivery

e options for delivery of this Plan includes

- · National grant funding;
- · Local funding
- Prudential borrowing, or private sector funding models.

The ability of the region's local authorities and delivery agencies to fund strategic capital and revenue investments at this time against the resources is limited, especially when considering their budgetary positions following a decade of austerity and the impacts of Covid-19.

Prudential borrowing levels of funding is a possibility, however the ability to pay this back over time is a consideration given the scale of investment at a sustained period. Importantly funding for capital schemes will generally be met with a decent amount of local match funding showing a commitment from local partners.

We will work with government and partners to establish how the benefits can be unlocked with funding approaches.

Investment in the first five-year period of the programme as demonstrated in the Connectivity Blueprint would help provide a boost to the construction sector in the economy at what may be a difficult economic period.

Funding asks

Our funding asks of Government and its partners to make this Plan a reality include:

- Transport and digital funding of £200m each year to support our region's Covid recovery, as set out in our Connectivity Blueprint;
- A multi-year settlement of £6.8 billion to commence delivery of the programme – an amount which will grow as further schemes are developed over the lifetime of the Plan;
- Affirm commitment to strategic investments identified in the TfN Investment Programme, including the delivery of upgrades to the East Coast Mainline, rail lines and upgrades to Highways England Infrastructure; Continue to fund local transport;
- Devolve further powers to provide for integrated management of our network;
- Sustain revenue funding to support public services.

Our programme requires an estimated £6.8bn of capital investment, an amount which will grow as further schemes are developed over the lifetime of the Plan.

We believe this to be a fair share of national transport funding which should be allocated to our region from Central Government to 2021-2035

Programme management and assurance

The funding required to realise the ambitions of this Plan is substantial, however the region is fortunate to have a well-established and ratified Transport Assurance Framework in place. That has guided the delivery of our devolved £270 million Local Growth Fund for the last six years and was flexible enough to deliver our Transforming Cities Fund programme. The heart of our Transport Assurance Framework is a scalable series of gateways that provide our governance structure with the confidence that each component investment is delivering on the requirements of the programme and delivering the Transport Plan outcomes that have been ascribed to that investment.

The Transport North East Strategy Unit will manage this programme and will be responsible for sponsoring the development of various strategies and policies that support this Plan, as well as a series of region-wide initiatives.

Implementation of the interventions that form part of this of this Plan will, for the most part, be undertaken by scheme sponsors across the region in local authorities and Nexus.

We have identified projects in this Plan that are national or pan-Northern in nature. To deliver these we will work with organisations including Transport for the North, Highways England, Northern Acceleration Council, Network Rail and others to secure investment.

The way in which we will deliver this plan is outlined in Appendix 1, Delivering the Transport North East Plan.



Rural benefits of the Plan

The policies and proposed interventions in this Plan have increased potential to support accessibility to, from and within rural areas through delivering a range of new and improved transport initiatives.

This includes investment in rural bus services and improved transport interchanges. As well as this, rural options which we have also appraised include maintaining bus services, support for smart travel and 'on demand' community transport, delivering improved communications infrastructure such as broadband and mobile phone infrastructure enhancements.

We also recognise that for some journeys car

we will remain the main and necessary transport

choice in rural areas. We will therefore, seek to

chance interchange between different types

transport, including potentially through Park

Ride. This will support accessibility for those

that access to private transport. We also want

increase the provision of Electric Vehicle (EV)

charge points in rural areas for those who are not
able to use public transport.

We will also examine the feasibility of creating a regional cycle network to ensure high quality cycle links between rural locations (including towns and villages) which people can enjoy and feel safe using. We also have aspirations for an off-carriageway regional cycle network. We will explore how this can be best achieved by considering infilling gaps to create continuous walking and cycling routes where practical, to improve access to the countryside and rural communities, supporting the rural economy.

Looking at the interventions in the Plan, the following table gives a snapshot of those are proposed to be implemented to deliver the Plan's objectives for rural areas:

County Durham

Scheme	Location	Description
Active mode route improvements	Bishop Auckland to Barnard Castle	Upgraded/new off carriageway track connecting Bishop Auckland and Barnard Castle. The off carriageway track will improve safety for pedestrians and cyclists and enhance the health and wellbeing of residents.
Active mode route	Stockton and Darlington railway active mode route connecting to Shildon and Witton Park	The development of a cycling and walking route is seen as a key way of restoring the emotional and physical connection of local people with their railway heritage, engaging with the many people and communities that live within and around this asset.
Environmental, road safety, and air quality improvements	Toft Hill	Rerouting of A68 road away from village centre, reducing impacts of general through traffic and a high percentage of HGVs adjacent to residential properties. This would result in air quality, noise, and safety improvements.
New Bus Station and Multi Storey Car Park	Bishop Auckland	A new fit for purpose bus station and car park provision is required, as visitor numbers are expected to increase over the next decade. The bus station and multi storey car park will be rebuilt on the existing bus station site, making better use of the space. The proposals will facilitate economic growth in the area.
Improvements to the national Cycle Network Route 1 in County Durham	County Durham (countywide)	A series of works to improve the quality of the route including upgrading to take into account biodiversity and appearance of a section of National Cycle Network Route 1 which runs between Seaham and Stockton. To include: • Seaham to A19 – Improvements to this section to include resurfacing and widening. • The Moonscape – Implement a preferred route to include resurfacing and widening. • Pesspool Woods – Replace the current boardwalk with a suitable, safe and to standard alternative. Improving the lead into and exit from the woods. • Making habitat improvements along the route where appropriate. • Removing any barriers along the route which prevent access for all non-motorised users.
Public transport connectivity improvements between Consett and Tyneside	Consett	Connectivity improvements along the Derwent Valley to improve public transport access between Consett and Tyneside.
Darlington to Weardale/ Crook rail service	Weardale- Bishop Auckland	A rail service to reconnect communities in Weardale, to the Bishop Auckland/Newton Aycliffe/Darlington corridor, enhancing access to employment, education, health and leisure opportunities. The railway will become the framework for economic regeneration of the railway corridor, both in South Durham and Weardale, realising substantial tourism potential.

Continued over page

Rural benefits of the Plan

Northumberland

Scheme	Location	Description
Critical rural road maintenance programme	Northumberland (countywide)	To repair and strengthen key roads underpinning the rural and regional economy including access to key tourist destinations (Hadrian's Wall World Heritage site, Northumberland National Park including International Dark Skies Park), timber extraction and quarrying. The scheme will also improve accessibility for residents.
Future extensions for the Northumberland Line	North Northumberland	Improving accessibility to South East Northumberland by rail, improving connectivity between South East Northumberland and Newcastle and delivering economic benefits.
Northumberland Could cycling and Walking infrastructure Plans CWIP	Northumberland (countywide)	Investment targeted at improving the walking and cycling networks in the 12 main towns of Northumberland. Proposed schemes will vary from town to town and would involve physical segregation of road users; traffic calming and road safety measures; providing dropped kerbs and tactile paving and improved crossing facilities, essentially improving the safety and convenience of walking and cycling and supporting a shift in the way we travel. The schemes will have a positive impact on the health and wellbeing of residents and will improve safety.
New Alnwick Bus Station	Alnwick	Construction of a new fit for purpose Bus Station and associated facilities in Alnwick town centre.
Facilitating growth of Ponteland and addressing congestion	Ponteland	The A696 is part of the Primary Road network in Northumberland. It forms an important strategic route with the A68 for traffic from Newcastle to Edinburgh and serves the Army Training Facilities at Otterburn Camp. The scheme objectives are to provide an alternative route for through traffic including heavy goods vehicles and Ministry of Defence convoys thus reducing congestion and delays to traffic through the village. Emissions on the existing route through the town centre will also be reduced, leading to improved traffic flow with less stationary traffic. Reduced traffic will create an improved town centre environment which will encourage other forms of sustainable travel including walking and cycling with the National Cycle Network Route 10 passing through the town.
Gilsland Railway Station	Gilsland	The proposal is to reopen the Gilsland Railway Station on the site of the former station. This will improve connectivity and deliver economic benefits.



North East Transport Plan — 6

This Plan is supported across our region

66

Connectivity within the region, as well as with the rest of the UK and the world, will be more important than ever to

our economy, businesses and the public. Newcastle International Airport will enable the North East to compete in the global marketplace and to attract inbound tourists into the region.

We are very pleased to see this ambitious plan which will help to shape the exciting future of North East transport.

Nick Jones

Chief Executive of Newcastle International Airport

66

Living Streets supports the vision for this Plan, that focuses on healthy and sustainable ways of



to success. We look forward to supporting

the North East on its path to a sustainable

Jenny WilesRegional Director (North), Living Streets

66

Transport is a vitally important catalyst of local economic growth, connecting people with jobs and places,

and customers with goods and services. This comprehensive Transport Plan will enhance the North East's productivity and competitive edge, reduce inequality and crucially, move us ever closer to our carbon neutral goal. It is fantastic to see the North East Joint Transport Committee working with our seven local authorities to deliver transformative and on-demand transport solutions that will change everyone's lives for the better.

Lucy Winskell, OBEChair of the North East Local Enterprise Partnership

66

Without doubt transport is fundamental to our region's future prosperity. Excellent connectivity unlocks so much

economic potential. This Transport Plan is a perfect roadmap for the future of the North East spelling out clearly the benefits of effective links not just around the North East but nationwide for businesses as well as individuals.

James Ramsbotham
Chief Executive of the North East England
Chamber of Commerce

66

Sustrans welcomes the publication of the North East Transport Plan.

Active travel has a significant role to play in the transport mix for the region and evidence shows us that safe infrastructure, separated from vehicles, is key to giving people the confidence to travel by foot or bike.

transport future.

In partnership with the region's authorities, we will continue to invest in improving the National Cycle Network. Alongside government and local authority investment, we will help make the changes we need to see. This change is critical to making our cities and towns more liveable and equitable.

Safer and more inclusive streets and places for everyone are vital not just in the response to the Covid-19 pandemic but for the health and wellbeing of people across the region and for changing the way we improve our neighbourhoods in the future.

Jonah Morris

Sustrans Partnerships Manager - North East & Cumbria



6

Bus operators welcome and support the call for investment to boost our regional economy by placing good local transport at the heart of this.

We look forward to continuing to work collaboratively with partners in playing our part to make public transport an even more sustainable and obvious choice as the best way to connect our communities as an integral part of a post Covid recovery.

Martiin Gilbert

Chair NEbus operator's association

Changes you will start to see

People in the North East will see the transport network evolve in a series of and lasting improvements that will shape our region in the decades to come. The table below offers a taste of some just some of the tangible improvements our residents, visitors and businesses will begin to experience at a regional level once the plan is funded and the schemes are rolled out.

Connecting communities to opportunities

 Regional bus corridors with priority traffic signals and redesigned roads for faster journeys. New electric buses, shelters, signage and amenities for a better customer experience. In rural areas connections will go further, with comfortable on-demand minibuses linking into the wider network.

A large-scale package of Metro and rail expansion, including better local services and new stations on existing routes and the Leamside Line reopened to local traffic. New 'mobility hub' stations featuring, bus, park and ride and active travel connections.



Digitally enabled regional ticketing and information products, with pricing structured to promote and reward sustainable travel choices and make it more affordable to those on low incomes, supporting a wider range of transport choices including car club, bike and micromobility rental across our region.

Enhance North East business advantage

- Prioritising rural areas and commercial fleets, a push on charging infrastucutre to celebrate our region's commitment to EV manufacturing;
- An electrified bus fleet, where possible built in partnership with the North East supply chain;
- Collaboration with North East institutions to showcase new design standards in our transport network ready for our future population demogrpahic;
- The founding of the Institute of New Mobility in the North
 East with new data collection and processing capablity on our transport network available to
 innovators making the North East a world centre for transport reseach and innovation
- Collaboration with North East businesses over more sustainainble and healthier travel to work plans and transport operations - our "Green Transport" pledge scheme;
- Intelligent traffic signalling and new technological capacity for automous transport and reliable transit of goods to market.

Healthy and vibrant places

- An off road, pleasantly landscaped, regional cycling network, which people can use safely and with confidence, linking public transport hubs, colleges or universities, workplaces, towns and villages for rural connections.
- Park and ride, or 'park and pedal' hubs to open up and convert our streets for pedestrians, businesses and events.
- Sustainable links to support our tourist industry with integrated ticket pricing for visitors, express coach links between major tourists sites and infrastructure to make it easier to explore the region in electric cars, by bike or on foot.
- Enhanced intelligent traffic signal capability for fewer road emissions and greater and smarter prioritisation of pedestrian and cyclist needs.



Best practice sustainable transport links into new commercial and housing developments to ensure the transport footprint of relocating staff is decarbonised;

- Reliable and sustainable connectivity to regional gateways minimising door to door journey times to other UK and world cities;
- Investment in rail capacity for a more reliable East Coast Mainline;
- Collaboration with business through our "Green Transport Pledge" to aid adoption of sustainable transport plans.





Conclusion

This Plan sets out the region's transport priorities up to 2035. If successfully delivered, the projects and policies in the Plan will help to protect our environment by providing attractive carbon-neutral sustainable transport for people across the region. Our plans will also significantly fuel regional economic growth which will help to boost job creation. It will move us to a green, healthy, dynamic and thriving North East.

By implementing this Plan in full we will seek to deliver a number of fundamental outcomes that will shape our region for decades to come. These high level outcomes form the basis for the development of the Plan and interface with our vision, objectives and key performance indicators.

2021 - Our regional challenges



We have a growing population but a one that is ageing over time (2m people, average age 43.7).



There are major health and income based inequalities. High percentage of economically inactive people in the region are long-term sick (North East: 28.5%. UK: 22.1%)



Plans for substantial housing growth need to be supported by good public and sustainable transport connections: 109,555 new homes planned



Average productivity per head in our region remains 16% below the output for England. This has an impact on the potential competitiveness and resilience of our businesses. (GVA) terms)



Gross Value Added output rising but challenged by external pressures with a persistent productivity gap GVA of £20,338. This is below the national average of £24,181.



We have fewer businesses per head and fewer jobs in high skilled occupations than other areas.



Analysis by IPPR North suggests that in 2019, planned Government spend on transport in London was £3,636 per person, over seven times more than the £519 per head in the North East.



A range of transport issues has led to a contrast between rural isolation in our remoter areas and poor air quality and congestion in parts of our cities.



Commuting to workplaces is dominated by car travel, so congestion is a significant issue on our roads, which affects public transport access and attractiveness, reduces productivity and increases inactivity and vehicle emissions.



Public transport use is falling over the long-term, despite an increase in bus use in 2019 as a result of investor. use in 2019 as a result of investment by bus operators.



Transport contributes a significant proportion of carbon emissions and we have an air quality problem in our region.



Cars are our region's most used form of transport and car ownership in the North East is increasing, leading to more traffic congestion and vehicle emissions.

Our vision

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

Our objectives



Carbon-neutral transport



Overcome inequality and grow our economy



Healthier North East



Appealing sustainable transport choices



Safe, secure network

By 2035, we'll achieve our objectives by:



Easier access to education, skills, and higher value jobs.



Health levels at least equal to other regions in the UK.



Better connections from the North East to national and international destinations.



A transport network with improved environmental credentials including more sustainable journeys, better air quality and reduced carbon output.



A safer and more reliable integrated transport network which is more intuitive for customers with a sustainable cost base.



Direct job opportunities in the transport and infrastructure sectors.



Enabling new development and housing sites and improving accessibility to existing communities.

This Plan will deliver profound and lasting improvements that will shape the North East and its people for decades to come.

To 2035, our region requires an estimated £6.8 billion of capital investment, an amount which will grow as further schemes are developed over the lifetime of the Plan.

We believe this to be a fair share of national transport funding which should be allocated to our region from Central Government to 2021-2035.



Appendix 1 - Delivering the Transport North East Programme

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

Transport North East

Appendix 1 - Delivering the Transport North East Programme

The North East Transport Plan includes an ambitious transport programme, this document details how we will deliver this programme and how you can get involved and keep the programme up to date.

Each stage represents a gateway in the process. Approvals and reviews are applied at each stage of this process.

How can I get involved

Transport North East is always keen to hear around new ideas for our programme. For more details and to get in touch, please visit https://www.transportnortheast.gov.uk/contact/

You can also contact with your local authority for details of schemes in your local area or speak with your local ward councillors.

Project Delivery Lifecycle



Concept	Transport improvements of any kind can enter the programme as concepts (any idea can be considered)
	Approved gateway, proceed to Objective assessment
Objective Assessment	Schemes are assessed based on the transport plan objectives and those of individual funding opportunities with a positive and balanced view sought.
Approv	ed gateway, proceed to Business Case Development assessment
Business Case Development	Some schemes are subject to the development of business cases which are developed in line with the latest government guidance / the region's assurance framework. These include environmental and economic appraisals of the impact of schemes
	oved gateway, proceed to Consultation and powers assessment
Consultation and powers	Some schemes may require consents or powers such as planning permission or traffic regulation changes, this will be sought and members of the public will have the chance to comment and influence plans
	Approved gateway, proceed to Reporting assessment
Reporting	Regular reporting to programme board and members of the Joint Transport Committee is undertaken when decisions are to be taken.
	proved gateway, proceed to Funding and Delivery assessment
Funding and Delivery	Most schemes require funding to enable their delivery, this is only confirmed once the scheme is developed all risks have been considered and the case has been made. Funding will come from a variety of sources.
	ved gateway, proceed to Monitoring and Evaluation assessment
Monitoring and Evaluation	The Transport Plan will be monitored and evaluated alongside the individual scheme components to ensure we are addressing the objectives.
Updates	Our programme of interventions will be updated continuously with new ideas added to reflect the most pressing issues facing the region, ensuring transport investment is agile to change.

North East Transport Plan

We have the ambition, drive and knowledge needed to improve regional transport Gramatically over the coming years.

TransportPlan@transportnortheast.gov.uk transportnortheast.gov.uk







North East Transport Plan 2021-2035

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

Your consultation feedback and our response

Contents

Background	3
The Integrated Sustainability Appraisal (ISA)	3
How we told you about the consultation	4
Your response	4
Who replied	5
How you travel	6
What you told us	7
Key insights from the consultation	8
☐Further Insights	9
Conclusion	11
Appendix A - List of organisations who responded	12
Appendix B – Consultation questionnaire	13

Background

The North East Transport Plan sets out the transport priorities for our region up to 2035 and has now been adopted by the Joint Transport Committee. We've worked with our seven local authorities and Nexus (the Tyne and Wear Passenger Transport Executive) to coordinate this collection of 'game-changing' projects and we're excited to share our vision for the future.

This is our first region-wide Transport Plan for the seven local authority areas in the North East, covering two Combined Authorities, brought together by the North East Joint Transport Committee:

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

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

he North East Transport Plan sets out the transport priorities for our region up to 2035. It has now been adopted by the Joint Transport Committee as the successor to the previous Local Transport Plans for Durham, Northumberland and Tyne and Wear. We've worked with our seven local authorities and Nexus (the Tyne and Wear Passenger Transport Executive) to coordinate this collection of 'game-changing' projects and we're excited to share our vision for the future.

The Integrated Sustainability Appraisal (ISA)

The role of an ISA is to assess the extent to which the policies in the Plan will help achieve wider environmental, economic, social and cultural objectives. The accompanying ISA has therefore been a core part of the development of the Draft North East Transport Plan and was intended to provide a thorough assessment of the proposed objectives, policies and investment plans for strategic transport in the region, as well as identifying any potential areas for improvement in sustainability performance. The ISA has been produced to the same timescales as the North East Transport Plan.

How we told you about the consultation

In order to reach out to as many people as possible, a multi-channel approach was used, including:

- posts on Transport North East social media channels – Facebook and LinkedIn
- digital advertising through Google and Facebook;
- media activity;
- a dedicated consultation telephone
 hotline and email address was in
 operation throughout the consultation;
- virtual consultation events held via Zoom an equivalent of local meetings in town and village halls);
- leaflet drops to 30,000 homes across the region;
- newspaper adverts across eight regional newspapers;
- Targeted e-mails via Primary Times and Bdaily;
- a six-week radio campaign across three local radio stations; and
- · e-mails to key stakeholders.

We worked with local authorities and a range of partners to ensure that messaging around the Plan and consultation were shared extensively.

We made sure that everyone's needs were taken into account by making the Transport Plan and the questionnaire were available in whatever format was required. This included large print and audio versions of the Transport Plan.

Recognising our aspiration to engage with young people, we also contacted the region's Youth Parliament groups and were subsequently invited to attend two Youth Parliament Sessions. We also reached out to our contacts at the region's universities and asked them to forward the consultation details on to their students. The team were invited to present to the Climate and Environment Group of Tyne and Wear whose members included secondary school and university students.

Additional forums and meetings were organised by special request including:

- Meetings with the CBI, several businesses and the Covid 19 North East Economic Response Group,
- Forums were also held with Berwick Town Council, the TUC, North East Tourism Working Group, the Tyne and Wear Climate and Environment Group, North East Freight Partnership, and the North East Climate Coalition.

Your response

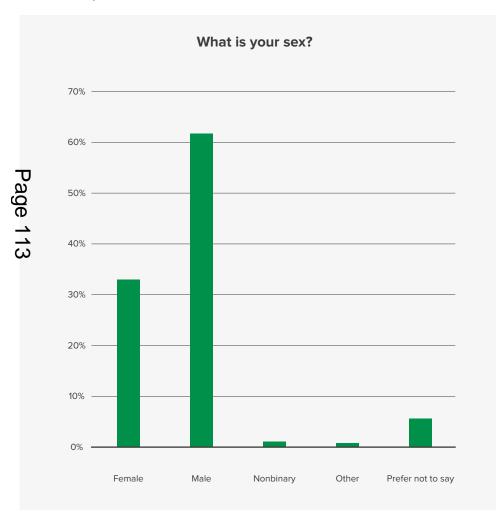
In total, we had almost 3,400 replies as part of the consultation.

The majority of you responded by completing the questionnaire that accompanied the Draft North East Transport Plan, but we also received feedback over the phone, via email and letter and verbally at our engagement events. Several of you contacted us in other ways. Some school children also chose to draw their aspirations for future transport. To summarise, we received:

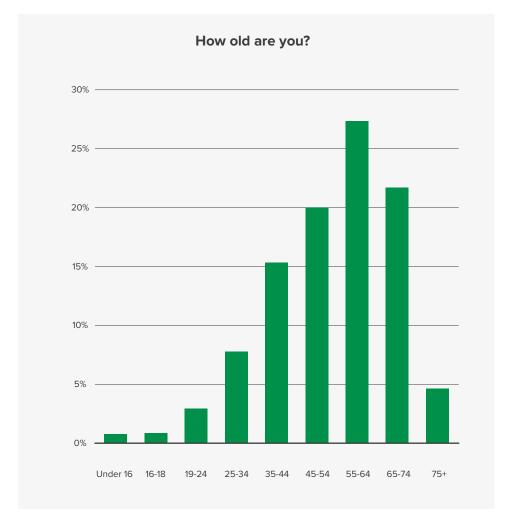
- 3,231 completed surveys questionnaires;
- 37 letters:
- 40 phone calls:
- 56 e-mails:
- Drawings from school children; and
- 136 registrations for one of the six engagement events, with around 60 people taking part in total.

Who replied

- 90% of respondents were white
- 61% of respondents were male

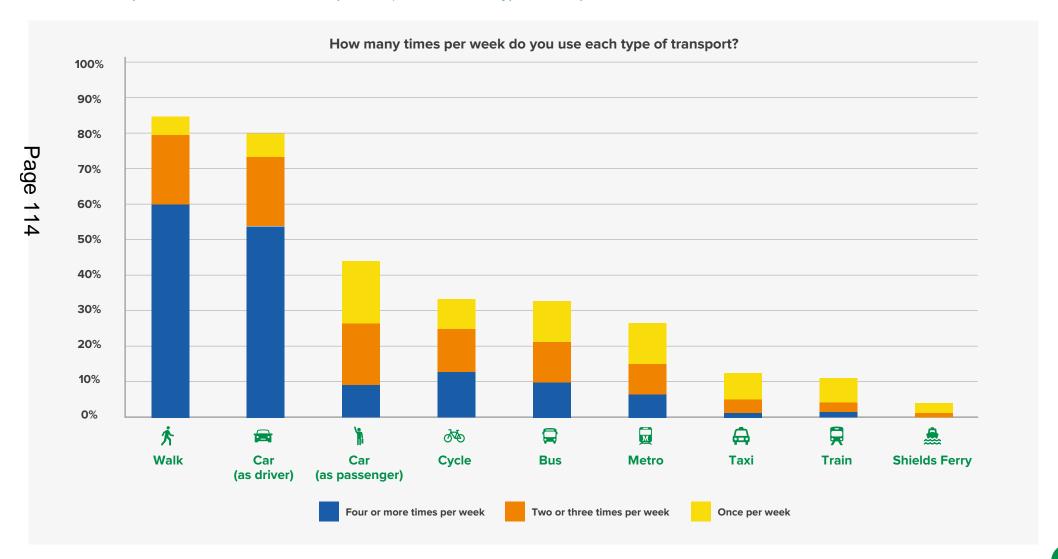


- Over half of respondents were aged 55 or over
- 62% of respondents were in employment and 28% were retired



How You Travel

When we asked you how often each week you travel by different forms of transport, walking came out top (60% of respondents to the walk question walked four or more times per week), followed by car driver (55% of respondents to the car driver question drove four or more times per week). You used other types of transport less often.



What you told us

A number of insights have been raised which we have considered in shaping the final version of the Plan. This page and the following ones summarise the consultation feedback and our response.

When we asked you what you thought of the Vision and Objectives of the Transport Plan, most of you agreed with each one, although there was some variation between items as to what percentage of you agreed, disagreed or were not sure.

The Transport Plan Vision and Objective	es		
All figures in percentages, some may not add up to 100 due to rounding	Agreed	Disagreed	Neither agreed or disagreed
Vision: Moving to a green, healthy, dynamic and thriving North East.	76	8	16
Objective: Carbon Neutral North East	78	8	14
Objective: Overcome inequality and grow our economy	81	5	14
Objective: Healthier North East	88	3	8
Objective: Appealing sustainable transport choices	85	6	9
Objective: Safe, secure network	87	3	10

Key insights from the consultation

Торіс	Your insights	Our response
Road schemes – too many or is the Plan 'anti-car'?	Many responses stated that the plan was too road focussed with too many new roads or road schemes which undermines the environmental ambitions of the plan. This was countered by many other responses asserting that the plan was 'anti-car'.	Decarbonising our transport system is the first objective of this Plan. Most schemes in the plan are at an early stage in their development and we will subject all the schemes in the Plan, including road schemes, to rigorous testing to prove that they meet all of the Plan's objectives, before they can be selected for delivery through a regional route. In addition, we have included an Appendix to the Plan, setting out the process we will follow to do this and we have also ensured that schemes are better described so that the improvements for all road users, or benefits of reduced carbon footprint are more apparent.
Employers' role in sustainable travel	Sustainable travel choices are often in the hands of the employer rather than the individual	We have introduced an initiative in the Plan which looks at collaboration with employers, potentially to develop a "green travel pledge", to introduce initiatives to recognise and celebrate employers who make it easier for employees to use public transport or active travel for business.
Support our tourism sector	We need to find more ways of supporting our tourism industry with sustainable transport infrastructure, especially in rural areas.	The Plan now includes an initiative to work with tourism authorities, Councils and bus operators, to develop schemes to do this, including new ticket products and new sustainable transport infrastructure, perhaps with park and ride for tourist sites (see also the Further Insight on coaches and tourism)
Design of new developments and neighbourhoods	There was a feeling that new developments and neighbourhoods could be designed so that they are less car reliant	We want to make sure that Councils across our region are able to work together to ensure we have access to the latest thinking and best practice in design to inform their own planning policies. We've also referred to potential plans from Government to make sure expected substantial housing growth is supported by good public and sustainable transport.
Sustainable travel for rural communities	People felt the plan should do more to promote sustainable travel in rural communities	We have enhanced our ambitions for a regional cycle network to better consider high quality cycle links between rural locations which people are confident they can use safely. Other rural options which we have also appraised include maintaining and improving bus services, support for smart travel and 'on demand' community transport
		We also want to increase the provision of Electric Vehicle (EV) charge points in rural areas for those who are not able to use public transport. We've set these and other rural initiatives out in a new table in the Plan.
Setting performance and financial targets	There were calls for the plan to set performance and financial targets (for example a minimum amount or proportion to be spent on cycling infrastructure), and that some Key Performance Indicators (KPIs) should be more specific	We have reconsidered the use of targets in the Plan, however, as the schemes in the Plan aren't yet funded targets would either be unambitious or unachievable. Once funding streams are confirmed from Government to support our Transport Plan, we will be better placed to consider the introduction of targets.

Further insights

Topic	Your insights	Our response
More on integrated transport and ticketing	Greater reference to integrated transport and ticketing should be made in the Plan.	Greater integration is at the heart of this plan, setting out how by 2035 we want simpler ticketing and payment, easily available and accurate travel information and seamless interchange between different forms of transport. We will elaborate on this in a forthcoming Ticketing, Pricing, and Information Strategy.
Include Zero Emission Vehicles and alternative fuels	References to electric vehicles should be augmented to cover zero emission vehicles and the content of the Plan developed to consider hydrogen and other alternative fuels.	We have amended the relevant sections of the Plan to include these points, so we talk about Zero instead of Low Emission wherever possible. We set out what we are doing already – for example around infrastructure for Zero Emission taxis. We've also explained that we want to investigate the practicalities of becoming a Transport Hydrogen Hub, and work with the National Centre for Data and the Newcastle University Centres for Research and Excellence to ensure that essential data is compiled which can be utilised to assist in the future deployment of hydrogen.
TAdd more on taxis ယ ထ	There are relatively few references to taxis (both Hackney Carriages and Private Hire Vehicles) and the role that they currently have, and could have in the future, in the region's transport system.	We've included completely new wording on taxis (both Hackney Carriages and Private Hire Vehicles) acknowledging their current, and potential future, contribution to our transport network.
Talk about coaches and their role in tourism	There is no mention of coaches in the draft Plan. The role they play in transporting tourists should also be acknowledged as this benefits the environment by reducing the number of cars on the road.	We've added new wording on coaches and tourism that explains how important coaches are in this respect.
Include car clubs and car sharing	The draft Plan did not describe car clubs and car sharing.	We have introduced a new commitment to investigate how car clubs and sharing can be introduced in parts of our region where commercial operations are not currently viable.
More on road and rail freight	There should be greater mention of both road and rail freight in the Plan.	We have explained there will be new Rail and Road strategies which will cover road haulage and rail freight in greater detail, and we've updated the table in the Plan to show what strategies we have planned and what they will cover. We intend to collaborate closely with both the road haulage and rail freight sectors in the development of these strategies.
Include motorcycles	We should talk about motorcycles in the Plan.	There is new wording on motorcycles, including the road safety issues associated with them.

Further insights continued

Address the needs of disabled people	The needs of those with disabilities were not expressed in the draft Plan.	We've added an undertaking to work with stakeholders such as public transport operators and groups representing different forms of impairment across the region to ensure that the region's transport infrastructure, services and information are accessible, regardless of people's circumstances. Our Integrated Sustainability Appraisal (ISA) will also assess the Equalities and Health impacts of our programme. These measures will ensure that this Plan is for everyone
More about affordability of transport	Whilst affordability and transport poverty are already themes within the draft Plan, they should have greater prominence.	We've added text to explain that our upcoming Ticketing, Pricing and Information Strategy will aim to identify ticketing and pricing solutions that make sustainable travel a feasible option for everyone in the region.
Which schemes are funded	We should show which schemes have already received funding within the Plan.	The transport programme set out in the Plan does not include any schemes which already have the funding to allow them to proceed; to make it clear which schemes have got such funding we will publish a list of them on the website. To obtain funding for each individual scheme in the programme, we will be required to bid for funding when opportunities become available. Committing to the programme as a whole is important- it would be misleading to show financial ask by transport share at this point.
①Greater attention tocross boundary travel	The Plan should show greater consideration to cross boundary travel, for example into Scotland	We've added wording saying we will commit to reach out, and seek closer working with, all the neighbouring transport authorities bordering on our region.
Osuggestions for additional schemes	Some respondents suggested additional schemes for the Plan.	We have assessed those schemes which are relevant to the whole region and added five schemes to our programme. However, we will forward suggestions for new schemes that are really local in nature to the relevant local authority to see whether they want to promote them.
Provide a financial breakdown by transport type	You asked why we weren't breaking down financial ask per transport type. You said you would like to see how this varies between the different transport types.	How we prioritise schemes is determined not only by our own assessment process, but also by what funds are available – Government often has different criteria for allocating funding by transport type and schemes taken forward must align with those criteria; we will use the assurance framework to make sure schemes do this. In addition, the Plan includes several schemes that will benefit different types of transport, so it would therefore be difficult to break the funding down by transport share at this point. Finally, rail schemes are especially costly and such a breakdown would give a misleading impression of our priorities.
Vehicles on the ferry	The question was asked whether the ferry could carry cars and buses	We've talked about our plans for new, greener vessels. We don't see the ferry being able to accommodate vehicles, as the Tyne Tunnel is close by. Also, the ferry is part of the public transport network offering a more sustainable alternative to the private car and is well integrated with bus and metro links.
Improve the design of the draft Plan	You said the Plan needs to be in a format that can be easily printed off without being in small font and the maps need to be clearer.	We've tweaked the design of the Transport Plan and added revised maps so the whole document can be printed more easily.

Conclusion

We're really grateful for your feedback as we look to the future for the North East. Your insights have given us a better picture of what is needed to help us improve the region's transport and achieve our Vision of Moving to a green, healthy, dynamic and thriving North East.

Appendix A - list of organisations who responded

Organisations

A2Z Licensing

Banks Group

Bishop Auckland Cycling club Bishop Auckland Town Council

Bowburn and Parkhill Community Partnership

Bus Users UK

Cassop Cum Quarrington Parish Council

Chartered Institute of Transport and Logistics

Cty of Durham Trust

ommunity Rail Network

Confederation of Passenger Transport

county Durham Green Party

ounty Durham Local Access Forum

Cross Country Trains

Department for Transport

Durham County Council

East Boldon Forum

Gateshead Council

Highways England

Homes England

Karbon Homes

Kielder Water & Forest Park Development Trust

Laverick Hall Farm Ltd

Middleton-in-Teesdale Parish Council

Mott MacDonald

National Union of Rail, Maritime and Transport Workers

(RMT)

Network Rail

Newbiggin Parish Council

Newcastle Disability Forum

North East England Climate Coalition (NEECCO)

Northumberland County Council

Northumberland Local Access Forum

Northumberland Public Health

Passenger Transport Networks, York

Rail Future North East

RISE Mental Health

Safe Pedestrian And Cycling Environment (SPACE) for

Fenham and Arthur's Hill

Safe Pedestrian And Cycling Environment (SPACE) for

Gosforth

South East Northumberland Rail Users Group

Stagecoach North East

Staindrop Parish Council

Stocksfield Parish Council

Sustrans

Transport for the North

Tyne And Wear Citizens- Green, Fair and Healthy Group

Tyne Valley Community Rail Partnership

Warden Parish Council

Appendix B - Consultation questionnaire

As part of the North East Transport Plan we want to hear your views! Your feedback will help to shape the final strategy which will be published in March 2021. To share your views, please fill out the following short survey before 14 January 2020. We hope that you are happy to answer all of the questions below however, if you'd prefer to just give general feedback please go to question 15.

If yo	ou are under 16 you will re	equire consent from a parent or guardian to take part.
1. H	ave you read and unders	stood the terms and conditions?
	Yes	No
Paġe	Are you responding as an	individual or on behalf of an organisation?
121	Individual	Organisation
If yo	ou are responding on beh	alf of an organisation what is the organisation's name?
	•	the full questionnaire or just give feedback? edback please progress to last question (Q19)
	Yes	No

About you

4. Which age range describes you?

Under 16	25-34	55-64
16-18	35-44	65-74
19-24	45-54	75 and ove

5. What is your ethnic group?

White	Mixed or Multiple ethnic groups
Asian of British Asian	Other ethnic group
Black, African, Caribbean or Black British	Prefer not to say

6. What is your sex?

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Male	Other
Female	Prefer not to say
Nonbinary	

7. What is your employment status?

Employed full time	Volunteer/carer	Unemployed on medical grounds
Employed part time	Student/apprentice	Other:
Self employed	Unemployed and looking for a job	
Retired	Unemployed but not looking for a job	

10. How often do you use each type of transport per week?

		0	1	2	3	4	5	5+
广	Walk							
₩	Cycle							
	Bus							
M	Metro							
Ŗ	Train							
	Shields Ferry							
	Car (as driver)							
b ade	Car (as passenger)							
\$ 3	Taxi							
?	Other							

11. Our vision for the Transport Plan is: 'Moving to a green, healthy, dynamic and thriving North East'. Do you agree with this vision?

Strongly Disagree Disagree Nor Disagree Agree Agree Strongly Agree

Please give a reason for your answer

12. Our Transport Plan objectives are:

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

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
Carbon neutral North East					
Overcome inequality and grow our economy					
Healthier North East					
Appealing sustainable transport choices					
Safe, secure network					
What do you think are the ba	rriers to ach	ieving each	of these objec	tives?	
Carbon neutral North East					
Overcome inequality					
Overcome inequality and grow our economy					
and grow our economy					
and grow our economy Healthier North East					

What do you think are the barriers to achieving each of these objectives?

13. On page 26 of the Plan we set out our approach to monitoring and evaluation and mention that individual projects will be required to submit Monitoring and Evaluation Plans. Do you agree with this approach?

Neither Agree Strongly Disagree Disagree Strongly Agree Agree Nor Disagree

Please give reasons for your answer

In our Transport Plan we set out 18 policy statements which show where we want our transport network to be by 2035. Our policy statements are listed in the following table.

ease give a rating out of five:

Strongly Disagree 2 = Disagree

 $3 = \frac{\text{Neither Agree}}{\text{Nor Disagree}}$

5 = Strongly Agree

		Rating
Making the right	We will enable people to make greener and healthier travel choices whenever they can and ensure our sustainable network takes everyone where they need to go at a price they can afford.	
travel choice	We must ensure all our actions improve transport across the region and deliver to the objectives of this Plan so we are greener, more inclusive, healthier, safer and our economy thrives.	
Active Travel	We will help more people use active travel by making the cycle network better across the North East. This will include being flexible in how we use road space to help cyclists and pedestrians.	

Public transport:	We will improve bus travel and attract more passengers with new rapid bus corridors. This will include changing how road space is used to help buses move more quickly.
travelling by bus, ferry and on demand public	We will take action to continue to support the Shields Ferry and develop potential improvements where possible.
transport	We must help more people to reach the sustainable transport network with more 'on demand' solutions.
Private transport: travelling by car	We must make our roads flow better for goods and essential car journeys.
and using road infrastructure	We must strengthen use of cleaner, greener cars, vans and lorries.
Public transport: travelling	We must make our roads flow better for goods and essential car journeys.
by local rail and Metro	We must strengthen use of cleaner, greener cars, vans and lorries.
Connectivity beyond our own	We must work with partners to make movement of people and goods to and from our region, more efficient and greener.
boundaries	We must work with partners to strengthen connections from destinations in our region to everywhere in the UK and beyond.
Research, Development Active travel and Innovation	We will embrace new technologies to meet our transport objectives and set innovation challenges to industry creating new opportunities with our network as the testbed.
	We will strive to integrate within and between different types of transport, so that each contributes its full potential and people can move easily between them.
Overarching	We must constantly seek funding opportunities to deliver our Transport Plan objectives.
policy areas	We will take action to make travel in the North East net carbon zero and improve transport safety and security.
We must ensure that we work with partner organisations to drive new, quality roles and innovate in the transport sectors.	

We have the ambition, drive and knowledge beeded to improve regional transport dramatically over the coming years.

TransportPlan@transportnortheast.gov.uk transportnortheast.gov.uk





This page is intentionally left blank



Integrated Sustainability Appraisal for the North East Transport Plan 2021-2035

ISA Report

Updated version following consultation on the Transport Plan

Transport North East Strategy Unit

March 2021

Quality information

Prepared by	Checked by	Approved by	
Cheryl Beattie Senior Consultant	Nick Chisholm-Batten Associate Director	lain Bell Regional Director	
Ryan Putt Environmental Consultant			

Revision History

Revision	Revision date	Details	Authorized	Name	Position
V3.0	8 th March 2021	Final version	8 th March 2021	Nick Chisholm- Batten	Associate Director

Prepared for:

Transport North East Strategy Unit

Prepared by:

AECOM Limited One Trinity Gardens, First Floor Quayside Newcastle-upon-Tyne NE1 2HF United Kingdom

T: +44 (191) 224 6500 aecom.com

© 2021 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

Non	n-Technical Summary	
1.	Introduction	1
	ground	
The N	North East Transport Plan 2021-2035	1
Integ	rated Sustainability Appraisal explained	5
This	ISA Report	7
2.	What is the scope of the ISA?	9
	Scoping Report	
Conte	ent of the ISA Scoping Report	15
3.	Assessment of reasonable alternatives for the NETP	24
	sonable alternatives in ISA	
	rea-led approach to considering reasonable alternatives	
,	and Wear	
•	of Durham	
	-industrial communities	
	stal areas	
	xet towns	
	l areas	
Over	all conclusions	56
4.	Appraisal of the current version of the NETP	57
	ground	
	ent version of the NETP	
	aisal of the NETP work programmes	
	iversity	
	er and Soil Resources	
	oric Environment	
	lscape	
	Quality and Noise	
	ate Change and Flood Risk	
	ulation	
	an health	
	alities	
	lityulative effects with other plans and programmes	
5.	What are the next steps?	95
App	pendix A Policy and plan review and baseline information	97

Prepared for: Transport North East Strategy Unit

This page has been left intentionally blank.

Non-Technical Summary

What is an Integrated Sustainability Appraisal?

An Integrated Sustainability Appraisal (ISA) has been carried out to inform the preparation of the emerging North East Transport Plan 2021-2035 (NETP).

ISA is a process that transport authorities such as the North East Joint Transport Committee undertake to inform their transport plans. ISA fulfils the requirements for Strategic Environmental Assessment (SEA)¹ and discharges the duties for Equalities Impact Assessment (EqIA)² and Health Impact Assessment (HIA). It also enables issues relating to rural areas to be effectively considered through a rural proofing exercise. Transport authorities use ISA to assess transport plans against a set of sustainability objectives and the baseline developed in consultation with interested parties.

The purpose of the appraisal is to help identify (and so be in a better position to avoid) negative environmental and socio-economic effects. It is also designed to identify opportunities to improve the environmental quality of the North East and the prosperity and quality of life of the region's residents through the NETP. It also helps ensure that equalities and health considerations are considered appropriately through plan development and rural issues are addressed.

What is the North East Transport Plan?

The North East Transport Plan 2021-2035 (NETP) is the first comprehensive transport plan to be developed for the North East region, comprising the local authority areas of Durham, Gateshead, Newcastle Upon Tyne, North Tyneside, Northumberland, South Tyneside and Sunderland. It brings together the region's two local transport authorities (the North East Combined Authority and the North of Tyne Combined Authority) and meets the requirement under the Transport Act 2000 that they produce a single local transport plan via the North East Joint Transport Committee (JTC).

Prior to the NETP, ten-year Local Transport Plans (LTPs) were published in 2011. These did not cover the North East as a whole; instead they presented three separate transport plans focusing on each local transport authority area: Tyne and Wear, Durham and Northumberland.

The NETP, which will comprise an overarching strategy document accompanied by an Implementation Plan, will supersede the LTPs which are set to expire in 2021. It will set out the North East's transport priorities up to 2035 and will communicate opportunities for investment and improvements to the region's transport network. The NETP will form the basis for bids and requests for funding inward transport investment to the region from central government and other sources.

Purpose and content of this ISA Report

This ISA Report accompanies the latest version of the NETP³ and is the third document to be produced as part of the ISA process. The first document was the ISA Scoping Report⁴, which includes information about the North East region's environment and communities and the 'framework' against which the NETP has been assessed. The second document was the ISA Report to accompany the Consultation Draft of the NETP.⁵ This accompanied the draft NETP for consultation between November 2020 and January 2021.

The current ISA Report updates the previous ISA Report through considering the updates made to the plan since consultation concluded.

¹ As set out by the Environmental Assessment of Plans and Programmes Regulations 2004

² As public sector organisations, the North Tyne Combined Authority and the North East Combined Authority have a duty under the Equality Act 2010 and the associated Public Sector Equality Duty (PSED) to ensure that the objectives and policy options within the NETP eliminate unlawful discrimination (direct and indirect), as well as advancing equality of opportunity.

³ North East Joint Transport Committee (March 2021) North East Transport Plan 2021-2035

⁴ AECOM (April 2020) North East Transport Plan: Integrated Sustainability Appraisal Scoping Report

⁵ AECOM (November 2020) Integrated Sustainability Appraisal for the North East Transport Plan 2021-2035, ISA Report: Consultation Version

The purpose of the ISA Report is to:

- Identify, describe and evaluate the likely environmental and socio-economic effects of the NETP and alternatives; and
- Provide an opportunity for statutory consultees, interested parties and the public to offer views on the ISA process carried out to date.

The ISA Report contains:

- An outline of the contents and main objectives of the NETP and its relationship with other relevant policies, plans and programmes;
- Relevant aspects of the current state of the environment and key environmental issues;
- The ISA Framework of objectives and assessment questions against which the NETP has been assessed:
- An assessment of alternative approaches for the NETP;
- The likely significant environmental and socio-economic effects of the NETP;
- The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects as a result of the NETP; and
- The next steps for the NETP and accompanying ISA process.

The information presented in this ISA Report has been presented through ten ISA themes, as follows:

- Biodiversity
- Water and Soil Resources
- Historic Environment
- Landscape
- Air Quality and Noise
- Climate Change and Flood Risk
- Population
- Human Health
- Equalities
- Rurality

Assessment of alternative approaches for the NETP

Assessing options for six different areas of the North East

A central element of the ISA process is the appraisal of 'reasonable alternatives' for the NETP, which should be undertaken in time to inform development of the draft plan. The appraisal of reasonable alternatives is a key requirement of the SEA Regulations.

To address this requirement, a number of alternative approaches have been considered in relation to the delivery of transport infrastructure in the North East. The assessment of reasonable alternatives has informed the preferred strategy for the NETP.

A central role of appraising reasonable alternatives is to help identify the relative sustainability merits of different approaches to delivering enhanced transport provision in the region. In recognition of the diversity of the region, the approach to the appraisal of reasonable alternatives subdivides the North East region into a number of distinct geographical areas.

The six areas are as follows:

- Tyne and Wear: This area covers the main Tyne and Wear conurbation, encompassing much of the local authority areas of Newcastle city, North Tyneside, South Tyneside, Sunderland and Gateshead.
- City of Durham: This area covers the city of Durham and its surrounding area.
- Post-industrial communities: This area incorporates the former coal-mining and steel working
 areas in the region. This includes the area around Consett, Stanley and Catchgate; the area
 around Peterlee, Easington, Shotton Colliery and Blackhall Colliery; a corridor between Peterlee
 and Ferryhill; a corridor along the A182 encompassing South Hetton, Hetton-le-Hole, and
 Houghton-le-Spring; and the area around Shildon.
- **Market towns:** This area incorporates the larger market towns in the region, including Bishop Auckland, Barnard Castle, Alnwick, Berwick-upon-Tweed, Morpeth and Hexham.
- Coastal areas: This area includes coastal areas located to the south and north of the main Tyne and Wear conurbation. It incorporates: the coastal areas between South Shields and Roker, including Marsden, Whitburn and Seaburn; Hendon to Seaham; and Blyth to Amble.
- Rural areas: This covers the rural areas of the region, including the rural parts of
 Northumberland and County Durham. It includes the parts of the region within the
 Northumberland National Park and the two AONBs (Northumberland Coast AONB and North
 Pennines AONB).

For each of these areas, a number of options have been identified and subsequently appraised. For all areas a 'do minimum' option is described which would be applied in all circumstances, together with one or more options for additional levels of intervention over and above the do minimum. These options are designed to reflect the key issues facing that area, and the different approaches that can be taken to intervention/investment in transport infrastructure and management.

A summary of the sustainability performance of the options against the ISA themes, including rankings, is presented below. Full appraisal findings are presented in **Chapter 3** of the main body of the ISA Report.

Table NTS1: Rankings of options for Tyne and Wear

Option TW1: Do minimum

Prepared for: Transport North East Strategy Unit

Option TW2: Optimise use of existing infrastructure

Option TW3: Initiate more significant interventions, including with regards to the rail, Metro and

road network

	Rani	Rank of preference		
ISA theme	TW1	TW2	TW3	
Biodiversity	1	2	3	
Water and Soil Resources	2	1	3	
Historic Environment	2	1	3	
Landscape	2	1	3	
Air Quality and Noise	2	1	3	
Climate Change and Flood Risk	2	1	2	
Population	3	2	1	
Human Health	3	1	2	
Equalities	3	2	1	
Rurality	3	2	1	

Table NTS2: Rankings of options for the city of Durham

Option D1: Do minimum.

Option D2: Make better use of existing transport infrastructure in the city.

	Rank of prefer	
ISA theme	D1	D2
Biodiversity	1	2
Water and Soil Resources	=	=
Historic Environment	2	1
Landscape	2	1
Air Quality and Noise	2	1
Climate Change and Flood Risk	2	1
Population	2	1
Human Health	2	1
Equalities	2	1
Rurality	2	1

Table NTS3: Rankings of options for post-industrial communities

Option PI1: Do minimum.

Option PI2: Deliver road and rail infrastructure enhancements to support post-industrial

communities' connectivity

	Rank of preference	
ISA theme	PI1	PI2
Biodiversity	1	2
Water and Soil Resources	1	2
Historic Environment	2	1
Landscape	1	2
Air Quality and Noise	1	2
Climate Change and Flood Risk	1	2
Population	2	1
Human Health	2	1
Equalities	2	1
Rurality	2	1

Table NTS4: Rankings of options relating to coastal areas

Option C1: Do minimum.

Option C2: Support the regeneration of coastal settlements through targeted interventions

	Rank of prefer	
ISA theme	C1	C2
Biodiversity	1	2
Water and Soil Resources	=	=
Historic Environment	2	1
Landscape	1	2
Air Quality and Noise	2	1
Climate Change and Flood Risk	2	1
Population	2	1
Human Health	2	1
Equalities	2	1
Rurality	N/A	N/A

Table NTS5: Rankings of options relating to market towns

Option MT1: Do minimum.

Option MT2: Optimise the use of existing transport infrastructure

	Rank of p	reference
ISA theme	MT1	MT2
Biodiversity	1	2
Water and Soil Resources	1	2
Historic Environment	2	1
Landscape	1	2
Air Quality and Noise	2	1
Climate Change and Flood Risk	2	1
Population	2	1
Human Health	2	1
Equalities	2	1
Rurality	2	1

Table NTS6: Rankings of options for rural areas

Option R1: Do minimum

Option R2: Optimise use of existing infrastructure and take a technological approach to transport

challenges in rural areas

Option R3: Initiate more significant interventions, including with regards to multimodal interchange

	Rank of preferenc		rence
ISA theme	R1	R2	R3
Biodiversity	1	2	3
Water and Soil Resources	1	1	3
Historic Environment	2	1	3
Landscape	2	1	3
Air Quality and Noise	3	1	2
Climate Change and Flood Risk	3	1	2
Population	3	1	1
Human Health	3	1	2
Equalities	2	1	3
Rurality	3	2	1

Assessment of alternative approaches: overall conclusions

The assessment of the options considered as reasonable alternatives for the six areas has shown that in many cases that the 'do minimum' option performs less favourably against the ISA themes. This is given these options will do less to deliver enhancements which will help address some of the key accessibility and social inclusion issues experienced in different parts of the region, or support economic vitality. Whilst in some cases the do minimum options may reduce the potential for direct adverse environmental effects, they also preclude opportunities to deliver key environmental enhancements in the region, including relating to air and noise quality, the quality of the townscape, landscape and the public realm, or relating to the rejuvenation of features and areas of historic environment interest. In addition, the do minimum options limit opportunities for utilising transport infrastructure enhancements to deliver regional, sub-regional or local environmental net gain or for limiting greenhouse gas emissions.

The options which focus to a greater degree on 'soft' measures and demand management measures are less likely than the options supporting physical transport capacity enhancements to lead to direct adverse impacts on key environmental and socio-economic receptors in the region. These options also have the potential to deliver significant environmental enhancements and quality of life benefits through the encouragement of modal shift, a reduction in the need to travel, a limitation in traffic flows and improved traffic management.

The options which propose significant transport capacity enhancements have the potential to have a range of direct impacts on key receptors, including from landtake and impacts on the quality of the public realm. Physical transport capacity enhancements also have the potential to stimulate induced demand, with the potential to lead to direct and indirect impacts on features, areas and networks of environmental sensitivity, air and noise quality and greenhouse gas emissions.

The significance of effects from these interventions will though depend on the design, layout and scale of the schemes, and the mitigation and avoidance measures proposed. It is also recognised that the implementation of appropriate measures to 'lock in' the benefits of physical transport capacity enhancements is possible with the implementation of an appropriate package of complementary 'soft' transport and demand management measures. It is also recognised that such capacity enhancements have the potential to offer environmental benefits and deliver net gain, if designed appropriately.

Appraisal of the current version of the NETP

Chapter 4 of the ISA Report presents appraisal findings in relation to the current version of the NETP.

The appraisal is presented through an assessment of the seven work programmes currently put forward through the NETP. These work programmes are as follows:

- 1) Helping people to make the right travel choice
- 2) Upgrading North East Active Travel Infrastructure
- 3) Bus, ferry and first and last mile
- 4) Local rail and metro
- 5) Road infrastructure
- 6) Maintaining and renewing our transport network
- 7) National and international connectivity

This is accompanied by an assessment of the 'in-combination' effects of the different work programmes together. In response to the findings of these assessments, a series of proposed mitigation and enhancement measures are also proposed. These are designed to offset the potential significant adverse effects identified and maximise the opportunities for enhancements which are potentially available through the implementation of the NETP.

A summary of the key significant effects identified, and proposed mitigation and enhancement measures, is presented below by ISA theme.⁶

Table NTS7: Summary of likely significant effects and recommendations / proposed mitigation

Biodiversity

Likely significant effect	Effect dimensions	Recommendations, mitigation
Impacts on biodiversity from land take, habitat loss and fragmentation and disturbance from road, rail and public transport schemes proposed through the NETP.	Direct, short, medium and long- term, permanent and negative.	Potential impacts on habitats and species from landtake, loss of vegetation and trees and light pollution should be addressed through appropriate avoidance and mitigation measures. Opportunities to enhance green infrastructure networks along routes should be sought, supporting a premise of environmental net gain and delivering multifunctional benefits. This should be informed at the project level by a robust Environmental Impact Assessment ⁷ process.
Potential impacts on European designated biodiversity sites from new transport infrastructure schemes.	Direct and indirect, short, medium and long-term, permanent and negative.	Apply the recommendations of the Habitats Regulations Assessment process undertaken alongside the NETP.

Page 137

⁶ Further mitigation measures are proposed for specific work programmes in the main body of the ISA Report.

⁷ Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development. It is undertaken in association with the provisions of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

	1 0 4	
Impacts on biodiversity from increased noise, light and air pollution linked to traffic increases resulting from the release of induced demand from new road schemes.	Indirect, medium and long-term, permanent and negative.	are 'locked in' through provision of complementary public transport and walking and cycling measures which limit road traffic increases. Opportunities for delivering this provision on the existing network should be considered first by Transport North East.
Impacts on internationally and nationally designated sites present on the coast from enhancements to the resilience of coastal transport infrastructure.	Direct, short, medium and long- term, permanent and negative.	Biodiversity enhancements should be facilitated alongside network improvements. Key habitats should be retained and the integrity of ecological linkages should be secured. Programmes of works should be developed to help ensure an increased proportion of the SSSIs and other important designated sites present locally are brought into favourable condition.
Impacts of new lighting and signage on nocturnal species.	Direct short and medium term effects, temporary and negative.	New lighting and signage should be designed to minimise impacts on nocturnal species. This should be informed by appropriate ecology surveys.
Water and Soil Resources		
Likely significant effect	Effect dimensions	Recommendations, mitigation
Improved management of surface water run off through enhanced maintenance of the road network and the delivery of sustainable drainage schemes alongside new transport infrastructure.	Direct, short, medium and long term, permanent and positive.	New infrastructure should be supported by appropriate drainage systems where necessary, to reduce surface water runoff and maintain or improve attenuation rates. Opportunities to improve strategic sustainable drainage solutions should be sought where possible.
Improvements to soil quality from improved management of surface water run off through enhanced maintenance of the road network and the delivery of sustainable drainage schemes alongside new transport infrastructure.	Direct, medium and long term, permanent and positive.	New infrastructure should be supported by appropriate drainage systems where necessary, to reduce surface water runoff and maintain or improve attenuation rates. Opportunities to improve strategic sustainable drainage solutions should be sought where possible.
Historic Environment		
Likely significant effect	Effect dimensions	Recommendations, mitigation
The delivery of new transport infrastructure schemes has the potential to lead to significant impacts on the key assets (including designated and non-designated features and areas) of historic environment interest located in the vicinity of the key routes and areas targeted for interventions.	Direct and indirect, short, medium and long term, permanent and negative.	Transport infrastructure schemes should be accompanied by a comprehensive package of avoidance and mitigation measures, as well as, where possible, enhancement measures. This should be informed at the project level by a robust EIA process. New infrastructure should be designed to facilitate enhancements to the fabric and setting of the historic environment. It should also seek to maximise opportunities for enhancing access to and understanding of the historic environment.

Enhancement to the fabric and setting of the historic environment through improved maintenance regimes.	Direct, short, medium and long term, permanent and positive.	Maintenance regimes should seek to facilitate enhancements to the fabric and setting of designated and undesignated features and areas of historic environment interest.
Enhanced accessibility to, and additional opportunities for enjoyment of the North East's heritage resource.	Direct, short, medium and long term, permanent and positive.	None proposed.
Landscape		
Likely significant effect	Effect dimensions	Recommendations, mitigation
The delivery of new transport infrastructure schemes (in particular, road schemes) has the potential to lead to significant impacts on landscape and townscape character.	Direct and indirect, short, medium and long term, permanent and negative.	Transport infrastructure schemes should be accompanied by a comprehensive package of avoidance and mitigation measures, as well, where possible, enhancement measures. This should be informed at the project level by a robust EIA process. New infrastructure should be designed to limit impacts on landscape and townscape character, and facilitate enhancements.
Enhancement to landscape and townscape character through improved maintenance regimes.	Direct, short, medium and long term, permanent and positive.	Maintenance regimes should seek to facilitate enhancements to the quality of the public realm and local distinctiveness.
Enhanced accessibility to, and additional opportunities for enjoyment of the North East's landscape/townscape resource, including associated with valued landscapes and townscapes.	Direct, short, medium and long term, permanent and positive.	None proposed.
Air Quality and Noise		
Likely significant effect	Effect dimensions	Recommendations, mitigation
Air quality enhancements at key 'pinchpoints' on the network which have existing air quality issues.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Impacts from road schemes on air and noise quality over a wider area, including through the stimulation of induced demand.	Direct and indirect, medium and long term, permanent and negative.	Initiation of complementary measures alongside road enhancements to limit increases in traffic flows resulting from a release of induced demand.
Support for electric vehicles and cleaner fuels, with benefits for air and noise quality.	Indirect, medium and long term, permanent and positive.	None proposed.
Climate Change and Flood Risk		
Likely significant effect	Effect dimensions	Recommendations, mitigation
Limitation of greenhouse gas emissions from transport, including through the stimulation of modal shift from the private car towards public transport and active travel, and enhanced connectivity and smart travel.	Direct and indirect, medium and long term, permanent and positive.	None proposed.

AECOM NTS9

Promotion of electric vehicle use (including through the delivery of a Zero Emissions Vehicle Policy and Strategy), supporting the decarbonisation of the transport network.	Direct and indirect, medium and long term, permanent and positive.	None proposed.
Impacts on greenhouse gas emissions through the release of induced demand from new road schemes.	Direct and indirect, medium and long term, permanent and negative.	Initiation of complementary measures alongside road enhancements to limit increases in traffic flows resulting from a release of induced demand. Identify, assess and integrate measures to further reduce carbon through on or off-site offsetting or sequestration.
Increased resilience of the transport network to the likely effects of climate change.	Direct, medium and long term, permanent and positive.	None proposed.
Population		
Likely significant effect	Effect dimensions	Recommendations, mitigation
Improved accessibility to services, facilities and employment opportunities.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Support for a reduction in deprivation from accessibility, congestion and severance issues, and elements relating to social exclusion.	Direct and indirect, medium and long term, permanent and positive.	None proposed.
Enhanced economic opportunities through improved connections with the strategic and local transport network and key employment and growth areas.	Indirect, medium and long term, permanent and positive.	None proposed.
Support for the visitor economy from enhancements in transport infrastructure.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Enhancements to the quality of the neighbourhoods through a reduction of the impact of traffic and congestion.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Enhanced maintenance of the road network, supporting its resilience, with associated benefits for the quality of life of residents.	Direct, medium and long term, permanent and positive.	None proposed.
Human Health		
Likely significant effect	Effect dimensions	Recommendations, mitigation
Improved accessibility to health services and leisure and recreational facilities.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.

Facilitation of healthier lifestyles through the encouragement of active modes of travel.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Support for a reduction in deprivation, which is one of the key contributors to poor health and wellbeing in the region.	Direct and indirect, medium and long term, permanent and positive.	None proposed.
Enhancements to the quality of the neighbourhoods through a reduction of the impact of traffic and congestion.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Improvements to road safety.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Benefits for health and wellbeing from air and noise quality enhancements at key 'pinchpoints' on the network.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Impacts on health and wellbeing from road schemes linked to increased traffic flows, including from the stimulation of induced demand over a wider area.	Direct and indirect, medium and long term, permanent and negative.	Design in measures to improve mobility by walking and cycling, limit severance and initiate green infrastructure enhancements.
Equalities		
Likely significant effect	Effect dimensions	Recommendations, mitigation
Improved accessibility for groups with protected characteristics via a range of transport modes.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Reduction of impacts from the transport network on those groups with protected characteristics, including from severance, and contributions to a poor quality public realm.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Improvements to road safety.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Impacts on groups with protected characteristics from effects of road schemes on the quality of the public realm and increased severance.	Direct and indirect, medium and long term, permanent and negative.	Incorporate measures within scheme design to improve mobility, limit severance and initiate green infrastructure enhancements.
Rurality		
Likely significant effect	Effect dimensions	Recommendations, mitigation

Enhanced accessibility to the services, facilities and amenities located in the urban areas of the North East from rural areas by all modes of transport.	Direct and indirect, medium and long term, permanent and positive.	None proposed.
Improvements to rural areas' vitality through enhanced connections to key services, facilities and economic and employment opportunities.	Indirect, medium and long term, permanent and positive.	None proposed.
Support for the visitor economy from enhancements in transport infrastructure.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Enhanced maintenance of the road network in rural areas, supporting its resilience.	Direct, medium and long term, permanent and positive.	None proposed.
Limitation of the impacts of transport movements associated with timber and quarrying on rural areas.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.

Overall summary of effects

As highlighted by the tables above, the NETP work programmes have the potential to lead to a range of significant positive environmental and socio-economic effects for the North East. These include relating to: enhanced accessibility; improvements to air and noise quality; enhancements to the quality of the public realm; improvements to road safety; a reduction of severance from the transport network; positive effects on deprivation; improvements to neighbourhood vitality; support for the needs of those living in rural areas; and contributions to the region's economic vitality.

The appraisal has also highlighted that the NETP work programmes have the potential to lead to a number of significant negative effects, if not appropriately avoided or mitigated. These include direct physical impacts on key environmental and socio-economic receptors from new and improved transport infrastructure, and indirect effects relating to the potential for transport infrastructure enhancements to generate increased demand for travel in the region. The significance of these potential negative effects however depend on the extent to which appropriate packages of avoidance and mitigation measures are initiated through the implementation of these programmes.

In response to this, the ISA Report has highlighted a series of avoidance and mitigation measures which could potentially be delivered alongside the work programmes to limit potential negative effects and facilitate enhancements.

Next steps

At adoption of the NETP, an ISA Adoption Statement will be published.

This will present:

- The reasons for choosing the preferred measures for the NETP as adopted in the light of other reasonable alternatives dealt with;
- How environmental and socio-economic considerations have been integrated into the NETP;
- How consultation responses have been taken into account; and
- Measures that are to be taken to monitor the significant environmental effects of the NETP.

1. Introduction

Background

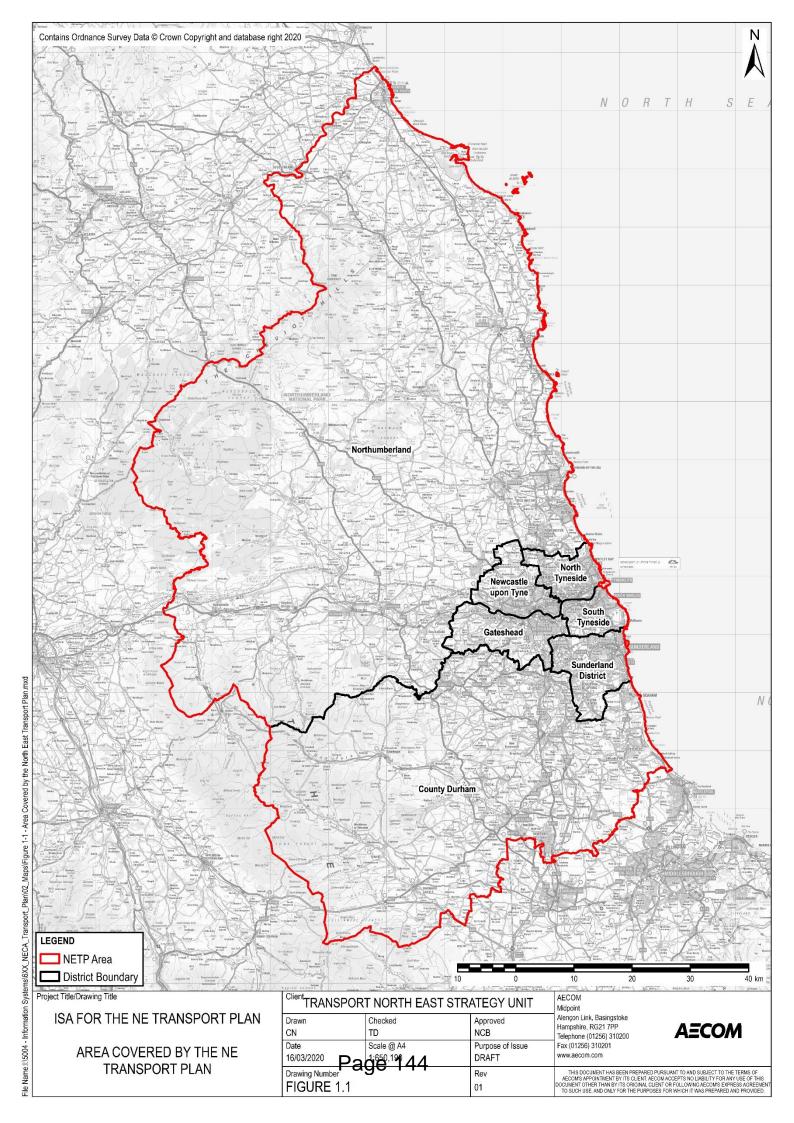
- 1.1 AECOM has been commissioned to undertake an independent Integrated Sustainability Appraisal (ISA) in support of the emerging North East Transport Plan 2021-2035 (NETP).
- 1.2 The ISA undertakes an integrated assessment that incorporates a Strategic Environmental Assessment (SEA), Equality Impact Assessment (EqIA), Health Impact Assessment (HIA), and Rural Proofing process.⁸ This integrated assessment will identify the potential impacts of the NETP on the environment, community and vitality of the North East region, with a view to promoting a more sustainable plan making process.
- 1.3 This ISA Report accompanies the latest version of the NETP, which was updated following consultation on the draft NETP undertaken between November 2020 and January 2021.
- 1.4 The NETP highlights the key transport challenges and opportunities in the North East region along with the transport infrastructure that needs to be delivered within the short, medium and longer term. This is with a view to connecting people to good employment opportunities, generating economic growth, whilst enabling the region and its people to move to greener more sustainable ways of travel.

The North East Transport Plan 2021-2035

Overview of the NETP

- 1.5 The North East Transport Plan 2021-2035 (NETP) is the first comprehensive transport plan to be developed for the North East region, comprising the local authority areas of Durham, Gateshead, Newcastle Upon Tyne, North Tyneside, Northumberland, South Tyneside and Sunderland. It brings together the region's two local transport authorities (the North East Combined Authority and the North of Tyne Combined Authority) and meets the requirement under the Transport Act 2000 that they produce a single local transport plan via the North East Joint Transport Committee (JTC).
- 1.6 Prior to the NETP, ten-year Local Transport Plans (LTPs) were published in 2011. These did not cover the North East as a whole; instead they presented three separate transport plans focusing on Tyne and Wear, Durham and Northumberland.
- 1.7 Given the complexities of travel patterns in the North East, which cross administrative boundaries, the decision was made to prepare a joint transport plan for the whole region. This has been taken forward through the governance of the North East Joint Transport Committee. which represents each of the seven local authorities.
- 1.8 The NETP, which will comprise an overarching strategy document accompanied by an Implementation Plan, will supersede the LTPs which are set to expire in 2021. It will set out the North East's transport priorities up to 2035 and will communicate opportunities for investment and improvements to the region's transport network. The NETP will form the basis for bids and requests for funding inward transport investment to the region from central government and other sources.
- 1.9 This NETP builds on the 'Connected North East Our blueprint' document published in October 2020, which set out how a connected North East can increase the prosperity, quality of life and health of the region. The aim of the blueprint is to help create and sustain 100,000 more and better jobs in a growing and decarbonised economy, where social and health inequalities are greatly reduced. The NETP is seen as fundamental to achieving these wider regional objectives.

⁸ A habitats regulations assessment is also being undertaken to support the development of the NETP; this has been reported on separately to the ISA.



- 1.10 The NETP is also closely aligned and interfaces with the North East Local Enterprise Partnership (LEP) Strategic Economic Plan and Local Industrial Strategy, central government strategy, as well as all relevant policies and Plans of Transport for the North, the seven North East local authorities and Nexus.
- 1.11 Key information relating to the NETP is presented in **Table 1.1** below.

Table 1.1: Key facts relating to the North East Transport Plan

Responsible authorities	The North Tyne Combined Authority and the North East Combined Authority.
	The North Tyne Combined Authority is a legal body that brings together Newcastle City Council, North Tyneside Council, Northumberland County Council under an elected Mayor.
	The North East Combined Authority (NECA) is a legal body that brings together Durham County Council, Gateshead Council, South Tyneside Council and Sunderland City Council.
	The plan is being delivered through the North East Joint Transport Committee.
Title of plan	North East Transport Plan 2021-2035
Subject	Transport plan
Purpose	The North East Transport Plan will provide a strategic framework for future transport planning across the seven local authority areas in the North East.
Timescale	To 2035
Area covered by the plan	The plan area covers the administrative area of Newcastle, North Tyneside, Northumberland, County Durham, Gateshead, South Tyneside and Sunderland (see Figure 1.1).
Summary of content	The North East Transport Plan will set strategic transport planning policy for the region in the period 2021-2035. It will set out which transport interventions the area intends to deliver during the plan period, and how these schemes will be funded. It will comprise an overarching strategy document, accompanied by an Implementation Plan. The vision and objectives for the NETP are presented in Figure 1.2.
Contact point	Andrew Dorrian, Specialist Transport Planner, Transport North East Strategy Unit
	Andrew.Dorrian@transportnortheast.gov.uk

Vision and objectives for the NETP

- 1.12 The vision and objectives for the NETP have been endorsed by the leaders of the seven local authorities in the North East as well as the North of Tyne Combined Authority Mayor. They set out the key principles as to what should be achieved by 2035.
- 1.13 An overview of the vision and objectives for the NETP is presented in Figure 1.2 below.

ISA Report for the North East Transport Plan ISA Report

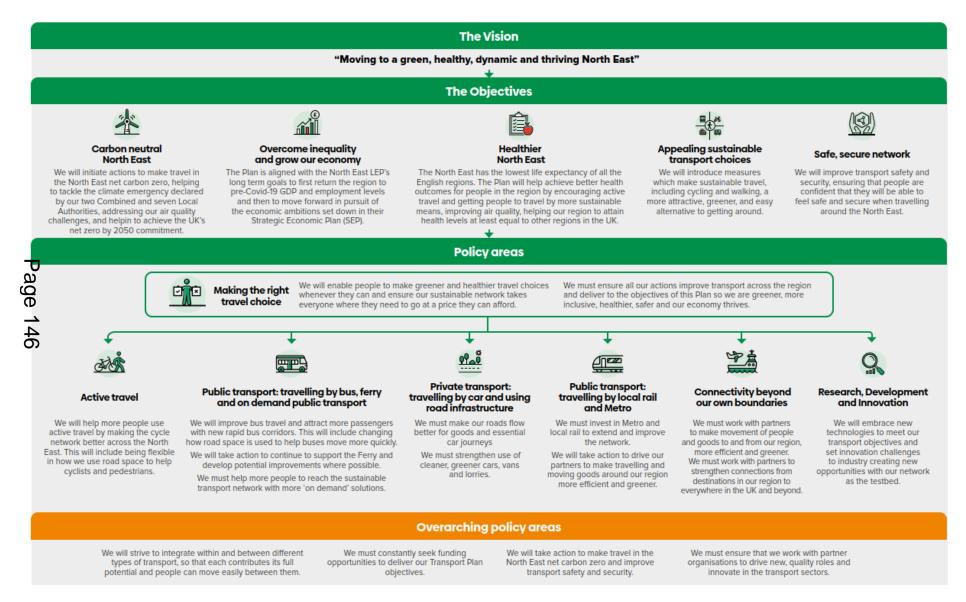


Figure 1.2: Vision and objectives for the NETP

Prepared for: Transport North East Strategy Unit

Integrated Sustainability Appraisal explained

- 1.14 Integrated Sustainability Appraisal (ISA) fulfils the requirements for Strategic Environmental Assessment (SEA) and discharges the duties for Equality Impact Assessment (EqIA) and Health Impact Assessment (HIA). It also incorporates Rural Proofing.
- 1.15 AECOM has also been commissioned to undertake a Habitats Regulations Assessment (HRA) of the NETP9. The findings of the HRA have been reported separately from, but will inform, the
- 1.16 An overview of SEA, EqIA, HIA and Rural Proofing is presented below.

Strategic Environmental Assessment (SEA)

- 1.17 SEA is undertaken to address the procedures prescribed by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations) which transpose into national law the EU Strategic Environmental Assessment (SEA) Directive¹⁰. It also widens the scope of the assessment from focusing on environmental issues to further consider social and economic issues. The SEA Regulations only formally apply to plans and programmes for which there is a statutory requirement; transport plans fall within this definition.
- 1.18 Two key procedural requirements of the SEA Directive are that:
 - When deciding on 'the scope and level of detail of the information' which must be included in the Environmental Report there is a consultation with nationally designated authorities concerned with environmental issues; and
 - A report (the 'Environmental Report') is published for consultation alongside the draft plan for consultation that presents an assessment of the draft plan (i.e. discusses 'likely significant effects' that would result from plan implementation) and reasonable alternatives.

Equality Impact Assessment (EqIA)

- 1.19 As public sector organisations, the North Tyne Combined Authority and the North East Combined Authority have a duty under the Equality Act 2010¹¹ and the associated Public Sector Equality Duty (PSED) to ensure that the objectives and policy options within the NETP eliminate unlawful discrimination (direct and indirect), as well as advancing equality of opportunity and fostering good relations between those with a protected characteristics 12 and all others. An Equality Impact Assessment (EgIA) is often used by public sector organisations to demonstrate how this duty has been met.
- 1.20 The Equality Act 2010 legally protects people from discrimination both in the workplace and in wider society. It replaces previous anti-discrimination laws which include the Sex Discrimination Act 1975, Race Relations Act 1976 and the Disability Discrimination Act 1995. The Act ensures that individuals with certain 'protected characteristics' are not indirectly or directly discriminated against. The protected characteristics include:
 - Age: this refers to persons defined by either a particular age or a range of ages;
 - Disability: a disabled person is defined as someone who has a physical or mental impairment that has a substantial and long-term adverse effect on his or her ability to carry out normal day-to-day activities;
 - Gender reassignment: this refers to people who are proposing to undergo, are undergoing, or have undergone a process for the purpose of reassigning their gender identity;

⁹ The requirement for HRA is set out within Article 6 of the EC Habitats Directive 1992, and interpreted into British law by the Conservation of Habitats and Species Regulations 2010

¹⁰ Directive 2001/42/EC

¹¹ Equality Act 2010 [online] available at: http://www.legislation.gov.uk/ukpga/2010/15/contents

¹² Protected characteristics under the Equality Act 2010 include age, sex, marital status, disability, gender reassignment, ethnicity, religion, pregnancy and maternity, sexual orientation and deprived/disadvantaged groups. Page 147

- Marriage and civil partnership: marriage can be between a man and a woman or between two people of the same sex. Same-sex couples can also have a civil partnership. Civil partners must not be treated less favourably than married couples;
- **Pregnancy and maternity:** pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after the birth. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth;
- Race: the Equality Act 2010 defines race as encompassing colour, nationality (including citizenship) and ethnic or national origins;
- Religion or belief: religion means any religion a person follows. Belief means any
 religious or philosophical belief, and includes those people who have no formal religion or
 belief;
- **Gender:** this refers to a man or to a woman or a group of people of the same sex, while gender refers to the wider social roles and relationships that structure men's and women's, boys' and girls' lives;
- **Sexual orientation:** a person's sexual orientation relates to their emotional, physical and/or sexual attraction and the expression of that attraction.
- 1.21 EqIA aims to assess how a particular policy or service will affect different groups of people with these protected characteristics. The EqIA process identifies alternative approaches which may mitigate adverse impacts; and aims to enhance equality of opportunity and manage relations between different groups of people.

Health Impact Assessment (HIA)

- 1.22 There are numerous links between planning and health highlighted throughout national policy. For example Paragraph 69 of the National Planning Policy Framework states that the planning system can play an important role in facilitating social interaction and creating healthy, inclusive communities and the National Planning Practice Guidance (NPPG) states that Local Authorities should ensure that health and wellbeing, and health infrastructure are considered within their decision making processes.¹³
- 1.23 In this context, Health Impact Assessment (HIA) is a process which seeks to ensure that the effect of proposals on both health and health inequalities are considered and responded to during the plan's development process. This is with a view to informing decision-making.

Rural Proofing

- 1.24 In addition to these three assessments this appraisal will also 'rural proof' the NETP. Rural proofing recognises that rural areas have some significant barriers to economic growth and quality of life improvements which urban areas do not have. These barriers may, for example, include a lack of access to goods and services, more limited public transport services, or fuel poverty exacerbated by more costly fuels. This is particularly relevant for the North East as there are extensive rural areas, mainly in Durham and Northumberland.
- 1.25 Government guidance states that the aim of rural proofing is to: "Make sure that the needs and interests of rural people, communities and businesses in England are properly considered" 14. This ensures that the action required to ensure fair outcomes from policy/plan delivery across rural and urban areas is determined and addressed in the plan/policy making process.

Habitats Regulations Assessment

1.26 A Habitats Regulations Assessment (HRA) will be undertaken parallel to this work. The primary aim of HRA is to ensure the protection of sites that host habitats and species of European importance. This process is set out in Directive 92/43/EEC on the Conservation of Natural

¹³ National Planning Practice Guidance. Paragraph: 001 Reference ID: 53-001-20140306 [online] available at: https://www.gov.uk/guidance/health-and-wellbeing

¹⁴ Department for environment and rural affairs (Defra) (2013) Rural Proofing Guidance [online] available at: https://www.gov.uk/guidance/rural-proofing-guidance [accessed 27/02/20]

Habitats and Wild Flora and Fauna (the 'Habitats Directive') and the Conservation of Habitats and Species Regulations 2010 (the 'Habitats Regulations).

This ISA Report

- 1.27 The SEA Regulations require that a report is published for consultation alongside the draft plan that 'identifies, describes and evaluates' the likely significant effects of implementing 'the plan, and reasonable alternatives'. The report must then be taken into account, alongside consultation responses, when finalising the plan.
- 1.28 In line with the SEA Regulations this report which for the current ISA comprises the 'ISA Report' must essentially answer four questions:
 - What is the scope of the ISA?
 - What has Plan-making / ISA involved up to this point?
 - Preparation of the draft plan must have been informed by at least one earlier planmaking / ISA iteration. 'Reasonable alternatives' must have been assessed.
 - What are the assessment findings at this current stage?
 - o i.e. in relation to the draft plan.
 - What happens next?
- 1.29 These questions are derived from Schedule 2 of the SEA Regulations, which present 'the information to be provided within the report. **Table 1.2** presents the linkages between the regulatory requirements and the four ISA guestions.

Table 1.2: Questions to be answered by the ISA Report in order to meet Regulatory¹⁵ requirements

ISA Report question		In line with Schedule II the report must include		
	What is the plan seeking to achieve?	An outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes		
	What is the sustainability	The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan		
What is the scope of the	'context' and baseline?	The environmental characteristics of areas likely to be significantly affected		
ISA?		Any existing environmental problems which are relevant to the plan including those relating to any areas of a particular environmental importance		
	What are the key issues and objectives that should be a focus?	Key problems / issues and objectives that should be a focus of (i.e. provide a 'framework' for) assessment		
		Outline reasons for selecting the alternatives dealt with (and thus an explanation of the 'reasonableness' of the approach)		
What has plan-making / ISA involved up to this point?		The likely significant effects associated with alternatives		
		Outline reasons for selecting the preferred approach in-light of alternatives assessment / a description of how environmental objectives and considerations are reflected in the draft plan.		
\All4 4l		The likely significant effects associated with the draft plan		
What are the assessment findings at this current stage?		The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects of implementing the draft plan		
What happens	next?	The next steps for plan making / ISA process.		

N.B. The right-hand column of Table 1.2 does not quote directly from Schedule II of the Regulations. Rather, it reflects a degree of interpretation.

- 1.30 In November 2020 the Consultation Draft of the NETP was released for consultation ¹⁶. This was accompanied by a full ISA Report ¹⁷, which addressed the above requirements.
- 1.31 The current ISA Report is an updated version of this earlier ISA Report, and provides sustainability context on the latest version of the NETP.

¹⁵ Environmental Assessment of Plans and Programmes Regulations 2004

¹⁶ Transport North East (November 2020) North East Transport Plan 2021-2035 Consultation Draft

¹⁷ AECOM (November 2020) Integrated Sustainability Appraisal for the North East Transport Plan 2021-2035, ISA Report: Consultation Version

2. What is the scope of the ISA?

ISA Scoping Report

- 2.1 The SEA Regulations require that 'When deciding on the scope and level of detail of the information that must be included in the Environmental Report, the responsible authority shall consult the consultation bodies'. In England, the consultation bodies are Natural England, the Environment Agency and Historic England. As such, these authorities were consulted on an ISA Scoping Report in April 2020.
- 2.2 The information in the Scoping Report was presented by the following ISA themes:
 - Biodiversity
 - Water and soil resources
 - Historic environment
 - Landscape
 - Air quality and noise
 - Climate change and flood risk
 - Population
 - Human health
 - Equalities
 - Rural Proofing

Prepared for: Transport North East Strategy Unit

- 2.3 The selected ISA themes incorporate the 'SEA topics' suggested by Annex I (f) of the SEA Directive¹⁹. These were refined to reflect a broad understanding of the anticipated scope of NETP effects. They also incorporate the aspects considered through the EqIA and Rural Proofing elements of the ISA.
- 2.4 Comments received on the Scoping Report, and how they have been considered and addressed through the ongoing development of the ISA process, are presented in **Table 2.1**.

Page 151

¹⁸ In line with Article 6(3).of the SEA Directive, these consultation bodies were selected because 'by reason of their specific environmental responsibilities,[they] are likely to be concerned by the environmental effects of implementing plans and programmes.'

programmes.'

19 The SEA Directive is 'of a procedural nature' (para 9 of the Directive preamble) and does not set out to prescribe particular issues that should and should not be a focus, beyond requiring a focus on 'the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors' [our emphasis]

Table 2.1 Consultation responses received on the ISA Scoping Report

Consultation response

How the response was considered and addressed

Natural England

Response received via email on 2nd June 2020 from Michael Miller: Lead Sustainable Development Advisor, Northumbria Team

Natural England welcomes the comprehensive approach to the Scoping report and notes specific attention to:

Comment noted.

- Designated and Protected sites, including comprehensive identification of the same.
- Biodiversity Strategy and policy Context
- Water and Soils Resource Policy context
- Landscape Policy Context
- Air Quality and Noise Policy Context
- Habitats and Species protection, conservation and enhancement.

We welcome the detailed research approach to the above assessment headings and advocate the flexibility within the report to allow changes should they become necessary.

Comment noted.

Natural England consider the scoping report covers all necessary requirements for the purposes of this report.

Comment noted.

Historic England

Response received via email on 1st June 2020 from Henry Cumbers: Principal Adviser, Historic Environment Planning Adviser (North East and Yorkshire)

Page 14, Section 2.18: Historic assets across the region, including two UNESCO assets and a National Park.

Information has been updated to reflect comment.

This bullet point would benefit from revision, replacing the word historic assets with heritage assets as a more universally recognised term. Also UNESCO World Heritage Sites in place of UNESCO assets and National Parks are landscape designations rather than heritage designations and would therefore benefit from being listed separately.

In respect of the historic environment and the planning system, the three key European legislative conventions are the UNESCO World Heritage Convention, The Convention for the Protection of the Architectural Heritage of Europe, The European Convention on the Protection of Archaeological Heritage. The Convention on the Value of Cultural Heritage for Society is primarily related to heritage and human rights and democracy. It promotes a wider understanding of heritage and its relationship to communities and society, and therefore has less of a role in relation to transport policy.

Information has been updated to reflect comment.

It is considered that the Culture White Paper is of limited relevance to the North East Transport Plan.

Reference to White Paper has been removed as suggested.

3.50-3.51: Whilst this paragraph contains key messages from the NPPF relating to the historic environment, it also include elements concerning landscape and the natural environment, given the specific focus on the historic environment it may be advisable to amend this paragraph to focus specifically on the conservation and enhancement of the historic environment.

Paragraph has been amended to focus specifically on the conservation and enhancement of the historic environment.

We have it noted that there are 70 conservation areas within Northumberland rather than 71.

This information has been updated.

Prepared for: Transport North East Strategy Unit

Consultation response How the response was considered and addressed The National Heritage List for England identifies the This information has been updated. following number of entries for listed buildings for the authorities comprising the NETP area: County Durham: 3,108 North Tyneside: 225 Gateshead: 248 South Tyneside: 195 Northumberland: 5614 Newcastle upon Tyne: 774 Sunderland: 375 Description of scheduling has been revised. In providing an explanation of scheduling, it should be stated that it is the designation used for sites of an archaeological character of national importance. Current legislation is provided by the Ancient Monuments and Archaeological Areas Act 1979. The National Heritage List for England identifies the Updated with up-to-date information on scheduled following number of entries for scheduled monuments monuments. for the authorities comprising the NETP area: County Durham: 233 North Tyneside: 8 Gateshead: 16 South Tyneside: 5 Northumberland: 975 Newcastle upon Tyne: 42 Sunderland: 10 References to these Registered Parks and Gardens The list identifies a number of Registered Parks and Gardens that are not within the North East Region, have been removed. which include...(list supplied) Information updated. There are 47 registered battlefields in England. The Heritage at Risk Register contains assets other Comment noted. Information on assets at risk has than listed buildings. been updated. The number of assets on 2019 list are as follows: County Durham: 97 Gateshead: 8 Newcastle upon Tyne: 16 North Tyneside: 1 South Tyneside: 6 Sunderland: 13 It would be worth stating that transport infrastructure Key issues for historic environment have been can often be an important historic asset in its own right updated to reflect comment. Proposed ISA objectives and assessment questions: To Terminology updated. be consistent with the NPPF, conserve is preferred over preserve as this acknowledges managed change within the historic environment. Additional question added: "Conserve and enhance Assessment questions: Whilst acknowledging the range of assets identified under the questions of the first the significance of Registered Parks and Gardens". objective, a further question should also be provided in relation to Registered Parks and Gardens. Context review: In addition to legislation, plans This has now been acknowledged. programmes and strategies identified at a national level we would advise inclusion of Planning (Listed Buildings and Conservation Areas) Act 1990 and Ancient Monuments and Archaeological Areas Act 1979 which together form the two primary pieces of legislation

Consultation response

How the response was considered and addressed

concerning the historic environment within the UK.

Context review: We would advise including both the World Heritage Site Management Plans for Durham Castle and Cathedral 2017-2023 and Hadrian's Wall Management Plan 2015-2019.

The Management Plans have been added to the policy context review.

Environment Agency

Response received via email on 15th June 2020 from Lawry Cook Economic Development Specialist

I really appreciated the amount of detail the scoping report went in to and the level information provided for aspects surrounding rural proofing, biodiversity, and climate change and flood risk.

Comment noted.

A key point within the Proposed ISA Framework which needs to remain is around utilising green infrastructure to increase habitat connectivity across the transport network. As the report states, there is a risk of habitat degradation during transport development, therefore to mitigate that, infrastructure that minimises this is crucial. It is worth referencing that green/blue infrastructure has many co-benefits associated with it that can be attached to other aspects of the proposed framework water and soil resources, climate change mitigation and flood resilience, air quality and health. It can also be linked back to economic growth and prosperity across the region with more GDP generated from tourism, more resilient businesses and a better state of health and wellbeing. I certainly think there could be a stronger section on green infrastructure with the co-benefits highlighted above.

Comment noted. These elements relating to green and blue infrastructure have been considered through the assessment (including assessment of reasonable alternatives and the draft plan).

The point within the proposed framework on reducing the need to travel is interesting. I suppose the main question and I would have on this is, is it time to diversify transport plans to incorporate other infrastructure such as digital? This feeds into the section on rural proofing, with connectivity being the main issue associated with reduced economic growth in rural areas. There could even be scope for increased rural connectivity in the energy sector to reduce the issues associated with fuel poverty etc.

Digital connectivity has been considered through the assessment, including through options considered as reasonable alternatives for rural areas in the region.

I am really eager to hear about how emissions are not increased from new transport infrastructure, especially with emissions associated from constructing these new assets, on top of those from using them. Is there any scope to consider offsetting emissions? This could be linked to the prospect of Biodiversity Net Gain - create a new habitat that enhances the biodiversity and sequesters the carbon from the development. Again this sort of work could be linked to other aspects of the plan - i.e. flood resilience through green infrastructure.

Elements relating to emissions and possibilities for Biodiversity Net Gain have been considered throughout the appraisal.

Again, really positive points throughout the report and I am excited to see what opportunities this presents for environmental improvements and economic growth across the North East.

Comment noted.

Northumberland National Park Authority

Response received via email on 2nd June 2020 from Duncan Wise, Visitor Development and Marketing Manager

The North East Transport Plan – Introduction Emergent Comment fed back to NETP development team Challenges and opportunities from the Covid 19 pandemic. Bullet Point should be modified:

"Potential reduction in international tourism and increase in domestic tourism"

Consultation response	How the response was considered and addressed
Links with other plans and programmes: Additional information should be included on the Northumberland National Park Local Plan.	Provisions of new National Park Local Plan have been considered in the assessment. However, unlike the Scoping Report, detailed information on each authority's Local Plan has not been included in the ISA Report to limit the size of the report.
We are pleased to see reference to the Government's 25 Year Environment Plan in Para 3.58, the NNPA Management Plan in Para 3.59, and a summary of the Aims of the Management Plan in Para 3.60.	Comment noted.
Biodiversity: Generally, we feel that you have covered all the statutory sites and mentioned priority habitats and species in the National Park. We welcome reference in paragraph 4.39 to Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, but believe it would be appropriate to also highlight the requirements of Section 40 of the NERC Act 2006 within Chapter 4 of the ISA. However, there is no mention of the Government's intention to improve the planning system in England in order to protect the environment (biodiversity net gain) and build places to live and work. This could be referred to and emphasised more in Para 4.45. At a practical level, it would be good to see how management of the transport network can positively improve things for biodiversity. Currently, the need for tidiness is often prioritised over the need to enhance biodiversity e.g. cutting of road verges when they are flowering and removing trees from railway line corridors. We suggest a modification to Para 4.51 to reflect the opportunities to improve bio-diversity through the careful management of these transport corridors.	Comments noted. Opportunities for Biodiversity Net Gain and Government's intention to increase the role of Net Gain have been recognised through the appraisal, including the appraisal of reasonable alternatives and the draft plan. Additional elements with regard to biodiversity enhancements have also been considered through the assessment.
Water and Soil Resources: Para 5.20 – Actions to improve bio-diversity through the careful management of the transport corridors (roads and rail) would also contribute to slowing water run-off.	Comment noted and considered through ISA process.
There is no recognition that the National Park Authority is an independent Local Authority (single-purpose). See our comments on Para 3.25	Comment noted.
Para 6.6 - Threats to Hadrian's Wall identifies "visitors and tourism". However, we also recognise that tourism brings opportunities, so there is a need for balance here. As Hadrian's Wall is a linear monument that passes through urban, peri-urban and rural areas, there are a number of concerns facing the monument from inappropriate development, agriculture and forestry.	Comment noted and considered through ISA process.
We suggest the ISA makes a more formal reference to the Hadrian's Wall World Heritage Site Management Plan.	Reference included.
Para 6.14 –We suggest that you list the 71 Conservation Areas in Northumberland.	Conservation areas have been mapped. Conservation area will be considered as appropriate through the appraisal.
Para 6.25 - Heritage at Risk – Only Listed Buildings are mentioned. Why aren't Scheduled Monuments and historic places such as Registered Parks or Battlefields broken down by each Authority?	Updates to information recognise that Heritage at Risk incorporates a wider range of designations.
After Para 6.25 - The plan needs to take account of undesignated heritage assets as a material consideration in the planning process and vulnerable to harm from inappropriate development including harm to their settings. This undesignated heritage accounts for	The importance of the fabric and setting of undesignated heritage assets has been recognised throughout the ISA process.

Consultation response

How the response was considered and addressed

some 90% of the heritage resource. Greater attention to Grade II buildings also needs to be made, including local heritage assets.

Para 6.33 - We welcome the inclusion of the positive contribution of careful and well planned transport infrastructure can have on the historic environment, would like to see how the historic environment makes a positive contribution to carefully planned transport infrastructure which avoids harm and contributes to making more attractive places to live and work.

Comment noted. Contribution of transport to the fabric and setting of the historic environment (and vice versa) has been considered throughout the ISA process.

Key Sustainability Issues - A key question for inclusion should be "do the options/proposals take full account of the historic environment, enabling informed, constructive conservation grounded upon sound principles and values, including the contribution the historic environment makes to society, economy and people's health and wellbeing?"

These elements have been considered throughout the ISA process.

Para 7.1 – Summary of Current Baseline. We are pleased to see the National Park's purposes and duty are explained here.

Comment noted.

Para 7.4 – We suggest a modification to list the National Park's special qualities, as outlined in its Management Plan (2016 - 2021).

Section discussing the special qualities has been updated as suggested.

A special quality associated with the sense of tranquillity Elements highlighted by comment noted. Potential here in Northumberland National Park is its pristine dark impacts on tranquillity and light pollution have been skies, due to the lack of light-pollution. The CPRE Night assessed through the ISA process. Blight Report (2016), stated that "Northumberland comes out top with 72% of its skies in the darkest category "Other than a brief mention in Para 7.69 and Para 7.73, there is no indication of their significance, both to the quality of life and wellbeing of residents, and to wildlife, as well as the fact that they contribute to the region's economy with the resultant development of astro-tourism in the last 12 years; all of which could be threatened by the proliferation of badly designed and installed lighting infrastructure associated with transport developments such as street lighting and illuminated highway signs. In 2013, an area of 1400 Km² comprising the whole of Northumberland National Park and 70% of the adjacent Kielder Water & Forest Park was designated England's first (and at the time) Europe's largest International Dark Sky Park (aka Northumberland International Dark Sky Park), obliging both the Northumberland County Council and the National Park Authority respectively to monitor and implement measures to minimise light pollution by adhering to the joint Exterior Lighting Master Plan. Government Guidance in the form of Planning Practice

Para 7.17 - Areas of Tranquillity: We suggest you either amend this or add another paragraph to specifically reference the impact of large vehicles such as timber haulage upon the fabric of our rural roads, many of which were not constructed to a specification suited to modern timber haulage vehicles, and the tranquillity of associated villages and hamlets. There is no reference to the Forestry and Timber Industry's North East Timber Transport Forum and their Agreed Routes map.

Guidance has recently been updated (November 2019) on lighting and advises how the planning system should consider light pollution. Government planning policy is

Additional key issue included.

Comment fed back to NETP development team

set out in the NPPF (para 180).

Consultation response

How the response was considered and addressed

After Para 10.14: Northumberland National Park has an identified need of 160 dwellings over their 20-year planning period 2017-2037, an average of 8 per annum. The National Park's need is not discounted from the figures for the whole of Northumberland (see Para 10.14), used by Northumberland County Council.

Information for Northumberland National Park has been included alongside housing needs for other Local Planning Authorities in the region.

may well be worth mentioning here that rural Northumberland has the largest off-grid electricity community anywhere in the Country. On site electricity generation can cost up to 3 times as much as that obtained by the local distribution network so contributes towards fuel poverty. Additionally, off-grid communities are likely to miss out on initiatives focused on decarbonising transportation.

Content of the ISA Scoping Report

- Reflecting the requirements of the SEA Regulations, the following information was presented in the Scoping Report for the ten ISA themes:
 - Context review: This explored the environmental and sustainability 'context' for the ISA/NETP through reviewing high level messages (e.g. internationally, from central government and at the regional level) with a view to establishing the focus for the ISA.
 - Baseline data: This established the baseline situation in the area in the absence of the NETP (including the future baseline) in order to help identify the plan's likely significant effects.
 - Key issues: This identified particular problems or opportunities ('issues') that should be a focus of the ISA.
- 2.6 Drawing on the key issues established through the above process, the Scoping Report presented an ISA Framework of objectives and assessment questions which would be used to assess the draft plan and alternatives. A summary of the key issues and the full ISA Framework is presented below. The context review and baseline data, which has been updated to reflect comments received on the Scoping Report consultation, is presented in Appendix A.

Key issues for the ISA and ISA Framework

- 2.7 The ISA Scoping Report identified a range of sustainability problems / issues that provide the focus of the ISA process. Presented by each of the ten environmental themes, this drew on the review of the sustainability context and baseline.
- 2.8 The key issues were then translated into an ISA Framework of objectives and assessment questions. The ISA Framework has been used to inform the assessment of likely significant effects on the baseline, as presented in Chapter 4 below. This enables the environmental effects of the NETP and alternatives to be defined and subsequently analysed based on a structured and consistent approach.
- 2.9 The key issues identified through scoping are presented below. Table 2.2 subsequently presents the objectives and assessment questions for each ISA theme.

Key issues: Biodiversity

2.10 Transport infrastructure enhancements have the potential to place increasing pressures on habitats and species and ecological networks in the North East.

- 2.11 There are a large number of internationally designated and nationally designated sites within the North East which are likely to come under increasing pressures from human activity including from transportation.
- 2.12 A number of the internationally designated nature conservation sites found within the North East have exceeded the critical load for nitrogen and acid deposition.
- 2.13 There is a need to sensitively manage visitor and recreational access to these areas. While tourism and recreation can provide a significant benefit to the local economy the impact on designated sites through increasing number of visitors should be considered fully. The NETP has a bearing on the impact which visitors may have on such sites.
- 2.14 Generally there is a slight upward trend in the condition of SSSIs within the North East, however there are still a number of sites particularly in the Tyne and Wear county where they are classed as 'unfavourable no change' or 'unfavourable declining'.
- 2.15 Wildlife transport corridors provide important wildlife links and facilitate the dispersal of plants and animals creating habitat networks²⁰. There are a number of pressures on these corridors associated with:
 - Direct loss due to development;
 - Simplified landscaping schemes failing to maximise the benefits to wildlife;
 - Loss/disturbance due to road improvement schemes;
 - · Over intensive or lack of management;
 - Vulnerable to vandalism, accumulations of litter and fly tipping;
 - A number of priority species are killed on busy roads every year, as there are few or no opportunities for their safe crossing;
 - Pollution of wetland habitats adjacent to roads from salt and petrochemical runoff can also have detrimental effects;
 - Management of village and urban verges for non-native species removes local distinctiveness provided by a wild flora, and will eventually lead to loss of wild flora;
 - Tree planting in inappropriate places shades out wildflower rich grassland;
 - · Salt piles can leach into the surrounding soils; and
 - Disused railways becoming multi-user routes could lead to habitat loss, without careful planning of routes.
- 2.16 The North East should explore opportunities to enhance, and where appropriate, create wildlife corridors in the delivery of transport schemes. This could be achieved through using animal bridges/tunnels across transport corridors to increase wildlife permeability, and be implemented as part of wider green infrastructure initiatives that many Local Authorities are pursuing²¹.

Key issues: Water and Soil Resources

- 2.17 Watercourses in the North East support a range of rare and important species such as fresh water pearl mussel. Physical modifications are a key issue in all three of the catchments within the North East particularly in relation to fish passage. This will need to be taken into consideration in any schemes taken forward under the NETP.
- 2.18 Urban transport and pollution pressures have been identified as a specific pressure in the Northumbria River Basin District. Schemes taken forward under the NETP should, where possible, seek to improve the existing road drainage. In addition, opportunities to reduce deposition of pollutants on European sites through the encouragement of a model shift and phasing out of older vehicles with poor emissions should be investigated.

Natural England (2014) making space for wildlife [online] available at: publications.naturalengland.org.uk/file/6737795561291776 [accessed 27/02/20]
 Further guidance and information on green infrastructure can be found at: http://publications.naturalengland.org.uk/publication/35033

2.19 There is a limited amount of best and most versatile agricultural land within the North East, where this is present it is restricted to low lying areas along river valleys.

Key issues: Historic Environment

- 2.20 The fabric and setting of heritage assets in the North East are sensitive to enhanced transport infrastructure.
- 2.21 Transport infrastructure can often be an important historic asset in its own right from prehistoric trackways and Roman roads, to medieval bridges, the development of canals and railways during the industrial revolution and the introduction of motor transport and aviation in the 20th century. To name but a few, examples in the North East include the Grade I listed Central Station in Newcastle, the Grade I listed Barnard Castle Bridge over the River Tees, the Grade II listed Tyne Pedestrian and Cyclist Tunnels, and the historic infrastructure associated with the many ports in the region.
- 2.22 The historic environment can be impacted from increasing traffic levels through emission levels, congestion, visual impact and noise pollution. There can also be direct or indirect impact from the new development associated with transport infrastructure.
- 2.23 High levels of visitors to historic sites can be a major economic benefit for local areas, however this can put a number of pressures on these sites including from transport.
- 2.24 New development need not however be harmful to the significance of a heritage asset, and in the context of the NETP there may be opportunity for new transport infrastructure to enhance the historic settings of localities and better reveal assets' cultural heritage significance.

Key issues: Landscape

- 2.25 New transport infrastructure has the potential to have an impact on local landscape character.
- 2.26 A large proportion of the North East is made up of a sparsely populated rural landscape with small nucleated villages accesses only by minor roads. In particular; the Border Moors and Forests, together with the neighbouring Cheviots NCA is sparsely populated with very few major settlements and transport links, and is valued for its dark night skies. Landscape character in these areas are particularly sensitive to change.
- 2.27 The growth of towns such as Morpeth and Ponteland in Northumberland, pressures to expand villages; and changes in use of farm buildings to residence and business premises has increased the number of privately owned vehicles travelling through the area. This is also corresponding with the upgrades of the A1 and other major transport routes such as the A68, A696 and A697.
- 2.28 There is a need to ensure that landscape sensitivity is considered in the provision or improvement of transport links. Measures to minimise landscape impacts, such as through planting to provide screening, should be implemented. In urban areas there are opportunities for transport infrastructure developments to incorporate green infrastructure and links to existing and planned greenspace and the open countryside.
- 2.29 There is a need to sensitively manage visitor and recreational access to the rural landscapes. This will need to include the careful planning of transport routes, and the provision of public transport, walking and cycling to minimise the use of the private car.
- 2.30 There is a significant impact of large vehicles such as timber haulage vehicles on the fabric of the region's rural roads, many of which were not constructed to a specification suited to modern haulage vehicles, and the tranquillity of associated villages and hamlets.
- 2.31 There is a need to support dark skies and tranquillity in rural areas, including through the management of lighting in settlements and along transport routes.

Key issues: Air Quality and Noise

2.32 Key issues include the exceedances of air quality objectives within AQMAs in the North East. Transport is the significant contributor to issues in the majority of these AQMAs.

2.33 The presence of Noise Action Plans for a number of major routes within Newcastle upon Tyne and Durham indicating that environmental noise levels are being adversely affected by transport.

Key issues: Climate Change and Flood Risk

- 2.34 Greenhouse gas emissions from transport have reduced at a lower rate than emissions from industrial/commercial sources and domestic sources. In terms of the proportion of overall emissions which originate from transport in the North East, this has increased in the last ten years.
- 2.35 There will be an ongoing need to decarbonise the transport sector in the North East to help meet international, national and local commitments and to reflect the declaration of climate emergencies by Local Authorities across the region.
- 2.36 Climate change has the potential to increase the occurrence of extreme weather events in the North East, with increases in mean summer and winter temperatures, increases in mean precipitation in winter and decreases in mean precipitation in summer. This is likely to increase the risks associated with climate change (including surface water and fluvial flood risk, as well as flooding by sea). This will result in an increased need for resilience and adaptation for transport infrastructure.

Key issues: Population

- 2.37 Population growth in the North East is lower than that of the England average, and in some council areas is decreasing. All seven councils have a lower proportion of the population within the 0-15, and 25-44 age groups than the national average and in turn there are a proportionally higher number of residents within the 45-59 and 60+ age groups. Supporting a proportional increase of older people within the population is an issue which requires important consideration; especially in an area estimated to have slow population growth.
- 2.38 The North East has a higher proportion of residents with no formal qualifications than the national average, and in there are also fewer people with level 4 qualifications than the national average, suggesting that there may be barriers to educational opportunities.
- 2.39 The affordability ratios for the North East are lower than the average ratios for England, showing that homes are more affordable. The majority of NETP council areas also have a higher proportion of residents traveling by bus than national average showing that there is considerable demand for good quality public transport links.

Key issues: Human Health

- 2.40 The NETP council areas have a higher proportion of households which are deprived in 2 or 3 dimensions than the national deprivation average. This suggests that overall residents within the North East are more likely to experience lower standards of living than in other areas of the country. According to the IMD, relative to the other NETP authority areas, County Durham, South Tyneside, and Sunderland all have on average, higher levels of deprivation while Northumberland and North Tyneside have lower levels of deprivation.
- 2.41 Although Northumberland and North Tyneside have female life expectancy rates which are slightly more favourable than the national average, throughout the North East male life expectancy is lower in some cases significantly. Female life expectancy rates are lower or comparable to the national average in the remaining NETP council areas.
- 2.42 Other health issues include that all NETP council areas have a higher proportion of people who consider themselves to be in bad health than the national average and also a higher proportion of residents whose day to day activities are limited a lot by disability. Sunderland has the highest levels of obesity in the North East at 28.6% of residents compared to the national average of 26.7%.
- 2.43 Enhancements in walking and cycling networks, including improved linkages to public transport networks, have significant potential to support the health and wellbeing of residents. This will be

supported by green infrastructure enhancements. There are also significant opportunities for enhancements to road safety across the North East.

Key issues: Rural Proofing

- 2.44 Key issues relating to rurality in the North East Region include as follows:
 - · Proportionally older populations;
 - Disabilities causing more limitations on people's activity than in urban areas;
 - · Access to, and use of, public transport appears to be lower; and
 - Higher levels of deprivation in sparsely populated areas both urban and rural
 - Higher levels of deprivation with regards to the Barriers to Housing and Services domain.
 - Northumberland has the largest off-grid electricity community nationally. On site electricity
 generation can cost up to three times as much as that obtained by the local distribution
 network so contributes towards fuel poverty. Additionally, off-grid communities are likely to
 miss out on initiatives focused on decarbonising transportation.

Table 2.2 ISA Framework for the North East Transport Plan 2021-2035

ISA theme	Objectives	Assessment questions – will the option/proposal help to:
Biodiversity	Support the integrity of nationally and locally designated sites.	 Protect the integrity of the internationally designated Ramsar sites, SACs and SPAs in the North East? Avoid negative impacts, and where possible improve the condition of SSSIs within the North East? Manage pressures on locally designated sites for biodiversity and geodiversity in the North East? Maintain, and where possible, enhance the status of NNRs and LNRs in the North East and people's access to these?
D.	Protect and enhance habitats and species.	 Protect and enhance semi-natural habitats? Protect and enhance priority habitats, and the habitat of priority species? Achieve a net gain in biodiversity? Increase the resilience of the North East's biodiversity to the potential effects of climate change?
Page 16	Increase habitat connectivity across the transport network.	 Contribute to the creation of coherent and resilient ecological networks? (i.e. allow passage of wildlife across roads, railway lines, cycle paths through the use of animal bridges/tunnels or support green infrastructure enhancements)?
	Minimise the impact which transport and transport infrastructure has on water quality, and on the physical state of water bodies.	 Support improvements to water quality, including through minimising the impacts of diffuse run off from road surfaces? Protect surface water and groundwater resources? Minimise physical alterations to water bodies? Minimise the impacts to, and where possible enhance the quality of water bodies of strategic significance for water supply?
	Promote the efficient use of land.	 Facilitate the use of previously developed land? Avoid the development of the best and most versatile agricultural land (Grade 1 to 3a agricultural land)?
	Promote sustainable waste management solutions that encourage the reduction, re-use and recycling of waste during construction.	 Encourage recycling of materials and minimise consumption of resources during construction, operation and maintenance of new transport infrastructure? Encourage the use of alternative transport methods for the movement of waste in the region?

ISA theme	Objectives	Assessment questions – will the option/proposal help to:
Historic Environment	Conserve and enhance the North East's' cultural heritage resource, including its historic environment and archaeological assets.	 Conserve the outstanding universal value of World Heritage Sites? Conserve and enhance the significance of buildings and structures of architectural or historic interest, both designated and non-designated, and their setting? Conserve and enhance the significance of Registered Parks and Gardens? Conserve and enhance the special interest, character and appearance of conservation areas and their settings? Conserve and enhance archaeological remains and support the undertaking of archaeological investigations and, where appropriate, recommend mitigation strategies?
	Promote understanding of the North East's cultural heritage resource.	Support access to, interpretation and understanding of the historic environment?
Landscape U ວ ວ ວ ວ ວ ວ	Protect and enhance the character and quality of the North East's landscapes.	 Support the purposes and duty of the Northumberland National Park? Support the management objectives and special qualities of the AONBs in the North East? Support the integrity of the LCAs and Heritage Coast in the North East? Conserve and enhance locally important landscape features? Improve accessibility by sustainable transport to the North East's landscape and townscape resource, including within the National Park and AONBs?
Air Quality and Noise	Deliver improvements in air quality in the North East.	 Reduce emissions from transport? Contribute to improvements in air quality within AQMAs? Promote the use of low emission vehicles? Promote enhancements to green infrastructure networks to facilitate increased absorption and dissipation of nitrogen dioxide and other pollutants?
	Reduce the impact on environmental noise from transportation sources in areas with Noise Action Plans.	Will it contribute to lowering noise levels in Noise Action Plan Areas?

ISA theme	Objectives	Assessment questions – will the option/proposal help to:
Climate Change and Flood Risk Page 164	Support climate change mitigation in the North East through limiting the contribution of transport to greenhouse gas emissions.	 Limit the increase in the carbon footprint resulting from new transport infrastructure provision? Promote the use of sustainable modes of transport, including walking, cycling and public transport? Reduce the need to travel? Reduce energy consumption from non-renewable resources? Encourage the update of electric and alternatively fuelled vehicles?
	Support the resilience of the North East's transport networks to the potential effects of climate change.	 Increase the resilience of the transport network to the potential effects of climate change? Promote a coordinated approach to the management of flood risk across public infrastructure provision? Improve and extend green infrastructure networks as part of transport infrastructure provision to support adaptation to the potential effects of climate change? Sustainably manage water run-off, reducing surface water runoff? Ensure the potential risks associated with climate change are considered through new transport network programmes? Reduce the impact of extreme weather events on the condition of the road network?
Population	Promote sustainable transport use and reduce the need to travel.	 Encourage modal shift to more sustainable forms of travel? Reduce the need to travel?
	Cater for existing and future residents' needs as well as the needs of different groups in the community, and improve access to local, high-quality community services and facilities.	 Maintain or enhance the quality of life of residents? Address the needs of all age groups? Meet the needs of those living in rural areas? Improve accessibility of key local facilities, including specialist services for disabled and older people

ISA theme	Objectives	Assessment questions – will the option/proposal help to:
Health	Improve the health and well-being of the North East's residents.	 Reduce the impacts of air and noise pollution on health? Promote accessibility to a range of leisure, health and community facilities, for all age groups? Promote the use of healthier modes of travel? Reduce health inequalities? Enhance the provision of, and access to, green infrastructure in the county, in accordance with national standards? Avoid any negative impacts to the quality and extent of existing recreational assets, such as formal or informal footpaths? Improve access to the countryside for recreation?
၂ သ	Improve road safety.	Improve road safety and reduce road accidents?
	Reduce the community severance effects of transport routes.	 Reduce community severance (i.e. through improved crossing facilities, reduced traffic speeds and reduced traffic levels)?
Q Œqualities → ⊙ ౮	Advance equality of opportunity for all.	 Promote access to transport services for all including those with and without shared Protected Characteristics? Provide opportunities to foster good relations between groups?
Rurality	Increase access via a range of transport modes for rural communities.	 Improve the sustainable transport network in rural areas (i.e. improvements to public and active travel) whilst also recognising that for some in rural areas the car is still essential for accessibility? Better enable people with specific needs to access transport and day to day activities?
	Enable economic growth, and employment diversification in rural areas.	 Support diversified economic activities in rural areas? Enhance access to rural employment opportunities? Improve people's ability to work or run a business from home?

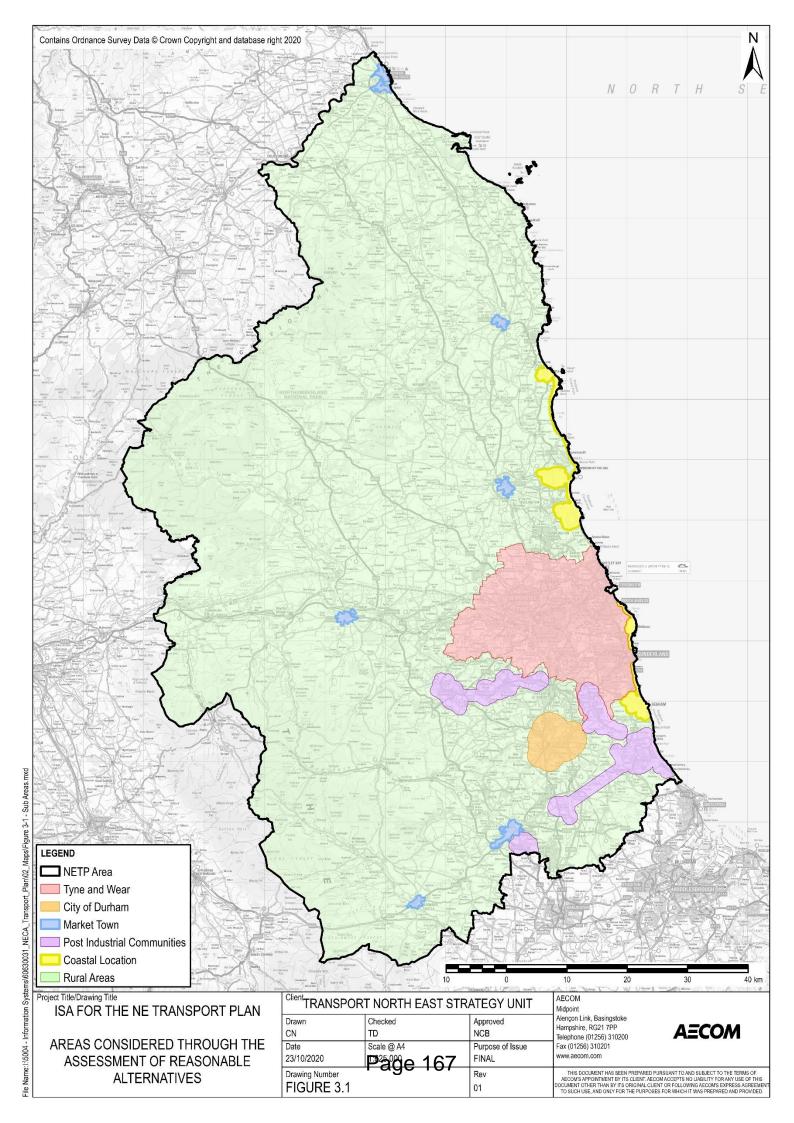
3. Assessment of reasonable alternatives for the NETP

Reasonable alternatives in ISA

- 3.1 A key element of the ISA process is the assessment of 'reasonable alternatives' for the NETP. The SEA Regulations²² are not prescriptive as to what constitutes a reasonable alternative, stating only that the Environmental Report (i.e. ISA Report) should present an appraisal of the 'plan and reasonable alternatives taking into account the objectives and geographical scope of the plan'.
- 3.2 The ISA process has therefore assessed a range of potential options as reasonable alternatives, which consider different approaches for six areas within the North East region.

An area-led approach to considering reasonable alternatives

- 3.3 The NETP covers a large and diverse region, with a wide range of transport challenges. These regional challenges sit within diverse environmental and socio-economic settings.
- 3.4 A central role of appraising reasonable alternatives through the ISA process is to help identify the relative sustainability merits of different approaches to delivering enhanced transport provision in the region. In recognition of the diversity of the region, the approach to the appraisal of reasonable alternatives subdivides the North East region into a number of distinct geographical areas.
- 3.5 The six areas are as follows:
 - Tyne and Wear: This area covers the main Tyne and Wear conurbation, encompassing much
 of the local authority areas of Newcastle city, North Tyneside, South Tyneside, Sunderland
 and Gateshead.
 - City of Durham: This area covers the city of Durham and its surrounding area.
 - Post-industrial communities: This area incorporates the former coal-mining and steel
 working areas in the region. This includes the area around Consett, Stanley and Catchgate;
 the area around Peterlee, Easington, Shotton Colliery and Blackhall Colliery; a corridor
 between Peterlee and Ferryhill; a corridor along the A182 encompassing South Hetton,
 Hetton-le-Hole, and Houghton-le-Spring; and the area around Shildon.
 - Market towns: This area incorporates the larger market towns in the region, including Bishop Auckland, Barnard Castle, Alnwick, Berwick-upon-Tweed, Morpeth and Hexham.
 - Coastal areas: This area includes coastal areas located to the south and north of the main Tyne and Wear conurbation. It incorporates: the coastal areas between South Shields and Roker, including Marsden, Whitburn and Seaburn; Hendon to Seaham; and Blyth to Amble.
 - Rural areas: This covers the rural areas of the region, including the rural parts of Northumberland and County Durham. It includes the parts of the region within the Northumberland National Park and the two AONBs (Northumberland Coast AONB and North Pennines AONB).
- 3.6 **Figure 3.1** highlights the broad locations covered by these areas.



- 3.7 For each of these areas a number of options have been identified and subsequently appraised. For all areas a do minimum is described which would be applied in all circumstances, together with one or more options for additional levels of intervention over and above the do minimum. These options are designed to reflect the key issues facing that area, and the different approaches that can be taken to intervention/investment in transport infrastructure and management.
- 3.8 The detail of the options appraised, and the appraisal findings, are presented below.

Tyne and Wear

3.9 This area (**Figure 3.2**) covers the main Tyne and Wear conurbation, encompassing much of the local authority areas of Newcastle city, North Tyneside, South Tyneside, Sunderland and Gateshead. Three options have been considered as alternatives for the ISA, as follows:

Option TW1: Do minimum

3.10 A do minimum option would rely on committed investment, which would continue. This includes the Transforming Cities Fund package, which would deliver a short-term programme of investments. The Metro would receive a new fleet in 2023 as currently planned and further investment in bus fleets would take place.

Option TW2: Optimise use of existing infrastructure

3.11 This option would comprise enhancements to the existing urban transport network. It would incorporate improved bus services on key corridors, enhancements to walking and cycling linkages, demand management measures and more effective use of Park and Ride provision.

Option TW3: Initiate more significant interventions, including with regards to the rail, Metro and road network

3.12 This option would seek to take forward significant capacity enhancements to the urban transport network. This would include, for example, an expansion of the Metro network (including potentially, new lines), delivery of new local rail lines, and an expansion of Park and Ride provision. In terms of the road network it would initiate significant junction capacity enhancements at key 'pinchpoints' and potentially, initiate new local links. There would also be a focus on connectivity across the Tyne.

Appraisal findings

- 3.13 The following table presents appraisal findings in relation to the three options introduced above. These are organised by the ten ISA themes.
- 3.14 For each ISA theme, a commentary on the likely effects is presented. Options are also ranked numerically reflecting their relative sustainability performance, with '1' the most favourable ranking and '3' the least favourable ranking.

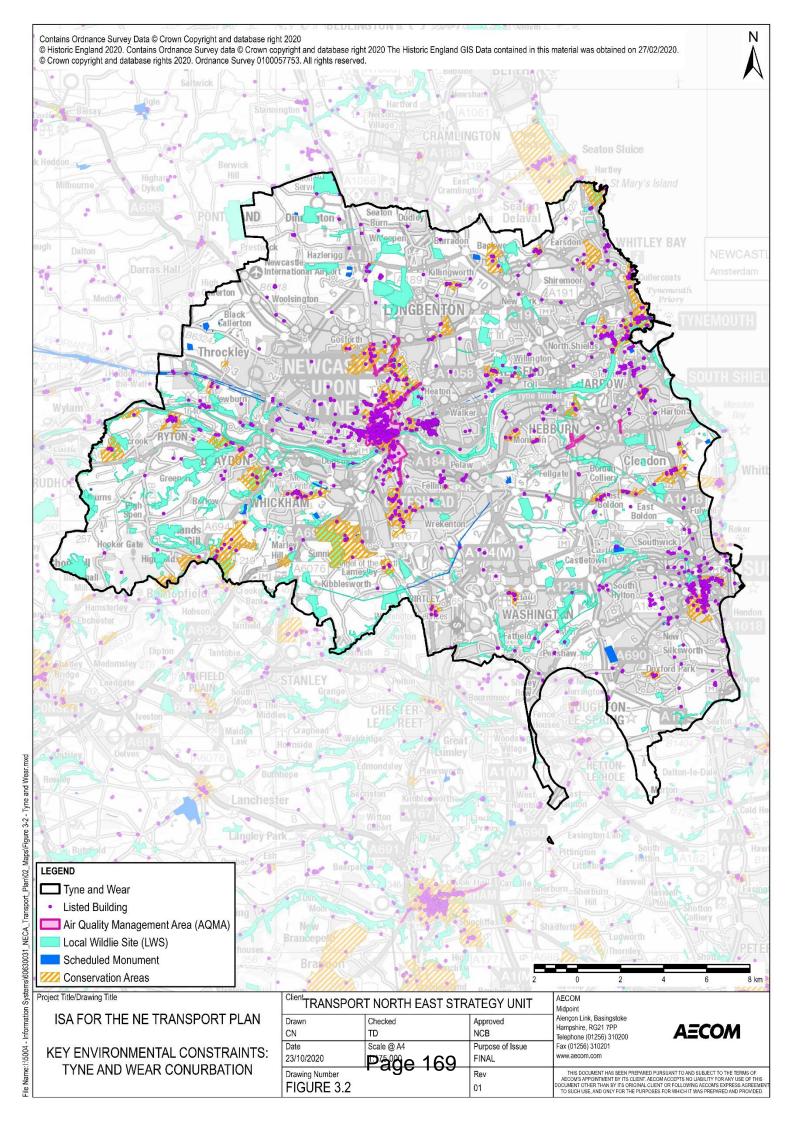


Table 3.1: Appraisal of options for Tyne and Wear

Option TW1: Do minimum

Option TW2: Optimise use of existing infrastructure

Option TW3: Initiate more significant interventions, including with regards to the rail, Metro and road network

ISA theme	Discussion of potential effects and relative merits of options	Rank	of prefe	erence
		TW1	TW2	TW3
Biodiversity	Key designated sites in the vicinity of the Tyne and Wear urban area include the Northumberland Shore SSSI and Durham Coast SSSI, a number of relatively small SSSIs on the edge of the urban area, and numerous Local Wildlife Sites. Key habitats in the urban area include open mosaic habitats on previously developed land and the following BAP Priority Habitats: wood pasture and parkland; deciduous woodland; good quality semi-improved grassland; and lowland dry acid grassland. Option TW3, through facilitating the delivery of significant new transport infrastructure in the Tyne and Wear urban area, has increased potential to lead to significant effects on biodiversity habitats, species and networks. This includes from land take, habitat loss and fragmentation and disturbance. In this respect Option TW1, which relies on committed investment, and Option TW2, which focuses on enhancing existing transport infrastructure, would lead to fewer physical impacts on key areas of sensitivity. Option TW2 however has the potential to lead to impacts on habitats and ecological networks on existing transport corridors. This is given many existing transport routes are important biodiversity corridors, containing and linking key habitats, and frequently, designated sites. These corridors support a significant number of protected species. As such Option TW2 still has the potential to lead to significant effects without the implementation of appropriate avoidance and mitigation measures. However, the scale of effects is less likely to be significant than those which result from Option TW3.	1	2	3
	It should be noted though that the delivery of new and enhanced transport infrastructure may support some enhancements to biodiversity networks. For example, the Government's 25-year Environment Plan seeks to embed an environment net gain principle for infrastructure development. In addition, Highways England's Road Investment Strategy states that by 2040 its schemes must deliver a net gain in biodiversity and Network Rail has committed to make a net positive contribution to biodiversity. In this context there is scope for transport infrastructure enhancements to support environmental net gain in Tyne and Wear. This includes through delivering enhancements in the Network Enhancement Zones ²³ and Network Expansion Zones ²⁴ identified to the south west, north west and south east of the Tyne and Wear conurbation by Natural England.			
Water and Soil Resources	Option TW3, through facilitating the delivery of significant new transport infrastructure, will require larger landtake than Option TW1 and TW2. This has increased potential to lead to the development of previously undeveloped land, including, potentially productive agricultural land. Without mitigation measures, an increased delivery of new transport infrastructure has the potential to have impacts on water and soil quality through increases in surface water run-off. However, no significant impacts on water quality would be anticipated from schemes if the required embedded mitigation measures are incorporated within the construction	2	1	3

and operational stage. Option TW2 also offers additional opportunities to deliver enhancements to surface water management on existing transport

corridors.

²³ Network Enhancement Zones comprise land within close proximity to existing habitat components that have been identified by Natural England as likely to be suitable for habitat re-creation for the particular habitat.

24 Network Expansion Zones are areas identified with potential for expanding, linking and joining biodiversity networks.

Page 170

3

Option TW1: Do minimum

Option TW2: Optimise use of existing infrastructure

Option TW3: Initiate more significant interventions, including with regards to the rail, Metro and road network

Historic

The Tyne and Wear urban area has a rich historic environment resource, as Environment highlighted by the significant number of features and areas designated for their heritage value. The historic environment of the urban area is also framed by the significant number of undesignated features of heritage value which are vulnerable to change given their lack of statutory and local protections. In addition, transport corridors are often themselves important heritage resources. The urban area also has a rich and diverse archaeological resource.

> The increased number of 'hard' transport infrastructure schemes likely to be initiated through Option TW3 have the potential to lead to impacts on the key assets (including designated features and areas) located in the vicinity of the key routes and areas targeted for interventions. The significance of effects from these interventions will however depend on design, layout and scale of the schemes, and mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and the setting of the historic environment. Similarly, measures which help to relieve congestion may support improvements to local distinctiveness and the quality of the public realm, with benefits for the setting of the historic environment.

> In relation to Option TW2, an approach which focuses to a greater degree on soft measures and demand management measures is less likely to lead to direct adverse impacts on the historic environment and townscape character. The setting of the historic environment also has the potential to benefit from initiatives taken forward through this option by an encouragement of modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic on the setting of historic environment assets. In this respect a 'do minimum' approach taken forward through Option TW1 has reduced potential to bring similar benefits.

Landscape

Option TW3, through facilitating the delivery of significant new transport infrastructure, has increased potential to have impacts on townscape and landscape character in Tyne and Wear. Option TW1 and TW2, through focusing on the existing urban transport network, is less likely to deliver new infrastructure which has significant impacts on local character, distinctiveness or a sense of place.

The significance of effects from schemes initiated by Option TW3 would however depend on the design, layout and scale of the schemes, and the mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and townscape/landscape character. Similarly, measures which help to relieve congestion may support improvements to local distinctiveness and the quality of the public realm.

With regards to Option TW2, an approach which focuses to a greater degree on soft measures and demand management measures is less likely to lead to direct adverse impacts on townscape and landscape character. Local character also has the potential to benefit from initiatives taken forward through this option by an encouragement of modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic on the townscape and landscape character. In this respect a 'do minimum' approach taken forward through Option TW1 has less potential to initiate measures which bring these benefits.

3

3

Option TW1: Do minimum

Option TW2: Optimise use of existing infrastructure

Option TW3: Initiate more significant interventions, including with regards to the rail, Metro and road network

Air Quality and Noise

There are seven AQMAs found within the Tyne and Wear area. Two of these are in Newcastle, one around the B1318 and the A189 between Gosforth and West Jesmond; and a second in central Newcastle stretching to the River Tyne. There is one AQMA in central Gateshead stretching north to the River Tyne. There are also two in South Tyneside; one at Lean Lane around the junction with the B1516 and the A19, and a second in West Harton along Boldon Lane.

Through delivering a more comprehensive package of schemes which supports modal shift to alternative modes of transport to the private car, Option TW2 has more potential than Option TW1 to support air and noise quality enhancements in Tyne and Wear.

Option TW3, through bringing forward junction capacity enhancements and new road schemes has the potential to lead to air quality enhancements at key 'pinchpoints' on the network which have existing air quality issues. This has the potential to support significant enhancements of air quality at specific locations. However, through contributing to an overall increase in traffic flows on the wider road network, the option has the potential to increase traffic flows over a broader area, including through stimulating induced demand. This may contribute to increases in emissions of the key pollutants which affect air quality over a wider area. For the same reason, the option also has the potential to lead to more significant effects on noise quality.

2 1 2

Climate Change and Flood Risk

Prepared for: Transport North East Strategy Unit

Option TW3's promotion of road schemes that relieve congestion and / or increase capacity has the potential effect of releasing demand for vehicle trips currently suppressed. As such the release of this induced demand may lead to increases in greenhouse gas emissions.

Option TW2, through delivering a more comprehensive package of schemes that Option TW1, will do more to support modal shift to alternative modes of transport to the private car. As such the option has additional potential to support a limitation of greenhouse gas emissions from transport.

In terms of adapting to the effects of climate change, Option TW3, and to a lesser extent, Option TW2, has more potential than Option TW1 to lead to proposals which enhance the resilience of particular locations to climate change. This is given the option will deliver transport schemes with the potential to initiate physical measures which will limit climate change impacts. However, the effect of initiatives depends on detailed interventions, including scheme design and layout, the integration of green infrastructure provision and other measures to help regulate the effects of extreme weather events. Similarly, the effect of initiatives on fluvial, surface water and groundwater flooding depend on scheme design considerations, including location, design and layout and the implementation of measures such as sustainable drainage systems.

Option TW1: Do minimum

Option TW2: Optimise use of existing infrastructure

Option TW3: Initiate more significant interventions, including with regards to the rail, Metro and road network

Population

A do minimum approach promoted through Option TW1 would do less to help address the key socio-economic and quality of life issues influenced by transport in Tyne and Wear. In this context a range of issues are less likely to be addressed without appropriate interventions, including accessibility issues, congestion and severance issues, and elements relating to social exclusion.

Option TW2, through providing a focus on improved bus services. enhancements to walking and cycling linkages and demand management measures would do more than Option TW1 and Option TW3 to encourage public transport use and active travel. In addition to supporting social inclusion and community vitality, this will contribute to the quality of life of residents through limiting the impact of traffic and congestion on neighbourhoods and on severance issues.

In addition to increasing travel choice through initiating significant transport capacity enhancements, Option TW3 has the potential to lead to a range of economic opportunities through enhancing connections with the strategic and local transport network and key employment and growth areas. This mirrors a core aim of the North East Local Enterprise Partnership and its Strategic Economic Plan, which seek to maximise economic opportunities and enhance the vitality of the region's economy through improvements in transport connectivity.

Prepared for: Transport North East Strategy Unit

Human Health

Option TW3, through enabling a reduction of congestion at key bottlenecks on the network, has the potential to reduce the impacts of traffic and congestion on health and wellbeing at these locations. This includes through enhancements to air and noise quality, and improvements in the quality of the public realm. However, a potential stimulation of traffic growth over a larger area due to induced demand has the potential to have wider negative effects on health and wellbeing of residents through impacts on the quality of the public realm and a contribution to air and noise pollution. This does however have the potential to be offset by the additional enhancements to the rail and Metro network facilitated by the option. Option TW2 has increased potential to support modal shift from the private car. This will support healthier modes of travel, including through encouraging active travel modes such as walking and cycling. Through promoting modal shift, and limiting induced demand, it also offers the potential to support air and noise quality enhancements and enhancements to the quality of the public realm. This will support the health and wellbeing of residents.

Options TW2 and TW3 have increased potential to facilitate enhancements to multifunctional green infrastructure networks in Tyne and Wear alongside transport infrastructure improvements, including along existing transport corridors. This will provide benefits for health and wellbeing.

Option TW1, through initiating a do minimum approach, has the least potential to address the transport issues which adversely affect health and wellbeing.

2

1

2

2

Option TW1: Do minimum

Option TW2: Optimise use of existing infrastructure

Option TW3: Initiate more significant interventions, including with regards to the rail, Metro and road network

Equalities

Groups with 'protected characteristics' tend to be disproportionately affected by the negative effects of transport infrastructure, including from the physical and severance effects of transport corridors, effects on the quality of the public realm, and the effects of traffic and congestion on health and wellbeing. These groups are also disproportionately affected by accessibility issues.

In this context, Option TW2, which seeks to 1) enhance accessibility by public transport and walking and cycling and 2) limit the impact of the private car on the built environment, including through demand management measures, will do more to support the needs of groups with protected characteristics.

Whilst a significant expansion of transport capacity proposed through Option TW3 has the potential to support accessibility for certain groups, the option has some potential to impact on equalities groups through stimulating car use. This includes through impacting on the quality of local neighbourhoods and increasing severance issues. In addition, the option has increased potential to impact on the health and wellbeing of these groups through undermining air and noise quality and impacting on road safety. However, it should be noted that the benefits from the more significant interventions through this option, including with regards to the additional enhancements to the rail and Metro network will help offset these potential impacts.

With regard to Option TW1, a do minimum approach would do less to help address the key socio-economic and quality of life issues influenced by transport in Tyne and Wear and is less likely to address the transport and accessibility needs of groups with protected characteristics.

Rurality

In the context of rural needs, the performance of the options for Tyne and Wear are closely linked to accessibility from rural areas to this key urban area in the North East. In this respect, the significant enhancement of transport capacity in Tyne and Wear facilitated through Option TW3 would do most of the options to support accessibility to services, facilities and employment opportunities in the Tyne and Wear urban area for those living in rural areas.

2

City of Durham

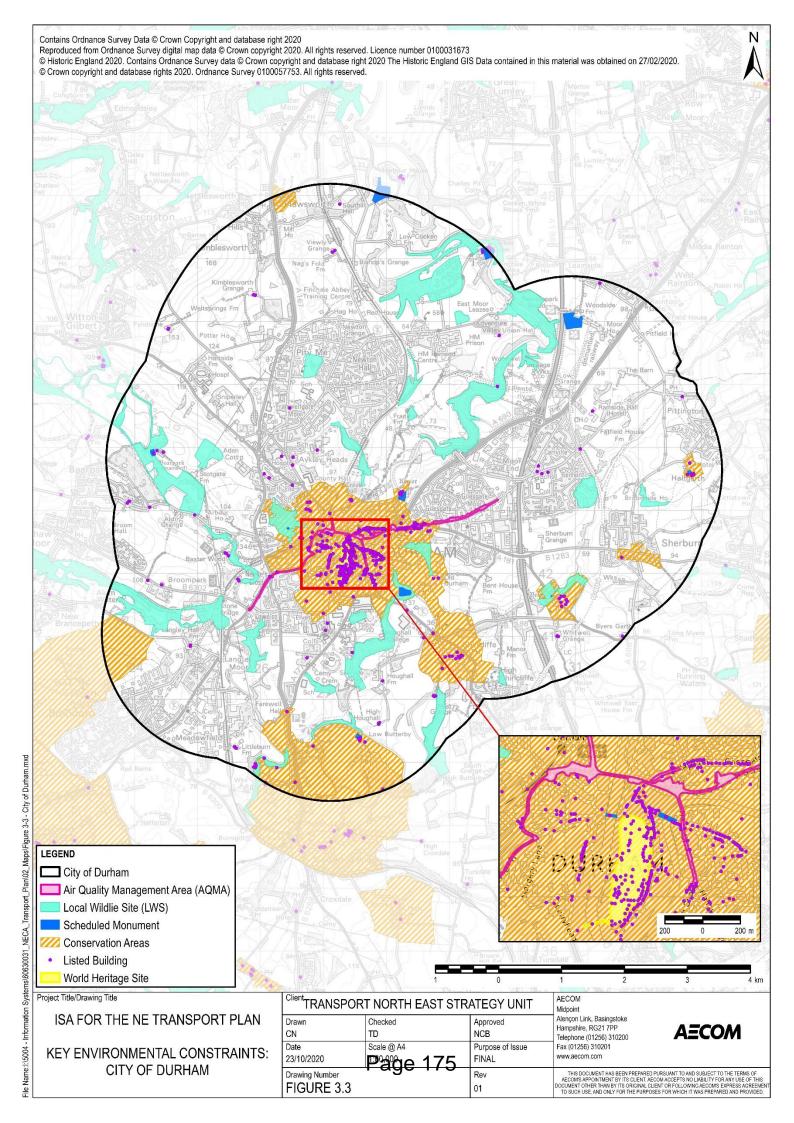
3.15 This area (**Figure 3.3**) covers city of Durham and the surrounding area. Two options have been considered as alternatives for the ISA, as follows:

Option D1: Do minimum

3.16 A do minimum option would rely on committed investment, which would continue at a local and strategic level.

Option D2: Make better use of existing transport infrastructure in the city

- 3.17 This option would seek to deliver measures which maximise the potential of the existing transport network in the city. It is likely to include schemes such as enhanced walking and cycling networks, bus service improvements and demand management measures.
- 3.18 No major road schemes are included in the options. This recognises the outcomes of the recent examination on the County Durham Plan, which highlighted that the Northern and Western Relief Roads should be removed from the Plan.



Appraisal findings

- 3.19 The following table presents appraisal findings in relation to the two options introduced above. These are organised by the ten ISA themes.
- 3.20 For each ISA theme, a commentary on the likely effects is presented. Options are also ranked numerically reflecting their relative sustainability performance, with '1' the more favourable ranking and '2' the less favourable ranking.

Table 3.2: Appraisal of options relating to the city of Durham

Option D1: Do minimum.

Option D2: Make better use of existing transport infrastructure in the city.

ISA theme	Discussion of potential effects and relative merits of options		Rank of preference	
		D1	D2	
Biodiversity	Key designated sites in the vicinity of the city of Durham include the Butterby Oxbow SSSI, the Brasside Pond SSSI, and a number of Local Wildlife Sites. Key habitats in the vicinity of the city include the following BAP Priority Habitats: deciduous woodland; lowland heathland; lowland raised bog; and lowland dry acid grassland. Through delivering additional transport measures, Option D2 has the potential to lead to additional impacts on habitats and ecological networks on existing transport corridors, where any enhancements would be focused. This is given many existing transport routes are important biodiversity corridors, containing and linking key habitats and which support a significant number of protected species. However, the option would not implement significant additional physical infrastructure. The do minimum approach of Option D1 would continue to take forward schemes from committed investment; potential effects though from Option D1 are likely to be more limited than Option D2. Both options however have the potential to lead to effects without the implementation of appropriate avoidance and mitigation measures. It should also be noted that delivery of new and enhanced transport infrastructure may support some enhancements to biodiversity networks. In this context there is scope for transport infrastructure enhancements in the vicinity of the city to support environmental net gain locally. This includes through delivering enhancements in the Network Enhancement Zones and Network Expansion Zones identified to the north, west and south of the city.	1	2	
Water and Soil Resources	In terms of impacts on land and soils resources, given Option D2 would not lead to significant additional landtake in the vicinity of the city, there is unlikely to be a significant difference between the two options in terms of the loss of productive agricultural land. No significant impacts on water quality would be anticipated from schemes linked to the two options if the required embedded mitigation measures are incorporated within the construction and operational stage.	=	=	
Historic Environmen t	The city of Durham has a rich historic environment resource. This is highlighted by the presence of the Durham Castle and Cathedral World Heritage Site, the coverage of conservation areas over large parts of the city, and the significant number of listed buildings and scheduled monuments present in the area (Figure 3.3). In addition, the city has a rich archaeological resource. The significance of direct effects on the historic environment from the interventions taken forward through each option will depend on design, layout and scale of the schemes, and mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and the setting of the historic environment. Potential effects from both options will though be limited by the limited number of new physical infrastructure schemes taken forward. However, Option D2 will initiate a range of measures which have the potential to deliver a greater degree of modal shift from the private car than Option D1. This includes a combination of measures to encourage public transport use and walking and cycling, as well as demand management measures. In this respect the fabric and setting of the historic environment has additional potential to benefit through modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic and congestion on the fabric and	2	1	

Option D1: Do minimum.

	setting of historic environment assets. In this respect a 'do minimum' approach taken forward through Option D1 has reduced potential to bring similar benefits.		
Landscape	Both options, through focusing on the existing transport network, are less likely to deliver new physical infrastructure which have significant impacts on local character, distinctiveness or a sense of place. Option D2 will however initiate a range of measures which have the potential to deliver a greater degree of modal shift from the private car than Option D1. This includes a combination of measures to encourage public transport use and walking and cycling, as well as demand management measures. This will support townscape and landscape character through encouraging modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic and congestion on townscape and landscape character in the vicinity of the city. In this respect a 'do minimum' approach taken forward through Option D1 has less potential to initiate measures which bring these benefits.	2	1
Air Quality and Noise	Monitoring and detailed assessment of Air Quality in the city of Durham has determined that levels of nitrogen dioxide from road traffic emissions in some areas exceeds the annual mean National Air Quality Objective for nitrogen dioxide. In response to this an AQMA in the city centre that incorporated Highgate, Milburngate and the Gilesgate areas of the city was declared in 2011. This was later extended in 2014 to cover the western part of the city. Through delivering a more comprehensive package of schemes which supports modal shift from the private car to public transport and walking and cycling, Option D2 has more potential than Option D1 to effectively support air and noise quality improvements at key air pollution hotspots in the city. This includes through limiting traffic flows and reducing congestion.	2	1
Climate Change and Flood Risk	Through delivering a more comprehensive package of schemes which supports modal shift from the private car to public transport and walking and cycling, Option D2 has more potential than Option D1 to effectively support a limitation of greenhouse gas emissions from transport in the city. In terms of adapting to the effects of climate change, the effect of initiatives taken forward through the options depend on detailed interventions, including scheme design and layout, the integration of green infrastructure provision and other measures to help regulate the effects of extreme weather events. Similarly, the effect of initiatives on fluvial, surface water and groundwater flooding depend on scheme design considerations, including design and layout and the implementation of measures such as sustainable drainage systems. As such it is not possible to differentiate between the options at this level of detail in terms of climate change adaptation.	2	1
Population	Option D2, through delivering additional packages of schemes focusing on walking and cycling network improvements, improved bus services and demand management measures would do more than Option D1 to encourage public transport use and active travel. In addition to supporting social inclusion and community vitality, this will contribute to the quality of life of residents through limiting the impact of traffic and congestion on neighbourhoods and on severance issues. In this respect a do minimum approach promoted through Option D1 would do less to help address socio-economic and quality of life issues influenced by transport in the city; for example, bus service patronage may suffer and the city may do less to benefit from investment at Durham railway station. In addition to increasing travel choice through initiating additional packages of enhancements, Option D2 has the potential to support economic opportunities in the city through enhancing connections with the strategic and local transport network and key employment and growth areas.	2	1
Human Health	Option D2 has increased potential to support modal shift from the private car. This will support healthier modes of travel, including through encouraging active travel modes such as walking and cycling. Through promoting modal shift, it also offers the potential to support air and noise quality enhancements and enhancements to the quality of the public realm. This will support the health and wellbeing of residents. Option D1, through initiating a do minimum approach, has less potential to address the transport issues which adversely affect health and wellbeing in the city.	2	1

Option D1: Do minimum.

Option D2: Make better use of existing transport infrastructure in the city.

Equalities

Groups with 'protected characteristics' tend to be disproportionately affected by the negative effects of transport infrastructure, including from the physical and severance effects of transport corridors, effects on the quality of the public realm, and the effects of traffic and congestion on health and wellbeing. These groups are also disproportionately affected by accessibility issues.

In this context, Option D2, which seeks to 1) enhance accessibility by public transport and walking and cycling and 2) limit the impact of the private car on the built environment, including through demand management measures, will do more to support the needs of groups with protected characteristics.

With regard to Option D1, a do minimum approach would do less to help address the socio-economic and quality of life issues influenced by transport in the city and is less likely to address the transport and accessibility needs of groups with protected characteristics.

Rurality

In the context of rural needs, the performance of the options for the city of Durham are closely linked to accessibility from rural areas to the city. In this respect, the more comprehensive measures proposed through Option D2 would do more to support accessibility to services, facilities and employment opportunities in the city from the rural hinterland.

Post-industrial communities

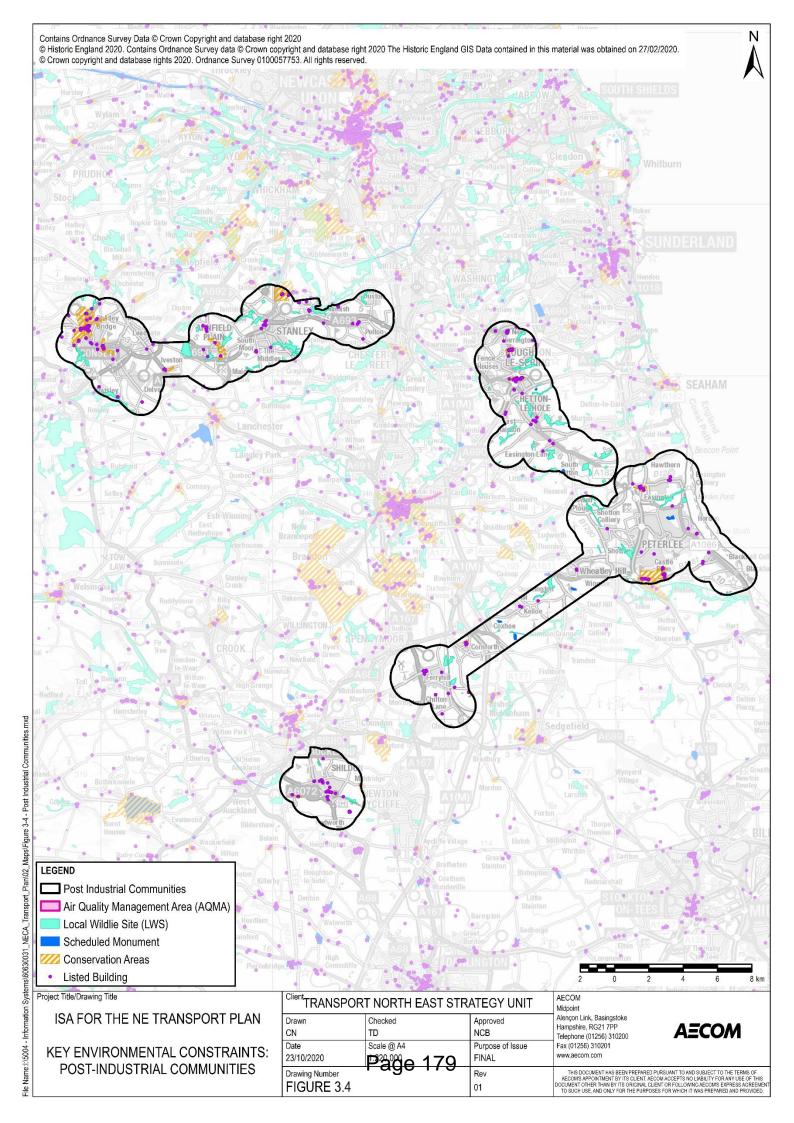
- 3.21 This area (Figure 3.4) incorporates the former coal-mining and steel working communities in the region. This includes the area around Consett, Stanley and Catchgate; the area around Peterlee, Easington, Shotton Colliery and Blackhall Colliery; a corridor between Peterlee and Ferryhill; a corridor along the A182 encompassing South Hetton, Hetton-le-Hole, and Houghton-le-Spring; and the area around Shildon.
- 3.22 Two options have been considered as alternatives for the ISA, as follows:

Option PI1: Do minimum

3.23 A do minimum option would rely on committed investment, which would continue at a local and strategic level.

Option PI2: Deliver road and rail infrastructure enhancements to support post-industrial communities' connectivity

3.24 Enhancements would include new and enhanced links to central Newcastle from these communities. In terms of rail infrastructure, this could include the reopening of railway lines (for example the Consett to Newcastle line and the reopening of the Leamside Line from Pelaw junction to Tursdale) and enhancing existing services and delivering improvements to rolling stock. In terms of road schemes, these could include some bypass schemes as well as targeted corridor-based approaches between these communities and other destinations, incorporating enhancements at key 'pinchpoint' junctions.



Appraisal findings

- 3.25 The following table presents appraisal findings in relation to the two options introduced above. These are organised by the ten ISA themes.
- 3.26 For each ISA theme, a commentary on the likely effects is presented. Options are also ranked numerically reflecting their relative sustainability performance, with '1' the more favourable ranking and '2' the less favourable ranking.

Table 3.3: Appraisal of options relating to post-industrial communities

Option PI1: Do minimum.

Option PI2: Deliver road and rail infrastructure enhancements to support post-industrial communities' connectivity

ISA theme	A theme Discussion of potential effects and relative merits of options		nk of rence
		PI1	PI2
Biodiversity	Option PI2, through facilitating the delivery of new bypasses and junction improvement schemes has increased potential to lead to significant effects on biodiversity habitats, species and networks. This includes from land take, habitat loss and fragmentation and disturbance. In terms of the reopening of railway lines, existing railway corridors are often important biodiversity corridors, containing and linking key habitats. These corridors support a significant number of protected species. This is highlighted by the designation of some of these corridors as Local Wildlife Sites and the presence of BAP Priority Habitats. As such, the reopening of these lines has significant potential to have impacts on biodiversity through loss of habitat from landtake, habitat fragmentation and disturbance from noise and light pollution. It should be noted though that the delivery of new and enhanced transport infrastructure may support some enhancements to biodiversity networks. For example, the Government's 25-year Environment Plan seeks to embed an environment net gain principle for infrastructure development. In addition, Highways England's Road Investment Strategy states that by 2040 its schemes must deliver a net gain in biodiversity and Network Rail has committed to make a net positive contribution to biodiversity. In this context there is scope for transport infrastructure enhancements to support environmental net gain in some locations. However, this should be carefully managed and been undertaken through a landscape-scale approach.	1	2
Water and Soil Resources	Option PI2, through facilitating the delivery of significant new transport infrastructure, will require increased landtake. This has increased potential to lead to the development of previously undeveloped land, including, potentially, productive agricultural land. Without mitigation measures, an increased delivery of new transport infrastructure also has the potential to have impacts on water and soil quality through increases in surface water run-off. However, no significant impacts on water quality would be anticipated from schemes if the required embedded mitigation measures are incorporated within the construction and operational stage. Option PI2 also offers additional opportunities to deliver enhancements to surface water management on existing transport corridors.	1	2
Historic Environment	The communities located in these areas have a rich historic environment resource, as highlighted by the significant number of features and areas designated for their heritage value. This includes associated with the diverse industrial heritage resource linked to the legacy of industrial activities in these areas. The historic environment of these areas is also framed by the significant number of undesignated features of heritage value which are vulnerable to change given their lack of statutory and local protections, and the large number of heritage assets 'at risk'. In addition, these areas have a rich archaeological resource, and existing railway corridors are also often themselves important heritage resources. The increased number of physical transport infrastructure schemes likely to be initiated through Option PI2 have the potential to lead to impacts on the key heritage assets (including designated features and areas) located in the vicinity of the key routes and areas targeted for interventions. This includes from new road schemes and in the vicinity of disused railway lines. The significance of effects	2	1

2

2

2

Option PI1: Do minimum.

Option PI2: Deliver road and rail infrastructure enhancements to support post-industrial communities'

connectivity

from these interventions will however depend on design, layout and scale of the schemes, and mitigation and avoidance measures proposed.

It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and the setting of the historic environment. Alongside, the reopening of railway lines could be viewed as positive from a heritage assessment given this will rejuvenate their usage. Similarly, measures which help to relieve congestion may support improvements to local distinctiveness and the quality of the public realm, with benefits for the setting of the historic environment. Well-designed transport schemes may also support the reuse and rejuvenation of underutilised designated and undesignated features of historic environment interest or support enhancements to the setting of features and areas of interest.

Landscape

Option PI2, through facilitating the delivery of significant new transport infrastructure, has increased potential than Option PI1 to have impacts on townscape and landscape character in the vicinity of these areas. This includes through visual impacts, the loss of features which contribute to the distinctiveness of the landscape, impacts on a sense of place, impacts on historic landscape character and impacts on noise pollution.

The significance of effects from schemes initiated by the option would however depend on the design, layout and scale of the schemes, and the mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and townscape/landscape character. Similarly, measures which help to relieve congestion may support improvements to local distinctiveness and the quality of the public realm.

Air Quality and Noise

Option PI2, through bringing forward junction capacity enhancements and new road schemes has the potential to lead to air quality enhancements at 'pinchpoints' on the network which have existing air quality issues. This has the potential to support significant enhancements of air quality at specific locations. However, through contributing to an overall increase in traffic flows on the wider road network, the option has the potential to increase traffic flows over a broader area, including through stimulating induced demand. This may contribute to increases in emissions of the key pollutants which affect air quality over a wider area. For the same reason, the option also has the potential to leading to more significant effects on noise quality.

The reopening of railways and rail service improvement schemes will help support modal shift from the private car. This will support a limitation of pollutants from transport and have positive effects for noise quality.

Climate Change and Flood Risk

Option PI2's promotion of road schemes that relieve congestion and / or increase capacity has the potential effect of releasing demand for vehicle trips currently suppressed. As such the release of this induced demand may lead to increases in greenhouse gas emissions. However, the reopening of railways and rail service improvement schemes will help support modal shift from the private car. This will support a limitation of greenhouse emissions from transport.

In terms of adapting to the effects of climate change, Option PI2 has more potential than Option PI1 to lead to proposals which enhance the resilience of particular locations to the effects of climate change. This is given the option will deliver transport schemes with the potential to initiate physical measures which will limit climate change impacts. However, the effect of initiatives depends on detailed interventions, including scheme design and layout, the integration of green infrastructure provision and other measures to help regulate the effects of extreme weather events. Similarly, the effect of initiatives on fluvial, surface water and groundwater flooding depend on scheme design considerations, including location, design and layout and the implementation of measures such as sustainable drainage systems.

Population

The post-industrial communities of the region suffer from significant deprivation issues. This is in part linked to accessibility to key services, facilities and employment opportunities. In this respect a do minimum approach promoted through Option PI1 would do less to help address the key socio-economic and quality of life issues influenced by transport in post-industrial communities. In this context a range of issues are less likely to be addressed through this option

1

2

1

1

2

Option PI1: Do minimum.

Option PI2: Deliver road and rail infrastructure enhancements to support post-industrial communities'

connectivity

without appropriate interventions, including accessibility issues, congestion and severance issues, and elements relating to social exclusion.

Option PI2, through proactively initiating a focus on significant rail and road enhancements will help address some of the key accessibility issues seen in the area. This includes relating to the lack of choices relating to public transport and its affordability and reliability (including during off peak times), and existing pressures on the road network.

In addition to increasing travel choice through initiating significant transport capacity enhancements, Option PI2 has the potential to lead to a range of economic opportunities through enhancing connections with the strategic and local transport network and key employment and growth areas. This mirrors a core aim of the North East Local Enterprise Partnership and its Strategic Economic Plan, which seek to maximise economic opportunities and enhance the vitality of the region's economy through improvements in transport connectivity.

Human Health

Option PI2, through enabling a reduction of congestion at key bottlenecks on the network, has the potential to reduce the impacts of traffic and congestion on health and wellbeing at these locations. This includes through enhancements to air and noise quality, and improvements in the quality of the public realm. However, a potential stimulation of traffic growth over a larger area due to induced demand has the potential to have wider negative effects on health and wellbeing of residents through significant impacts on the quality of the public realm and a contribution to air and noise pollution.

Through initiating significant rail enhancements in these areas (including through the reopening of disused rail lines), Option PI2 will also support modal shift from the private car to public transport. This will indirectly support healthier modes of travel, including through encouraging active travel modes such as walking and cycling for at least part of journey. Through promoting modal shift, it also offers the potential to support air and noise quality enhancements and enhancements to the quality of the public realm. This will support the health and wellbeing of residents.

The option also has increased potential to facilitate enhancements to multifunctional green infrastructure networks in these communities alongside transport infrastructure improvements. This will provide benefits for health and wellbeing.

Option PI2 also has the potential to deliver accessibility enhancements which will help reduce some of the causes of deprivation in these communities. This is significant given deprivation levels are a key contributor to health and wellbeing

Equalities

A do minimum approach taken forward through Option PI1 would do less to help address the key socio-economic and quality of life issues influenced by transport in the region's post-industrial communities. As such it is less likely to address the transport needs of groups with protected characteristics, groups who are disproportionately affected by accessibility issues.

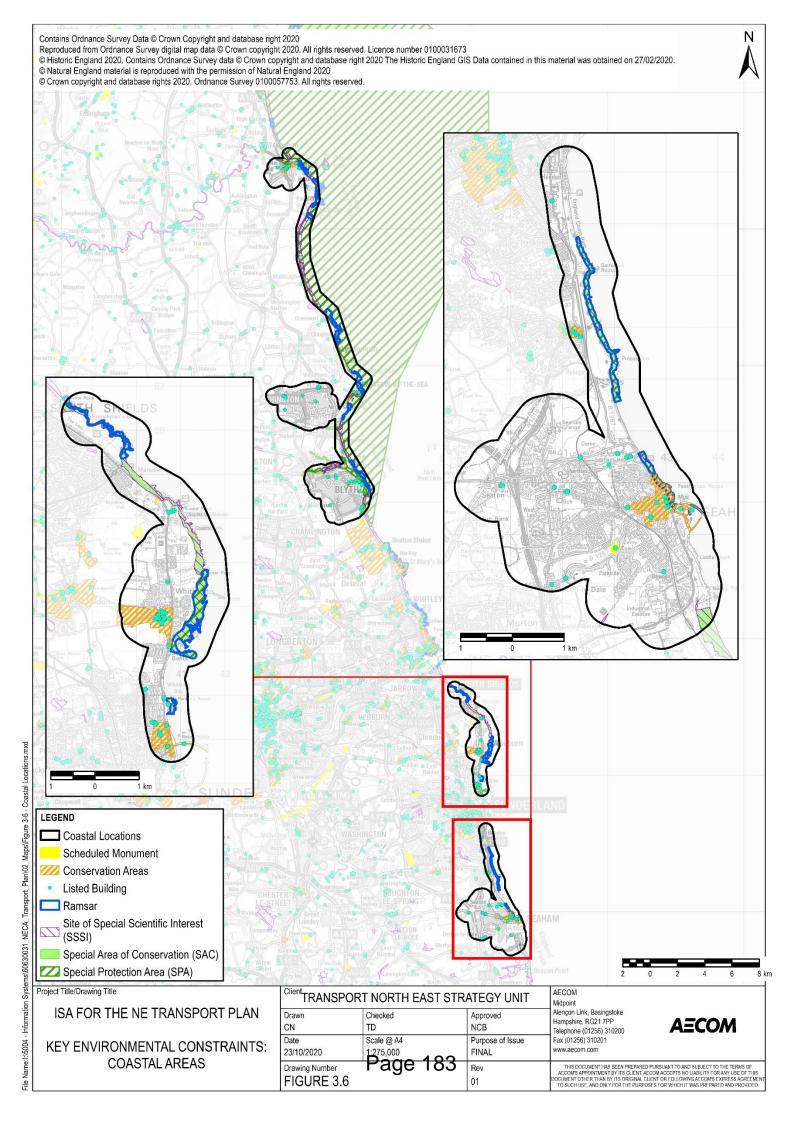
In this context Option PI2, through proactively initiating a focus on significant enhancements by rail and road will help address some of the key accessibility issues seen in the area. This includes relating to the lack of choices relating to public transport and its affordability and reliability (including during off peak times). This will do more to support the needs of groups with protected characteristics.

However, groups with protected characteristics tend to be disproportionately affected by the negative effects of transport infrastructure, including from the physical and severance effects of transport corridors, effects on the quality of the public realm, and the effects of traffic and congestion on health and wellbeing. In this respect, the road schemes promoted through Option PI2 may impact on equalities groups through effects on the public realm through a stimulation of car use. This however depends on the extent to which proposals taken forward through this options support enhancements to the public realm through limiting the adverse impacts of the transport network on neighbourhoods.

Rurality

The significant rail and road infrastructure enhancements proposed through Option PI2 have increased potential to enhance accessibility from the rural areas surrounding post-industrial communities to key urban areas in the North East. This includes through enhancing rail links and supporting enhancements to the road network. As such Option PI2 will do more to address rural accessibility issues.

Page 182



Coastal areas

- 3.27 This area (**Figure 3.6**) includes coastal areas located to the south and north of the main Tyne and Wear conurbation. It incorporates the coastal areas between South Shields and Roker, including: Marsden, Whitburn and Seaburn; Hendon to Seaham; and Blyth to Amble.
- 3.28 Two options have been considered as alternatives for the ISA, as follows.

Option C1: Do minimum

3.29 A do minimum option would rely on committed investment, which would continue at a local and strategic level.

Option C2: Support the regeneration of coastal settlements through targeted interventions

3.30 The option would seek to deliver enhanced public transport and active travel infrastructure. Given the coastal location of these settlements, interventions would seek to help relieve pressures on junctions linked to the east-west pattern of movements by car and deliver targeted improvements in unlocking growth sites, supporting the visitor economy, and improving job prospects. The option would also seek to ensure the maintenance and upkeep of key assets.

Appraisal findings

- 3.31 The following table presents appraisal findings in relation to the two options introduced above. These are organised by the ten ISA themes.
- 3.32 For each ISA theme, a commentary on the likely effects is presented. Options are also ranked numerically reflecting their relative sustainability performance, with '1' the more favourable ranking and '2' the less favourable ranking.

Table 3.4: Appraisal of options relating to coastal areas

Option C1: Do minimum.

Option C2: Support the regeneration of coastal settlements through targeted interventions

ISA theme	Discussion of potential effects and relative merits of options		Rank of preference	
		C1	C2	
Diodivoroity	A range of internationally and nationally designated sites are present in the vicinity	4		

Biodiversity

A range of internationally and nationally designated sites are present in the vicinity of the coastal area. This includes the Northumbria Coast SPA, the Durham Coast SAC, the Durham Coast SSSI, the Northumberland Shore SSSI and the Cresswell and Newbiggin Shores SSSI.

Through delivering additional transport measures, Option C2 has the potential to lead to additional impacts on habitats and ecological networks on existing transport corridors, where any enhancements would be focused. This is given many existing transport routes are important biodiversity corridors, containing and linking key habitats and which support a significant number of protected species. However, the option would not implement significant additional physical infrastructure, and would be unlikely to take place in locations which would directly affect the internationally and nationally designated sites on the coast. The do minimum approach of Option C1 would continue to take forward schemes from committed investment; however, potential effects from Option C1 have the potential to be more limited than Option C2. Both options though have the potential to lead to effects without the implementation of appropriate avoidance and mitigation measures.

It should also be noted that delivery of new and enhanced transport infrastructure may support some enhancements to biodiversity networks. In this context there is scope for transport infrastructure enhancements in coastal areas to support environmental net gain locally. This includes through delivering enhancements in the expansive area of Network Enhancement Zones and Network Expansion Zones identified in the coastal area.

Option C1: Do minimum.

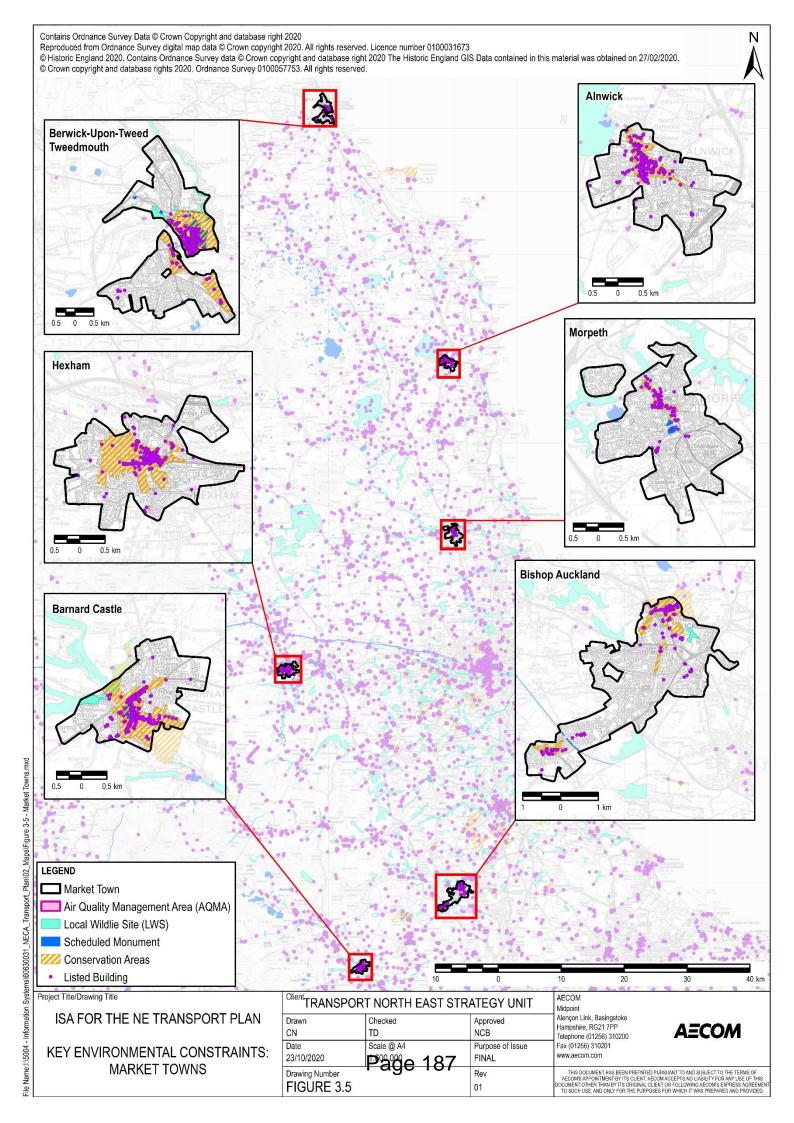
Option C2: Support the regeneration of coastal settlements through targeted interventions

In terms of impacts on land and soils resources, given Option C2 would not lead to		
significant additional landtake, there is unlikely to be a significant difference between the two options in terms of the loss of productive agricultural land. No significant impacts on water quality would be anticipated from schemes linked to the two options if the required embedded mitigation measures are incorporated within the construction and operational stage.	=	=
A number of the coastal communities have a rich historic environment resource, as highlighted by clusters of features and areas designated for their heritage value. The Durham Heritage Coast also extends south of Sunderland, which has been designated in part for its distinctive historic coastal landscape. The significance of direct effects on the historic environment from the interventions taken forward through each option will depend on the design, layout and scale of the schemes, and mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and the setting of the historic environment. Potential effects from both options will though be limited by the limited number of new physical infrastructure schemes taken forward. However, Option C2 will initiate a range of measures which have the potential to deliver a greater degree of modal shift from the private car than Option C1. This includes a combination of measures to encourage public transport use and active travel modes. As such, the fabric and setting of the historic environment has additional potential to benefit through modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic and congestion on the fabric and setting of historic environment assets. In this respect a 'do minimum' approach taken forward through Option C1 has reduced potential to bring similar benefits.	2	1
Whilst no nationally designated landscapes are located within the area (with the exception of the Northumberland Coast AONB, which is located to the north of Amble), the coastal area has a distinctive landscape and seascape which is valued by residents and visitors. The Durham Heritage Coast also extends south of Sunderland, which has been designated for its distinctive coastal landscape associated with its natural, historical and geological interest. Both options, through focusing on the existing transport network, are less likely to deliver new physical infrastructure which have significant impacts on local character, distinctiveness or a sense of place. Option C2 will however initiate a range of measures which have the potential to deliver a greater degree of modal shift from the private car than Option C1. This includes a combination of measures to encourage public transport use and active travel modes. This will support landscape character through encouraging modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic and congestion on landscape character in the vicinity of these coastal areas. In this respect a 'do minimum' approach taken forward through Option C1 has less potential to initiate measures which bring these benefits.	1	2
Whilst no AQMAs exist in the area (the AQMA in Blyth was revoked in 2012), Option C2 will do more than Option C1 to support air quality at key hotspots. This includes through delivering a more comprehensive package of schemes which supports modal shift from the private car to public transport and walking and cycling.	2	1
Through delivering a more comprehensive package of schemes which supports modal shift from the private car to public transport and walking and cycling, Option C2 has more potential than Option C1 to effectively support a limitation of greenhouse gas emissions from transport. In terms of adapting to the effects of climate change, the effect of initiatives taken forward through the options depend on detailed interventions, including scheme design and layout, the integration of green infrastructure provision and other measures to help regulate the effects of extreme weather events. Similarly, the effect of initiatives on fluvial, surface water and groundwater flooding depend on scheme design considerations, including design and layout and the implementation of measures such as sustainable drainage systems.	2	1
	between the two options in terms of the loss of productive agricultural land. No significant impacts on water quality would be anticipated from schemes linked to the two options if the required embedded mitigation measures are incorporated within the construction and operational stage. A number of the coastal communities have a rich historic environment resource, as highlighted by clusters of features and areas designated for their heritage value. The Durham Heritage Coast also extends south of Sunderland, which has been designated in part for its distinctive historic coastal landscape. The significance of direct effects on the historic environment from the interventions taken forward through each option will depend on the design, layout and scale of the schemes, and mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and the setting of the historic environment. Potential effects from both options will though be limited by the limited number of new physical infrastructure schemes taken forward. However, Option C2 will initiate a range of measures which have the potential to deliver a greater degree of modal shift from the private car than Option C1. This includes a combination of measures to encourage public transport use and active travel modes. As such, the fabric and setting of the historic environment has additional potential to benefit through modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic and congestion on the fabric and setting of historic environment assets. In this respect a 'do minimum' approach taken forward through Option C1 has reduced potential to bring similar benefits. Whilst no nationally designated landscapes are located within the area (with the exception of the Northumberland Coast AONB, which is located to the north of Amble), the coastal area has a distinctive landscape and seascape which is valued by res	between the two options in terms of the loss of productive agricultural land. No significant impacts on water quality would be anticipated from schemes linked to the two options if the required embedded mitigation measures are incorporated within the construction and operational stage. A number of the coastal communities have a rich historic environment resource, as highlighted by clusters of features and areas designated for their heritage value. The Durham Heritage Coast also extends south of Sunderland, which has been designated in part for its distinctive historic coastal landscape. The significance of direct effects on the historic environment from the interventions taken forward through each option will depend on the design, layout and scale of the schemes, and mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and the setting of the historic environment. Potential effects from both options will though be limited by the limited number of new physical infrastructure schemes taken forward. However, Option C2 will initiate a range of measures which have the potential to deliver a greater degree of modal shift from the private car than Option C1. This includes a combination of measures to encourage public transport use and active travel modes. As such, the fabric and setting of the historic environment assets. In this respect a 'do minimum' approach taken forward through Option C1 has reduced potential to bering similar benefits. Whilst no nationally designated landscapes are located within the area (with the exception of the Northumberland Coast AONB, which is located to the north of Amble), the coastal area has a distinctive landscape and seascape which is valued by residents and visitors. The Durham Heritage Coast also extends south of Sunderland, which has been designated for its distinctive coastal landscape associated with its natural, historical and geological interest. Both options, through f

Option C1: Do minimum.

Option C2: Support the regeneration of coastal settlements through targeted interventions

	However, Option C2, through seeking to enhance the resilience of the existing transport network, has the potential to respond more positively to the impacts from climate change relating to coastal change in the area.		
Population	Option C2, through delivering additional packages of schemes with a focus on public transport and active travel enhancements will support social inclusion and community vitality. The option also has the potential to contribute to the quality of life of residents through limiting the impact of traffic and congestion on neighbourhoods and on severance issues. In this respect a do minimum approach promoted through Option C1 would do less to help address some of the key accessibility issues seen in coastal areas. This includes relating to the lack of choices relating to public transport and its affordability and reliability (including during off peak times), and existing pressures on the road network. In addition to increasing travel choice through initiating additional packages of enhancements, Option C2 has the potential to support economic opportunities in coastal areas through enhancing connections with the strategic and local transport network and key employment and growth areas. In this respect, under Option C1, local economic regeneration opportunities could be held back and not delivered with the most sustainable transport choices. The option would also do less to support local high streets or the visitor economy, both of which provide vital contributions to the economic vitality of these coastal areas.	2	1
Human Health	Option C2 has increased potential to support modal shift from the private car. This will support healthier modes of travel, including through encouraging active travel modes such as walking and cycling. Through promoting modal shift, it also offers the potential to support air and noise quality enhancements and enhancements to the quality of the public realm. This will support the health and wellbeing of residents. Option C1, through initiating a do minimum approach, has less potential to address the transport issues which adversely affect health and wellbeing in coastal areas.	2	1
Equalities	Groups with 'protected characteristics' tend to be disproportionately affected by the negative effects of transport infrastructure, including from the physical and severance effects of transport corridors, effects on the quality of the public realm, and the effects of traffic and congestion on health and wellbeing. These groups are also disproportionately affected by accessibility issues. In this context, Option C2, which seeks to enhance accessibility by public transport and walking and cycling and deliver increased transport choice will do more to support the needs of groups with protected characteristics. With regards to Option C1, a do minimum approach would do less to help address the socio-economic and quality of life issues influenced by transport in coastal areas and is less likely to address the transport and accessibility needs of groups with protected characteristics.	2	1
Rurality	Whilst the public transport infrastructure enhancements proposed through Option C2 have increased potential to enhance accessibility from areas surrounding these coastal areas, they are unlikely to have significant benefits for those living in the more rural areas of the North East.	N/A	N/A



Market towns

- 3.33 This area (**Figure 3.5**) incorporates the larger market towns in the region, including Bishop Auckland, Barnard Castle, Alnwick, Berwick-upon-Tweed, Morpeth and Hexham.
- 3.34 Two options have been considered as alternatives for the ISA, as follows.

Option MT1: Do minimum

3.35 A do minimum option would rely on committed investment in transport infrastructure in the vicinity of the market towns, which would continue at a local and strategic level.

Option MT2: Optimise use of existing transport infrastructure

3.36 This option would seek to support the region's market towns to make better use of existing transport networks. This includes through delivering measures such as enhancements to bus services, improved road maintenance regimes, electric charging infrastructure and enhanced walking and cycling links. Park and ride could also play a role in some towns. The option would also seek to support the vitality of town centres and the visitor economy.

Appraisal findings

Option MT1: Do minimum.

- 3.37 The following table presents appraisal findings in relation to the two options introduced above. These are organised by the ten ISA themes.
- 3.38 For each ISA theme, a commentary on the likely effects is presented. Options are also ranked numerically reflecting their relative sustainability performance, with '1' the more favourable ranking and '2' the less favourable ranking.

Table 3.5: Appraisal of options relating to market towns

ISA theme	Discussion of potential effects and relative merits of options		nk of rence
		MT1	MT2
Biodiversity	In terms of internationally and nationally designated sites present in the vicinity of the market towns, the main concentration of such sites is around Berwick-upon-Tweed, where the Tweed Estuary SAC, the Berwickshire & North Northumberland Coast SAC, the Tweed Catchment Rivers SSSI and the Northumberland Shore SSSI are present locally. The Tyne Watersmeet SSSI is also located to the north west of Hexham. All of the settlements have a range of important biodiversity habitats present locally, including BAP Priority Habitats, and also Local Wildlife Sites. Through delivering a broader range of transport measures, Option MT2 has the potential to lead to additional impacts on habitats and ecological networks in the vicinities of market towns. However, the option would not in most cases implement significant additional physical infrastructure (with the exception of potential additional Park & Ride provision, which may be delivered in a few of the settlements). Alongside, any physical infrastructure would be unlikely to take place in locations which would directly affect the internationally and nationally designated sites or near Berwick-upon-Tweed or Hexham. Both options though have the potential to lead to effects on habitats and species without the implementation of appropriate avoidance and mitigation measures. It should also be noted that delivery of new and enhanced transport infrastructure may support some enhancements to biodiversity networks. In this context there is scope for transport infrastructure enhancements in the vicinities of the market towns to support environmental net gain locally. This includes through delivering enhancements in the numerous Network Enhancement Zones and Network Expansion Zones identified in the vicinities of the six towns.	1	2
Water and Soil	In terms of impacts on land and soils resources, Option MT2 has the potential to lead to additional land take through the delivery of new Park & Ride provision. This	1	2

has the potential to lead to land take on productive agricultural land, potentially

Resources

1

2

2

0	nti	on	MT	4.	D_{Ω}	minir	num.
U	μu	UII	IVI I	1.	טט	1111111111	mun.

Option MT2: Optimise the use of existing transport infrastructure

leading to the loss of land classified as the best and most versatile agricultural land.

No significant impacts on water quality would be anticipated from schemes linked to the two options if the required embedded mitigation measures are incorporated within the construction and operational stage.

Historic

The market towns have a rich historic environment resource. This is highlighted by Environment the presence of significant clusters of listed features in around the settlements, as well as the presence of conservation areas covering the historic cores of each of

> The significance of direct effects on the historic environment from the interventions taken forward through each option will depend on design, layout and scale of the schemes, and mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and the setting of the historic environment. Potential effects from both options will though be limited by the relatively limited number of new physical infrastructure schemes taken forward.

> However, Option MT2 will initiate a range of measures which have the potential to deliver a greater degree of modal shift from the private car than Option MT1. This includes a combination of measures to encourage public transport use and active travel modes. In this respect the fabric and setting of the historic environment has additional potential to benefit through modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic and congestion on the fabric and setting of historic environment assets. In this respect a 'do minimum' approach taken forward through Option MT1 has reduced potential to bring similar benefits.

Landscape

Whilst no nationally designated landscapes are located within the immediate vicinities of the six market towns (with the exception of the coastline to the south east of Berwick-upon-Tweed), the hinterland of each of the towns have a distinctive landscape character which is valued by residents and visitors alike. In addition the towns have a distinctive townscape, as highlighted by the presence of conservation areas in many parts of the towns.

Both options, through focusing on the existing transport network, are less likely to deliver new physical infrastructure which have significant impacts on local character, distinctiveness or a sense of place. However, Park & Ride provision potentially taken forward through Option MT2 may lead to negative impacts on landscape character locally.

Option MT2 will however initiate a range of measures which have the potential to deliver a greater degree of modal shift from the private car than Option MT1. This includes a combination of measures to encourage public transport use and active travel modes. This will support landscape character in the vicinity of the market towns through encouraging modal shift, a limitation in traffic flows and improved traffic management. In this respect a 'do minimum' approach taken forward through Option MT1 has less potential to initiate measures which bring these benefits.

Air Quality and Noise

Whilst no AQMAs exist in the market towns, Option MT2 will do more than Option MT1 to support air quality (and noise quality) at hotspots. This includes through delivering a more comprehensive package of schemes which supports modal shift from the private car to public transport and walking and cycling.

2

Climate Change and Flood Risk

Through delivering a more comprehensive package of schemes which supports modal shift from the private car to public transport and walking and cycling, Option MT2 has more potential than Option MT1 to effectively support a limitation of greenhouse gas emissions from transport. Whilst car travel will remain the predominant choice for many, especially for those accessing the towns from the surrounding rural areas, the option will do more to support modal shift.

However, R2's effect on climate change mitigation may be undermined through the option's support for Park & Ride provision. Whilst Park & Ride provision will support modal shift for at least part of users' journey, it also has the potential to encourage car use. However, this option recognises that car travel will remain the predominant choice for many living in rural areas, and such provision has the potential to support modal shift for at least part of the journey. In this respect the detailed location and design of such multi-modal provision should be carefully

Page 189

2

1

Option MT1: Do minimum.

Option MT2: Optimise the use of existing transport infrastructure

considered to ensure that newly generated trips are limited, and benefits maximised.

In terms of adapting to the effects of climate change, the effect of initiatives taken forward through the options depend on detailed interventions, including scheme design and layout, the integration of green infrastructure provision and other measures to help regulate the effects of extreme weather events. Similarly, the effect of initiatives on fluvial, surface water and groundwater flooding depend on scheme design considerations, including design and layout and the implementation of measures such as sustainable drainage systems.

Population

Option MT2, through delivering additional packages of schemes with a focus on public transport and active travel enhancements, will support social inclusion and community vitality. The option also has the potential to contribute to the quality of life of residents through limiting the impact of traffic and congestion on neighbourhoods and on severance issues. In this respect a do minimum approach promoted through Option MT1 would do less to help address some of the key accessibility issues seen in the vicinities of market towns, including from their surrounding hinterlands. This includes relating to the lack of choices relating to public transport, its affordability and reliability (including during off peak times), and existing pressures on the road network.

In addition to increasing travel choice through initiating additional packages of enhancements, Option MT2 has the potential to support the economic vitality of market towns through enhancing connections with the strategic and local transport network. In this respect, Option MT1 would do less to support the economic vitality and viability of the six town centres or support their visitor economy.

Human Health

Option MT2 has increased potential to support modal shift from the private car. This will support healthier modes of travel, including through encouraging active travel modes such as walking and cycling. Through promoting modal shift, the option also offers the potential to support air and noise quality enhancements and enhancements to the quality of the public realm. This will support the health and wellbeing of residents.

Option MT1, through initiating a do minimum approach, has less potential to address the transport issues which adversely affect health and wellbeing in market towns.

Equalities

Groups with 'protected characteristics' tend to be disproportionately affected by the negative effects of transport infrastructure, including from the physical and severance effects of transport corridors, effects on the quality of the public realm, and the effects of traffic and congestion on health and wellbeing. These groups are also disproportionately affected by accessibility issues.

In this context, Option MT2, which seeks to enhance accessibility by public transport and walking and cycling will do more to support the needs of groups with protected characteristics.

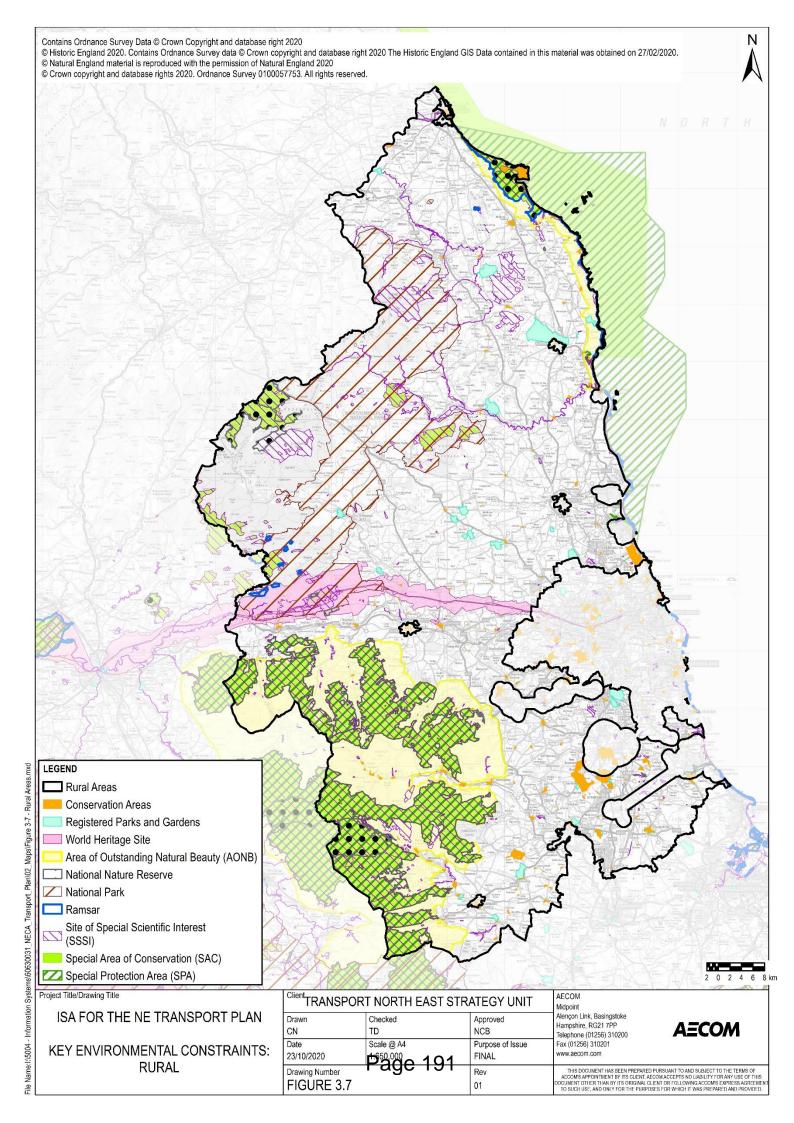
With regards to Option MT1, a do minimum approach would do less to help address the socio-economic and quality of life issues influenced by transport in market towns and their catchment areas, and is less likely to address the transport and accessibility needs of groups with protected characteristics.

Rurality

The six market towns are key service centres serving their rural hinterlands. In this respect Option MT2 has increased potential to support accessibility from rural areas through delivering an increased range of transport interventions. This includes through investment in rural bus service and improved transport interchange.

1

2



Rural areas

3.39 This area (**Figure 3.7**) covers the rural area of the region, including the rural parts of Northumberland and County Durham. It includes the parts of the region within the Northumberland National Park and the two AONBs (Northumberland Coast AONB and North Pennines AONB).

Option R1: Do minimum

3.40 A do minimum option would rely on committed strategic and local level investment, which would continue.

Option R2: Optimise use of existing infrastructure and take a technological approach to transport challenges in rural areas

3.41 This option would seek to make best use of existing infrastructure. It would include measures such as supporting rural bus services, providing an additional impetus on smart travel / 'on demand' community transport, communications enhancements (including broadband and mobile phone infrastructure improvements) and improvements to electric charging infrastructure.

Option R3: Initiate more significant interventions, including with regards to multimodal interchange

3.42 This option would seek to enhance multi-modal interchanges serving rural areas, including through the delivery of new Park and Ride facilities, additional car parking provision at key transport nodes and new walking and cycle links.

Appraisal findings

- 3.43 The following table presents appraisal findings in relation to the three options introduced above. These are organised by the ten ISA themes.
- 3.44 For each ISA theme, a commentary on the likely effects is presented. Options are also ranked numerically reflecting their relative sustainability performance, with '1' the most favourable ranking and '3' the least favourable ranking.

Table 3.6: Appraisal of options for rural areas

Option R1: Do minimum

Option R2: Optimise use of existing infrastructure and take a technological approach to transport challenges

in rural areas

Option R3: Initiate more significant interventions, including with regards to multimodal interchange

ISA theme	Discussion of potential effects and relative merits of options	Rank of preference		
		R1	R2	R3
Biodiversity	The rural areas of the North East have a significant number of internationally designated sites, including SACs, SPAs and Ramsar sites, and nationally designated sites including SSSIs and National Nature Reserves. These cover a range of internationally and nationally significant habitats and form important components of regional and national ecological networks. In addition, there are numerous areas of biodiversity value which are not covered by statutory designations, which hold a range of important habitats and protected species.	1	2	3
	Option R3, through initiating more significant transport interventions, including Park & Ride facilities, has increased potential to lead to significant effects on biodiversity habitats, species and networks. This includes from land take, habitat loss and fragmentation and disturbance. In this respect Option R1, which relies on committed investment, and Option R2, which focuses on enhancing existing transport infrastructure with limited physical interventions would lead to fewer physical impacts on key areas of sensitivity. It should be noted though that given the lack of internationally and nationally designated sites in the vicinities of the settlements where such enhancements are likely to take place, significant adverse effects on these sites would be unlikely through Option R3.			
	It should also be noted that the delivery of new and enhanced transport infrastructure may support some enhancements to biodiversity networks. For example, the Government's 25-year Environment Plan seeks to embed an environment net gain principle for infrastructure development. In this context there is scope for the delivery of new transport infrastructure to support environmental net gain in rural areas. This includes through delivering enhancements in the Network Enhancement Zones ²⁵ and Network Expansion Zones ²⁶ identified in many rural areas of the North East by Natural England.			
Water and Soil Resources	Option R3, through facilitating the delivery of additional new physical transport infrastructure (including Park & Ride sites), will require increased landtake than Option R1 and R2. This has increased potential to lead to the development of previously undeveloped land, including potentially productive land classified as the best and most versatile agricultural land. Without mitigation measures, additional delivery of new transport infrastructure such as Park & Ride sites has the potential to have impacts	1	1	3

within the construction and operational stage.

Prepared for: Transport North East Strategy Unit

on water and soil quality through increases in surface water run-off. However, no significant impacts on water quality would be anticipated from schemes if the required embedded mitigation measures are incorporated

²⁵ Network Enhancement Zones comprise land within close proximity to existing habitat components that have been identified by Natural England as likely to be suitable for habitat re-creation for the particular habitat.

26 Network Expansion Zones are areas identified with potential for expanding, linking and joining biodiversity networks.

Page 193

3

Option R1: Do minimum

Option R2: Optimise use of existing infrastructure and take a technological approach to transport challenges

in rural areas

Option R3: Initiate more significant interventions, including with regards to multimodal interchange

Historic

The rural areas of the North East have a rich historic environment. This is Environment accompanied by distinctive historic landscapes, including the internationally designated Frontiers of the Roman Empire World Heritage Site and the two AONBs designated in the region.

> The increased number of 'hard' transport infrastructure schemes likely to be initiated through Option R3 have the potential to lead to impacts on the key assets (including designated features and areas) located in the vicinity of the locations targeted for interventions. The significance of effects from these interventions will however depend on design, layout and scale of the schemes, and mitigation and avoidance measures proposed.

It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and the setting of the historic environment. Similarly, measures which help to relieve congestion may support improvements to local distinctiveness and the quality of the public realm, with benefits for the setting of the historic environment.

In relation to Option R2, an approach which focuses to a greater degree on soft measures, technological solutions and demand management measures is less likely to lead to direct adverse impacts on the historic environment and historic landscape/townscape character. The setting of the historic environment also has the potential to benefit from initiatives taken forward through this option by an encouragement of modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic on the setting of historic environment assets. In this respect a 'do minimum' approach taken forward through Option R1 has reduced potential to bring similar benefits.

Landscape

The landscapes of the rural areas of the North East are diverse, incorporating upland areas, forest, limestone plateaus, undulating agricultural landscapes, lowland areas and distinctive coastlines. The value of the landscape is recognised by the presence of the nationally designated landscapes of the Northumberland National Park, the Northumberland Coast AONB and the North Pennines AONB.

Whilst, given the likely locations of interventions, the option is unlikely to lead to significant effects on nationally designated landscapes, Option R3, through facilitating the delivery of additional transport infrastructure, including Park & Ride, has additional potential to lead to impacts on landscape character locally. This includes through the loss of features of landscape value, impacts on local distinctiveness and effects on tranquillity. Options R1 and R2, through focusing less on the delivery of physical infrastructure enhancements, are unlikely to deliver transport initiatives which have significant impacts on landscape character.

The significance of effects from schemes initiated by Option R3 would however depend on the design, layout and scale of the schemes, and the mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and local character. Similarly, measures which help to relieve congestion may support improvements to local distinctiveness and the quality of the public realm.

With regards to Option R2, an approach which focuses to a greater degree on soft measures, technological solutions and demand management measures is less likely to lead to direct adverse impacts on landscape character. Local character also has the potential to benefit from initiatives taken forward through this option by an encouragement of modal shift, a limitation in traffic flows and improved traffic management. This will help limit adverse effects from traffic on landscape character. In this respect a 'do minimum' approach taken forward through Option R1 has less potential to initiate measures which bring these benefits.

3

2

Prepared for: Transport North East Strategy Unit

Option R1: Do minimum

Option R2: Optimise use of existing infrastructure and take a technological approach to transport challenges

in rural areas

Option R3: Initiate more significant interventions, including with regards to multimodal interchange

Air Quality and Noise

Air quality is not a significant issue for most rural areas in the North East. However, noise quality is a key issue for some rural areas.

Options R2 and R3 will do more though than Option R1 to deliver packages of schemes which supports modal shift from the private car to public transport and walking and cycling, with benefits for noise and air quality.

Option R3, through introducing new Park & Ride provision at some locations, may however increase noise and air quality issues at locations closer to such facilities. In addition, Option R2, through delivering improved communications infrastructure such as broadband and mobile phone infrastructure enhancements, may do more to reduce the need to travel for key services and facilities. This will support noise and air quality.

1

3

2

Climate Change and Flood Risk

Option R2 has a close focus on technical solutions to transport challenges. Through delivering improved communications infrastructure such as broadband and mobile phone infrastructure enhancements, the option will support a reduction of the need to travel to key services, facilities and opportunities. The option also has a focus on smart travel, community transport and maintaining existing public transport links, and on enhancing electric charging infrastructure. In this context, the option will initiate a range of approaches which will help limit greenhouse gas emissions from rural transport.

Option R3, as part of its proposed package of interventions, seeks to deliver enhanced multimodal interchange, including new Park & Ride provision. The overall effect of these interventions on greenhouse gas emissions is uncertain. Whilst Park & Ride provision will support modal shift for at least part of users' journey, it also has the potential to encourage car use. However, this option recognises that car travel will remain the predominant choice for many living in rural areas, and such provision has the potential to support modal shift for at least part of the journey. In this respect the detailed location and design of such multi-modal provision should be carefully considered to ensure that newly generated trips are limited, and benefits maximised.

Option R1 will do less to initiate interventions which will limit greenhouse gas emissions from transport in rural areas, including through providing least support to alternative modes of transport to the private car or the decarbonisation of the transport network.

As such, Option R2, through combining an approach which seeks to limit the need to travel, promote modal shift from the private car, whilst supporting the decarbonisation of private travel, will do most of the options to support climate change mitigation in rural areas through limiting greenhouse gas emissions from transport.

In terms of adapting to the effects of climate change, the effect of initiatives taken forward through the options depend on detailed interventions, including scheme design and layout, the integration of green infrastructure provision and other measures to help regulate the effects of extreme weather events. Similarly, the effect of initiatives on fluvial, surface water and groundwater flooding depend on scheme design considerations, including design and layout and the implementation of measures such as sustainable drainage systems.

Option R1: Do minimum

Option R2: Optimise use of existing infrastructure and take a technological approach to transport challenges

in rural areas

Option R3: Initiate more significant interventions, including with regards to multimodal interchange

Population

A 'do minimum' approach promoted through Option R1 would do the least of the options to address the key socio-economic and quality of life issues influenced by transport in rural areas. In this context a range of issues are less likely to be addressed without appropriate interventions, including rural accessibility issues, the availability and affordability of public transport, and social exclusion.

Option R2, through seeking to maintain existing rural bus services, support smart travel and 'on demand' community transport, will help support accessibility for those without access to a private car. In addition, through delivering improved communications infrastructure such as broadband and mobile phone infrastructure enhancements, the option will support a reduction of the need to travel to key services, facilities and opportunities, with benefits for social inclusion.

Option R3 recognises that car use will remain the predominant and necessary choice for many in rural areas through seeking to enhance multimodal interchange, including potentially through Park & Ride. This will support accessibility for those with access to private transport.

Options R2 and R3 will therefore both bring benefits for the quality of life of rural residents. In this context a mixture of the schemes taken forward through these options would be likely to deliver most benefits for those living in rural areas.

In addition to increasing travel choice, Options R2 and R3 have the potential to support economic vitality through enhancing connections to key services, facilities and employment opportunities and supporting the visitor economy. Option R2 will also support the diversification of the rural economy through enhancing digital connectivity in rural areas.

Human Health

Prepared for: Transport North East Strategy Unit

Health and wellbeing are closely linked to deprivation issues. In this context deprivation in rural areas is directly influenced by accessibility and social exclusion issues. This is highlighted by the higher levels of deprivation seen in rural areas relating to the 'Barriers to Housing and Services' domain. In this respect Options R2 and R3 will do more to deliver accessibility enhancements which will help limit deprivation in rural areas. Option R2, through supporting rural bus services and providing an additional impetus on smart travel / 'on demand' community transport will help enhance accessibility to those without access to a private car. Communications enhancements, including to broadband and mobile phone infrastructure will also help overcome some of the barriers to accessing services and

Taking a different approach, Option R3 recognises that car use will remain the predominant and necessary choice for many in rural areas through seeking to enhance multimodal interchange, including potentially through Park & Ride. This will support accessibility for those with access to private transport.

Option R1, through initiating a do minimum approach, has the least potential to address the transport issues which adversely affect health and wellbeing in rural areas

1

2

3

Option R1: Do minimum

Option R2: Optimise use of existing infrastructure and take a technological approach to transport challenges

in rural areas

Option R3: Initiate more significant interventions, including with regards to multimodal interchange

Equalities

In rural areas, groups with 'protected characteristics' tend to be disproportionately affected by accessibility issues. For those lacking their own transport, including the young, the elderly, and those with mobility issues, access to services and facilities is a significant challenge. These groups are often the least able to afford high costs of public transport and research shows that, on average, people on lower incomes in rural areas pay a higher proportion of their income on travel costs.

In this respect Options R2 and R3 will do more to deliver accessibility enhancements which will support the needs of equalities groups in the rural areas of the North East. Option R2, through supporting rural bus services and providing an additional impetus on smart travel / 'on demand' community transport will help enhance accessibility to those groups without access to a private car. Communications enhancements, including to broadband and mobile phone infrastructure will also help overcome some of the barriers to accessing services and facilities for those with protected characteristics.

Option R3 recognises that car use will remain the predominant and necessary choice for many of those with protected characteristics in rural areas through seeking to enhance multimodal interchange, including potentially through Park & Ride. This will support accessibility for those with access to private transport.

Option R1, through initiating a do minimum approach, has the least potential to enhance accessibility for those groups with protected characteristics in the rural areas of the North East.

Rurality

A 'do minimum' approach promoted through Option R1 would do the least of the options to address the key socio-economic and quality of life issues influenced by transport in rural areas. In this context a range of issues are less likely to be addressed without appropriate interventions, including rural accessibility issues, the availability and affordability of public transport, and social exclusion.

Option R2, through seeking to maintain existing rural bus services, support smart travel and 'on demand' community transport, will help support accessibility for those without access to a private car. In addition, through delivering improved communications infrastructure such as broadband and mobile phone infrastructure enhancements, the option will support a reduction of the need to travel to key services, facilities and opportunities, with benefits for social inclusion in rural areas.

Option R3 recognises that car use will remain the predominant and necessary choice for many in rural areas through seeking to enhance multimodal interchange, including potentially through Park & Ride. This will support accessibility for those with access to private transport.

Options R2 and R3 will therefore both bring benefits for the quality of life of rural residents. In this context a mixture of the options would be likely to deliver most benefits for those living in rural areas.

In addition to increasing travel choice, Options R2 and R3 have the potential to support economic vitality in rural areas through enhancing connections to key services, facilities and employment opportunities and supporting the visitor economy. Option R2 will also support the diversification of the rural economy through enhancing digital connectivity in rural areas.

2

1

Page 197

Overall conclusions

- 3.45 The assessment of the options considered as reasonable alternatives for the six areas has shown that in many cases that the 'do minimum' option performs less favourably against the ISA themes. This is given these options will do less to deliver enhancements which will help address some of the key accessibility and social inclusion issues experienced in different parts of the region, or support economic vitality. Whilst in some cases the do minimum options may reduce the potential for direct adverse environmental effects, they also preclude opportunities to deliver key environmental enhancements in the region, including relating to air and noise quality, the quality of the townscape, landscape and the public realm, or relating to the rejuvenation of features and areas of historic environment interest. In addition, the do minimum options limit opportunities for utilising transport infrastructure enhancements to deliver regional, sub-regional or local environmental net gain or for limiting greenhouse gas emissions.
- 3.46 The options which focus to a greater degree on 'soft' measures and demand management measures are less likely than the options supporting physical transport capacity enhancements to lead to direct adverse impacts on key environmental and socio-economic receptors in the region. These options also have the potential to deliver significant environmental enhancements and quality of life benefits through the encouragement of modal shift, a reduction in the need to travel, a limitation in traffic flows and improved traffic management.
- 3.47 The options which propose significant transport capacity enhancements have the potential to have a range of direct impacts on key receptors, including from landtake and impacts on the quality of the public realm. Physical transport capacity enhancements also have the potential to stimulate induced demand, with the potential to lead to direct and indirect impacts on features, areas and networks of environmental sensitivity, air and noise quality and greenhouse gas emissions.
- 3.48 The significance of effects from these interventions will though depend on the design, layout and scale of the schemes, and the mitigation and avoidance measures proposed. It is also recognised that the implementation of appropriate measures to 'lock in' the benefits of physical transport capacity enhancements is possible with the implementation of an appropriate package of complementary 'soft' transport and demand management measures. It is also recognised that such capacity enhancements have the potential to offer environmental benefits and deliver net gain, if designed appropriately.

4. Appraisal of the current version of the NETP

Background

- 4.1 The ISA Report must include:
 - The likely significant effects associated with the draft plan approach; and
 - The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects of implementing the draft plan approach.
- 4.2 This chapter of the ISA Report therefore presents appraisal findings in relation to the latest version of the NETP, which was updated following consultation undertaken between November 2020 and January 2021.
- 4.3 The appraisal is presented through an assessment of the seven work programmes currently put forward through the NETP. This is accompanied by an assessment of the 'in-combination' effects of the different work programmes together. In response to the findings of these assessments, a series of proposed mitigation and enhancement measures are also proposed. These are designed to avoid, reduce or offset the potential significant adverse effects identified and maximise the opportunities for enhancements which are potentially available through the implementation of the NETP.

Current version of the NETP

- 4.4 The current version of the NETP updates the Consultation Draft that was consulted on in late 2020 and early 2021.
- 4.5 As discussed above, the current version of the plan presents a vision and strategic objectives for the NETP. To deliver the vision and strategic objectives for the NETP, the current version of the plan sets out seven work programmes. These work programmes propose a number of packages of transport schemes that have been identified as 'shovel ready' for delivery, or can be delivered over the next five years, over the next ten years, or beyond a ten-year period.
- 4.6 The packages of transport schemes are grouped as follows:
 - 1) Helping people to make the right travel choice
 - 2) Upgrading North East Active Travel Infrastructure
 - 3) Bus, ferry and first and last mile
 - 4) Local rail and metro
 - 5) Road infrastructure
 - 6) Maintaining and renewing our transport network.
 - 7) National and international connectivity
- 4.7 The schemes taken forward through these work programmes will be implemented through the Implementation Plan accompanying the overall strategy document for the NETP.
- 4.8 An overview of the preferred approach for the NETP and proposed interventions is presented in **Figure 4.1** and **Figure 4.2**.

ISA Report for the North East Transport Plan

Vision & Objectives

What is our vision?

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

What are our objectives?

Carbon neutral North East

Overcoming Inequality and grow our economy

Healthier North East

Appealing Sustainable Public Transport Choices

Safe, Secure Network



Scheme Options

What options might we consider to deliver our vision and objectives?

- Encouraging people to make journeys by sustainable means;
- Encouraging active travel through behaviour change initiatives;
- Delivering affordable services;

Page

- Expanding the reach of the active travel, public transport and road networks.
- · Reducing adverse environmental effects;

- · Reducing accidents;
- Increasing speed, frequency and reliability of the public transport network and highways;
- · Reducing severance of major infrastructure projects;
- Understanding demand associated with future travel scenarios;
- Working with partners to connect people and places to the wider North, UK and internationally;

We will use a mix of these options as a preferred route in the plan



How we will monitor success? Our Key Performance Indicators

- Increase sustainable transport mode share;
- Increase accessibility of public transport;
- Improve greener journeys by reducing carbon output per capita

- Increase the take up of ULEVs;
- Improve Air Quality;
- Improve Network Performance
- · Managing Motor Vehicle Mileage
- Improving Road Safety;



Figure 4.1: Overview of approach taken by the NETP

Outcomes we can achieve

- · Easier access to, education, skills, and higher value jobs.
- Health levels at least equal to other regions in the UK.
- Better connections from the North East to national and international destinations
- A transport network with improved environmental credentials including mores sustainable journeys, better air quality and reduced carbon output.
- A safer and more reliable integrated transport network which is more intuitive for customers with a sustainable cost base
- · Direct job opportunities in the transport and infrastructure sectors
- Enabling new development and housing sites and improving accessibility to existing communities

Prepared for: Transport North East Strategy Unit

ISA Report for the North East Transport Plan

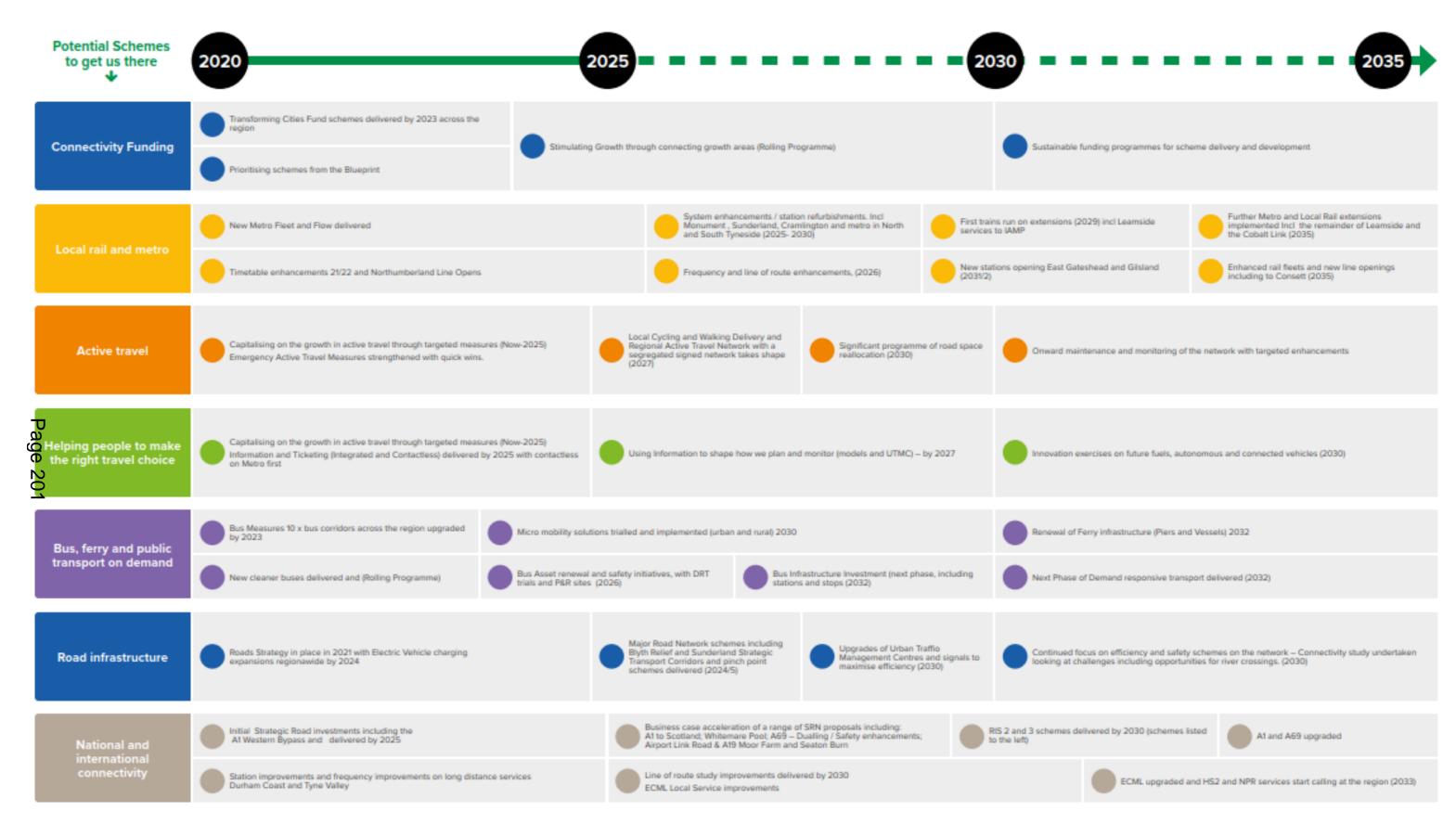


Figure 4.2: Overview of strategic interventions proposed for the NETP

Prepared for: Transport North East Strategy Unit

Appraisal of the NETP work programmes

- 4.9 The following sections presents the appraisal of the current version of the NETP.
- 4.10 The appraisal identifies and evaluates the likely significant effects of each work programme of schemes on the baseline, informed by the ISA Framework developed through scoping (Chapter 2). Findings have been presented through the ten ISA themes developed during scoping:
 - Biodiversity
 - Water and soil resources
 - Historic environment
 - Landscape
 - Air quality and noise
 - Climate change and flood risk
 - Population
 - Human health
 - Equalities
 - Rurality
- 4.11 Under each of the above ISA themes, assessment findings have been discussed for each potential work programme. In response to the assessment findings, potential mitigation measures have also been proposed, and opportunities identified. This is with a view to informing the ongoing development of the work programmes' schemes to implementation.
- 4.12 A commentary of the in-combination effects of the work programmes against each ISA theme is subsequently presented, with additional recommendations/mitigation to cover assessed effects.

Biodiversity

Appraisal of work programmes

4.13 The following table presents an appraisal of the seven work programmes against the Biodiversity ISA theme.

Table 4.1: Appraisal of work programmes: Biodiversity

Work Programme	Appraisal findings	Mitigation and / or enhancement opportunities
1: Helping people to make the right travel choice	The short, medium and long-term schemes proposed through this work programme are largely focused on user experience of more sustainable modes of travel, such as active travel and bus travel. The measures introduced under this programme include; introducing the delivery of a 'School Streets' approach and low-traffic neighbourhoods, delivering cross-modal ticketing and enhanced passenger travel technology (including improved mapping services), traffic management schemes and technology test-bed initiatives. The focus on technology and user experience translates to a limited introduction of physical infrastructure and landtake in terms of the schemes proposed. As a result, no significant effects are anticipated in relation to biodiversity. Ultimately the measures support a reduction in local car journeys to the benefit of air and noise quality, and by this means, minor indirect positive effects are considered likely for biodiversity. However, technology/ signage improvements may need to consider the effects of light pollution at the project-scale.	 Opportunities for 'urban greening' of routes, particularly active travel networks should be sough where possible. Strategic opportunities to maximise biodiversity net gains should be sought where possible. Technology and signage improvements should seek to limit impacts on nocturn species.

2: Upgrading North East Active Travel Infrastructure The interventions proposed under this work programme range in type but can be broadly grouped as measures to improve and extend active travel routes, and road infrastructure improvements which seek to reduce the dominance of road traffic. This includes physical development that has the potential to affect biodiversity.

With most of the proposed schemes focused in the urbanised areas of Newcastle, Gateshead, Sunderland and North and South Tyneside, the potential for effects in relation to European designated sites is limited. Alternatively, a focus here on reducing vehicle use and dominance may support improvements to air quality overall, indirectly benefiting biodiversity.

However, there are multiple designated sites, habitats and ecological corridors within these urban areas that have the potential to be affected through habitat fragmentation, increased disturbance and noise, light and air pollution, particularly during the construction phase (where applicable). Notably, a new crossing over the River Derwent (GA46) has the potential to affect habitats and ecology in the area with multiple SSSI habitats associated with the river. It will be important to deliver mitigation alongside development to avoid/minimise any negative effects arising.

New hard surfaces also have the potential to affect water runoff and attenuation rates that may affect habitats.

In the more rural areas of County Durham the proposed schemes focus on cycle route improvements, including new tracks and route extensions. These schemes are predominantly focused along existing transport corridors such as the A689, A688, A177 as well as existing cycle routes. NCN1 is notably set a series of works to improve the quality of the route taking into account biodiversity and appearance of the section running between Seaham and Stockton. With further urban greening measures, such as a new tree-lined boulevard in Gateshead (GA04) and public realm improvements in Sunderland (SU29), minor positive effects can be anticipated.

It is noted that some of the proposed schemes run in close proximity to European designated sites, and the Habitats Regulations Assessment accompanying the NETP will explore the 'likely significant effects' in greater detail in due course. Ultimately though the focus on promoting alternative modes of travel to the car could bring about positive effects for air quality in the vicinity of designated sites.

 Public realm enhancements should seek to enhance ecological networks through appropriate planting and green infrastructure enhancements, and where possible, employing the premise of environmental net gain.

3: Bus, ferry and first and last mile

A number of significant schemes are proposed through this work package that will result in the development of physical infrastructure with the potential to affect designated biodiversity, as well as local habitats and ecological connectivity. Schemes of particular significance in relation to biodiversity include a proposed new bus station at Blythe (NO09) and the replacement of the South Bank ferry landing (NX23), which are in the vicinity of European designated coastal habitats.

Further, significant urban construction works, including additional new bus stations (at Alnwick and Bishop Auckland) and new park and ride facilities (at Team Valley and Slatyford), alongside existing infrastructure upgrades, have the potential to indirectly affect nationally designated habitats associated with SSSIs and more directly affect locally designated habitats. Potential effects include direct habitat loss, habitat fragmentation, increased disturbance, noise, light and air pollution. These effects are likely to be most prominent in the short-term during construction phases.

It is noted that some of the proposed schemes run in close proximity to European designated sites. In this context the Habitats Regulations Assessment accompanying the NETP will explore the 'likely significant effects' of these schemes in greater detail in due course. Ultimately though, the focus on promoting alternatives modes of travel to the car could bring about positive effects for air quality in the vicinity of designated sites.

- Development should seek to limit potential impacts on habitats and species from landtake, loss of vegetation and trees and light pollution through appropriate avoidance and mitigation measures.
- Opportunities to enhance ecological networks through appropriate planting and green infrastructure enhancements should also be sought where possible.

4: Local rail and Metro

The work package focuses on existing rail infrastructure (including reinstatement of disused lines), with a number of significant proposals, including a new station at East Gateshead, the extension of the Northumberland Line, reinstatement of the Derwent Valley Line from Consett to Newcastle, and new metro stations. Significant car park expansions at rail connection areas in South Tyneside are also proposed.

Due to the sensitivity of these transport corridors, enhancements to local rail and Metro networks have the potential to have adverse effects on habitats, species and ecological corridors without the integration of appropriate mitigation and avoidance measures. This may also have impacts on nationally and locally designated sites.

Whilst the potential for negative effects through disturbance, noise and light pollution is identified, there is some potential for positive effects also to take place. For example the focus on improving strategic rail connectivity, for example in the Derwent Valley Line, provides significant support for increasing access to key employment areas by more sustainable modes of transport. This is expected to reduce the dominance of vehicle traffic and congestion on roads, which may have indirect positive effects for biodiversity from air and noise quality enhancements and a reduction of impacts from the transport network on local habitats.

 Potential impacts on biodiversity habitats should be considered during scheme development, avoidance and mitigation measures implemented, and opportunities for net gain explored.

5: Road infrastructure

This package provides a focus on road infrastructure upgrades. In the short-term there is a predominant focus on expanding the EV network and supporting planned growth with enabling infrastructure. In the medium to longer term focus shifts to reducing severance with the delivery of new bridges, enabling next generation connectivity, and local bypass schemes.

The likely effects of these schemes in relation to European designated sites will be assessed in greater detail through the Habitat Regulations Assessment accompanying the NETP in due course.

However, more localised impacts are considered likely. Negative effects can be anticipated in relation to nationally designated SSSIs, locally designated sites and Priority Habitats as a result of habitat loss and fragmentation, disturbance, noise, light and air pollution.

Further, road infrastructure improvements ultimately have the potential to attract more road users, which in turn can negatively effect biodiversity, particularly in terms of air quality in the vicinity of designated sites. However, technological advances are also proposed which seek to integrate air quality monitoring and real-time information to the benefit of air quality in the longer-term.

Overall however, effects on habitats, species, ecological networks and designated sites will depend on the detailed location and design of schemes, and the integration of biodiversity-friendly design within new infrastructure. Potential effects, including cumulative effects between schemes will need to be carefully considered through the project stage.

- Potential impacts on biodiversity habitats should be considered during scheme development, avoidance and mitigation measures implemented, and opportunities for net gain explored.
- Opportunities to enhance green infrastructure networks along routes should also be sought, supporting a premise of environmental net gain and delivering multifunctional benefits. This should be informed at the project level by a robust EIA process.

6: Maintaining and renewing our transport network

This package provides a focus on future funding, targeted decarbonisation solutions and asset energy generation potential, and technological advances.

Enhanced maintenance regimes may have impacts on biodiversity assets locally, including from landtake and disturbance. Increasing the resilience of coastal transport infrastructure has the potential to have impacts on internationally and nationally designated sites present on the coast

- Biodiversity enhancements should be facilitated alongside network improvements.
- Development of a programme of works to ensure that SSSIs and other important designated sites are brought into favourable condition.

7: National and international connectivity

This work package focuses on strategic road and rail connection enhancement opportunities to better manage future growth in the region and accelerate existing business cases for strategic interventions. This includes future rail connectivity with High Speed 2 and Northern Powerhouse Rail, as well as a package of measures to address highway pinchpoints (including the A1 Western Bypass, A19 and Sunderland Strategic Transport Corridors and Blyth Relief Road). Effects on habitats, species, ecological networks and designated sites will depend on the detailed location and design of schemes, and the integration of biodiversity-friendly design within new infrastructure. Potential effects, including cumulative effects between schemes will need to be carefully considered through the project stage.

Cumulatively, the increased strategic connectivity has the potential to further increase visitor trips and recreational pressures on key areas of biodiversity value in the region, such as coastal habitats, As such, potential cumulative effects will need to be carefully managed.

- Potential impacts on biodiversity habitats should be considered during scheme development, avoidance and mitigation measures implemented, and opportunities for net gain explored.
- Strategic connectivity improvements that result in increased visitor and recreational pressures at designated sites will need to be carefully managed.

Key significant effects resulting from the NETP packages: Biodiversity

4.14 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Biodiversity ISA theme.

Table 4.2: Likely significant effects, Biodiversity

Likely significant effect	Effect dimensions	Recommendations, mitigation
Impacts on biodiversity from land take, habitat loss and fragmentation and disturbance from road, rail and public transport schemes proposed through the NETP.	Direct, short, medium and long-term, permanent and negative	Potential impacts on habitats and species from landtake, loss of vegetation and trees and light pollution through should be addressed through appropriate avoidance and mitigation measures. Opportunities to enhance green infrastructure networks along routes should be sought, supporting a premise of environmental net gain and delivering multifunctional benefits. This should be informed at the project level by a robust EIA process.
Potential impacts on European designated biodiversity sites from new transport infrastructure schemes.	Direct and indirect, short, medium and long-term, permanent and negative	Apply the recommendations of the Habitats Regulations Assessment process undertaken alongside the NETP.
Impacts on biodiversity from increased noise, light and air pollution linked to traffic increases resulting from the release of induced demand from new road schemes.	Indirect, medium and long-term, permanent and negative	Ensure benefits of road improvements are 'locked in' through provision of complementary public transport and walking and cycling measures which limit road traffic increases. Opportunities for delivering this provision on the existing network should be considered first by Transport North East.
Impacts on internationally and nationally designated sites present on the coast from enhancements to the resilience of coastal transport infrastructure.	Direct, short, medium and long-term, permanent and negative	Biodiversity enhancements should be facilitated alongside network improvements. Key habitats should be retained and the integrity of ecological linkages should be secured. Programmes of works should be developed to help ensure an increased proportion of the SSSIs and other important designated sites present locally are brought into favourable condition.
Impacts of new lighting and signage on nocturnal species	Direct short and medium term effects, temporary and negative.	New lighting and signage should be designed to minimise impacts on nocturnal species. This should be informed by appropriate ecology surveys.

Prepared for: Transport North East Strategy Unit

Water and Soil Resources

Appraisal of work programmes

4.15 The following table presents an appraisal of the seven work programmes against the Water and Soil Resources ISA theme.

Table 4.3: Appraisal of work programmes: Water and Soil Resources

Work Programme	Appraisal findings	Mitigation and / or enhancement opportunities
1: Helping people to make the right travel choice	The schemes proposed under this work programme largely focus on user experience of more sustainable modes of travel, such as active travel and bus travel. Given the lack of significant physical infrastructure to be delivered through the package no significant effects are anticipated in relation to the Water and Soil Resources ISA theme. Despite this, measures which seek to enhance active travel networks, particularly new or extended routes have the potential to increase the amount of hard surfacing and affect surface water run-off and attenuation rates.	None proposed
2: Upgrading North East Active Travel Infrastructure	The interventions proposed under this work programme range in type but can be broadly grouped as measures to improve and extend active travel routes, and road infrastructure improvements which seek to reduce the dominance of road traffic. This includes physical infrastructure that has the potential to affect soil and water resources. No significant development is proposed under this programme which would result in significant greenfield loss or significant effects in relation to agricultural land resources. The effects are considered likely to predominantly relate to water quality, as a result of the introduction of hard surfacing requiring the management of surface water run-off and attenuation rates, as well as development in the vicinity of rivers and other waterbodies. Whilst no significant effects are anticipated in this respect, it is recognised that the use of permeable surfaces supported by integrated sustainable drainage systems where appropriate can reduce the potential for minor negative effects arising. Construction Environmental Management Plans (CEMPs) can further contribute to minimising effects arising during construction, particularly relevant to the proposed new crossing at the River Derwent at Metro Green (GA46).	 Promoting the use of Construction Environmental Management Plans (CEMPs). Use of permeable surfaces in any new or extended routes should be sought where possible. New infrastructure should be supported by appropriate drainage systems where necessary, to reduce surface water run-off and maintain or improve attenuation rates.
3: Bus, ferry and first and last mile	Whilst its main focus is on improving the quality and functioning of existing transport infrastructure, a number of significant development proposals are included within this package. This includes the development of new bus stations, new park and ride facilities, and rapid transit corridors. It is assumed that key transport interchange locations, such as new bus station and rapid transit corridors will maximise the use of brownfield land opportunities where these exist. The short-term priorities outline intentions to establish a strategy for effective park and ride sites, with potential schemes identified at this stage at Team Valley and Slatyford, again maximising the use of urban land. Should future development sites include greenfield sites then negative effects of greater significance could be anticipated in relation to soil resources. At this stage though, no significant effects are anticipated. It is assumed that appropriate consultation with water companies will occur as the plan progresses, to ensure the timely provision of infrastructure servicing new stations and asset locations. Further, all schemes which propose new development will need to consider the effects of introducing new hard surfacing and manage the effects of surface-water run-off in relation to water quality. Overall, no significant effects are considered likely at this stage.	New infrastructure should be supported by appropriate drainage systems where necessary, to reduce surface water run-off and maintain or improve attenuation rates.

4: Local rail and Metro

The work package focuses on existing rail infrastructure (including reinstatement of disused lines), with a number of significant proposals, including a new station at East Gateshead, the extension of the Northumberland Line, reinstatement of the Derwent Valley Line from Consett to Newcastle, and new metro stations. Significant car park expansions at rail connection areas in South Tyneside are also proposed.

As above, it is assumed that key transport interchange locations, such as new rail and metro stations and associated car parking facilities will maximise the use of brownfield land opportunities where these exist. A significant focus on existing infrastructure across the schemes on the whole minimises the likelihood of significant effects arising in relation to soil resources.

Again, it is assumed that appropriate consultation with water companies will occur as the plan progresses, to ensure the timely provision of infrastructure servicing new stations and asset locations. Further, all schemes which propose new development will need to consider the effects of introducing new hard surfacing and manage the effects of surface-water run-off in relation to water quality. Overall, no significant effects are considered likely at this stage.

 New infrastructure should be supported by appropriate drainage systems where necessary, to reduce surface water run-off and maintain or improve attenuation rates.

5: Road infrastructure

This package provides a focus on road infrastructure upgrades. In the short-term there is a predominant focus on expanding the EV network and supporting planned growth with enabling infrastructure. In the medium to longer term focus shifts to reducing severance with the delivery of new bridges, enabling next generation connectivity, and local bypass schemes.

The package includes significant development schemes, including a number of new link roads and relief roads, dualling schemes and corridor-based improvements. The associated construction works have the potential for negative effects in relation to soil resources, particularly where works encroach upon greenfield land.

Further, new roads and new bridges have potential for effects in relation to water quality through the introduction of hard surfacing affecting water run-off and attenuation rates and potentially water quality. Negative effects can be anticipated in this respect, and it will be important for development to deliver sustainable drainage systems where possible to minimise the effects arising. No significant impacts on water quality are anticipated from schemes if the required embedded mitigation measures are incorporated within the construction stage.

Provision of sustainable drainage systems should be sought where possible.

Maintaining and renewing our transport network The package has a close focus on enhancing the maintenance of the road network, including to provide greater resilience to climate change. This has the potential to support significant enhancements to water and soil quality given maintenance schemes are likely to incorporate measures to more sustainably manage surface water run off.

None proposed.

7: National and international connectivity

This work package focuses on strategic road and rail connection enhancement opportunities to better manage future growth in the region and accelerate existing business cases for strategic interventions. This includes future rail connectivity with High Speed 2 and Northern Powerhouse Rail, as well as a package of measures to address highway pinchpoints (including the A1 Western Bypass, A19 and Sunderland Strategic Transport Corridors and Blyth Relief Road). The focus on strategic connectivity and existing infrastructure minimises the likelihood of significant effects arising in relation to both soil and water resources.

However, it is recognised that strategic interventions also present opportunities to improve aspects such as drainage and positively affect water quality in this respect. Such strategic opportunities should be capitalised upon where available.

 Opportunities to improve strategic sustainable drainage solutions should be sought where possible.

Key significant effects resulting from the NETP packages: Water and Soil Resources

4.16 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Water and Soil Resources ISA theme.

Table 4.4: Likely significant effects, Water and Soil Resources

Likely significant effect	Effect dimensions	Recommendations, mitigation
Improved management of surface water run off through enhanced maintenance of the road network and the delivery of sustainable drainage schemes alongside new transport infrastructure.	Direct, short, medium and long term, permanent and positive.	New infrastructure should be supported by appropriate drainage systems where necessary, to reduce surface water run-off and maintain or improve attenuation rates. Opportunities to improve strategic sustainable drainage solutions should be sought where possible.
Improvements to soil quality from improved management of surface water run off through enhanced maintenance of the road network and the delivery of sustainable drainage schemes alongside new transport infrastructure.	Direct, medium and long term, permanent and positive.	New infrastructure should be supported by appropriate drainage systems where necessary, to reduce surface water run-off and maintain or improve attenuation rates. Opportunities to improve strategic sustainable drainage solutions should be sought where possible.

Historic Environment

Appraisal of work programmes

4.17 The following table presents an appraisal of the seven work programmes against the Historic Environment ISA theme.

Table 4.5: Appraisal of work programmes: Historic Environment

Work Programme	Appraisal findings	Mitigation and / or enhancement opportunities
1: Helping people to make the right travel choice	The short, medium and long-term schemes proposed for work programme are largely focused on user experience of more sustainable modes of travel, such as active travel and bus travel. As such, no direct impacts on the fabric and setting of the historic environment (including both designated and non-designated heritage assets).	Urban greening measures can support a high-quality public realm and support the setting of the historic environment.
	However, through encouraging modal shift, a limitation in traffic flows and improved traffic management, the package of measures has the potential to support the setting of historic environment assets, both designated and non-designated, and historic townscapes and landscapes. Minor indirect positive effects could be anticipated in this respect.	

2: Upgrading North East Active Travel Infrastructure

The interventions proposed under this work programme range in type but can be broadly grouped as measures to improve and extend active travel routes, and road infrastructure improvements which seek to reduce the dominance of road traffic. This includes physical development that has the potential to affect the fabric and setting of the historic environment.

A significant focus of the package is on extending cycle and pedestrian infrastructure. This has the potential for multiple benefits relating to the historic environment, including through reduced vehicle presence and increased access to and enjoyment of heritage assets and their settings. This is particularly demonstrated through schemes such as the proposed new cycle track along the disused railway between Bishop Auckland and Barnard Castle, which traverses the setting of three Registered Parks and Gardens, and multiple Listed Buildings and Scheduled Monuments, and the development of a cycling and walking route along the Darlington and Stockton railway, which is a route of key importance for railway heritage.

Despite this, it is recognised that there is a potential for short-term negative effects during construction (e.g. groundworks and diversions). In light of this, new infrastructure should be designed to support the setting of the historic environment, and maximising opportunities for public realm improvements, including green infrastructure provision, to secure longer term positive effects.

- Development should seek to manage and minimise impacts on the setting of the historic environment during construction phases.
- New infrastructure should be designed to support the setting of the historic environment and maximise opportunities for public realm improvements.

3: Bus, ferry and first and last mile

Whilst great focus is paid to improving the quality and functioning of the existing transport infrastructure network, a number of significant development proposals are included within this package. This includes the development of new bus stations, new park and ride facilities, and rapid transit corridors.

A number of proposals under this work package are likely to affect different sensitive heritage receptors. Of significance, the proposed South Bank Ferry Landing replacement scheme (NX23) lies close to the 'Frontiers of the Roman Empire' (Hadrian's Wall) World Heritage Site and its buffer zone. Development here has the potential for effects of significance, both positive and negative. Negative effects are likely to predominantly relate to construction phases, provided that high-quality design ensures that in the long-term development supports the setting of the historic environment. However, the South Bank Ferry Terminal replacement could unlock further regeneration and investment in the vicinity of the World Heritage Site, bolstering the rejuvenation of heritage assets in this locality.

Proposals such as the new bus stations at Alnwick (NO08) and Bishop Auckland (DU11) are also likely to affect sensitive heritage settings. Similar to above, it will be important to ensure that high-quality design proposals support the setting of the historic environment.

However, modal shift facilitated by the package have the potential to support enhancements to the setting of the historic environment and increase access to and enjoyment of key heritage assets. This is particularly relevant for more localised schemes, and within designated conservation areas.

 New infrastructure should be designed to facilitate enhancements to the fabric and setting of the historic environment. It should also seek to maximise opportunities for enhancing access to and understanding of the historic environment.

4: Local rail and Metro

The work package focuses on existing rail infrastructure (including reinstatement of disused lines), with a number of significant proposals, including a new station at East Gateshead, the extension of the Northumberland Line, reinstatement of the Derwent Valley Line from Consett to Newcastle, and new metro stations. Significant car park expansions at rail connection areas in South Tyneside are also proposed.

Of significance within this work package, the re-opening of Gilsland Railway Station is proposed, which lies within the buffer zone of the 'Frontiers of the Roman Empire' (Hadrian's Wall) World Heritage Site. Development here has the potential for effects of significance, both positive and negative. Negative effects are likely to predominantly relate to construction phases, provided that high-quality design ensures that in the long-term development supports the setting of the historic environment.

Positive effects can also be anticipated as a result of increased access to and enjoyment of designated heritage assets.

 New infrastructure should be designed to facilitate enhancements to the fabric and setting of the historic environment. It should also seek to maximise opportunities for enhancing access to and understanding of the historic environment.

5: Road infrastructure

This package provides a focus on road infrastructure upgrades. In the short-term there is a predominant focus on expanding the EV network and supporting planned growth with enabling infrastructure. In the medium to longer term focus shifts to reducing severance with the delivery of new bridges, enabling next generation connectivity, and local bypass schemes.

The delivery of these schemes has the potential to lead to impacts on the key assets (including designated features and areas) located in the vicinity of the key routes and areas targeted for interventions. There are likely to be trade-off effects. For example, bypass routes that alleviate congestion in certain areas to the benefit of certain settings may also introduce new traffic into other areas affecting designated assets and heritage settings in these locations. In addition, improvements on key corridors (including on the A194, A1018 and A183 in South Tyneside) overs the potential to deliver enhancements to the public realm and the fabric and setting of the historic environment.

The significance of effects on the historic environment from the interventions taken forward through this package will depend on design, layout and scale of the schemes, and mitigation and avoidance measures proposed. It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and the setting of the historic environment.

- Road schemes should be accompanied by a comprehensive package of avoidance and mitigation measures, as well, where possible, enhancement measures. This should be informed at the project level by a robust EIA process.
- New infrastructure should be designed to facilitate enhancements to the fabric and setting of the historic environment. It should also seek to maximise opportunities for enhancing access to and understanding of the historic environment.

6: Maintaining and renewing our transport network

Enhancements to maintenance regimes taken forward through this package has the potential to deliver enhancements to the fabric of designated and undesignated features of historic environment interest, including those associated with the transport network. The package also has the potential to support enhancements to the setting of the historic environment, including through improvements to visual amenity and enhancements to noise quality through enhanced road surfacing.

 Maintenance regimes should seek to facilitate enhancements to the fabric and setting of designated and undesignated features and areas of historic environment interest. 7: National and international connectivity

This work package focuses on strategic road and rail connection enhancement opportunities to better manage future growth in the region and accelerate existing business cases for strategic interventions. This includes future rail connectivity with High Speed 2 and Northern Powerhouse Rail, as well as a package of measures to address highway pinchpoints (including the A1 Western Bypass, A19 and Sunderland Strategic Transport Corridors and Blyth Relief Road).

The focus on strategic connectivity and existing infrastructure minimises the likelihood of direct significant effects on the historic environment.

Cumulatively, the increased strategic connectivity which is sought through this package has the potential to support enhancements in accessibility to key heritage assets in the region, including the World Heritage Sites, Registered Parks and Gardens, city and town centres and other areas of significance for their historic environment interest.

· None proposed.

Key significant effects resulting from the NETP packages: Historic Environment

4.18 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Historic Environment ISA theme.

Table 4.6: Likely significant effects, Historic Environment

Likely significant effect	Effect dimensions	Recommendations, mitigation
The delivery of new transport infrastructure schemes has the potential to lead to significant impacts on the key assets (including designated and non-designated features and areas) of historic environment interest located in the vicinity of the key routes and areas targeted for interventions.	Direct and indirect, short, medium and long term, permanent and negative.	Transport infrastructure schemes should be accompanied by a comprehensive package of avoidance and mitigation measures, as well, where possible, enhancement measures. This should be informed at the project level by a robust EIA process. New infrastructure should be designed to facilitate enhancements to the fabric and setting of the historic environment. It should also seek to maximise opportunities for enhancing access to and understanding of the historic environment.
Enhancement to the fabric and setting of the historic environment through improved maintenance regimes.	Direct, short, medium and long term, permanent and positive.	Maintenance regimes should seek to facilitate enhancements to the fabric and setting of designated and undesignated features and areas of historic environment interest.
Enhanced accessibility to, and additional opportunities for enjoyment of the North East's heritage resource.	Direct, short, medium and long term, permanent and positive.	None proposed.

Landscape

Appraisal of work programmes

Prepared for: Transport North East Strategy Unit

4.19 The following table presents an appraisal of the seven work programmes against the Landscape ISA theme.

Table 4.7: Appraisal of work programmes: Landscape

Work Programme	Appraisal findings	Mitigation and / or enhancement opportunities
1: Helping people to make the right travel choice	The short, medium and long-term schemes proposed for work programme are largely focused on user experience of more sustainable modes of travel, such as active travel and bus travel. As such, no direct impacts on the landscape and townscape character. However, through encouraging modal shift, a limitation in traffic flows and improved traffic management, the package of measures has the potential to support the quality of the public realm, local distinctiveness and townscape and landscape character. Minor indirect positive effects could be anticipated in this respect.	Urban greening measures can support a high-quality public realm and support the setting of the townscape.
2: Upgrading North East Active Travel Infrastructure	The interventions proposed under this work programme range in type but can be broadly grouped as measures to improve and extend active travel routes, and road infrastructure improvements which seek to reduce the dominance of road traffic. This includes physical development that has the potential to affect landscape and townscape character. A significant focus of the package is on extending cycle and pedestrian infrastructure. This has the potential for multiple benefits relating to the landscape and townscape character, including through reduced vehicle presence and increased access to and enjoyment of the public realm. Despite this, it is recognised that there is a potential for short-term negative effects during construction (e.g. groundworks and diversions). In light of this, new infrastructure should be designed to support local character and maximising opportunities for public realm improvements, including green infrastructure provision, to secure longer term positive effects.	 New cycle infrastructure should be designed and located to support high-quality landscape abd townscape settings. Opportunities for 'urban greening' and green infrastructure enhancements should be sought where possible. Development should avoid the loss of existing trees and landscape features where possible.

3: Bus, ferry and first and last mile

Whilst the focus of the package is on improving the quality and functioning of the existing infrastructure network, a number of significant development proposals are included within this package. This includes the development of new bus stations, new park and ride facilities, and rapid transit corridors which have significant implications for landscape and townscape character.

It is assumed that key transport interchange locations, such as new bus stations and rapid transit corridors will maximise the use of brownfield land opportunities where these exist to improve upon the townscape. Further, development should seek to avoid the loss of trees and existing landscape/townscape features. Greater emphasis on public realm improvements and urban greening factors in the schemes could enhance the potential for development to lead to positive townscape effects. This will be particularly relevant in the more rural areas of the region, particularly targeted measures within the setting of the AONBs or National Park such as at Alnwick.

The short-term priorities outline intentions to establish a strategy for effective park and ride sites, with potential schemes identified at this stage at Team Valley and Slatyford, again maximising the use of urban land. Should future development sites include greenfield sites, then negative effects of additional significance could be anticipated in relation to landscape character, particularly in greenfield sites in the more rural areas of the region and areas within, or within the setting of, designated landscapes.

New infrastructure should be designed to facilitate enhancements to the quality of the public realm and townscape and landscape character.

4: Local rail and Metro

The work package focuses on existing rail infrastructure (including reinstatement of disused lines), with a number of significant proposals, including a new station at East Gateshead, the extension of the Northumberland Line, reinstatement of the Derwent Valley Line from Consett to Newcastle, and new metro stations. Significant car park expansions at rail connection areas in South Tyneside are also proposed.

Similar to above, it is assumed that key transport interchange locations, such as new stations and car parking facilities, will maximise the use of brownfield land opportunities where these exist to improve upon the townscape. Schemes involving greenfield development have the potential for potential negative effects on landscape, particularly those within the setting of distinctive and valued landscapes (such as at Consett, located within the setting of the North Pennines AONB).

The reinstatement of disused railway lines and stations (e.g. DU17 & NO04) has the potential tor impact on the historic townscape and landscape, and much of the Metro network has a distinctive historical lineage forming part of the development of townscape character in these locates. High-quality design supported by public realm enhancements and green infrastructure development can support overall long-term positive effects in the re-establishment and enhancement of these routes.

 New and enhanced infrastructure should be designed to facilitate enhancements to the quality of the public realm and townscape and landscape character.

5: Road infrastructure

This package provides a focus on road infrastructure upgrades. In the short-term there is a predominant focus on expanding the EV network and supporting planned growth with enabling infrastructure. In the medium to longer term focus shifts to reducing severance with the delivery of new bridges, enabling next generation connectivity, and local bypass schemes.

The package includes significant development schemes, such as new relief and link roads, dualling schemes, new bridges and corridor-based improvements. Given the scale of these schemes, a number of these have the potential to have significant effects on landscape character, particularly those schemes on greenfield land and those that encroach on valued countryside or coastal settings.

The significance of effects from schemes taken forward by the package however depend on the design, layout and scale of the schemes, and the mitigation and avoidance measures proposed.

It should also be noted that well designed schemes have the potential to lead to enhancements to the public realm and townscape/landscape character.

Furthermore, the schemes taken forward through this work package may in some cases contribute to a reduction in severance and contribute to a more cohesive settlement and townscape form. Similarly, measures which help to relieve congestion may support improvements to local distinctiveness and the quality of the public realm.

- Road schemes should be accompanied by a comprehensive package of avoidance and mitigation measures, as well, where possible, enhancement measures. This should be informed at the project level by a robust EIA process.
- New infrastructure should be designed to facilitate enhancements to landscape and townscape character.

6: Maintaining and renewing our transport network

Enhancements to maintenance regimes taken forward through this package has the potential to deliver enhancements to landscape and townscape character, including through improvements to visual amenity and enhancements to noise quality through enhanced road surfacing.

The package seeks to repair and strengthen key roads underpinning the rural and regional economy. This will support the enjoyment of key tourism destinations in the key designated landscapes of the North East, including the Northumberland National Park (including the International Dark Skies Park) and Hadrian's Wall World Heritage site. It also seeks to limit the impacts from transport of timber extraction and quarrying. This recognises the impact of such activities on the landscape character and quality of the public realm in some rural areas, with associated impacts on the tranquillity of these areas.

 Maintenance regimes should seek to facilitate enhancements to landscape and townscape character.

7: National and international connectivity

This work package focuses on strategic road and rail connection enhancement opportunities to better manage future growth in the region and accelerate existing business cases for strategic interventions. This includes future rail connectivity with High Speed 2 and Northern Powerhouse Rail, as well as a package of measures to address highway pinchpoints (including the A1 Western Bypass, A19 and Sunderland Strategic Transport Corridors and Blyth Relief Road).

The focus on strategic connectivity and existing infrastructure minimises the likelihood of direct significant effects on the historic environment.

Cumulatively, the increased strategic connectivity which is sought through this package has the potential to support enhancements in accessibility to valued landscapes and townscapes, including with the Northumberland National Park, the two AONBs and the two World Heritage Sites in the region.

None proposed.

Key significant effects resulting from the NETP packages: Landscape

4.20 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Landscape ISA theme.

Table 4.8: Likely significant effects, Landscape

Likely significant effect	Effect dimensions	Recommendations, mitigation
The delivery of new transport infrastructure schemes (in particular, road schemes) has the potential to lead to significant impacts on landscape and townscape character.	Direct and indirect, short, medium and long term, permanent and negative.	Transport infrastructure schemes should be accompanied by a comprehensive package of avoidance and mitigation measures, as well, where possible, enhancement measures. This should be informed at the project level by a robust EIA process. New infrastructure should be designed to limit impacts on landscape and townscape character, and facilitate enhancements.
Enhancement to landscape and townscape character through improved maintenance regimes.	Direct, short, medium and long term, permanent and positive.	Maintenance regimes should seek to facilitate enhancements to the quality of the public realm and local distinctiveness.
Enhanced accessibility to, and additional opportunities for enjoyment of the North East's landscape/townscape resource, including associated with valued landscapes and townscapes.	Direct, short, medium and long term, permanent and positive.	None proposed.

Air Quality and Noise

Appraisal of work programmes

4.21 The following table presents an appraisal of the seven work programmes against the Air Quality and Noise ISA theme.

Table 4.9: Appraisal of work programmes: Air Quality and Noise

Work Programme	Appraisal findings	Mitigation and / or enhancement opportunities
1: Helping people to make the right travel choice	The schemes proposed under this work programme largely focus on user experience of more sustainable modes of travel, such as active travel and bus travel.	None proposed.
	A number of schemes proposed in this package (e.g. TNE04, NE10, SU32 and TNE21) will specifically target air quality improvements and improved air quality monitoring and modelling. This is considered likely to lead to significant long-term positive effects. The targeted reduction in vehicle dominance is also considered likely to reduce the impacts of noise, particularly at the neighbourhood scale.	

2: Upgrading North East Active Travel Infrastructure

The interventions proposed under this work programme range in type but can be broadly grouped as measures to improve and extend active travel routes, and road infrastructure improvements which seek to reduce the dominance of road traffic.

· None proposed.

The measures seek to enhance the use of more sustainable modes of transport, with a predominant focus on walking and cycling routes, that will ultimately support long-term air quality improvements, as well as reduce the noise impacts associated with vehicular traffic. Whilst road infrastructure improvements may attract more road users, the targeted interventions seek to reduce vehicle congestion and traffic, and the associated impacts on air quality.

Measures to support urban greening, such as tree-lined streets (GA04) are likely to provide further support for clean air in the long-term, with positive effects are likely in this respect. It is recognised that a greater emphasis on the urban greening of these routes could enhance the significance of these effects.

None proposed.

3: Bus, ferry and first and last mile

The measures seek to enhance the use of more sustainable modes of transport that will ultimately support long-term air quality improvements, as well as reduce the noise impacts associated with vehicular traffic. Any negative effects arising are likely to be short-term during construction phases, e.g. as a result of road closures or delays causing localised impacts.

4: Local rail and Metro

Prepared for: Transport North East Strategy Unit

The work package focuses on existing rail infrastructure (including reinstatement of disused lines), with a number of significant proposals, including a new station at East Gateshead, the extension of the Northumberland Line, reinstatement of the Derwent Valley Line from Consett to Newcastle, and new metro stations. Significant car park expansions at rail connection areas in South Tyneside are also proposed.

The measures seek to enhance the use of more sustainable modes of transport that will ultimately support long-term air quality improvements, as well as reduce the noise impacts associated with vehicular traffic.

The expansion of car parking facilities may create more local journeys/ trips in certain locations, with impacts on air quality. Negative effects are also likely to arise in the short-term during construction phases, e.g. as a result of road closures or delays causing localised impacts.

• None proposed.

None proposed.

5: Road infrastructure

This package provides a focus on road infrastructure upgrades. In the short-term there is a predominant focus on expanding the EV network and supporting planned growth with enabling infrastructure. In the medium to longer term focus shifts to reducing severance with the delivery of new bridges, enabling next generation connectivity, and local bypass schemes.

Expansion of the EV network will continue to support improved air quality and is also considered likely to reduce the noise impacts associated with vehicular traffic.

Of note, the collaborative scheme with Newcastle University to integrate new demand data with real-time air quality modelling and pilot a new and innovative support tool for traffic management (TNE02) is likely to deliver long-term positive effects of significance.

New road schemes have the potential to lead to air quality enhancements at key 'pinchpoints' on the network which have existing air quality issues. This has the potential to support significant enhancements of air quality at specific locations. However, through contributing to an overall increase in traffic flows on the wider road network, the schemes also have the potential to increase traffic flows over a broader area, including through stimulating induced demand. This may contribute to increases in emissions of the key pollutants which affect air quality over a wider area. For the same reason, the option also has the potential to leading to more significant effects on noise quality. However, it should be noted that proposed multi-modal improvements on key corridors (including on the A194, A1018 and A183 in South Tyneside) may support air quality enhancements locally.

It is recognised that interventions are largely sought to alleviate the impacts of congestion, particularly in the form of relief roads drawing vehicles away from the more congested centres of settlement areas and the integration of public transport and active travel measures within physical infrastructure schemes. Residual positive effects are therefore considered likely.

6: Maintaining and renewing our transport network This package provides a focus on future funding, targeted decarbonisation solutions and asset energy generation potential, and technological advances, alongside general maintenance measures. The schemes also seek to support the move to more sustainable, cleaner fuels which will ultimately reduce harmful emissions and particulates from vehicle usage. Enhanced maintenance regimes also have the potential to limit noise pollution from the road network.

None proposed

7: National and international connectivity

This work package focuses on strategic road and rail connection enhancement opportunities to better manage future growth in the region and accelerate existing business cases for strategic interventions. This includes future rail connectivity with High Speed 2 and Northern Powerhouse Rail, as well as a package of measures to address highway pinchpoints (including the A1 Western Bypass, A19 and Sunderland Strategic Transport Corridors and Blyth Relief Road). Enhanced strategic connectivity, particularly linkages to high speed rail, provides opportunities to support more sustainable cross-country travel, particularly with key destinations further afield, such as London, which provide significant economic links. This is likely to lead to minor positive effects for air quality. However, it is also recognised that strategic highways infrastructure improvements may also attract more road users.

None proposed

Key significant effects resulting from the NETP packages: Air Quality and Noise

4.22 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Air Quality and Noise ISA theme.

Table 4.10: Likely significant effects, Air Quality and Noise

Likely significant effect	Effect dimensions	Recommendations, mitigation
Air quality enhancements at key 'pinchpoints' on the network which have existing air quality issues.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Impacts from road schemes on air and noise quality over a wider area, including through the stimulation of induced demand.	Direct and indirect, medium and long term, permanent and negative.	Initiation of complementary measures alongside road enhancements to limit increases in traffic flows resulting from a release of induced demand.
Support for electric vehicles and cleaner fuels, with benefits for air and noise quality.	Indirect, medium and long term, permanent and positive.	None proposed.

Climate Change and Flood Risk

Appraisal of work programmes

Prepared for: Transport North East Strategy Unit

4.23 The following table presents an appraisal of the seven work programmes against the Climate Change and Flood Risk ISA theme.

Table 4.11: Appraisal of work programmes: Climate Change and Flood Risk

Work Programme	Appraisal findings	Mitigation and / or enhancement opportunities
1: Helping people to make the right travel choice	The short, medium and long-term schemes proposed to address this work programme are largely focused on user experience of more sustainable modes of travel, such as active travel and bus travel. The measures introduced under this programme include; introducing 'School Streets' and low-traffic neighbourhoods, delivering cross-modal ticketing and enhanced passenger travel technology (including improved mapping services), traffic management schemes and technology test-bed initiatives. The focus on technology and user experience translates to the limited delivery of physical infrastructure in terms of the schemes proposed. As a result, no significant effects are anticipated in relation to flood risk. The expansion of technological transport solutions and focus on smart travel and improved connectivity is likely to initiate a range of approaches that will help to limit greenhouse gas emissions and contribute towards aims for carbon neutrality. The focus on installing more sustainable travel behaviours, particularly within the young is also likely to bolster climate change mitigation. Long-term positive effects are anticipated in this respect. A number of schemes proposed in this package (e.g. TNE04, NE10, SU32 and TNE21) will specifically target air quality improvements and improved air quality monitoring and modelling, which is considered likely to further support climate resilience.	None proposed

2: Upgrading North East Active Travel Infrastructure

The interventions proposed under this work programme range in type but can be broadly grouped as measures to improve and extend active travel routes, and road infrastructure improvements which seek to reduce the dominance of road traffic.

The significant focus on extending and improving both cycle and pedestrian access under this work package is considered likely to reduce vehicle use, particularly with regards to local trips and commuter journeys. This will support a limitation of greenhouse gas emissions from transport.

Despite this, the introduction of new hard surfacing will need to consider the effects of surface-water run-off in terms of flood risk. The use of permeable surfaces should be prioritised where possible. More broadly, in terms of adapting to the effects of climate change, the effect of initiatives taken forward through the package depend on detailed interventions, including scheme design and layout, the integration of green infrastructure provision (e.g. tree-lined streets – GA04) and other measures to help regulate the effects of extreme weather events. Similarly, the effect of initiatives on fluvial, surface water and groundwater flooding depend on scheme design considerations, including design and layout and the implementation of measures such as sustainable drainage systems.

- Transport infrastructure should seek to prioritise the use of permeable surfaces.
- Any introduction of new hard surfacing will need to consider the effects of runoff on surface water flood risk.
- Opportunities to improve and extend green infrastructure provision alongside the development of transport infrastructure should be sought.

3: Bus, ferry and first and last mile

The measures seek to enhance the use of more sustainable modes of transport that will ultimately support a limitation of greenhouse gas emissions associated with vehicular traffic. This will support climate change mitigation

The overall effect of new Park & Ride provision on greenhouse gas emissions is uncertain. Whilst Park & Ride provision will support modal shift for at least part of users' journey, it also has the potential to encourage car use. However, this recognises that car travel will remain the predominant choice for many, including those living in rural areas, and such provision has the potential to support modal shift for at least part of the journey. In this respect the detailed location and design of such multi-modal provision should be carefully considered to ensure that newly generated trips are limited, and benefits maximised.

 The detailed location and design of such multi-modal provision should be carefully considered to ensure that newly generated trips are limited, and benefits maximised.

4: Local rail and Metro

The work package focuses on existing rail infrastructure (including reinstatement of disused lines), with a number of significant proposals, including a new station at East Gateshead, the extension of the Northumberland Line, reinstatement of the Derwent Valley Line from Consett to Newcastle, and new metro stations. Significant car park expansions at rail connection areas in South Tyneside are also proposed.

The measures seek to enhance the use of more sustainable modes of transport that will ultimately support modal shift and long-term climate resilience and enhance the accessibility of growth locations. However, the expansion of car parking facilities may encourage car use and create more local journeys/ trips in certain locations.

In terms of adapting to the effects of climate change, the effect of initiatives taken forward through the package depend on detailed interventions, including scheme design and layout, the integration of green infrastructure provision (e.g. tree-lined streets – GA04) and other measures to help regulate the effects of extreme weather events. Similarly, the effect of initiatives on fluvial, surface water and groundwater flooding depend on scheme design considerations, including design and layout and the implementation of measures such as sustainable drainage systems.

- Transport infrastructure should seek to prioritise the use of permeable surfaces.
- Any introduction of new hard surfacing will need to consider the effects of runoff on surface water flood
- Opportunities to improve and extend green infrastructure provision alongside the development of transport infrastructure should be sought.

5: Road infrastructure

This package provides a focus on road infrastructure upgrades. In the short-term there is a predominant focus on expanding the EV network and supporting planned growth with enabling infrastructure. In the medium to longer term focus shifts to reducing severance with the delivery of new bridges, enabling next generation connectivity, and local bypass schemes.

The expansion of the EV network and focus on smart travel will support a limitation of greenhouse gas emissions from the private vehicle and contribute towards aims for carbon neutrality. Long-term positive effects are anticipated in this respect. This will be supported through the NETP's commitment to deliver a Zero Emission Vehicle Policy, which seeks to further develop and expand the North East's EV charging network, and to increase the number of plug-in vehicles in the region. This will be further reinforced by the NETP's commitment to deliver a Roads and Zero Emission Vehicle Strategy.

This may be supported by the delivery of multimodal enhancements on key corridors (including on the A194, A1018 and A183 in South Tyneside), which support modal shift. However, the promotion of road schemes that relieve

congestion and / or increase capacity has the potential effect of releasing demand for vehicle trips currently suppressed. As such, the release of this induced demand may lead to increases in greenhouse gas emissions.

In terms of adapting to the effects of climate change, the effect of initiatives taken forward through the package depend on detailed interventions, including scheme design and layout, the integration of green infrastructure provision and other measures to help regulate the effects of extreme weather events. Similarly, the effect of initiatives on fluvial, surface water and groundwater flooding depend on scheme design considerations, including design and layout and the implementation of measures such as sustainable drainage systems. It is recognised that a greater emphasis on the urban greening of these routes could enhance the significance of these effects.

- Comprehensive monitoring of greenhouse gas emissions from transport.
- Identify, assess and integrate measures to further reduce carbon through on or off-site offsetting or sequestration.
- Opportunities to improve and extend green infrastructure provision alongside the development of transport infrastructure should be sought.

6: Maintaining and renewing our transport network The package proposes a number of maintenance schemes targeted at existing infrastructure. This has the potential to support the effective management of surface run off, contribute to flood risk management, and increase the resilience of the transport network to extreme weather events. The maintenance schemes further seek to address issues arising as a result of climate change, including areas affected by subsistence (DU19). In this respect, the work package will help increase the resilience of the region's transport network to the likely effects of climate change, with significant long-term positive effects anticipated.

The package also provides a focus on targeted decarbonisation solutions and asset energy generation potential, which will support efforts to move to carbon neutrality in the coming years.

 Development should seek to deliver sustainable drainage solutions and enhancements alongside maintenance works where possible.

7: National and international connectivity

This work package focuses on strategic road and rail connection enhancement opportunities to better manage future growth in the region and accelerate existing business cases for strategic interventions. This includes future rail connectivity with High Speed 2 and Northern Powerhouse Rail, as well as a package of measures to address highway pinchpoints (including the A1 Western Bypass, A19 and Sunderland Strategic Transport Corridors and Blyth Relief Road). Enhanced strategic connectivity, particularly linkages to high speed rail, provides opportunities to support more sustainable cross-country travel, particularly with key destinations further afield, such as London, which provide significant economic links. This is likely to support a limitation of greenhouse gas emissions. However, it is also recognised that strategic highways infrastructure improvements may also attract more road users, and enhanced strategic connectivity may increase longer distance travel. This will have implications for greenhouse gas emissions.

None proposed

Key significant effects resulting from the NETP packages: Climate Change and Flood Risk

4.24 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Climate Change and Flood Risk ISA theme.

Table 4.12: Likely significant effects, Climate Change and Flood Risk

Likely significant effect	Effect dimensions	Recommendations, mitigation
Limitation of greenhouse gas emissions from transport, including through the stimulation of modal shift from the private car towards public transport and active travel, and enhanced connectivity and smart travel.	Direct and indirect, medium and long term, permanent and positive.	None proposed.
Promotion of electric vehicle use, including through the delivery of a Zero Emissions Vehicle Policy and Strategy, supporting the decarbonisation of the transport network.	Direct and indirect, medium and long term, permanent and positive.	None proposed.
Impacts on greenhouse gas emissions through the release of induced demand from new road schemes.	Direct and indirect, medium and long term, permanent and negative.	Initiation of complementary measures alongside road enhancements to limit increases in traffic flows resulting from a release of induced demand. Identify, assess and integrate measures to further reduce carbon through on or off-site offsetting or sequestration.
Increased resilience of the transport network to the likely effects of climate change.	Direct, medium and long term, permanent and positive.	None proposed.

Population

Appraisal of work programmes

4.25 The following table presents an appraisal of the seven work programmes against the Population ISA theme.

Table 4.13: Appraisal of work programmes: Population

Work Programme	Appraisal findings	Mitigation and / or enhancement opportunities
1: Helping people to make the right travel choice	The short, medium and long-term schemes proposed to address this work programme are largely focused on user experience of more sustainable modes of travel, such as active travel and bus travel. The measures introduced under this programme include; introducing 'School Streets' and low-traffic neighbourhoods, delivering cross-modal ticketing and enhanced passenger travel technology (including improved mapping services), traffic management schemes and technology test-bed initiatives. The schemes are likely to benefit residents and passengers with improved accessibility (particularly in terms of more local).	Promote high-quality public realm and green infrastructure improvements alongside active travel opportunities to maximise benefits in relation to resident health and wellbeing.
	with improved accessibility (particularly in terms of more local journeys such as school runs), a move towards more seamless journeys for multi-modal travel, and higher-quality user experience. The package supports technological advances, such as enhanced mapping and real-time information which will support residents in travel planning with improved journey times. Technological advances further provide the opportunity to give users information on the environmental impact of their transport choices, shaping their future travel decisions.	
	Schemes under this programme make targeted efforts to enhance social and behaviour change initiatives, including bolstering community engagement through schemes such as ambassadors for walking and cycling initiatives (e.g. TNE23). Further schemes targeting promotion of active travel in schools (e.g. TNE05) can contribute to development of lifelong healthy travel behaviours for future generations.	
	In this respect package provides significant support for residents in addressing behaviour change and reducing the dominance of traffic to support high-quality neighbourhoods and improved public safety. As a result, significant long-term positive effects are considered likely.	

2: Upgrading North East Active Travel Infrastructure

The interventions proposed under this work programme range in type but can be broadly grouped as measures to improve and extend active travel routes, and road infrastructure improvements which seek to reduce the dominance of road traffic.

The focus on improved active travel connections is likely to benefit residents with increased accessibility and support active and healthy lifestyles. New and extended cycle routes will also provide better connections between settlements, particularly with key employment locations.

Measures such as the new crossing over the River Derwent at Metro Green seek to reduce severance and increase permeability for pedestrians and cyclists.

Further measures to deliver green infrastructure and biodiversity enhancements (e.g. GA04 and DU16) and public realm improvements (SU29) are likely to benefit residents with high-quality routes and amenity spaces. Schemes such as the proposed new cycle track along the disused railway between Bishop Auckland and Barnard Castle and the development of a cycling and walking route along the Darlington and Stockton railway will further increase access to and enjoyment of the historic environment for residents. Significant positive effects are therefore anticipated for residents under this work package.

None proposed.

3: Bus, ferry and first and last mile

The work package provides significant support for the enhancement and upgrading of the existing infrastructure network to reduce congestion in the network, improve journey times and support multi-modal travel. The work package includes the development of new bus stations, new park and ride facilities, and rapid transit corridors.

New bus stations and park and ride facilities are expected to provide residents with improved access to key central locations. Coupled with bus priority measures, residents should be provided more direct and quicker access to key employment locations and service centres. Further, this will contribute to a limitation of traffic and congestion in urban centres, allowing residents to move more freely and safely through these locations. Significant positive effects can therefore be anticipated.

The South Bank Ferry Terminal replacement could unlock further regeneration and investment in the vicinity of the World Heritage Site, bolstering the local economy and heritage values. Minor long-term positive effects are anticipated in this respect.

 Maximise opportunities to unlock further investment in local areas and key regional economies and tourism attractions, including the Hadrian's Wall World Heritage Site.

4: Local rail and Metro

The work package focuses on existing rail infrastructure (including reinstatement of disused lines), with a number of significant proposals, including a new station at East Gateshead, the extension of the Northumberland Line, reinstatement of the Derwent Valley Line from Consett to Newcastle, and new metro stations. Significant car park expansions at rail connection areas in South Tyneside are also proposed.

Improved and extended rail connectivity is likely to benefit residents with improved accessibility to key employment areas, service locations and tourism/ leisure attractions. This includes improved connections between the rural and urban areas of the region (e.g. through the reinstatement of the Derwent Valley Line from Consett to Newcastle). Significant long-term positive effects can be anticipated in this respect. The extended rail coverage can further contribute to reducing traffic and congestion, particularly within urban centres, supporting ease of pedestrian movement and increased safety.

 Maximise opportunities to encourage inward investment and growth in areas of improved rail transport access.

5: Road infrastructure

This package provides a focus on road infrastructure upgrades. In the short-term there is a predominant focus on expanding the EV network and supporting planned growth with enabling infrastructure. In the medium to longer term focus shifts to reducing severance with the delivery of new bridges, enabling next generation connectivity, local bypass schemes, new active travel routes and the delivery of multi modal enhancements on key corridors (including on the A194, A1018 and A183 in South Tyneside). The focus on reduced severance will therefore increase local accessibility for residents and improve settlement connectivity.

Furthermore, new relief road schemes are likely to support town and village centres by alleviating the pressures of congestion within them. Relief road schemes are outlined for areas including Ponteland, Blyth, Farringdon and Barnard Castle. New link roads, dualling schemes and junction improvements will further improve access and relieve congestion in certain locations across the region and along key strategic transport corridors.

In addition to increasing travel choice through initiating significant transport capacity enhancements, the package has the potential to lead to a range of economic opportunities through enhancing connections with the strategic and local transport network and key employment and growth areas. This mirrors a core aim of the North East Local Enterprise Partnership and its Strategic Economic Plan, which seek to maximise economic opportunities and enhance the vitality of the region's economy through improvements in transport connectivity.

None proposed.

Maintaining and renewing our transport network

This package provides a focus on future funding, targeted decarbonisation solutions and asset energy generation potential, and technological advances, alongside a focus on enhanced maintenance measures for the road network.

The package will ensure the general upkeep of the existing network to support continued access to employment areas, service centres and tourism/ leisure attractions. This includes along coastal roads which suffer from coastal erosion and in areas with issues associated with ongoing landslip and subsidence. Furthermore, the schemes seek to ensure that key roads underpinning the rural and regional economy are repaired and strengthened where necessary - including those providing access to key tourist destinations such as Hadrian's Wall World Heritage Site, Northumberland National Park and the International Dark Skies Park.

The focus on future funding, and opportunities to generate income and capital will support continued investment and growth in the transport network and deliver against key transport priorities for the future.

In this respect, long-term positive effects are anticipated with regards to the quality of life of residents.

None proposed.

7: National and international connectivity

Prepared for: Transport North East Strategy Unit

This work package focuses on strategic road and rail connection enhancement opportunities to better manage future growth in the region and accelerate existing business cases for strategic interventions. This includes future rail connectivity with High Speed 2 and Northern Powerhouse Rail, as well as a package of measures to address highway pinchpoints (including the A1 Western Bypass, A19 and Sunderland Strategic Transport Corridors and Blyth Relief Road). Cumulatively this can support increased accessibility within and beyond the region for residents, unlocking further employment and leisure opportunities.

None proposed.

Key significant effects resulting from the NETP packages: Population

4.26 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Population ISA theme.

Table 4.14: Likely significant effects, Population

Likely significant effect	Effect dimensions	Recommendations, mitigation
Improved accessibility to services, facilities and employment opportunities.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Support for a reduction in deprivation from accessibility, congestion and severance issues, and elements relating to social exclusion.	Direct and indirect, medium and long term, permanent and positive.	None proposed.
Enhanced economic opportunities through improved connections with the strategic and local transport network and key employment and growth areas.	Indirect, medium and long term, permanent and positive.	None proposed.
Support for the visitor economy from enhancements in transport infrastructure.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Enhancements to the quality of the neighbourhoods through a reduction of the impact of traffic and congestion.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Enhanced maintenance of the road network, supporting its resilience, with associated benefits for the quality of life of residents.	Direct, medium and long term, permanent and positive.	None proposed.

Human health

Appraisal of work programmes

4.27 The following table presents an appraisal of the seven work programmes against the Human Health ISA theme.

Table 4.15: Appraisal of work programmes: Human Health

Work Appraisal findings Mitigation and / or **Programme** enhancement opportunities Promote high-quality public 1: Helping The short, medium and long-term schemes proposed to people to address this work programme are largely focused on user realm and green infrastructure improvements make the experience of more sustainable modes of travel, such as alongside active travel right travel active travel and bus travel. The measures introduced under choice this programme include; introducing 'School Streets' and lowopportunities to maximise traffic neighbourhoods, delivering cross-modal ticketing and benefits in relation to resident health and enhanced passenger travel technology (including improved mapping services), traffic management schemes and wellbeing. technology test-bed initiatives. Schemes under this work programme include targeted plans to integrate initiatives between the NHS, Public Health Directors and Transport North East (TNE31), with a view to encouraging activity and healthy behaviours. Further schemes target promotion of active travel in schools (e.g. TNE05). These measures will promote healthier lifestyles and support road Recognising the recovery from the Covid-19 pandemic, the measures proposed also include initiatives to reduce the need for physical contact when using the transport network, including with ticket machines, barriers and physical cash. A number of schemes proposed in this package (e.g. TNE04, NE10, SU32 and TNE21) specifically target air quality improvements and improved air quality monitoring and modelling. The targeted reduction in vehicle dominance is also considered likely to reduce the impacts of noise, particularly at the neighbourhood scale. A reduction of air and noise quality issues will support health and wellbeing. Considering the above, long-term positive effects are considered likely overall. Maximise opportunities to 2: Upgrading The interventions proposed under this work programme range North East in type but can be broadly grouped as measures to improve link new active travel routes Active Travel and extend active travel routes, and road infrastructure with existing green/ open and recreational spaces Infrastructure improvements which seek to reduce the dominance of road and features of heritage traffic. interest. A significant focus of the package is on increasing the coverage and quality of cycle routes and active travel connections. This will promote health and wellbeing through supporting healthy and active lifestyles, and increasing access to green infrastructure networks and the countryside. The measures will also support road safety. Opportunities to link these routes with key regional green and blue infrastructure and heritage assets (for example through the proposed new Bishop Auckland to Barnard Castle track – scheme DU24 and the development of a cycling and walking route along the Darlington and Stockton railway - scheme DU32) are likely to further enhance wellbeing benefits for residents. Through promoting modal shift, the package also offers the potential to support air and noise quality enhancements and enhancements to the quality of the public realm. This will support the health and wellbeing of residents.

3: Bus, ferry and first and last mile

The proposed schemes provide significant focus on extending and improving the quality of sustainable transport corridors. Proposals include the development of new bus stations, new park and ride facilities, and improvements to bus and rapid transit corridors.

These measures will support resident access to healthcare services, recreational/leisure facilities and employment opportunities. Given deprivation issues (which are a key contributor to health and wellbeing in the region) are closely linked to accessibility issues (particularly in less well-connected areas such as the rural areas and post-industrial communities of the North East), these measures will support health and wellbeing.

Through promoting modal shift, the package also offers the potential to support air and noise quality enhancements and enhancements to the quality of the public realm. This will support the health and wellbeing of residents.

None proposed.

4: Local rail and Metro

The work package focuses on existing rail infrastructure (including the reinstatement of disused lines), with a number of significant proposals, including a new station at East Gateshead, the extension of the Northumberland Line, reinstatement of the Derwent Valley Line from Consett to Newcastle, and new metro stations. Significant car park expansions at rail connection areas in South Tyneside are also proposed. These measures will support resident access to healthcare services, recreational/leisure facilities and employment opportunities. Given deprivation issues (which are a key contributor to health and wellbeing in the region) are closely linked to accessibility issues (particularly in less well-connected areas such as the rural areas and post-industrial communities of the North East), these measures will support health and wellbeing.

Through promoting modal shift to rail and Metro, the package also offers the potential to support air and noise quality enhancements and enhancements to the quality of the public realm. This will support the health and wellbeing of residents.

 Opportunities to improve and extend green infrastructure provision alongside the development of transport infrastructure should be sought.

5: Road infrastructure

This package provides a focus on road infrastructure upgrades. In the short-term there is a predominant focus on expanding the EV network and supporting planned growth with enabling infrastructure. In the medium to longer term focus shifts to reducing severance with the delivery of new bridges, enabling next generation connectivity, and local bypass schemes.

These measures will support resident access to healthcare services, recreational/leisure facilities and employment opportunities.

Through enabling a reduction of congestion at key bottlenecks on the network, through enhancements to active travel routes, and multi modal improvements on key corridors, the package the potential to reduce the impacts of traffic and congestion on health and wellbeing at a number of locations. This includes through enhancements to air and noise quality, and improvements in the quality of the public realm. However, a potential stimulation of traffic growth over a larger area due to induced demand has the potential to have wider negative effects on health and wellbeing of residents through impacts on the quality of the public realm and a contribution to air and noise pollution.

- Maximise opportunities to increase road safety where possible.
- Road capacity enhancements should be accompanied by measures to 'lock in' benefits for traffic flows and congestion levels.
- Opportunities to improve and extend green infrastructure provision alongside the development of transport infrastructure should be sought.

6: Maintaining and renewing our transport network	This package provides a focus on future funding, targeted decarbonisation solutions and asset energy generation potential, and technological advances, alongside an enhancement of maintenance measures. The schemes also seek to support the move to more sustainable, cleaner fuels which will ultimately reduce harmful emissions and particulates from vehicle usage. This will support air quality. Enhanced maintenance regimes also have the potential to limit noise pollution from the road network. Positive impacts on air and noise quality from these measures are therefore anticipated to support health and wellbeing.	None proposed.
7: National and international connectivity	This work package focuses on strategic road and rail connection enhancement opportunities to better manage future growth in the region and accelerate existing business cases for strategic interventions. This includes future rail connectivity with High Speed 2 and Northern Powerhouse Rail, as well as a package of measures to address highway pinchpoints (including the A1 Western Bypass, A19 and Sunderland Strategic Transport Corridors and Blyth Relief Road). Cumulatively this can support increased accessibility within and beyond the region for residents. This has the potential to support health and wellbeing.	None proposed.

Key significant effects resulting from the NETP packages: Human Health

4.28 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Human Health ISA theme.

Table 4.16: Likely significant effects, Human Health

Likely significant effect	Effect dimensions	Recommendations, mitigation
Improved accessibility to health services and leisure and recreational facilities.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Facilitation of healthier lifestyles through the encouragement of active modes of travel.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Support for a reduction in deprivation, which is one of the key contributors to poor health and wellbeing in the region.	Direct and indirect, medium and long term, permanent and positive.	None proposed.
Enhancements to the quality of the neighbourhoods through a reduction of the impact of traffic and congestion.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Improvements to road safety.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Benefits for health and wellbeing from air and noise quality enhancements at key 'pinchpoints' on the network.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Impacts on health and wellbeing from road schemes linked to increased traffic flows, including from the stimulation of induced demand over a wider area.	Direct and indirect, medium and long term, permanent and negative.	Design in measures to improve mobility by walking and cycling, limit severance and initiate green infrastructure enhancements.

Equalities

Appraisal of work programmes

4.29 The following table presents an appraisal of the seven work programmes against the Equalities ISA theme.

Table 4.17: Appraisal of work programmes: Equalities

Work Programme	Appraisal findings	Mitigation and / or enhancement opportunities
1: Helping people to make the right travel choice	The short, medium and long-term schemes proposed to address this work programme are largely focused on user experience of more sustainable modes of travel, such as active travel and bus travel. The measures introduced under this programme include; introducing 'School Streets' and low-traffic neighbourhoods and specifically targeting the young with behaviour change initiatives. Further schemes delivering cross-modal ticketing and enhanced passenger travel technology (including improved mapping services), traffic management schemes and technology test-bed initiatives are likely to increase accessibility and improve journey planning. Schemes under this work programme include targeted plans integrating initiatives between the NHS, Public Health Directors and Transport North East (TNE31) which seek to encourage health benefits. These measures are likely to particularly benefit groups with 'protected characteristics' who tend to be disproportionately affected by accessibility issues. For those lacking their own transport, including the young, the elderly, and those with mobility issues, access to services and facilities is a significant challenge. These groups are often the least able to afford high costs of public transport and research shows that, on average, people on lower incomes in rural areas pay a higher proportion of their income on travel costs.	None proposed.
2: Upgrading North East Active Travel Infrastructure	Groups with 'protected characteristics' tend to be disproportionately affected by the negative effects of transport infrastructure, including from the physical and severance effects of transport corridors, effects on the quality of the public realm, road safety issues and the effects of traffic and congestion on health and wellbeing. These groups are also disproportionately affected by accessibility issues. The interventions proposed under this work programme range in type but can be broadly grouped as measures to improve and extend active travel routes, and road infrastructure improvements which seek to reduce the dominance of road traffic. These interventions are therefore likely to have particular benefits for groups with protected characteristics.	Encourage design which supports the needs of mobility-impaired groups.
3: Bus, ferry and first and last mile	The work package provides significant support for the enhancement and upgrading of the existing infrastructure network to reduce congestion in the network, improve journey times and support multi-modal travel. The work package includes the development of new bus stations, new park and ride facilities, and rapid transit corridors. This is likely to benefit groups with 'protected characteristics' who tend to be disproportionately affected by accessibility issues. For those lacking their own transport, including the young, the elderly, and those with mobility issues, access to services and facilities is a significant challenge. These groups are often the least able to afford high costs of public transport and research shows that, on average, people on lower incomes in rural areas pay a higher proportion of their income on travel costs.	Maximise opportunities to increase sustainable transport access for more vulnerable groups such as the elderly and disabled.

4: Local rail and Metro

The work package focuses on existing rail infrastructure (including reinstatement of disused lines), with a number of significant proposals, including a new station at East Gateshead, the extension of the Northumberland Line, reinstatement of the Derwent Valley Line from Consett to Newcastle, and new metro stations. Significant car park expansions at rail connection areas in South Tyneside are also proposed.

For those lacking their own transport, including the young, the elderly, and those with mobility issues, access to services and facilities is a significant challenge. These groups are often the least able to afford high costs of public transport and research shows that, on average, people on lower incomes in rural areas pay a higher proportion of their income on travel costs. These measures are therefore likely to benefit groups with 'protected characteristics' who tend to be disproportionately affected by accessibility issues.

None proposed.

5: Road infrastructure

This package provides a focus on road infrastructure upgrades. In the short-term there is a predominant focus on expanding the EV network and supporting planned growth with enabling infrastructure. In the medium to longer term focus shifts to reducing severance with the delivery of new bridges, enabling next generation connectivity, and local bypass schemes.

Enhancements to the quality of the built environment facilitated by road schemes, enhancements to active travel routes, and multi modal enhancements on key corridors are likely to support groups with 'protected characteristics' who tend to be disproportionately affected by the negative effects of transport infrastructure, including from the physical and severance effects of transport corridors, effects on the quality of the public realm, and the effects of traffic and congestion on health and wellbeing.

However, a potential stimulation of traffic growth over a larger area due to induced demand has the potential to have wider negative effects on the needs of groups with protected characteristics through impacts on the quality of the public realm, severance issues and a contribution to air and noise pollution.

 Maximise opportunities to increase road safety, particularly for more vulnerable groups such as the elderly and disabled.

Maintaining and renewing our transport network

Groups with 'protected characteristics' tend to be disproportionately affected by the negative effects of transport infrastructure, including from the physical and severance effects of transport corridors, effects on the quality of the public realm, road safety issues and the effects of traffic and congestion on health and wellbeing. As such, enhanced maintenance of the transport network facilitated by the package has the potential to help improve the usability of the transport network and reduce some of the negative effects of the network on those with protected characteristics.

 Maximise opportunities to increase road safety, particularly for more vulnerable groups such as the elderly and disabled.

7: National and international connectivity

This work package focuses on strategic road and rail connection enhancement opportunities to better manage future growth in the region and accelerate existing business cases for strategic interventions. This includes future rail connectivity with High Speed 2 and Northern Powerhouse Rail, as well as a package of measures to address highway pinchpoints (including the A1 Western Bypass, A19 and Sunderland Strategic Transport Corridors and Blyth Relief Road). Cumulatively this can support increased accessibility within and beyond the region for residents. This has the potential to support the accessibility needs of groups with protected characteristics.

None proposed.

Key significant effects resulting from the NETP packages: Equalities

4.30 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Equalities ISA theme.

Table 4.18: Likely significant effects, Equalities

Likely significant effect	Effect dimensions	Recommendations, mitigation
Improved accessibility for groups with protected characteristics via a range of transport modes.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Reduction of impacts from the transport network on those groups with protected characteristics, including from severance, and contributions to a poor quality public realm.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Improvements to road safety.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Impacts on groups with protected characteristics from effects of road schemes on the quality of the public realm and increased severance.	Direct and indirect, medium and long term, permanent and negative.	Incorporate measures within scheme design to improve mobility, limit severance and initiate green infrastructure enhancements.

Rurality

Appraisal of work programmes

4.31 The following table presents an appraisal of the seven work programmes against the Rurality ISA theme.

Table 4.19: Appraisal of work programmes: Rurality

Work Programme	Appraisal findings	Mitigation and / or enhancement opportunities
1: Helping people to make the right travel choice	The measures will offer a more flexible approach to public transport provision and increase the accessibility and ease of use of the public transport network in rural areas. This includes through enhancing linkages between transport modes (including car and public transport), the provision of enhanced information for users, simplification of ticketing and soft measures such as travel plans.	None proposed.
	More effective management of the highways network and the provision of enhanced information for users will also support those travelling by private car, which will continue to comprise a key transport mode for those living in rural areas. The encouragement of car clubs will enable access to mobility opportunities that would not otherwise be accessible and have the potential to reduce individuals' expenditure on transport use through reducing the need for the private car. Car clubs also provide opportunities to increase the use of public transport use through the greater flexibility enabled by making a car available as an option rather than a first choice. These elements therefore have the potential to bring a range of benefits for the quality of life of residents and support social inclusion, which is a key issue in rural areas. Intelligent transport networks also will support accessibility through implementing systems which balance the needs of public transport users and pedestrians / cyclists with the needs of private car users.	

2: Upgrading North East Active Travel Infrastructure

Enhancements to the rural cycle network promoted by the work package will promote accessibility to services, facilities and amenities by cycle, with benefits for the quality of life of rural residents. Improvements in cycle infrastructure also has the potential to support the visitor economy in rural areas.

Enhancements of urban walking and cycle networks will increase travel choice for those living in rural areas who travel into the towns and cities of the region, and will support accessibility through promoting the ease of multi-modal transport use.

Enhancements to the active travel network through enhanced information provision, active travel programmes, behavioural change initiatives and cycle parking improvements will also support the use of active travel modes for those living in rural areas, with benefits for health and wellbeing and accessibility.

· None proposed.

3: Bus, ferry and first and last mile

The package of measures will support rural accessibility by enhancing the quality of rural bus networks and links to urban areas from rural areas. This includes through the implementation of bus infrastructure enhancements, priority schemes, performance enhancement measures and behaviour change programmes.

Establishing a strategy for effective park and ride sites and enhancements to existing and new multi-modal park and ride schemes will also support accessibility for those with access to private transport in rural areas. This recognises that car use will remain the predominant and necessary choice for many in rural areas.

· None proposed.

4: Local rail and Metro

The package of measures will support rural accessibility through enhancing rail and Metro networks and the quality of services in the region. This includes through enhancing accessibility from rural areas to the services, facilities, amenities and employment/economic opportunities available in the urban areas of the North East.

Recognising that such stations are key nodes for those travelling from rural areas into the urban areas of the North East, and to destinations further afield, enhancements to multi modal interchanges and car parking at railway and metro stations also have the potential to have significant positive effects on accessibility for those living in rural areas.

None proposed.

5: Road infrastructure

The package will initiate a range of road network enhancements. Recognising that car use will remain the predominant and necessary choice for many in rural areas, this will support accessibility for those living in rural areas, including to the amenities and opportunities available in the region's market towns and urban areas.

The schemes also have in some cases the potential to support accessibility by non-car modes. In this respect a number of the road schemes seek to reduce severance for non-car users and enhance public transport connectivity. The measures may also in some cases support enhancements to the quality of the public realm through supporting a reduction in localised congestion in some rural locations.

The package also has the potential to support economic vitality in rural areas through enhancing connections to key services, facilities and employment opportunities and supporting the visitor economy.

None proposed.

6: Maintaining and renewing	The package seeks to repair and strengthen key roads underpinning the rural and regional economy. This will help support access to key tourism destinations in the rural part of	None proposed.
our transport network	the North East, including Hadrian's Wall World Heritage site and Northumberland National Park (including the International Dark Skies Park), with benefits for the visitor economy. It also seeks to limit the impacts from transport of timber extraction and quarrying. This recognises the impact of such activities on the landscape character and quality of the public realm in some rural areas, with associated impacts on the rurality and tranquillity of these areas.	
	More broadly, enhanced maintenance of the road network in rural areas will support the resilience of transport links in rural areas and help overcome some of the barriers to accessibility associated with a poorly maintained network.	
7: National and international connectivity	Enhanced strategic-level investment in the transport network will support accessibility for those living in rural areas to key urban centres in the region and further afield. The package also has the potential to support economic vitality in rural areas through enhancing connections to key services, facilities and employment opportunities and supporting the visitor economy.	None proposed.

Key significant effects resulting from the NETP packages: Rurality

4.32 The following table sets out the key significant effects resulting from the in-combination effects of NETP packages in relation to the Rurality ISA theme.

Table 4.20: Likely significant effects, Rurality

Likely significant effect	Effect dimensions	Recommendations, mitigation
Enhanced accessibility to the services, facilities and amenities located in the urban areas of the North East from rural areas by all modes of transport.	Direct and indirect, medium and long term, permanent and positive.	None proposed.
Improvements to rural areas' vitality through enhanced connections to key services, facilities and economic and employment opportunities.	Indirect, medium and long term, permanent and positive.	None proposed.
Support for the visitor economy from enhancements in transport infrastructure.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.
Enhanced maintenance of the road network in rural areas, supporting its resilience.	Direct, medium and long term, permanent and positive.	None proposed.
Limitation of the impacts of transport movements associated with timber and quarrying on rural areas.	Direct and indirect, short, medium and long term, permanent and positive.	None proposed.

Cumulative effects with other plans and programmes

- 4.33 Cumulative effects occur from the combined impacts of policies and proposals on specific areas or sensitive receptors.
- 4.34 In the context of ISA, cumulative effects can arise as a result of the in-combination and synergistic effects of a plan's policies and proposals. Comprising 'intra-plan' effects, these interactions have been discussed above in the evaluation of the in-combination and synergistic²⁷ effects of the various work programmes of the NETP.
- 4.35 Cumulative effects can also result from the combined impacts of a plan with impacts of another plan, or the 'inter-plan' effects. These can affect the same receptor, resulting in in-combination or synergistic effects. The NETP therefore has the potential to combine with other planned or on-going activities in the vicinity of the North East to result in cumulative effects.
- 4.36 For example, the in-combination effects of NETP proposals with the development proposed through the adopted or emerging Local Plans for the Local Planning Authorities in the North East have the potential to lead to cumulative effects. This includes relating to housing and employment growth proposed through the adopted or emerging Local Plan documents for:
 - Newcastle upon Tyne;
 - · Gateshead;
 - Sunderland:
 - North Tyneside;
 - South Tyneside;
 - County Durham;
 - Northumberland; and
 - Northumberland National Park.

Furthermore, the combination of NETP proposals and other proposals and activities being taken forward within and outside the North East region has the potential to lead to cumulative effects. Examples include:

- Proposals taken forward through the provisions of the North East Strategic Economic Plan
- Minerals proposals
- Proposals to increase visitor numbers to Northumberland National Park, the World Heritage Sites and AONBs in the North East
- Investment in the East Coast Mainline
- Development of the Northern Powerhouse Rail network
- Progression of HS2
- Upgrades to the strategic road network, including the A1, A1(M) and A19
- Proposed expansion of Newcastle Airport to facilitate growth from 5.4 million passengers in 2017 to 9.4 million in 2035
- Port capacity expansion
- Activities designed to enhance sub-regional green infrastructure networks

²⁷ Synergistic effects arise between two or more factors to produces an effect greater than the sum of their individual effects.

In this context, potential effects (both positive and negative) which may occur as a result of the incombination effects of the NETP and other plans and proposals include the following:

- Increases in traffic flows and congestion from the in-combination effects of development
 and transport capacity enhancements, with potential impacts on air and noise quality,
 landscape and townscape character and the setting of the historic environment. However,
 the in-combination effects of proposals on enhancing public transport and pedestrian and
 cycle infrastructure may help limit potential negative effects and secure positive effects in
 this regard.
- Cumulative impacts on ecological networks. This is from the in-combination effects of new
 development and associated infrastructure on habitats and biodiversity corridors.
 However, enhancements to green infrastructure provision facilitated through plan
 proposals and other projects in the area, as well as an increased focus on biodiversity net
 gain also have significant potential to support local, sub-regional and regional ecological
 networks.
- Cumulative and synergistic impacts on greenhouse gas emissions from growth areas and the NETP proposals which support them.
- Impacts from a release of induced demand for transport from the in-combination effects of the NETP and Nationally Significant Infrastructure Projects.
- Impacts on flood risk from the in-combination effects of new development, including relating to surface water and fluvial flooding.
- Enhancements to regional green infrastructure networks.
- Improvements in accessibility resulting from the in-combination effects of enhancements to public transport and walking and cycling networks and public realm enhancements.

For many potential cumulative effects, the policy approaches proposed by the various plans and programmes will help reduce the significance of these in-combination impacts. However, monitoring for the plans and programmes will be a key means of ensuring that unforeseen adverse environmental and socio-economic effects are highlighted, and remedial action can be taken where adverse effects arise.

5. What are the next steps?

Introduction

5.1 This section of the ISA Report explains next steps that will be taken as part of the plan-making / ISA process.

Plan finalisation

- 5.2 This ISA Report has been prepared to accompany the latest version of the NETP, which was updated following consultation on the draft plan in late 2020 and early 2021.
- 5.3 SEA Regulations 16(3c)(iii) and 16(4) require that a 'statement' be made available to accompany the plan, as soon as possible after the adoption of the plan or programme. The purpose of the ISA Statement is to outline how the ISA process has influenced and informed the NETP development process and demonstrate how consultation on the ISA has been taken into account.
- 5.4 As the regulations outline, the statement should contain the following information:
 - The reasons for choosing the preferred measures for the NETP as adopted in the light of other reasonable alternatives dealt with;
 - How environmental considerations have been integrated into the NETP;
 - How consultation responses have been taken into account; and
 - Measures that are to be taken to monitor the significant environmental effects of the NETP.
- 5.5 To meet these requirements, an ISA Adoption Statement will be published with the adopted version of the North East Transport Plan.

This page has been left intentionally blank.

Appendix A Policy and plan review and baseline information

Policy context

Biodiversity policy context

Key messages from the National Planning Policy Framework (NPPF) in relation to biodiversity include:

- One of the three overarching objectives of the NPPF is an environmental objective to 'contribute to protecting and enhancing our natural, built and historic environment' including by 'helping to improve biodiversity.'
- 'Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value[...], take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scape across local authority boundaries.'
- 'Planning policies and decisions should contribute to and enhance the natural and local environment by: protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with the statutory status or identified quality in the development plan); and minimising impacts on and providing net gains for biodiversity, including establishing coherent ecological networks that are more resilient to current and future pressures.'
- 'To protect and enhance biodiversity and geodiversity, plans should:
 - a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - b) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity'.

The Natural Environment White Paper (NEWP)²⁸ sets out the importance of a healthy, functioning natural environment to sustained economic growth, prospering communities and personal well-being. It was in part a response to the UK's failure to halt and reverse the decline in biodiversity by 2010 and it signalled a move away from the traditional approach of protecting biodiversity in nature reserves to adopting a landscape approach to protecting and enhancing biodiversity. The NEWP also aims to create a green economy in which economic growth and the health of our natural resources sustain each other and markets, business and Government better reflect the value of nature. It includes commitments to:

- Halt biodiversity loss, support functioning ecosystems and establish coherent ecological networks by 2020;
- Establish a new voluntary approach to biodiversity offsetting to be tested in pilot areas;
- Enable partnerships of local authorities, local communities and landowners, the private sector and conservation organisations to establish new Nature Improvement Areas; and
- Address barriers to using green infrastructure to promote sustainable growth.

Reflecting the commitments within the Natural Environment White Paper and the EU Biodiversity Strategy, 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' aims to 'halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people'²⁹.

²⁸ DEFRA (2012) The Natural Choice: securing the value of nature (Natural Environment White Paper) [online] available at: http://www.official-documents.gov.uk/document/cm80/8082/8082 and [online] laccessed 21/02/20]

http://www.official-documents.gov.uk/document/cm80/8082/8082.pdf [accessed 21/02/20]

29 DEFRA (2011): 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services', [online] Available to download from: https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services [accessed 21/02/20]

The recently published 25 Year Environment Plan³⁰ sets out the Government's environmental plan of action over the next quarter century, in the context of Brexit. The Plan aims to tackle the growing problems of waste and soil degradation, improving social justice through tackling pollution and promoting the mental and physical health benefits of the natural world. It also sets out how the Government will address the effects of climate change. These aims are supported by a range of policies which are focused on the following six key areas:

- Using and managing land sustainably;
- Recovering nature and enhancing the beauty of landscapes;
- Connecting people with the environment to improve health and wellbeing;
- Increasing resource efficiency, and reducing pollution and waste;
- Securing clean, productive and biologically diverse seas and oceans; and
- Protecting and improving the global environment.

In this context, Goal 3 'Thriving plants and wildlife' and the policies contained within Chapter 2 'Recovering nature and enhancing the beauty of landscapes' and Chapter 5 'Securing clean, productive and biologically diverse seas and oceans' directly relate to the Biodiversity theme.

Published in June 2015, the Highways England (HE) Biodiversity Plan³¹ identifies the approach which HE is taking to meet the challenge of a national decline in biodiversity. The Plan contains five specific outcomes, with a series of related actions. These outcomes aim to provide the most support for biodiversity across the HE networks, and include:

- Outcome 1: HE and our suppliers are equipped to produce good biodiversity performance;
- Outcome 2: The Strategic Road Network is managed to support biodiversity;
- Outcome 3: We have delivered biodiversity enhancements whilst implementing a capital programme of network improvements;
- Outcome 4: We have addressed the legacy of biodiversity problems on out network via a targeted programme of investment; and
- Outcome 5: We are fully transparent about our biodiversity performance (achieved via the production of annual progress reports).

The 2020 Biodiversity Strategy

The 2020 Biodiversity Strategy was published by Defra in 2011. It is a national strategy for England's wildlife and ecosystem services; and builds on the Natural Environment White Paper to provide a comprehensive picture of how international and EU commitments are being implemented. It was published in summer 2011. It sets out the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea. A series of goals have been set as part of this strategy:

- better wildlife habitats quality goals for priority habitat and Sites of Special Scientific Interest (SSSIs);
- more, bigger and less fragmented areas for wildlife an increase in priority habitats by at least 200,000ha;
- the restoration of 15% of degraded ecosystems as a contribution to climate change mitigation and adaptation establishing a Marine Protected Area network managing and harvesting fish sustainably;
- marine plans in place by 2022;

³⁰ HM GOV (2018) A Green Future: Our 25 Year Plan to Improve the Environment [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-

environment-plan.pdf [accessed 21/02/20]

31 Highways England (2015): 'Biodiversity Plan', [online] available to access via: https://www.gov.uk/government/publications/biodiversity-plan> last accessed [21/02/20] Page 241

- an overall improvement in status of our wildlife and prevention of further human induced extinctions of known threatened species; and
- significantly more people engaged in biodiversity issues, aware of its value and taking positive action.

Water and soil resources policy context

The EU's Soil Thematic Strategy³² presents a strategy for protecting soil resources in Europe. The main aim of the strategy is to minimise soil degradation and limit associated detrimental effects linked to water quality and quantity, human health, climate change, biodiversity, and food safety.

The Water Framework Directive (WFD) drives a catchment-based approach to water management. In England and Wales there are 100 water catchments and it is Defra's intention to establish a 'framework for integrated catchment management' across England. The Environment Agency is establishing 'Significant Water Management Issues' and recently presented second River Basin Management Plans to ministers. The plans seek to deliver the objectives of the WFD namely:

- Enhance the status and prevent the further deterioration of aquatic ecosystems and associated wetlands which depend on aquatic ecosystems;
- · Promote the sustainable use of water;
- Reduce the pollution of water, especially by 'priority' and 'priority hazardous' substances; and
- Ensure the progressive reduction of groundwater pollution.

Key messages from the NPPF include:

- 'Planning policies and decisions should contribute to and enhance the natural and local environment by:
 - i. protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils; and
 - ii. recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.'
- Prevent new or existing development from being 'adversely affected' by the presence of 'unacceptable levels' of soil pollution or land instability and be willing to remediate and mitigate 'despoiled, degraded, derelict, contaminated and unstable land, where appropriate'.
- 'Planning policies and decisions should promote an effective use of land in meeting the need
 for homes and other uses, while safeguarding and improving the environment and ensuring
 safe and healthy living conditions. Strategic policies should set out a clear strategy for
 accommodating objectively assessed needs, in a way that makes as much use as possible of
 previously-developed or 'brownfield' land.'
- 'Encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains.'
- Planning policies and decisions should 'give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs', and 'promote and support the development of under-utilised land and buildings.'
- Taking a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for water supply.
- Prevent new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of water pollution.
- The government has produced a separate plan that specifically deals with planning policy in relation to waste management; this should be read in conjunction with the NPPF.

³² European Commission (2006) Soil Thematic Policy [online] available at: http://ec.europa.eu/environment/soil/index_en.htm [accessed 27/02/20]

Along with the policies contained within Chapter 1 'Using and managing land sustainably' and Chapter 4 'Increasing resource efficiency, and reducing pollution and waste', Goal 2 'Clean and plentiful water', Goal 5 'Using resources from nature more sustainably and efficiently' and Goal 8 'Minimising waste' of the Government's 'A Green Future: Our 25 Year Plan to Improve the Environment' directly relates to the water and soil resources theme.

Other key documents at the national level include Safeguarding our Soils: A Strategy for England³³. which sets out a vision for soil use in England, and the Water White Paper³⁴, which sets out the Government's vision for a more resilient water sector. It states the measures that will be taken to tackle issues such as poorly performing ecosystems, and the combined impacts of climate change and population growth on stressed water resources. In terms of waste management, the Government Review of Waste Policy in England³⁵ recognises that environmental benefits and economic growth can be the result of a more sustainable approach to the use of materials.

Historic environment policy context

The three key European legislative conventions are the UNESCO World Heritage Convention (1972), The Convention for the Protection of the Architectural Heritage of Europe (1985), and The European Convention on the Protection of Archaeological Heritage (1992).

The Planning (Listed Buildings and Conservation Areas) Act 1990 and Ancient Monuments and Archaeological Areas Act 1979 together form the two primary pieces of legislation concerning the historic environment within the UK.

The Heritage Statement (2017)³⁶ replaces the 2010 Statement on the Historic Environment for England and sets out the Government's vision for supporting the heritage sector to help it to protect and care for heritage and the historic environment in the coming years, in order to maximise the economic and social impact of heritage and to ensure that everyone can enjoy and benefit from it.

Key messages from the National Planning Policy Framework (NPPF) include:

- Strategic policies should set out an overall strategy making provision for 'conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure.'
- Planning policies and decisions should ensure that developments 'are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation of change (such as increased densities).'
- Heritage assets should be recognised as an 'irreplaceable resource' that should be conserved in a 'manner appropriate to their significance', taking account of 'the wider social, cultural, economic and environmental benefits' of conservation, whilst also recognising the positive contribution new development can make to local character and distinctiveness.
- Plans should set out a 'positive strategy' for the 'conservation and enjoyment of the historic environment', including those heritage assets that are most at risk.
- When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.'

The policies contained within Chapter 2 'Recovering nature and enhancing the beauty of landscapes' and Goal 6 'Enhanced beauty, heritage and engagement with the natural environment' of the

³³ Defra (2009) Safeguarding our Soils: A strategy for England [online] available at:

https://www.gov.uk/government/publications/safeguarding-our-soils-a-strategy-for-england [accessed 21/02/20]

³⁴ Defra (2011) Water for life (The Water White Paper) [online] available at < http://www.officiallocuments.gov.uk/document/cm82/8230/8230.pdf> [accessed 21/02/20]

documents.gov.uk/gocument/cmoz/ozov/ozov.pui/ [accossed 2.752.5]

35 Defra (2011) Government Review of Waste Policy in England [online] available at:

http://www.defra.gov.uk/publications/files/pb13540-waste-policy-review110614.pdf [accessed 21/02/20]

³⁶ Department for Digital, Culture, Media and Sport (2017) Heritage Statement [online], available at: https://www.gov.uk/government/publications/the-heritage-statement-2017 Page 243

Government's "A Green Future: Our 25 Year Plan to Improve the Environment' directly relates to the Landscape and Historic Environment SEA theme.

Historic England is the statutory body that helps people care for, enjoy and celebrate England's spectacular historic environment. Guidance and advice notes provide essential information for local planning authorities, neighbourhood groups, developers, consultants, landowners and other interested parties on historic environment considerations, and are regularly reviewed and updated in light of legislative changes. The following guidance and advice notes are particularly relevant and should be read in conjunction with the others.

Conservation Area Designation, Appraisal and Management: Historic England Advice Note 1 (February 2019)³⁷ outlines ways to manage change that conserves and enhances historic areas in order to positively contribute to sustainable development. Principally, the advice note emphasises the importance of:

- Understanding the different types of special architectural and historic interest which underpin the designations; and
- Recognising the value of implementing controls through the appraisal and/or management plan which positively contribute to the significance and value of conservation areas.

Sustainability Appraisal (SA) and Strategic Environment Assessment (SEA): Historic England Advice Note 8 (December 2016)³⁸ provides support to all stakeholders involved in assessing the effects of certain plans and programmes on the historic environment. It offers advice on heritage considerations during each stage of the SA/SEA process and helps to establish the basis for robust and comprehensive assessments.

Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (2nd Edition) (December 2017)³⁹ provides general advice on understanding setting, and how it may contribute to the significance of heritage assets and allow that significance to be appreciated, as well as advice on how views can contribute to setting. Specifically, Part 2 of the advice note outlines a five stepped approach to conducting a broad assessment of setting:

- Step 1: Identify which heritage assets and their settings are affected;
- Step 2: Asses the degree to which these settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated;
- Step 3: Assess the effects of the proposed development, whether beneficial or harmful, on that significance or on the ability to appreciate it;
- Step 4: Explore ways to maximise enhancement and avoid or minimise harm; and
- Step 5: Make and document the decision and monitor outcomes.

In terms of the two World Heritage Sites in the North East, the Management Plans for Durham Castle and Cathedral 2017-2023 and Hadrian's Wall Management Plan 2015-2019 are the key documents which set out the approach to the management of these sites.

Landscape policy context

The European Landscape Convention of the Council of Europe, known as the Florence Convention promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues. The European Landscape Convention introduced a Europe-wide concept centring on the quality of landscape protection, management and planning and covering the entire territory, not just outstanding landscapes.

Key messages from the National Planning Policy Framework (NPPF) (2019) include:

³⁷ Historic England (2019): 'Conservation Area Designation, Appraisal and Management: Advice Note 1', [online] available at: < https://historicengland.org.uk/images-books/publications/conservation-area-appraisal-designation-management-advice-note-1/heag-268-conservation-area-appraisal-designation-management/> [accessed 21/02/20]

³⁸ Historic England (2016): 'SA and SEA: Advice Note 8' [online] available at: < https://historicengland.org.uk/images books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/> [accessed 21/02/20]
³⁹ Historic England (2017): 'Setting of Heritage Assets: 2nd Edition', [online] available to download via:

https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/ [accessed 21/02/20]

Page 244

- Give great weight to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas and should be given great weight in National Parks and the Broads. The scale and extent of development within these designated areas should be limited.
- Strategic policies should set out an overall strategy making provision for 'conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure.
- Planning policies and decisions should ensure that developments 'are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation of change (such as increased densities).
- Planning policies and decisions should contribute to and enhance the natural and local environment by:
 - protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
 - recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; and
 - o remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues.

The Government's 25 Year Environment Plan (2018) sets out a strategy for managing and enhancing the natural environment. Chapter 2 is dedicated to recovering nature and enhancing the beauty of landscapes, with the main focus on reviewing the National Park's and Areas of Outstanding Natural Beauty (AONBs) in order to better conserve and enhance landscapes. Along with the policies contained within Chapter 2, Goal 6 'Enhanced beauty, heritage and engagement with the natural environment' directly relates to the Landscape SA theme.

Northumberland National Park Authority has a duty to prepare a National Park Management Plan as the framework for the delivery of the National Park statutory purposes and duty. The Management Plan sets out the guiding principles, vision, objectives and actions for managing the National Park.

The Northumberland National Park Management Plan 2016-2021 was adopted in 2016, and is currently being updated. The key aims of the Management Plan are as follows:

- Aim 1: A Welcoming Park To put people and their connections with the landscape at the heart of the National Park.
- Aim 2: A Distinctive Place To manage, conserve and enhance the distinctive natural and cultural qualities of the National Park.
- Aim 3: A Living, Working Landscape for Now and the Future To adapt to change by applying new approaches, together with traditional techniques.
- Aim 4: Thriving Communities To ensure the thriving and vibrant communities have a strong sense of place and an economy grounded in the natural and cultural qualities of the National Park.
- Aim 5: A Valued Asset To ensure the National Park is valued as a local, regional and national asset, with influence beyond its boundaries that is worth looking after now and for generations to come.

Each AONB management unit is required to prepare and keep updated a Management Plan for the respective AONB.

The North Pennines AONB Management Plan 2019-2024⁴⁰ sets out the following '2030 Vision':

- There is wide recognition of the breadth of services and benefits provided for society through conserving our biodiversity, landscape and natural processes, and our cultural heritage.
- There is greater connectivity of priority habitats and it is enhanced by improvements in condition and ecological function. Work to restore our moors to fully functioning wetland ecosystems is complete and they are richer in wildlife.
- Declines in biodiversity have slowed, or have halted and are reversing.
- Local action for climate change adaptation and mitigation (eg. through peatland restoration) means the area is playing its full part in national efforts.
- Management of land allows opportunities for more natural processes to develop, over larger areas, including greater native woodland cover.
- Coniferous woodlands from the 20th century have been restructured and make a more positive contribution to the landscape and biodiversity; new well-designed and appropriately located mixed woodlands provide income for land managers.
- Action on pollution from abandoned metal mines has lead to an increase in water quality.
- High Nature Value farming prospers and farmers are well-rewarded for the public goods they produce, including more species-rich hay meadows, wading birds, pollinators and public access. The area has been at the forefront of shaping new Environmental Land Management Schemes which have sustained nature and farming.
- There are closer partnerships between conservation bodies and land managers of all kinds, focused on delivering more for nature together.
- The tourism industry is both environmentally responsible and economically sustainable, with a wealth of nature and culture-related things to see and do.
- A greater diversity of people are easily, safely and confidently exploring the area on foot, on horseback and by bike.
- The North Pennines is a much-used outdoor classroom, which inspires young and old.
- The area's historic environment is increasingly better understood, conserved and celebrated.
- Communities are increasingly proud of their natural and cultural heritage and are active in conserving and celebrating it.
- Development takes place to a high standard, meeting community need and contributing to the area's quality and character.
- The North Pennines AONB and UNESCO Global Geopark is increasingly recognised at a national level as an exemplar of what Protected Landscapes can do for conservation, local communities and local economies.

The Northumberland Coast AONB Management is currently being updated.⁴¹ The 'Vision for 2040' set out by the consultation version of the Management Plan is as follows:

"A sense of remoteness and wildness is maintained, with wide open coastal and sea views, a naturally functioning coastline rich in wildlife, and a clear distinction between settlements and open countryside. The AONB is a living, working area with a celebrated history and culture, and a vibrant present in which social and economic wellbeing is successfully integrated with the conservation and enhancement of the special qualities of the area."

The aims of the Northumberland Coast Management Plan are as follows:

⁴⁰ North Pennines AONB (2019) North Pennines AONB Management Plan 2019-24 https://www.northpennines.org.uk/wpcontent/uploads/2019/06/MPlan-220719-webres.pdf

41 Northumberland Coast Area of Outstanding Natural Beauty Draft Management Plan 2020-2024

http://www.northumberlandcoastaonb.org/public-consultation-opens-on-plan-for-the-northumberland-coast/b295

Page 246

- Aim 1: To ensure that the natural beauty and special qualities of the AONB are conserved and enhanced.
- Aim 2: To ensure that the communities in and around the AONB are thriving places to live and work.
- Aim 3: The designation of 'Area of Outstanding Natural Beauty' and the special qualities of the Area are understood and valued for their contribution to life in the wider region and are seen as being worthy of protection.
- Aim 4: The AONB provides a high quality, clean environment that is welcoming and accessible to all.

Air quality and noise policy context

The Clean Air Strategy released in 2019 sets out the Government plans for dealing with all sources of air pollution. The strategy sets out proposals in detail and indicates how devolved administrations intend to make their share of emissions reductions, and complements the Industrial Strategy, Clean Growth Strategy and 25 Year Environment Plan.

Key messages from the National Planning Policy Framework (NPPF) include:

- 'Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.'
- 'Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health.'
- New and existing developments should be prevented from contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of air pollution.

Published in January 2018 by the UK Government, 'A Green Future: Our 25 Year Plan to Improve the Environment'⁴² sets out a number of goals and policies in order to help the natural world regain and retain good health. In this context, Goal 1 'Clean Air' and the policies contained within 'Chapter 4: Increasing resource efficiency and reducing pollution and waste' within the 25 year plan directly relate to the air quality ISA theme.

Local Authorities are required under Section 82 of the Environment Act (1995) to monitor air quality across the district, report regularly to DEFRA, and take action where nationally set levels are likely to be exceeded. Monitoring is undertaken to assess levels of nitrogen dioxide (NO₂), sulphur dioxide (SO₂), ozone (O₃), benzene (C₆H₆) and particulates (PM₁₀). Where exceedances exist, areas are declared as Air Quality Management Areas (AQMAs) and local authorities are required to produce an Air Quality Action Plan (AQAP) to improve air quality in the area.

A series of air quality directions made by the Government have required local authorities with concentrations of NO_2 forecast to exceed legal limits to consider whether establishment of clean air zones / low emission zones would deliver a way to meet air quality targets in the shortest possible time. These were delivered under the Environment Act 1995 in order to meet the obligations placed upon the UK under the EU Ambient Air Quality Directive 2017.

⁴² HM GOV (2018) A Green Future: Our 25 Year Plan to Improve the Environment [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf [accessed 21/02/20]

Gateshead Council, Newcastle City Council and North Tyneside Council were provided with a legal direction in 2017, which was revised in mid-2019.⁴³ This was a legal order requiring the three local authorities to produce a feasibility study to identify measures to deliver compliance with legal limits for nitrogen dioxide in the Authorities' administrative areas, with a view to this being the first stage in identifying, exploring, analysing and developing options for measures which the Councils would implement to deliver compliance in the shortest possible time. Subsequent to this direction, a series of options were developed, evaluated and consulted on. Final proposals were then consulted on in October 2019. This resulted in the intention to introduce a charging Clean Air Zone covering Newcastle city centre affecting non-compliant buses, coaches, taxis (both Hackney Carriages and private hire vehicles), heavy goods vehicles and vans, to be enforced from 2021.

Climate change and flood risk policy context

In May 2019, the UK Parliament declared a climate emergency, with a view to explicitly acknowledging that human activities are significantly affecting the climate, and actions to mitigate and adapt to climate change should be paramount. This declaration has been mirrored by the authorities covering the North East, as follows:

- Newcastle City Council: Declared a climate emergency in April 2019, with the aim of making the city carbon neutral by 2030.
- North Tyneside Council: Declared a climate emergency in June 2019, with the aim of reducing the council's carbon footprint by 50% by 2027.
- Northumberland County Council: Declared a climate emergency in June 2019, with the aim of becoming carbon neutral by 2030
- Durham County Council: Declared a climate emergency in February 2019. Seeks to reduce emissions from Durham County Council's operations by 80% from 2008/09 levels by 2030 and is investigating what further actions are necessary to make County Durham carbon neutral by 2050.
- Gateshead Council: Declared a climate emergency in May 2019, with the aim of becoming carbon neutral by 2030.
- South Tyneside Council: Declared a climate emergency in July 2019, with the aim of becoming carbon neutral by 2030.
- Sunderland City Council: Declared a climate emergency in March 2019, with the aim of becoming carbon neutral by 2030.

In addition, the North of Tyne Combined Authority declared a climate emergency in May 2019. The North East Combined Authority declared a climate emergency in November 2019.

The UK Climate Change Act⁴⁴ was passed in 2008 and established a framework to develop an economically credible emissions reduction path. It also highlighted the role it would take in contributing to collective action to tackle climate change under the Kyoto Protocol, and more recently as part of the UN-led Paris Agreement.

- The Climate Change Act includes the following:

 Commits the UK government by law to reducing greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050. This includes reducing emissions from the devolved administrations (Scotland, Wales and Northern Ireland), which currently account for about 20% of the UK's emissions. The 100% target was based on advice from the CCC's 2019 report, 'Net Zero - The UK's contribution to stopping global warming' and introduced into law through the Climate Change Act 2008 (2050 Target Amendment) Order 2019.
 - The Act requires the Government to set legally binding 'carbon budgets'. A carbon budget is a cap on the amount of greenhouse gases emitted in the UK over a five-year period. The

Page 248

⁴³ Environment Act 1995 (Gateshead Council, Newcastle City Council and North Tyneside Council) Air Quality Direction 2019 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/817394/air-quality-direction-

⁴⁴ GOV.UK (2008): 'Climate Change Act 2008', [online] available at: <http://www.legislation.gov.uk/ukpga/2008/27/contents> [accessed 21/02/20]

carbon budgets are designed to reflect the cost-effective path to achieving the UK's long-term objectives. The first five carbon budgets have been put into legislation and run up to 2032.

- The Committee on Climate Change was set up to advise the Government on emissions targets, and report to Parliament on progress made in reducing greenhouse gas emissions.
- The Act requires the Government to assess the risks and opportunities from climate change
 for the UK, and to prepare for them. The Committee on Climate Change's Adaptation SubCommittee advises on these climate change risks and assesses progress towards tackling
 them. The associated National Adaptation Programme requires the Government to assess
 the risks to the UK from climate change, prepare a strategy to address them, and encourage
 key organisations to do the same.

The UK Climate Change Risk Assessment is published on a 5-yearly cycle in accordance with the requirements of the Climate Change Act 2008. It required the Government to compile an assessment of the risks for the UK arising from climate change, and then to develop an adaptation programme to address those risks and deliver resilience to climate change on the ground. For both the 2012 and the 2017 UK Climate Change Risk Assessment, the Adaptation Sub-Committee commissioned an evidence report aiming to understand the current and future climate risks and opportunities. The evidence report contains six priority risk areas requiring additional action in the next five years, see below⁴⁵:

- Flooding and coastal change risks to communities, businesses and infrastructure;
- · Risks to health, well-being and productivity from high temperatures;
- Risk of shortages in the public water supply, and for agriculture, energy generation and industry;
- Risks to natural capital, including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity;
- Risks to domestic and international food production and trade; and
- New and emerging pests and diseases, and invasive non-native species, affecting people, plants and animals.

The Committee of Climate Change published a 2012 report entitled 'How Local Authorities Can Reduce Emissions and Manage Climate Change Risk'46 which emphasises the crucial role councils have in helping the UK meet its carbon targets and preparing for the impacts of climate change. It outlines specific opportunities for reducing emissions and highlights good practice examples from Local Authorities.

The Clean Air Strategy⁴⁷ released in 2019 sets out the Government plans for dealing with all sources of air pollution. The strategy sets out proposals in detail and indicates how devolved administrations intend to make their share of emissions reductions, and complements the Industrial Strategy, Clean Growth Strategy and 25 Year Environment Plan.

Key messages from the National Planning Policy Framework (NPPF) include:

- One of the three overarching objectives of the NPPF is an environmental objective to 'contribute to protecting and enhancing our natural, built and historic environment' including by 'mitigating and adapting to climate change' and 'moving to a low carbon economy.' 'The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.'
- 'Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply,

⁴⁵ GOV UK: 'UK Climate Change Risk Assessment Report January 2017', [online] available at:

https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-2017> [accessed 21/02/20]

46 CCC (2012)
'How local authorities can reduce emissions and manage climate risks' [online] available at:

https://www.theccc.org.uk/publication/how-local-authorities-can-reduce-emissions-and-manage-climate-risks/

biodiversity and landscapes, and the risk of overheating from rising temperatures. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.'

- 'Local planning authorities should support community-led initiatives for renewable and low carbon energy, including developments outside areas identified in local plans or other strategic policies that are being taken forward through neighbourhood planning.'
- Direct development away from areas at highest risk of flooding (whether existing or future).
 'Where development is necessary, it should be made safe for its lifetime without increasing flood risk elsewhere.'

The Flood and Water Management Act⁴⁸ highlights that alternatives to traditional engineering approaches to flood risk management include:

- Incorporating greater resilience measures into the design of new buildings, and retro-fitting properties at risk (including historic buildings);
- Utilising the environment in order to reduce flooding, for example through the management of land to reduce runoff and through harnessing the ability of wetlands to store water;
- Identifying areas suitable for inundation and water storage to reduce the risk of flooding elsewhere;
- Planning to roll back development in coastal areas to avoid damage from flooding or coastal erosion; and
- Creating sustainable drainage systems (SuDS).⁴⁹

Population policy context

Key messages from the NPPF include:

- One of the three overarching objectives of the NPPF is 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 wellbeing.'
- To support the Government's objective of significantly boosting the supply of housing, strategic policies 'should be informed by a local housing need assessment, conducted using the standard method in national planning guidance. In addition to the local housing need figure, any needs that cannot be met within neighbouring areas should also be taken into account in establishing the amount of housing to be planned for.'
- The size, type and tenure of housing needed for different groups in the community should be
 assessed and reflected in planning policies. Where a need for affordable housing is identified,
 planning policies should specify the type of affordable housing required, and expect it to be
 met on-site where possible.
- Recognise the important contribution of small and medium sized development sites in meeting
 housing needs. Local Plans should identify land to accommodate at least 10% of their housing
 requirement on sites no larger than one hectare, and neighbourhood planning groups should
 also consider the opportunities for allocating small and medium-sized sites.
- In rural areas, planning policies and decisions should be responsive to local circumstances
 and plan housing development to reflect local needs, particularly for affordable housing,
 including through rural exception sites where appropriate. Authorities should consider
 whether allowing some market housing would facilitate the provision of affordable housing to
 meet local needs.

Page 250

⁴⁸ Flood and Water Management Act (2010) [online] available at: < http://www.legislation.gov.uk/ukpga/2010/29/contents [accessed 21/02/20]

⁴⁹ N.B. The provision of Schedule 3 to the Flood and Water Management Act 2010 came into force on the 1st of October 2012 and makes it mandatory for any development in England or Wales to incorporate SuDs.

- Promote the retention and development of local services and community facilities such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship.
- Ensure that developments create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion. Places should contain clear and legible pedestrian routes, and high-quality public spaces, which encourage the active and continual use of public areas.
- Ensuring that there is a 'sufficient choice of school places' and taking a 'proactive, positive and collaborative approach' to bringing forward 'development that will widen choice in education'

The 'Ready for Ageing?' report, published by the Select Committee on Public Service and Demographic Change⁵⁰ warns that society is underprepared for an ageing population. The report states that 'longer lives can be a great benefit, but there has been a collective failure to address the implications and without urgent action this great boon could turn into a series of miserable crises'. The report recognises that the supply of specialist housing for the older generation is insufficient for the demand. There is a need for central and local Government, housing associations, and house builders to ensure that these housing needs are better addressed, giving as much priority to promoting an adequate market of social housing for the older generation as is given to the younger generation.

Human health policy context

Key messages from the NPPF include:

- One of the three overarching objectives of the NPPF is 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 wellbeing.'
- 'Planning policies and decisions should aim to achieve healthy, inclusive and safe places
 which enable and support healthy lifestyles, especially where this would address identified
 local health and wellbeing needs for example through the provision of safe and accessible
 green infrastructure, sports facilities, local shops, access to healthier food, allotments and
 layouts that encourage walking and cycling.'
- Policies and decisions should take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community.
- Access to a network of high-quality open spaces and opportunities for sport and physical
 activity is important for the health and wellbeing of communities. Development should avoid
 building on existing open space, sports and recreational buildings and land, including playing
 fields.
- Promote the retention and development of local services and community facilities such as local shops, meeting places, sports venues, cultural buildings, public houses and places of worship.

In relation to other key national messages in relation to health, Fair Society, Healthy Lives⁵¹ ('The Marmot Review') investigated health inequalities in England and the actions needed in order to tackle them. Subsequently, a supplementary report was prepared providing additional evidence relating to spatial planning and health on the basis that that there is: "overwhelming evidence that health and environmental inequalities are inexorably linked and that poor environments contribute significantly to poor health and health inequalities".

⁵⁰ Select Committee on Public Service and Demographic Change (2013) Ready for Ageing? [online] available at: http://www.parliament.uk/business/committees/committees-a-z/lords-select/public-services-committee/report-ready-for-ageing/ [accessed 21/02/20]

⁵¹ The Marmot Review (2011) The Marmot Review: Implications for Spatial Planning [online] available to download from: https://www.nice.org.uk/media/default/About/what-we-do/NICE-quidance/NICE-quidelines/Public-health-quidelines/Additional-publications/Spatial-planning/the-marmot-review-implications-for-spatial-planning.pdf [accessed 21/02/20]

The increasing role that local level authorities are expected to play in providing health outcomes is demonstrated by recent government legislation. The Health and Social Care Act 2012 transferred responsibility for public health from the NHS to local government, giving local authorities a duty to improve the health of the people who live in their areas. This will require a more holistic approach to health across all local government functions.

Baseline

Biodiversity: Summary of Current Baseline

European designated sites

Special Areas of Conservation

Special Areas of Conservation (SACs) are protected sites designated under the EC Habitats Directive (Council Directive 92/43/EEC). Article 3 of the Habitats Directive requires the establishment of a European network of conservation sites to conserve the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended). These listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds). Of the Annex I habitat types, 78 are believed to occur in the UK. Of the Annex II species, 43 are native to, and normally resident in, the UK.

There are 18 SACs within or partly within the North East; these are illustrated in Figure 4.1.

These SACs are predominantly located on the western boundaries of Northumberland and County Durham within the Pennines and Cheviot Hills. However, there are also a number located on the North Sea coastlines of County Durham and Northumberland.

Information on the qualifying features of the SACs located within the North East is outlined below.

Border Mires, Kielder Butterburn

Border Mires, Kielder – Butterburn is made up of several individual sites running north-east from Carlisle. Collectively, these sites contain a wide range of bog-moss Sphagnum species, for example 11 on Caudbeck alone, along with an almost equally large number of Carex species. The transition mire element of these sites is relatively small, but is an important component of one of the least-damaged and more valuable species-rich mire complexes in England.

Berwickshire and North Northumberland Coast

This is an extensive and diverse stretch of coastline in north-east England and south-east Scotland. There is variation in the distribution of features of interest along the coast. Stretches of the coast in England support a very extensive range of intertidal mudflats and sandflats; large shallow inlets and bays; reefs; and submerged or partially submerged sea caves.

Castle Eden Dene

Castle Eden Dene in north-east England represents the most extensive northerly native occurrence of yew Taxus baccata woods in the UK. Extensive yew groves are found in association with ash-elm Fraxinus-Ulmus woodland and it is the only site selected for yew woodland on magnesian limestone in north-east England.

Durham Coast

The Durham Coast is the only example of vegetated sea cliffs on magnesian limestone exposures in the UK. These cliffs extend along the North Sea coast for over 20 km from South Shields southwards to Blackhall Rocks. Their vegetation is unique in the British Isles and consists of a complex mosaic of Para maritime, mesotrophic and calcicolous grasslands, tall-herb fen, seepage flushes and wind-pruned scrub.

Ford Moss

Ford Moss is a largely intact 46 ha bog in undulating topography in the rain-shadow of the Cheviot Hills. Although partially drained, the re-wetted surface contains many waterlogged areas with species typical of peat-formation. Thus, although there are drier purple moor-grass Molinia caeruleadominated parts, it is considered to be predominantly active raised bog. There is a 12 m depth of peat within the confining basin. The vegetation includes species of raised bog as well as poor-fen, which is also indicated in places by the presence of white sedge Carex curta where water runs into the bog from the surrounding slopes.

Harbottle Moors

At a little under 400 m altitude, Harbottle Moors is a relatively low-lying example of upland European dry heath. Situated on Carboniferous rocks, the heathland community is dominated by heather Calluna vulgaris with some crowberry Empetrum nigrum, bilberry Vaccinium myrtillus and bracken Pteridium aquilinum. Some areas are relatively species-rich, with up to six different dwarf shrub species being found. This may suggest a fairly un-intensive management history with regard to grazing and burning.

Moor House Upper Teesdales

This large site in northern England consists of an upland complex on limestone and gritstone, with enclosed hay meadows and pastures as well as large tracts of mountain and moorland, with varied and extensive mires and flushes, acid and calcareous grasslands, and dwarf shrub heaths. Other valued habitats present include an upland water body, cliffs and screes of varying chemistry and the largest stands of juniper in England.

Newham Fen

Newham is a lowland short sedge fen in north-east England, a part of the UK in which alkaline fens are rare. The site is an example of basin fen, developed from the hydroseral succession of a small lake. The main fen community is black bog-rush – blunt-flowered rush (Schoenus nigricans – Juncus subnodulosus) mire and bottle sedge Carex rostrata –Calliergon cuspidatum/giganteum (moss) mire, and there are transitions to tall-herb fen grassland and woodland. A number of rare species occur at this site, including coralroot orchid Corallorhiza trifida and round-leaved wintergreen Pyrola rotundifolia.

North Northumberland Dunes

This site consists of a number of dune systems on the north-east coast of England. The embryonic shifting dune vegetation is both extensive and varied, with examples of all themain embryonic dune types. Lyme-grass Leymus arenarius communities are particularly strongly represented, but sand couch Elytrigia juncea communities and strandline species are also present. Most of the dune systems are accreting and forming suitable conditions for the development of shifting dunes with marram. Climbing dunes can occur on steep rocky coasts, as found at Bamburgh.

North Pennine Dales Meadows

This site contains a series of isolated fields within several north Pennine and Cumbria valleys, and encompasses the range of variation exhibited by mountain hay meadows in the UK. The grasslands included within the site exhibit very limited effects of agricultural improvement and show good conservation of structure and function. A wide range of rare and local meadow species are contained within the meadows, including globeflower Trollius europaeus, the lady's-mantles Alchemilla acutiloba, A. monticola and A. subcrenata, and spignel Meum athamanticum.

North Pennine Moors

The North Pennine Moors (along with the North York Moors) hold much of the upland heathland of northern England. At higher altitudes and to the wetter west and north of the site complex, the heaths grade into extensive areas of 7130 blanket bogs. The North Pennine Moors includes one major stand of juniper scrub in Swaledale as well as a number of small and isolated localities.

Roman Wall Loughs

Roman Wall Loughs comprises three natural eutrophic (nutrient-rich) lakes; Crag, Broomleeand Greenlee Loughs. Together the loughs contain 11 species of pondweed Potamogeton including P. lucens, P. pusillus, and P. obtusifolius. P. gramineus occurs in all three loughs in an unusual association with stone worts Chara spp. The nationally-rare autumnal water starwort Callitriche hermaphroditica occurs in Crag Lough. Shore weed Littorella uniflora grows in Broomlee and Greenlee Loughs, and greater bladderwort Utricularia vulgaris in the latter.

River Tweed

The River Tweed drains a large catchment on the east coast of the UK, with sub-catchments in both Scotland and England. It shows a strong nutrient gradient along its length, with oligotrophic (nutrient-poor) conditions in its headwaters, and nutrient-rich lowland conditions just before it enters the sea at Berwick. The river has a high ecological diversity which reflects the mixed geology of the catchment. Stream water-crowfoot Ranunculus penicillatus ssp. pseudofluitans, a species of southern rivers and streams, here occurs at its most northerly location as does fan-leaved water-crowfoot R. circinatus, along with river water-crowfoot R. fluitans, common water-crowfoot R. aquatilis, pond water-crowfoot R. peltatus and a range of hybrids.

River Eden

The River Eden flows through the Eden District of Cumbria. It consists of tidal rivers, estuaries, mud flats, sand flats, lagoons, inland water bodies, bogs, marshes, water fringed vegetation, fens and broad-leaved deciduous woodlad. It supports a number of Annex I habitats including oligotrophic to mesotrophic standing waters, water courses of plain to montane levels and alluvial forests with Alnus glutinosa and Fraxinus excelsior. Annex II species include austropotamobius pallipes, petromyzon marinus, lampetra planeri, lampetra fluviatilis, salmo salar, cottus gobio and lutra.

Simonside Hills

This site comprises part of the Simonside Hills, a sandstone-ridge in central Northumberland. It is particularly important for the extent of heather Calluna vulgaris moorland which grades into blanket mire on wetter ground. A large proportion of the dry heather moorland is managed by rotational burning for grouse and this has produced a characteristic pattern of even-aged stands of heather with few accompanying species.

Thrislington

Thrislington contains one of the most important stands of primary Magnesian Limestone grassland in Britain. Although a comparatively small site it nonetheless contains the largest of the few surviving examples of these blue-moor-grass – small scabious (Sesleria caerulea – Scabiosa columbaria) grasslands. A variety of grassland communities occur over this substrate, most notable, and completely restricted to the Durham Magnesian Limestone, are those characterised by blue moorgrass and small scabious Scabiosa columbaria.

Tweed Estuary

The Tweed Estuary is a complex estuary, which discharges into the North Sea. It is a long narrow estuary, which is still largely natural and undisturbed, with excellent water quality throughout. At its mouth there are substantial sandbanks and some areas of rocky shore. Further upstream, large areas of estuarine boulders and cobbles overlie sediment flats and extend into subtidal areas of the channel. Sheltered estuarine mud and sandflats occur away from the fast-flowing river channel. A wide range of intertidal sediments occurs within the estuary. These range from exposed east-facing sandy shores at the estuary mouth, including its sheltering sand-spit, to muddy gravels where the river is actively eroding the banks. The most exposed sandy shores are subject both to wave action and, in places, the scouring action of the out-flowing river; their mobile infauna (mainly crustaceans such as Eurydice pulchra and Bathyporeia spp. and a few polychaetes) and ephemeral algae reflect these conditions. Species and habitat diversity rises with increasing shelter, until increasingly low-salinity estuarine conditions upstream lead to naturally low infaunal diversity, dominated by characteristic species that are tolerant of brackish-water conditions.

Tyne and Allen River Gravel

This site in north-east England encompasses the most extensive, structurally varied and species-rich examples of riverine Calaminarian grasslands in the UK. The river gravels contain a range of structural types, ranging from a highly toxic, sparsely vegetated area with abundant lichens through to closed willow/alder Salix/Alnus woodland. In addition, the site is of considerable functional interest for the series of fossilised river channel features. Spring sandwort Minuartia verna and thrift Armeria maritima are particularly abundant, and there are several rare species, including Young's helleborine Epipactis youngiana, which has its main UK population at this site.

Special Protection Areas

Special Protection Areas (SPAs) are internationally protected sites classified in accordance with Council Directive 2009/147/EEC. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

There are eight SPAs within or partially within the North East, which are also illustrated on **Figure 4.1**. These are predominantly located in the south west corner of Northumberland and the west side of County Durham. There are also two SPAs located on the north east coast of Northumberland.

Coquet Island

Coquet Island is located 1 km off the coast of Northumberland. This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance. During the breeding season, the area regularly supports 33,448 individual seabirds including: Black-headed Gull Larus ridibundus, Puffin Fratercula arctica, Arctic Tern Sterna paradisaea, Common Tern Sterna hirundo, Roseate Tern Sterna dougallii, Sandwich Tern Sterna sandvicensis.

Farne Islands

The Farne Islands are a group of low-lying islands between 2-6 km off the coast of Northumberland. The islands are important as nesting areas for birds, especially terns, gulls and auks which are of European importance. The seabirds feed outside the SPA in the nearby waters, as well as more distantly in the North Sea. During the breeding season, the area regularly supports 142,490 individual seabirds including: Kittiwake Rissa tridactyla, Shag Phalacrocorax aristotelis, Cormorant Phalacrocorax carbo, Puffin Fratercula arctica, Guillemot Uria aalge, Arctic Tern Sterna paradisaea, Common Tern Sterna hirundo, Roseate Tern Sterna dougallii, Sandwich Tern Sterna sandvicensis.

Holburn Lake and Moss

The SPA of Holburn Lake and Moss is located about 5 km inland from the coast of Northumberland in north-east England. The site comprises part of a lowland raised mire and parts of the adjacent slopes that form its catchment area. The south-western outflow to the mire was dammed in 1934 to create Holburn Lake

Lindisfarne

Lindisfarne is situated off the Northumberland coast near Berwick-upon-Tweed. As well as the island of Lindisfarne (Holy Island), the site includes extensive mud-flats south of Holy Island and at Budle Bay. The area comprises a range of coastal habitats, including rocky shore, sand dunes, saltmarsh and intertidal sand- and mud-flats he area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl, including: Pink-footed Goose Anser brachyrhynchus, Golden Plover Pluvialis apricaria, Bar-tailed Godwit Limosa lapponica, Greylag Goose Anser, Lightbellied Brent Goose Branta bernicla hrota, Wigeon Anas penelope, Whooper Swan Cygnus, Knot Calidris canutus, Redshank Tringa totanus, Shelduck Tadorna, Eider Somateria mollissima, Common Scoter Melanitta nigra, Ringed Plover Charadrius hiaticula, Lapwing Vanellus, Dunlin Calidris alpina, Grey Plover Pluvialis squatarola.

Northumbria Coast

The Northumbria Coast SPA includes much of the coastline between the Tweed and Tees Estuaries in north-east England. The site consists of mainly discrete sections of rocky shore with associated boulder and cobble beaches. The SPA also includes parts of three artificial pier structures and a small

section of sandy beach. In summer, the site supports important numbers of breeding Little Tern Sterna albifrons, whilst in winter the mixture of rocky and sandy shore supports large number of Turnstone Arenaria interpres and Purple Sandpiper Calidris maritima.

North Pennine Moors

The North Pennine Moors SPA is situated in Cumbria, County Durham, Northumberland and North Yorkshire and includes parts of the moorland massif between the Tyne Gap (Hexham) and the Ribble-Aire corridor (Skipton). It encompasses extensive tracts of semi-natural moorland habitats. The site is of European importance for several upland breeding species, including birds of prey and waders. The southern end of the SPA is within 10 km of the South Pennine Moors SPA which supports a similar assemblage of upland breeding species. North Pennine Moors subsumes Moor House SPA, a site subject to separate classification.

Teesmouth & Cleveland Coast

The Teesmouth and Cleveland Coast SPA is a wetland of European importance, comprising intertidal sand and mudflats, rocky shore, saltmarsh, freshwater marsh and sand dunes. Large numbers of waterbirds feed and roost on the site in winter and during passage periods; in summer Little Terns breed on the sandy beaches within the site. The existing Teesmouth and Cleveland Coast SPA was classified on 15 August 1995. However, an extension to that area has been recommended to enlarge the area within the Tees Estuary and along part of the foreshore to the north because of the site's European ornithological interest.

Northumberland Marine

Northumberland Marine SPA is located on the Northumberland coast between Blyth and BerwickUpon-Tweed. The coastal parts of the site consist of sandy bays separated by rocky headlands backed by dunes or soft and hard cliffs. There are extensive areas of inter-tidal rocky reef, long sandy beaches at Beadnell, Embleton and Druridge Bay and extensive sand and mud flats at Budle Bay and Fenham Flats at Lindisfarne. Discrete areas of intertidal mudflats and estuarine channels are also included where the site extends into the Aln, Coquet, Wansbeck and Blyth estuaries. The open coast habitats extend into the subtidal zone, where large shallow inlets and bays and extensive rocky reefs are present. Further offshore, soft sediments predominate.

Ramsar sites

The Convention on Wetlands of International Importance (the Ramsar Convention) is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources. The convention was adopted in 1971 and came into force in 1975. In the UK, the initial emphasis was on selecting sites of importance to waterbirds, and consequently, many Ramsar Sites were also designated as Special Protection Areas (SPA) under the European Birds Directive (79/409/EEC). There are four Ramsar sites within or partially within the North East which are outlined in **Figure 4.1**.

Sites of Special Scientific Interest

Sites of special scientific interest (SSSIs) are protected by national legislation to conserve their wildlife or geology. 98.47% of sites in the North East are at favourable or unfavourable recovering status. The percentage of sites within each county that make up the North East, at each status is set out in the table below. Tyne and Wear has the highest percentage of sites (7.14%) in unfavourable declining status, however it also has the highest percentage of sites in favourable condition.

Table: Percentage of SSSIs within the North East within each status designation

	% of favourable or unfavourable recovering	Favourable	Unfavourable recovering	Unfavourable no change	Unfavourable declining	Destroyed
North East	98.47%	22.98%	75.98%	0.90%	0.62%	0.01%
County Durham	97.96%	12.81%	85.15%	0.99%	1.03%	0.03%
Northumberland	98.98%	30.97%	68.01%	0.79%	0.24%	0.00%
Tyne and Wear	92.28%	72.08%	20.20%	0.58%	7.14%	0.00%

National Nature Reserves

National Nature Reserves (NNRs) were established to protect some of the most important habitats, species and geology, and to provide 'outdoor laboratories' for research. The majority of NNRs offer opportunities to schools, specialist interest groups and the public to experience wildlife and to learn about nature conservation. There are 15 NNRs within the North East, concentrated in County Durham and Northumberland. These are illustrated in **Figure 4.1.**

Local Nature Reserves

Local Nature Reserves (LNRs) are places with wildlife or geological features that are of special interest locally. They offer people opportunities to study and experience nature. There are 84 LNRs within the North East.

Habitats and species

UK Biodiversity Action Plan (UKBAP) priority habitats cover a wide range of semi-natural habitat types, and were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). UKBAP was succeeded by the 'UK Post-2010 Biodiversity Framework' in July 2012. The UK list of priority habitats, however, remains an important reference source and has been used to help draw up statutory lists of priority habitats in England, as required under Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006.

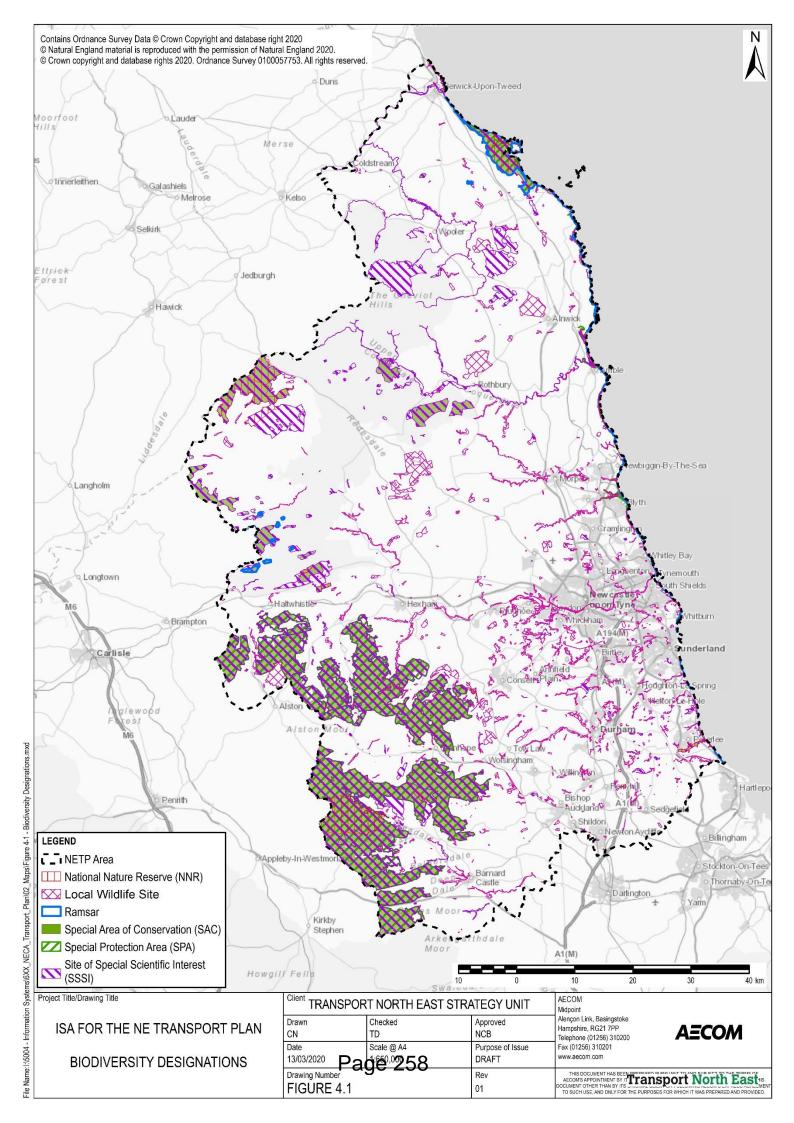
Local Biodiversity Action Plans (LBAPs) identify local priorities for biodiversity conservation and work to deliver agreed actions and targets for specific habitats and species. LBAPs are delivered through wide local partnerships that involve wildlife organisations, local authorities, businesses and other interested parties. The location of the BAP Priority Habitats in the North East are illustrated in **Figure 4.2**.

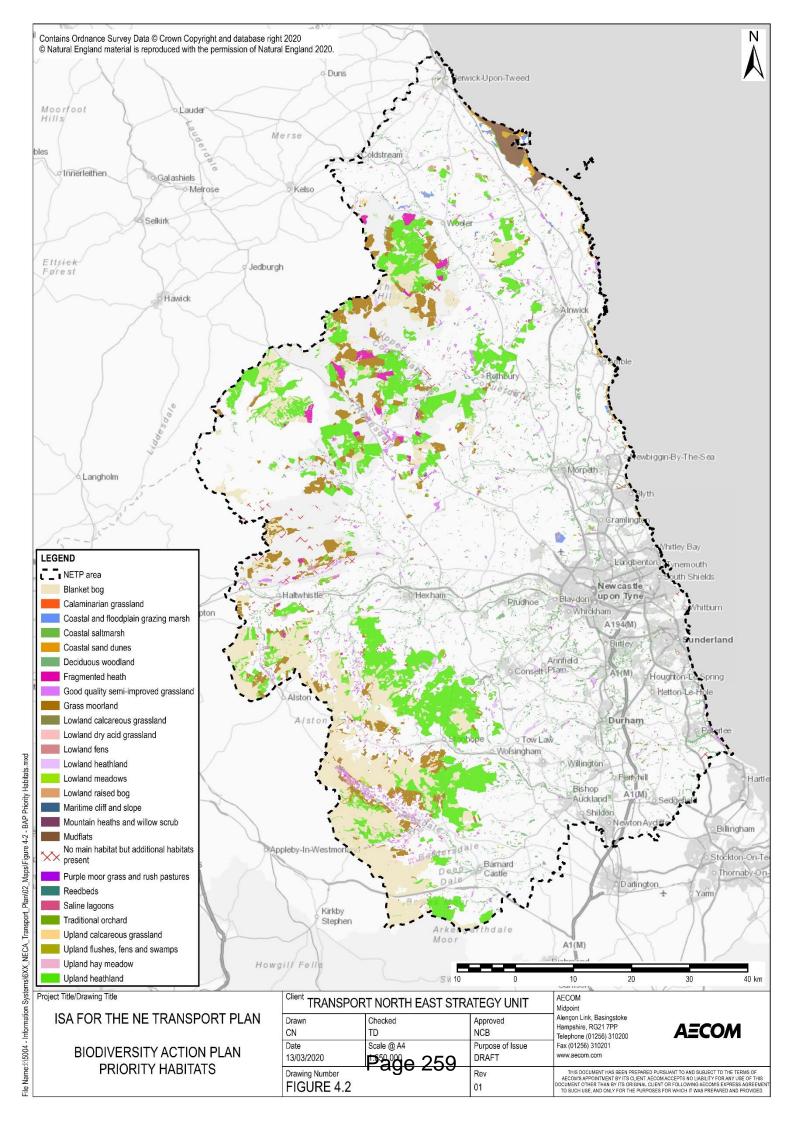
Ancient woodland

In England, ancient woodlands are defined as areas which have been continuously wooded since at least 1600 AD; and which display a high content of native species, typically of semi-natural or planted origin. ⁵² Ancient woodlands hold both very high biodiversity and cultural/historical value.

Ancient woodland is located throughout some of the North East as isolated stands. These are found in County Durham, Northumberland; and Gateshead.

⁵² Natural England/Forestry Commission (2014) [online] available at: https://www.gov.uk/ancient-woodland-and-veteran-trees-protection-surveys-licences [accessed 27/02/20]





Biodiversity: Summary of Future Baseline

Habitats and species will potentially face increasing pressures from future housing, employment and infrastructure delivery within the North East, with the potential for negative impacts on the wider ecological network. This may include a loss of habitats and impacts on biodiversity networks. The potential impacts on biodiversity from climate change are likely to include changes in habitat, changes in species distribution, changes in hydrology, changes in ecosystem functioning and a range of others.

Internationally and nationally designated sites are particularly sensitive to air quality issues and recreational pressures. In regards to air quality, exceeding critical values for air pollutants may result in changes to the chemical status of habitat substrate, accelerating or damaging plant growth, altering vegetation structure and composition and thereby affecting the quality and availability of nesting, feeding or roosting habitats. Additionally, the nature, scale, timing and duration of some human activities can result in the disturbance of birds (i.e. – the notifying features of the European protected sites within the North East) at a level that may substantially affect their behaviour, and consequently affect the long-term viability of their populations.

The NETP presents an opportunity to maximise benefits for biodiversity by including consideration of important habitats, species, undesignated sites, and connections between designated sites and undesignated sites at a localised scale, and at an early stage of planning for future enhancements to transport infrastructure.

Water and Soil Resources: Summary of Current Baseline

Surface and Groundwater

The North East falls within the Northumbria River Basin District (RBD) which covers an area of 9,029km².

The RBD is divided into four catchments: Northumberland, Tyne, Wear and Tees. The Tees is the longest river in the RBD, and the Tyne has the largest catchment area. Other major rivers include the Wear, Aln and Coquet rivers. The RBD has 170km of coastline (much of which is designated as SAC, SPA and Ramsar). 25km² of estuaries and 34 designated bathing waters, as well as many important marine species and habitats. The Northumberland, Tyne and Wear catchments all fall within the North East.

Northumberland

The Northumberland catchment extends southwards from Berwick-upon-Tweed down to the Blyth Valley, with the Cheviot Hills to the west and the North Sea to the east. It includes Holy Island and the Farne Islands, both internationally recognised for their native wildlife.

The Northumberland Rivers catchment contains two groundwater bodies. Of these, The Devonian and Lower Carboniferous groundwater body has been classified as being at good chemical and quantitative status. The Carboniferous Limestone and Coal Measures groundwater body has been classified as being at poor chemical status (due to impact on surface waters from discharges from abandoned mine workings) and good quantitative status.

There are 95 river water bodies and seven lakes in the catchment. 22 are artificial or heavily modified. 42% of rivers currently achieve good or better ecological status/potential. 41% of rivers assessed for biology are at good or better biological status, with 30% at poor biological status, and 3% at bad status.

Physical modifications are a key issue for the ecological value of the catchment, especially in relation to land drainage, flood protection, urbanisation and water storage and supply.

Tyne

The rivers North and South Tyne rise in the rural Cheviot and North Pennine hills respectively, and converge at Warden. From Warden the Tyne flows through Hexham and Corbridge and on towards the large Tyneside conurbation. The Northern Tyne area is mostly covered by the Northumberland

National Park. The catchment includes areas of recognised national importance for nature conservation such as upland bogs and river shingle sites.

Many of the rivers have a high conservation and ecological value, supporting salmon, sea and brown trout, as well as coarse fish. The Tyne is one of the best salmon rivers in England and populations of otters and pearl mussels are also recorded in the catchment.

The Tyne catchment contains two groundwater bodies. The Tyne Carboniferous Limestone groundwater body and the Tyne Carboniferous Limestone and Coal Measures groundwater body have both been classified as being at poor chemical but good quantitative status. The failure to meet good status is predominantly due to historic mining, both coal and metal. Kielder Water, to the northwest of the area, is one of Northern Europe's largest man-made lakes and supports major water abstractions.

There are 116 river water bodies and 19 lakes in the catchment. 49 are artificial or heavily modified. 50% of rivers (456 km or 45% of river length) currently achieve good or better ecological status/potential. 51% of rivers assessed for biology are at good or better biological status now, with 12% at poor biological status, and there are no rivers assessed for biology at bad status.

Physical modifications are a key issue in relation to the passage of fish, urbanisation and water storage and supply. Disused mines are also a key pressure within the Tyne catchment.

Wear

This catchment covers the River Wear, which runs from the Pennines in the east then flows west to the estuary through Sunderland, and also includes southern coastal streams. The fish populations of the River Wear and its tributaries are generally of a high quality, with a good distribution of salmon and trout, and coarse fish in the lower and middle reaches.

The Wear catchment contains two groundwater bodies. The Wear Magnesian Limestone groundwater body has been classified as being at poor chemical and quantitative status. The Wear Carboniferous limestone and Coal Measures groundwater body has been classified as being at poor chemical but good quantitative status. Pressures are having an impact on the quality of the principal aquifer in this catchment, namely the Magnesian Limestone. This aquifer is the sole supply of potable water for Hartlepool and it fails the specific test due to rising trends in sulphate.

There are 68 river water bodies and 16 lakes in the catchment. 32 are artificial or heavily modified. 15% of rivers (60 km or 10% of river length) currently achieve good or better ecological status/potential. 22% of rivers assessed for biology are at good or better biological status now, with 35% at poor biological status, and 10% at bad status.

Point source releases from sewage works and combined sewage outfalls are key reasons for failures in the Wear catchment. Physical modifications that impede fish passage and water storage and abstraction also play a key role in determining the status of rivers and lakes in this catchment.

Pressures on water resources

Urban transport and pollution pressures have been identified as a specific pressure in the Northumbria River Basin District. There are 34 river water bodies at risk or probably at risk from urban diffuse pollution. Pollution issues related to the urban environment and transport networks include:

- A range of pollutants which are present in run-off from roads including contaminated sediment, metals, and organic substances;
- Air emissions from vehicles which are then deposited to water or land (and in some cases can cause acidification);
- Pesticides used to control weeds on roads, pavements, railway tracks and other amenity areas such as parks and playing fields;
- · Run-off from air strips that may contain de-icers and pesticides to control weeds; and
- Dredging and maintenance of navigable waterways that can result in water quality issues from suspended solids and leaching of contaminants from the sediment.

Soil

Agricultural land

The Agricultural Land Classification (ALC) classifies land into size grades (plus 'non-agricultural land' and 'urban'), where Grades 1 to 3a are recognised as being the 'best and most versatile' land and Grades 3b to 5 of poorer quality. In this context, there is a need to avoid loss of higher quality 'best and most versatile' agricultural land.

A detailed classification has not been undertaken for the majority of the North East. As such, there is a need to rely on the national 'Provisional Agricultural Land Quality' dataset. The Provisional Agricultural Land Quality dataset shows that the majority of the western side of the North East is designated as Grade 5 land and non-agricultural land. The eastern side of Northumberland is predominantly covered by Grade 3, with pockets Grade 2 land located along the Scottish border, the east coast, and in the south. There are also small areas of land designated as urban. County Durham is predominantly covered by Grade 3 land with smaller pockets of Grade 2 land, and urban areas. The remaining councils within the Plan are covered predominantly by land classified as urban, but also with areas of Grade 3 outside of the major conurbations. Without the subset grading (3a or 3b) it is not possible to tell at this stage whether the Grade 3 agricultural land is considered to be 'best and most versatile'. It is also important to note that the national dataset is of very low resolution, and may not necessarily provide an accurate reflection of the agricultural land quality within the North East. Agricultural land classification in the North East is illustrated on **Figure 5.1**.

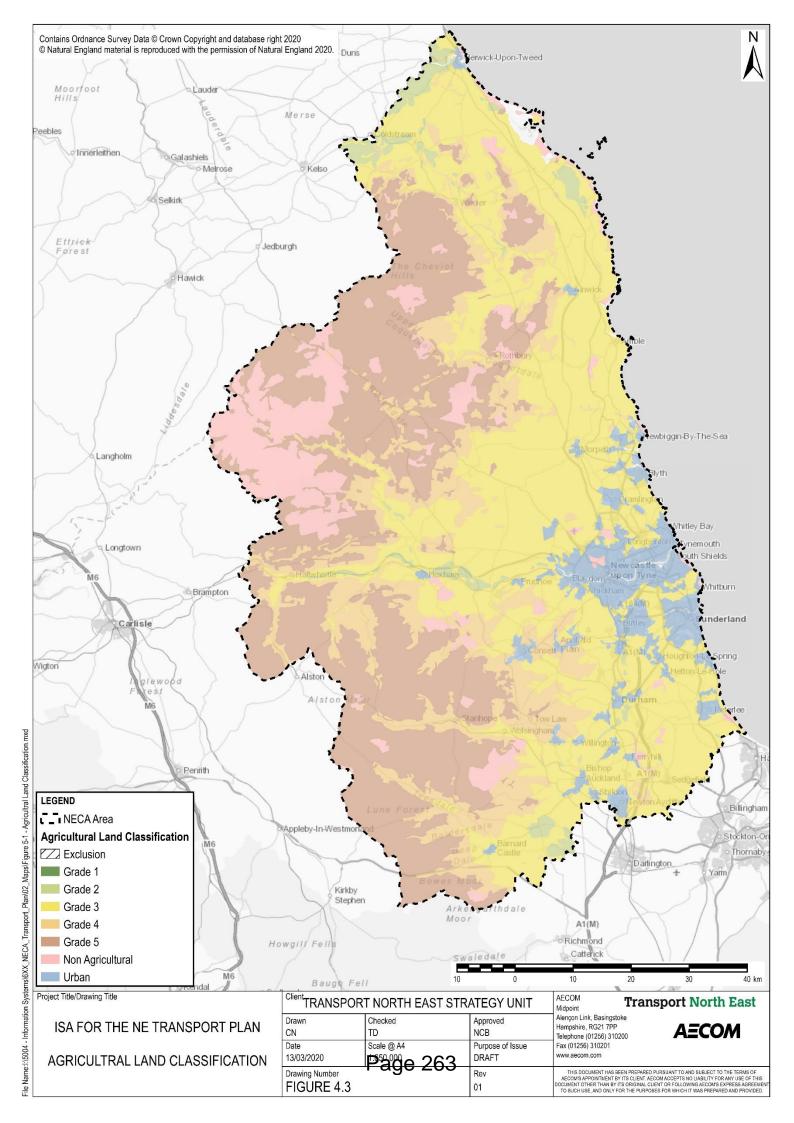
Contaminated Land

Contaminated land is used to describe land that is polluted by heavy metals, oils and tars, chemical substances, gases, asbestos or radioactive substances and it is land that could significantly harm people or protected species and cause pollution of surface waters or groundwater. There are a number of historical and active landfill sites throughout the North East with higher concentrations of contaminated land within the towns and cities in Tyne and Wear.

Water and Soil Resources: Summary of Future Baseline

Quality of surface waters is likely to improve slowly, in line with measures in the Northumbria River Basin Management Plan. However, population growth in most areas, development and climate change is likely to increase pressure on WFD objectives and water resources. Climate change could increase flooding which could lead to adverse effects on water quality from overflowing of storm water drains and leaching of contaminated soils into surface waters.

An increased number and severity of extreme rainfall events associated with climate change may lead to increased soil erosion. Contaminated areas will remain, however as development continues on previously developed land, contaminated areas will continue to be remediated. In addition legislation and pollution prevention measures should prevent new areas of land from becoming contaminated from new developments.



Historic Environment: Summary of Future Baseline

World Heritage Sites

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Sites are places, monuments or buildings which have been recognised as of "outstanding universal value" to humanity. There are two such World Heritage Sites within the North East: Frontiers of the Roman Empire: Hadrian's Wall⁵³, which extends across the North East from Wallsend to the west coast running parallel with the A69; and Durham Castle and Cathedral, which is located within Durham. The location of these sites are presented in **Figure 6.1**.

Frontiers of the Roman Empire- Hadrian's Wall World Heritage Site

The 'Roman Limes' represents the border line of the Roman Empire at its greatest extent in the 2nd century AD. It stretched over 5,000 km from the Atlantic coast of northern Britain, through Europe to the Black Sea, and from there to the Red Sea and across North Africa to the Atlantic coast. The remains of the Limes today consist of vestiges of built walls, ditches, forts, fortresses, watchtowers and civilian settlements. Certain elements of the line have been excavated, some reconstructed and a few destroyed. The 118-km-long Hadrian's Wall was built on the orders of the Emperor Hadrian c. AD 122 at the northernmost limits of the Roman province of Britannia. It is a striking example of the organization of a military zone and illustrates the defensive techniques and geopolitical strategies of ancient Rome. The Antonine Wall, a 60-km long fortification in Scotland was started by Emperor Antonius Pius in 142 AD as a defense against the "barbarians" of the north. It constitutes the northwestern-most portion of the Roman Limes.

A detailed description of the Outstanding Universal Value of the Hadrian's Wall WHS is presented at the following location:

https://whc.unesco.org/en/list/430/

Attributes are aspects of a World Heritage Site which are associated with, or express, its Outstanding Universal Value (OUV). The Attributes help to articulate that OUV and, within the decision-making process, they should assist the assessment of the impact of any proposed change to the site or in its immediate vicinity.

The key attributes of the Hadrian's Wall World Heritage Site are as follows:

- Hadrian's Wall is a frontier which was designed and constructed to protect the Roman Empire. It is a symbol of a common heritage.
- In its engineering and construction it illustrates the technological and organisational ability
 of the Roman Empire, and is a reflection of the way that resources were deployed by the
 Roman army.
- Hadrian's Wall displays the complexity and variety of the elements of the frontier system, their inter-relationships, and the relative completeness of the system as a whole.
- The frontier was occupied by the Romans for three centuries; its remains therefore display considerable evidence of repair, rebuilding, re-use, re-planning, and decay.
- The retrievable archaeological information that survives in the form of buried structures, artefacts, ecofacts, and data about the palaeo-environment - is still extensive and is a significant attribute of the OUV.
- The setting of the WHS offers the opportunity to understand and appreciate Roman military planning and operations.
- The settlements associated with the frontier illustrate the impact and attraction of the Roman economy.

⁵³ UNESCO (2018) Hadiran's Wall Management Plan [online] available at: http://hadrianswallcountry.co.uk/hadrians-wall-management-plan [accessed 27/02/20]

- The course and extent of the frontier zone, its massive size, and its infrastructure, all influenced the subsequent development of the landscape, both in open country and in urban areas.
- Extensive stretches of the frontier within urban areas, and some other discrete associated
 elements, are not yet designated as Scheduled Monuments; they are therefore not
 included in the WHS but they represent an associated attribute of considerable
 significance which is worthy of protection.

UNESCO has identified the impact of visitors and tourism as a threat to the conservation state of Hadrian's Wall⁵⁴.

Durham Castle and Cathedral World Heritage Site

Durham Cathedral was built in the late 11th and early 12th centuries to house the relics of St Cuthbert (evangelizer of Northumbria) and the Venerable Bede. It attests to the importance of the early Benedictine monastic community and is the largest and finest example of Norman architecture in England. The innovative audacity of its vaulting foreshadowed Gothic architecture. Behind the cathedral stands the castle, an ancient Norman fortress which was the residence of the prince-bishops of Durham

The key elements of the World Heritage Site's Oustanding Universal Value are as follows:

- Significance 1: The Site's exceptional architecture demonstrating architectural innovation
- Significance 2: The visual drama of the Cathedral and Castle on the Peninsula and the associations with notions of romantic beauty.
- Significance 3: The physical expression of the spiritual and secular powers of the medieval Bishops Palatine that the defended complex provides.
- Significance 4: The relics and material culture of the three Saints, (Cuthbert, Bede, and Oswald) buried at the Site
- Significance 5. The continuity of use and ownership over the past 1000 Years as a place of religious worship, learning and residence
- Significance 6: The Site's role as a political statement of Norman power Imposed upon a subjugate nation, as one of the country's most powerful symbols of the Norman conquest of Britain
- Significance 7: The importance of the Site's archaeological remains, which are directly related to its history and continuity of use over the past 1000 years.
- Significance 8: The Cultural and Religious Traditions and Historical Memories Associated with the Relics of St Cuthbert and the Venerable Bede, and with the Continuity of Use and Ownership over the Past Millennium.

A detailed description of the Outstanding Universal Value of the Durham Castle and Cathedral World Heritage Site is presented at the following location:

https://whc.unesco.org/en/list/370/

Threats to Durham Castle and Cathedral include⁵⁵:

- The expansion of development onto existing historic open spaces or landscape zones impacting on the World Heritage Site or its approaches and the underestimation the heritage significance of the landscape areas fringing the city core;
- New buildings of sufficient mass or height to impinge on views to and from or including the site;
- Major skyline developments or major developments impinging on the backdrop to the World Heritage Site;

UNECSO (2020) Reporting and modelling [online] available at: http://whc.unesco.org/en/118/ [accessed 27/02/20]
 Durham County Council (2017) Durham Castle and Cathedral World Heritage Site Management Plan 2017-2023 [online] available at: https://www.durhamworldheritagesite.com/files/Durham%20WHS%20Management%20Plan%202017.pdf
 [accessed 27/02/20]

- Quality of development impacting on the integrity of views from, and of the site. Cumulative
 minor changes in historic areas close to World Heritage Site degrading the quality of
 approaches and townscape relationship to the World Heritage Site;
- Unmanaged tree areas being drawn into use as landscape mitigation against harm to the World Heritage Site by development without ensuring adequate analysis and continuing care; and
- New developments can impact on the dark setting of the World Heritage Site.

Conservation areas

Conservation areas are designated because of their special architectural and historic interest. ⁵⁶ Conservation area appraisals are a tool to demonstrate the area's special interest, explaining the reasons for designation and providing a greater understanding and articulation of its character - mentioned within the 'Conservation Area Designation, Appraisal and Management' advice note by Historic England. Ideally, appraisals should be regularly reviewed as part of the management of the conservation area and can be developed into a management plan. Distribution of Conservation Areas within the North East are as follows:

There are 72 conservation areas in Tyne and Wear, distributed as follows:

Gateshead: 22Newcastle: 12

North Tyneside: 17South Tyneside: 11Sunderland: 14

There are 93 conservation areas in Country Durham, distributed as follows:

Chester-le-Street: 2Derwentside: 16City of Durham: 14

Easington: 4Sedgefield: 15Teesdale: 22Wear Valley: 20

There are 70 conservation areas in Northumberland.

Listed buildings

A listed building is one which has been placed on the Statutory List of Buildings of Special Architectural or Historic Interest.

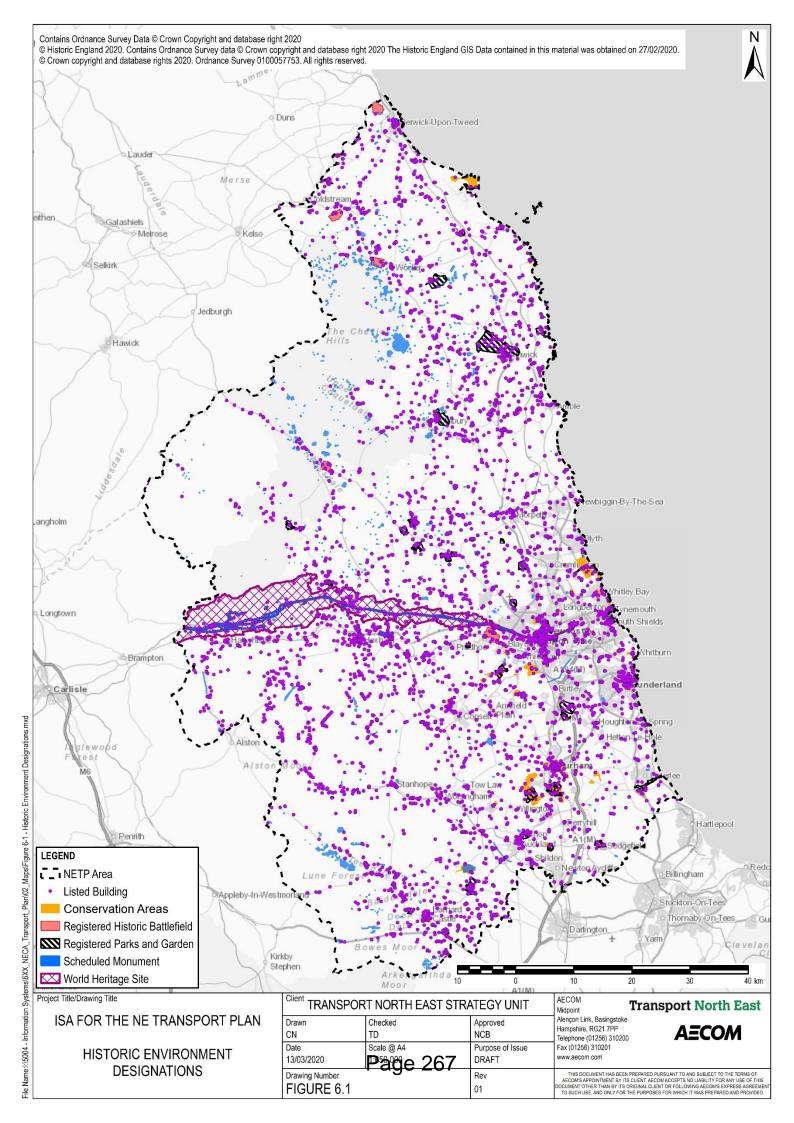
There are three categories of listed buildings:

Prepared for: Transport North East Strategy Unit

- Grade I buildings are of exceptional interest, only 2.5% of listed buildings are Grade I.
- Grade II* buildings are particularly important buildings of more than special interest; 5.5% of listed buildings are Grade II*.
- Grade II buildings are of special interest; 92% of all listed buildings are in this class.

Page 266

⁵⁶ Historic England (2019): 'Conservation Areas', [online] available at: https://historicengland.org.uk/listing/what-is-designation/local/conservation-areas/> [accessed 20/09/19]



There are a total of 10,539 of listed buildings within the North East. This number is split between the Local Authority areas as follows:

County Durham: 3,108North Tyneside: 225

Gateshead: 248

South Tyneside: 195Northumberland: 5,614Newcastle upon Tyne: 774

Sunderland: 375

Scheduled monuments

Scheduling is the designation used for sites of an archaeological character of national importance Current legislation is provided by the Ancient Monuments and Archaeological Areas Act 1979.

The National Heritage List for England identifies the following number of entries for scheduled monuments for the authorities in the North East region:

• County Durham: 233

North Tyneside: 8

Gateshead: 16South Tyneside: 5

Northumberland: 975

Newcastle upon Tyne: 42

Sunderland: 10

Registered Parks and Gardens

Under Section 8C of the Historic Buildings and Ancient Monuments Act 1953 (inserted by section 33 of, and paragraph 10 of Section 4, to the National Heritage Act 1983) Historic England has compiled a Register of Parks and Gardens of special historic interest in England.

The table below lists the Registered Historic Parks and Gardens which are within the North East.

Table: Registered Historic Parks and Gardens in the North East

Registered Historic Parks and Gardens

- Tillmouth Park Grade II*
- Althorp Grade II*
- Lindisfarne Castle Grade II
- The Rookery Grade II
- Belford Hall Grade II
- Chillingham Grade II
- Howick Hall Grade II
- Alnwick Castle Grade II
- Cragside Grade I
- Hesleyside Grade II
- Wallington Grade II*

Prepared for: Transport North East Strategy Unit

Kirkharle Hall Grade II

- Newcastle General Cemetery Grade II*
- Jesmond Dene, Armstrong and Heaton Parks Grade II
- North and South Marine Parks and Bents Park Grade II
- Saltwell Park Grade II
- Gibside Grade I
- Roker Park Grade II
- Mowbray Park Grade II
- Lambton Castle Grade II
- Lumley Castle Grade II
- Old Durham Gardens Grade II

- Capheaton Grade II
- Belsay Hall Grade I
- St Mary's Hospital, Stannington, Grade

 II
- Blagdon Grade II
- Seaton Delaval
- Woolsington Park Grade II
- Nunwick Grade II
- St Andrew's Cemetery Grade II
- The Hexham Parks Grade II
- Bradley Park Grade II
- · St John's Cemetery Grade II
- Westgate Hill Cemetery Grade II
- Leazes Park Grade II
- Lartington Hall Grade II

- Croxdale Hall Grade II*
- Burn Hall Grade II
- Brancepeth Castle Grade II
- Pasmore Pavilion Grade II
- The Castle, Castle Eden, Grade II
- Ceddesfeld Hall Gardens Grade II
- Hardwick Park Grade II*
- Windlestone Hall Grade II
- Auckland Castle Park Grade II*
- Ramshaw Hall Garden Grade II
- Raby Castle Grade II*
- Rokeby Park Grade II*
- Bowes Museum Grade II

Registered Battlefields

The Historic England Register of Historic Battlefields identifies 47 important English battlefields. Its purpose is to offer them protection and to promote a better understanding of their significance. These maps are intended to be the starting point for battlefield conservation and interpretation by identifying the most visually sensitive areas. The following six Registered Battlefields are within the North East:

- Battle of Halidon Hill 1333;
- Battle of Flodden 1513:
- Battle of Homildon Hill 1402;
- Battle of Otterburn 1388;
- Battle of Newburn Ford 1640; and
- Battle of Neville's Cross 1346.

Heritage at Risk

Historic England has a programme known as the Heritage at Risk Programme, this Programme collecting information on the condition of built heritage in the United Kingdom to determine of the sites most at risk and most in need of safeguarding for the future.

Since 2008, as part of this Programme, Historic England has released an annual Heritage at Risk Register. The Heritage at Risk Register highlights the Grade I and Grade II* listed buildings, and scheduled monuments, conservation areas, wreck sites and registered parks and gardens in England deemed to be 'at risk'. It is worth noting that Grade II buildings are not included on the list.

The North East has 141 listed buildings currently listed on the Heritage at Risk Register (2019), these are split between council areas as follows:

- County Durham: 97
- Gateshead: 8
- Newcastle upon Tyne: 16
- North Tyneside: 1
- South Tyneside: 6
- Sunderland: 13

Historic Environment: Summary of Future Baseline

New housing, employment and infrastructure provision within the North East has the potential to impact on the fabric and setting of cultural heritage assets; for example through inappropriate design and layout. It should be noted, however, that existing historic environment designations offer a degree of protection to cultural heritage assets and their settings, and there are a range of existing initiatives to enhance the historic environment of the region.

Increasing traffic levels associated with an increase in population has the potential to negatively impact heritage assets. In urban areas this can be from vibration affecting the structural integrity of vulnerable buildings, emissions, and from the provision of street furniture affecting the setting of assets.

New development need not however be harmful to the significance of a heritage asset, and in the context of the NETP there may be opportunity for new transport infrastructure to enhance the historic settings of localities and better reveal assets' cultural heritage significance.

The number of heritage assets at risk is likely to continue to decrease in line with national trends; however funding sources will continue to be a constraint on this.

Landscape: Summary of Current Baseline

Northumberland National Park

National Parks are designated by Natural England under the provisions of The National Parks and Access to the Countryside Act, 1949, and have two statutory purposes:

- To conserve and enhance their natural beauty, wildlife and cultural heritage; and
- To promote opportunities for the public understanding and enjoyment of these special qualities.

National Park Authorities also have a duty, in taking forward the two purposes to:

 Seek to foster the economic and social well-being of local communities within the National Park.

Northumberland National Park was designated in 1956 and has a current population of approximately 2,000 people within its 1,030km² boundaries, which extend from Hadrian's Wall in the south to the Cheviots in the north (**Figure 7.1**). The National Park contains a number of cultural heritage assets, including Hadrian's Wall, remains of ancient settlements, prehistoric and medieval landscapes and burial monuments.

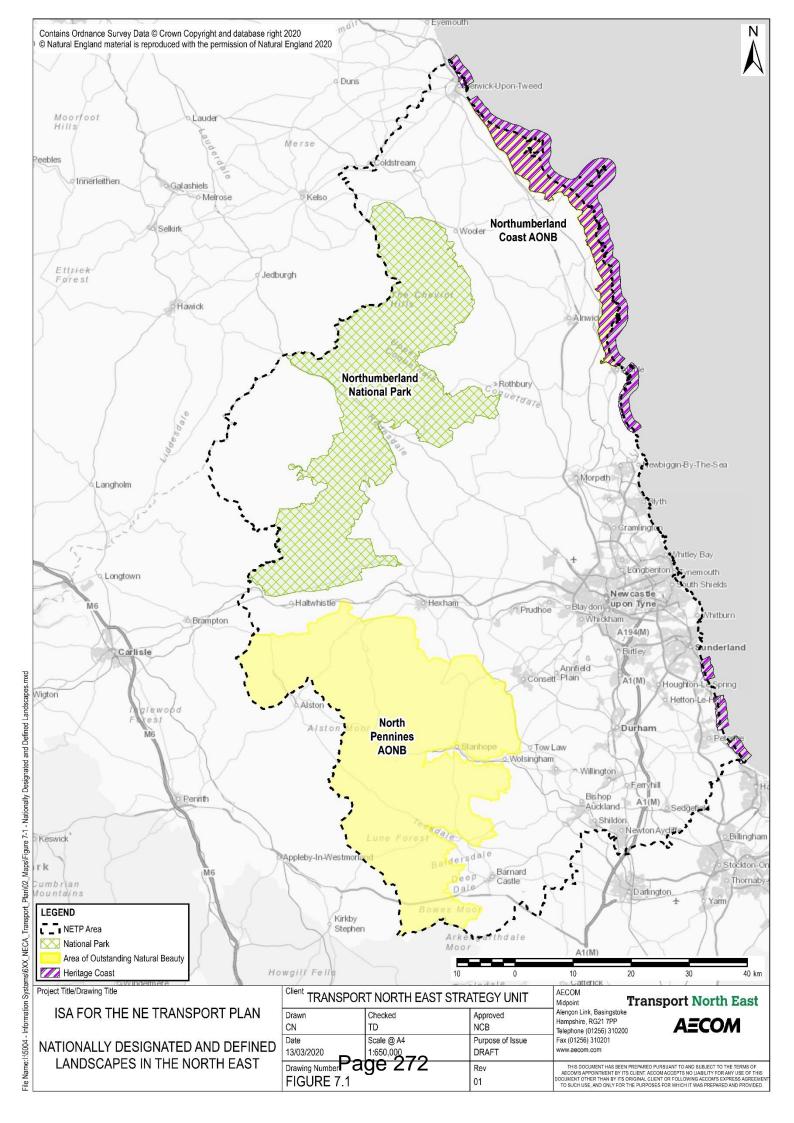
Each National Park in England, Wales and Scotland has an aim and purpose to promote understanding and enjoyment of the 'special qualities' of their area. The defined special qualities of the Northumberland National Park are as follows:

- Distinctive Landscape Character
- · Rich Cultural Heritage
- Landscape Rich in Biodiversity and Geology
- True Sense of Tranquillity

More specifically, the special qualities of the National Park comprise the following elements:

- The landscape is ancient and includes remains from the Stone Age, 7,000 years ago, and medieval buildings which illustrate this border country's history.
- The park is home to a World Heritage site Hadrian's Wall it's a stunning example of the dramatic legacy the Roman Empire left in the area.
- The community in the park has deep roots and the cultural identity of the local people is reflected in their speech, traditions, folklore, knowledge and skills.

- The Cheviot Hills are home to ancient hill forts and pure rivers and a landscape that even today seems barely touched by human intrusion.
- People come here to be inspired and to seek spiritual refreshment those tranquil views and far horizons are good for the soul.
- The valleys of the North Tyne and Redesdale were once home of the Border Reivers the wild landscape now supports habitats suitable for rare species such as red squirrel.
- It's an area rich in biodiversity Northumberland National Park boasts a wide range of other rare or important species and habitats, for example curlew.
- The park offers a diverse landscape from upland rivers and burns to ancient woodlands, upland hay meadows to blanket bogs and heather moorland.
- Extensive areas of the national park have been designated for their international importance for nature conservation such as Special Areas of Conservation and Ramsar sites.
- It's a geologically important landscape, too there are five Sites of Special Scientific Interest designated for their geological importance, from the Cheviot volcanic and glacial features in the north to the Whin Sill intrusion and escarpments in the south.



Areas of Outstanding Natural Beauty

Areas of Outstanding Natural Beauty (AONBs) are designated by the Government for the purpose of ensuring that the special qualities of the finest landscapes in England, Wales and Northern Ireland are conserved and enhanced. The primary purpose of the AONB designation is to conserve and enhance the natural beauty of the area, as confirmed by Section 82 of the Countryside and Right of Way Act 2000 (CRoW Act). There are two AONBs designated within the North East which are outlined below and are illustrated in **Figure 7.1**.

Northumberland Coast AONB

The Northumberland Coast was designated as an AONB in 1958 under the national parks and access to countryside act 1949. It comprises a narrow coastal strip extending between Warwick in the south and Berwick-upon-Tweed in the north.

The following list of special qualities define the unique 'natural beauty' for which the Northumberland Coast AONB is designated as a nationally important protected landscape:

- Dramatic natural coastline of rocky headlands and cliffs contrasting with extensive sweeping sandy beaches and dynamic sand dune systems;
- Dramatic coastal and riverside setting of iconic historic and cultural landmark features which
 provide localised vertical emphasis within a predominantly horizontal landscape and
 seascape;
- Remote historic, cultural and spiritual qualities and ecclesiastical associations of the Holy Island of Lindisfarne;
- Distinctive rocky Farne Islands archipelago feature in many coastal views;
- Distinctive traditional coastal fishing villages clustered around small harbours;
- Views inland to the rounded sandstone hills and Cheviot Hills provide a dramatic and dynamic backdrop to the coast;
- Feeling of exposure and tranquillity on the flat, low lying open coastal plain and windswept coast, with sparse tree cover, huge skies and wide seascape views; and
- A number of nationally important geological sites occur within the boundary, including Loughoughton Quarry SSSI, Howick to Seaton Point SSSI, Bamburgh Coast and Hills SSSI and the Castlepoint to Cullernose Point SSSI.

North Pennines AONB

The designation of the North Pennines AONB was confirmed in 1988 and at 1983km², it is the second largest of the 40 AONBs in England and Wales. One of the most remote and unspoilt places in England, it lies between the National Parks of the Lake District, the Yorkshire Dales and Northumberland. The AONB crosses the boundaries of two English Regions, being in both the North East and the North West. It lies mostly within the political boundaries of Durham, Northumberland and Cumbria County Councils, with 2.6km² in North Yorkshire around Tan Hill. The North Pennines AONB is Britain's first European Geopark and a founding member of the Global Geoparks Network.

The North Pennines AONB comprises a landscape of open heather moors and peatlands, dales and hay meadows, upland rivers, wooded areas, rural communities, mining and industrial heritage and distinctive flora and fauna.

The defined special qualities of the North Pennines AONB⁵⁷ are linked to the following:

- Has 40% of the UK's upland hay meadows;
- Contains 30% of England's upland heathland and 27% of its blanket bog;
- Is home to 80% of England's black grouse;
- Is a place to see short-eared owl, ring ouzel, snipe and redshank;

⁵⁷ North Pennines AONB (2020) Special qualities [online] available at: https://www.northpennines.org.uk/whats-special/ [accessed 27/02/20]

- Has important habitats 36% of the AONB is designated as Sites of Special Scientific Interest;
- Has red squirrels, otters and rare arctic alpine plants;
- Is the upland England's hotspot for breeding wading birds;
- Enjoys peace, tranquillity and fabulous night skies; and
- Boasts England's biggest waterfall High Force in Upper Teesdale.

National Trails

There are two National Trails within the North East. These are the Pennine Way, which runs for 270 miles from Edale to the Border Inn; and the Kirk Yetholm and Hadrian's Wall Path, which runs for 86 miles from Segedenum Roman Fort, Wallsend and The Bank's Promenade, Bownes-on-Solway.

Durham Heritage Coast

Heritage Coasts were established to conserve the best stretches of undeveloped coast in England. The national policy framework and objectives for heritage coasts were developed by the Countryside Commission, a predecessor of Natural England, and ratified by government. Heritage coasts are 'defined' rather than designated, so there is not a statutory designation process like that associated with national parks and AONBs.

The Durham Heritage Coast is located within the North East, covering the part of the coast from Sunderland to Hartlepool. The Heritage Coast is a coastal landscape of magnesian limestone grasslands, cliffs, pebble and sandy beaches stretching between the two main conurbations of Tyne and Wear and Teesside.

Until the late 1990s the area was one of the most heavily polluted coastlines in Britain, the legacy of over a hundred years of dumping colliery waste from its six coal mines along the beaches, and of quarrying and subsequent landfill throughout the 20th Century. Wildlife, habitats and the landscape suffered heavily, discouraging visitors and leaving the local communities with little sense of pride. Parts of the coast became derelict and suffered from vandalism and misuse, excluded from mainstream use and appreciation.

A partnership of fourteen organisations came together between 1997-2002 to regenerate the coast of County Durham. The Turning The Tide Partnership successfully regenerated and cleaned up the coastal strip through a £10 million programme of environmental improvements. Following this the Heritage Coast Partnership has worked for over ten years to provide integrated management and continuing investment in gateway sites, habitat and access amelioration, interpretation, awareness raising and engagement. In recognition of the considerable improvements in the quality of the coastal landscape and the restored magnesian limestone grasslands, dunes, cliffs and stacks, the area was defined as a Heritage Coast in March 2001.

Areas of Tranquillity

Paragraph 180 of the NPPF notes that planning policies and decisions should aim to: "identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason."

Northumbria University, on behalf of CPRE, developed methodology for mapping areas of tranquillity⁵⁸. While urban centres within the North East have low levels of tranquillity, many of the rural areas - particularly those with landscape areas which are protected nationally such as National Parks and AONBs - have high levels of tranquillity. It should be noted that such protected areas will continue to be offered protection through other designations. However, the maps show that major trunk roads can have significant effects for tranquillity in rural areas and therefore the affect which this transport plan has on tranquillity of rural areas should be considered further as part of the SEA process.

⁵⁸ The countryside charity (2020) CPRE interactive tranquillity map [online] available at: https://www.cpre.org.uk/resources/tranquility-map-england/ [accessed 27/02/20] Page 274

National Character Areas

National Character Areas (NCAs) are landscape areas which share similar characteristics, following natural lines in the landscape rather than administrative boundaries. Developed by Natural England, NCA profiles describe the natural and cultural features that shape each of these landscapes, providing a broad context to their character⁵⁹. There is a total of 159 NCAs in England, 14 of which are in the North East. These are described below and outlined in Figure 7.2.

North Northumberland Coastal Plain

The North Northumberland Coastal Plain is a narrow, windswept strip that runs from the Anglo-Scottish border south to the mouth of the River Coquet, bounded by the sea to the east and the Northumberland Sandstone Hills to the west.

The gently undulating inland plain is dominated by arable farming, with large, regular fields bounded by gappy hedgerows and in some places grey sandstone walls, with some pasture for beef cattle and sheep. Woodland cover is sparse and predominantly confined to the river valleys that meander across the coastal plain and the estate woodlands around Howick.

The dramatic coastline is exceptionally varied, with rocky headlands and cliffs contrasting with long, sweeping sandy beaches backed by dunes, and extensive intertidal mudflats and salt marsh around Lindisfarne. The nationally important Whin Sill outcrops both inland and at the coast, supporting rare Whin grassland, and forming the distinctive rocky Farne Islands offshore.

Northumberland Sandstones Hills

The Northumberland Sandstone Hills curve across central Northumberland in a series of distinctive flat-topped ridges which provide panoramic views of the Cheviots and the coast.

The ridgetops and upper slopes are covered with heather and grass moorland broken by large geometric blocks of conifer. Below this is pasture with some arable cultivation on the lower and dip slopes, broadleaved woodland on scarp slopes and along watercourses and a few notable parklands.

There are relatively few major roads but two of the three principal crossborder routes pass through this NCA with the A1 skirting around the eastern edge and the A68 cutting through to the south. Other key transport routes include the A696 and A697 linking the rural border communities to Tyneside and the A1. These transport links play an important role in the haulage of timber from this and adjacent NCAs to processing destinations and provide access for military vehicle convoys to the Otterburn Military Training Area.

Cheviot Fringe

The Cheviot Fringe NCA is a tranquil, undulating, lowland landscape, framed by the Cheviots NCA to the west and the Northumberland Sandstone Hills NCA to the east. The western edge falls within the Northumberland National Park and encompasses the edge of the Cheviot Hills. The importance of glacial processes in shaping this landscape is shown by the extensive array of glacial lake and fan deposits, sinuous ridges, eskers, kames and kettle holes. Weathering of the underlying bedrock combined with the widespread blanket of glacial and alluvial deposits have resulted in fertile soils that support the agriculture which dominates this area, and the river valleys provide much of the North East region's sand and gravel resources.

The vales to the south are a patchwork of arable farmland, pasture and meadows with the regular field pattern still strong, delineated by hedgerows punctuated with trees. To the north, arable cultivation dominates and the fields are flatter and larger with fewer hedgerows. Conifer blocks and shelterbelts are prominent in the landscape with broadleaved woodland predominantly along watercourses.

Cheviots

The distinctive, smooth, rounded hills of the Cheviots NCA are part of the remote upland chain of the Northumberland moors which form the northern end of the Northumberland National Park. They rise

⁵⁹ Natural England (2020) National Character Areas [online] available at: http://publications.naturalengland.org.uk/category/587130 [accessed 27/02/20] Page 275

steeply above the lowland belt of the Cheviot Fringe NCA to the north and east and the Border Moors and Forests NCA to the south. To the west, the rounded hills cascade into southern Scotland but the NCA is bounded by the Scottish border that follows a high natural ridgeline.

The distinct igneous geology has formed a sinuous cluster of rounded hills with tors on some hill tops, rocky outcrops and scree slopes on the northern flanks, and many other glacial and post-glacial features.

The wild, open upland landscape is dominated by rolling moorlands; there are extensive mosaics of heath, blanket bog and grassland, managed for sheep and cattle rearing and, grouse moors. Areas in the southern end of the NCA are also in use for military training. Large conifer plantations occur on some of the upper slopes, interrupting the smooth lines of the landscape.

Border Moors and Forests

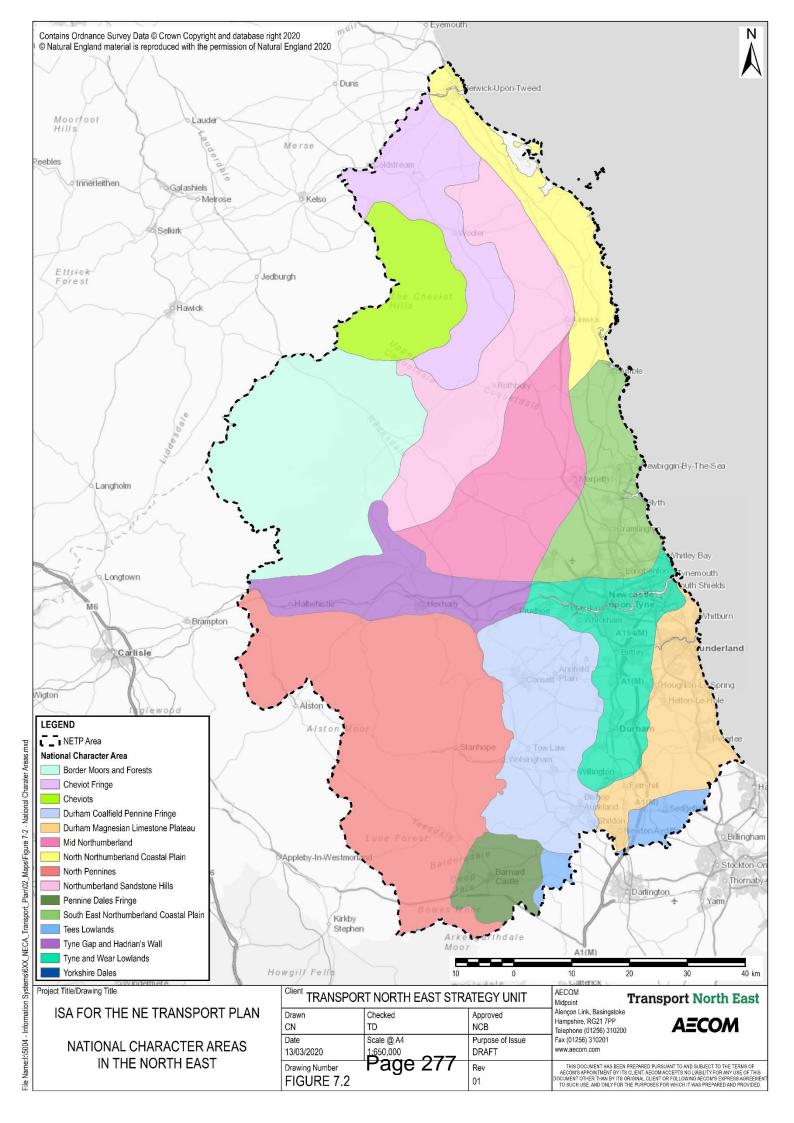
The Border Moors and Forests NCA consists of an extensive, sparsely populated upland plateau, with long-distance views and a strong sense of remoteness and tranquillity. The rivers North Tyne and Rede form wide valleys through the uplands, while the rivers Lyne and Irthing flow south-west to the Solway Firth. The underlying geology consists of Carboniferous deposits which have weathered differentially to form craggy outcrops, with subsequent glacial and fluvial deposition. The high altitude and climatic conditions led to the build-up of peat deposits and the formation of a large expanse of upland mire habitats, much of which is internationally designated as Border Mires, Kielder–Butterburn Special Area of Conservation. Kielder Water, a large, winding reservoir at the head of the North Tyne Valley which also forms a prominent feature in the landscape. The uplands are drained by small rivers in enclosed valleys, with the larger valleys sheltering upland hay meadows, scattered farmsteads and copses of broadleaved woodland. Much of the south-eastern area lies within Northumberland National Park. Military training areas also occupy large tracts of land.

Owing to the remote upland nature of the area, there are very few major transport links. The A68, which follows the Rede Valley, is the only principal route passing through the area, linking the Tyne Valley to the south with the Scottish Borders to the north.

North Pennines

The North Pennines NCA, at the northern end of the Pennine ridge, has a distinct identity, with its remote upland moorlands divided by quiet dales. It is characterised by a sense of remoteness, with few settlements, slow change and cultural continuity. It comprises some of the highest and most exposed moorland summits in England, with several major rivers, including the South Tyne, Wear and Tees, draining out to the north,east and south-east. There are dramatic and panoramic views both across the moorlands and outwards, especially towards the west. The area's natural beauty is reflected in the fact that 88% of it has been designated as the North Pennines Area of Outstanding Natural Beauty (AONB).

Transport routes are limited, due the topography, with the main roads following the valley floors. However, much of the area (61%) is open access land, and there are over 2,000 km of public rights of way, including three national trails (the Pennine Way, the Pennine Bridleway and a small stretch of the Hadrian's Wall Path). These, and the quiet roads, make the area a popular destination for walkers and, increasingly, for cyclists, with the popular Coast 2 Coast cycle route crossing the area.



Tyne Gap and Hadrian's Wall

This narrow, distinctive corridor centred on the River Tyne separates the uplands of the North Pennines NCA from the Border Moors and Forests NCA. Westwards are views of pastoral landscapes of the Solway Basin and Eden Valley NCAs and eastwards a more urban character prevails with views of the conurbation of Newcastle in the Tyne and Wear Lowlands NCA.

The Tyne valley is underlain by sedimentary Carboniferous rocks comprising a repetitive succession of limestones, sandstones, shales and intrusion of horizontal, igneous rock dolerite. Also, the prominent, intruded igneous Whin Sill formation forms a dramatic escarpment on which Hadrian's Wall is built. A mosaic of arable and pasture land, conifer plantations and well-wooded valley sides occur, along with the fertile lowland corridor of the river flood plain. Here, flat, arable fields contrast with the larger-scale upper slopes of valleys. In the west, cattle and sheep graze large areas of rough pasture, divided by walls and fences, merging to mixed and arable land in the east. A well-wooded mosaic of deciduous, mixed and coniferous woodland provides habitat for priority species – red squirrel and woodland birds. Broadleaved woodland on steeper slopes lines the rivers.

Mid Northumberland

Mid Northumberland is an intermediate plateau of gently undulating farmland which forms a transitional area between the Northumberland Sandstone Hills to the west and the low-lying coastal plain to the east. A series of ridges and enclosed river valleys in the northern part of the area open out into a broader, flatter landscape in the south. Hadrian's Wall World Heritage Site forms the southern border to the NCA.

The area is dissected by several small rivers which flow eastwards to the sea. The River Coquet flows down from the Cheviots, while the rivers Font, Wansbeck and Blyth and their tributaries wind down from the sandstone hills and upland pastures through wooded valleys and lowland arable areas. Within this predominantly farmed landscape there are many small woodlands and shelterbelts, and a few areas of open water, relatively infrequent within Northumberland.

The A68 and A696 transport corridors reflect the general west-to-east connectivity and the A1 and A697 create a strong north–south link.

South East Northumberland Coastal Plain

The South East Northumberland Coastal Plain is a flat, low-lying strip along the coast of the North Sea, extending from north Tyneside in the south to Amble and the Coquet Estuary in the north. It is largely urbanised in the south and more rural to the north, with large fields, restored and active open cast coal mines and a coast of rocky headlands and wide, sandy bays. Rural areas support mixed farming, with fields divided by low, often gappy hedgerows and few trees. The underlying geology has had a significant effect on the character of the area.

The coast supports a wide diversity of habitats including sand dunes, maritime cliffs and slopes, coastal and flood plain grazing marsh and mudflats. The area supports a diverse range of marine species and ecosystems as a consequence of its geological diversity and the natural variation in the sediment loading of the water. The rivers Blyth, Wansbeck, Coquet, Pont and Seaton Burn drain through the coastal plain from the uplands to the west into the North Sea to the east, often passing through incised valleys with fragments of ancient woodland. They support rich wildlife, including white-clawed crayfish, otter, water vole and salmonids, and are important for recreation (walking, fishing and wildlife watching), water abstraction and sense of place.

Tyne and Wear Lowlands

Tyne and Wear Lowlands NCA is an area of gently undulating or rolling land, incised by the valleys of the major rivers and their tributaries. It is densely populated and heavily influenced by urban settlement, industry and infrastructure. Between settlements there are wide stretches of agricultural land. The undulating land and broad valleys of the Tyne and Wear Lowlands are underlain almost entirely by Coal Measures rocks of Upper Carboniferous age. Mineral extraction has played a considerable role in the area and the legacy of coal mining remains evident in the landscape, although much restoration has occurred in recent years. Spoil heaps have been restored to pastures, mixed/coniferous plantations, amenity ponds and lakes (former open cast mines) and accessible

green spaces such as country parks, and new networks of footpaths and cycle routes have been created along former wagonways.

Newcastle upon Tyne and the surrounding settlements cover a large area in the north of the NCA. Newcastle lies on the site of the Pons Aelius, a Roman fort on Hadrian's Wall, at a strategic crossing point of the River Tyne. Hadrian's Wall, which extends north-west from this NCA, is a World Heritage Site and the Hadrian's Wall Path National Trail provides recreational opportunities for visitors and local people.

Durham Magnesian Limestone Plateau

The Durham Magnesian Limestone Plateau is an open, agricultural landscape with sharply defined boundaries in the form of a steep limestone escarpment to the west and a dramatic coast of limestone cliffs, headlands and bays to the east. The River Wear cuts across the north of the area, flowing into the sea at Sunderland, and the River Skerne drains into the Tees Lowlands to the south. Rural land cover consists of arable land and grazing pasture, with small, isolated areas of wildlife-rich habitat such as Magnesian Limestone grassland and ancient woodland in the narrow valleys (or denes) running down to the coast. The area has been strongly shaped by its industry, with coal mining and quarrying in particular leaving a very clear mark on local landscapes and identity. Settlements range from larger urban areas such as Sunderland to the north and ex-mining towns with their distinctive terraces to the south and east, to scattered traditional stone villages built around village greens on the plateau and 'New Towns' such as Peterlee and Newton Aycliffe.

Transport routes such as the A19 and the coastal railway form prominent features in the landscape and provide links to the north and south, but also detract from tranquillity and create physical and psychological barriers to public access.

Durham Coalfield Pennine Fringe

The Durham Coalfield Pennine Fringe NCA is a transitional landscape between the North Pennines NCA to the west and the Tyne and Wear Lowlands NCA to the east. It is formed by a series of broad ridges, separated by river valleys, with a strong west—east grain. Some 3 per cent (2,252 ha) of the NCA lies within the North Pennines Area of Outstanding Natural Beauty, and 204 ha falls within the North Pennine Moors Special Area of Conservation and Special Protection Area, designated for its habitats (including dry heath, blanket bog and old sessile oak woodland) and upland breeding birds (including golden plover, curlew, dunlin, hen harrier and merlin). The west is more upland in character, with large, open, regular fields bounded by drystone walls or fences, and is primarily used for sheep and cattle grazing. In the east the farmed landscape becomes more mixed, with arable crops grown on the richer land, and more irregular fields divided by hedges rather than walls. Networks of hedges and strips of woodland in river valleys and alongside streams, combined with shelterbelts and large conifer plantations, give parts of the area a well-wooded appearance.

Pennine Dales Fringe

The Pennine Dales Fringe NCA lies between the uplands of the Pennines to the west, and the Magnesian Limestone ridge and arable lowlands to the east. The land has a varied topography of exposed upland moorland fringes and plateaux dropping to lower foothills, separated by major river valleys and incised by numerous minor tributary valleys. It is underlain by Yoredale rocks in the north (limestone, sandstone and mudstone) and Millstone Grit in the south. It is a transitional landscape between upland and lowland. Drystone walls are common in the west while hedges, often thick and tall with frequent hedgerow trees, are more prevalent at lower elevations in the east. Broad valleys, widening to the east, with their more fertile soils support arable crops, while steeper, higher land in the west supports predominantly livestock farming.

Broadleaved woodlands (many of them of ancient origin), coniferous and mixed plantations, and numerous small woods and hedgerow trees all contribute to the well-wooded character of the area. Hamlets, villages and small market towns are particularly distinctive, with strong visual unity, being built in local Millstone Grit Group and Yoredale Group stone in the west and Magnesian Limestone in the east.

Transport links include a number of major roads including the A66, A684 and A59, connecting major settlements to the east and west of the Pennine uplands. Several long-distance walking routes pass through the area, including the Coast to Coast path, Ebor Way, Nidderdale Way and Teesdale Way.

Tees Lowlands

The Tees Lowlands NCA forms a broad, open plain dominated by the meandering lower reaches of the River Tees and its tributaries, with wide views to distant hills. The large conurbation around the Lower Tees and Teesmouth contrasts with the rural area to the south and west, which is largely agricultural in character. These areas are in close proximity to heavy industry, which has developed due to the estuary's strategic location close to; mineral reserves, a network of main roads, railways and Teesport. Industrial installations form a dramatic skyline when viewed from the surrounding hills. Early successional grasslands and scrub have also emerged on previously developed land; these brownfield sites have significant biodiversity value.

There are a number of major transport corridors through the NCA. The East Coast Main Line railway, the A1(M) motorway and A19 trunk road provide links to the south, and northwards to the Tyne and Wear conurbations and beyond.

Local landscape character areas

Detailed local landscape studies have been carried out in Northumberland and Durham.

Northumberland Landscape Character Assessment

The Northumberland Landscape Character Assessment⁶⁰ presents a consolidated landscape character assessment for the whole County. This breaks Northumberland down into landscape character types and landscape character areas. Detailed descriptions of each landscape character type and character area are given. These are arranged by the refined NCA into which they fall. Figure **7.3** outlines the landscape character areas within the NCAs.

The Landscape Character Assessment also defines key principles and guidelines relating to landscape and land uses. The assessment recognises that all landscapes are dynamic, undergoing changes both natural and human-influenced.

Each landscape character type within Northumberland has been divided into three broad categories based on three guiding principles: protect, manage and plan.

The landscapes which have been identified for protection are the most valued landscapes in the county. They include the coastal landscapes and seascapes which comprise the Northumberland Coast AONB, the foothills which form the setting to the Cheviots, and the dales of the North Pennines AONB, as well as other sensitive river valley landscapes. Protection does not imply preservation, but rather conservation of key landscape qualities. It is recognised that these landscapes are not static, but evolving. They will undergo change in future, but change within these landscapes requires more careful management.

⁶⁰ Land use consultants (2010) Northumberland Landscape Character Assessment [online] available at: < https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Planning-and-Building/planning%20policy/Studies%20and%20Evidence%20Reports/Landscape%20Green%20Spaces%20Studies/1.%20La ndscape%20Character/Landscape-Character-Part-A.pdf> [accessed 27/02/20] Page 280

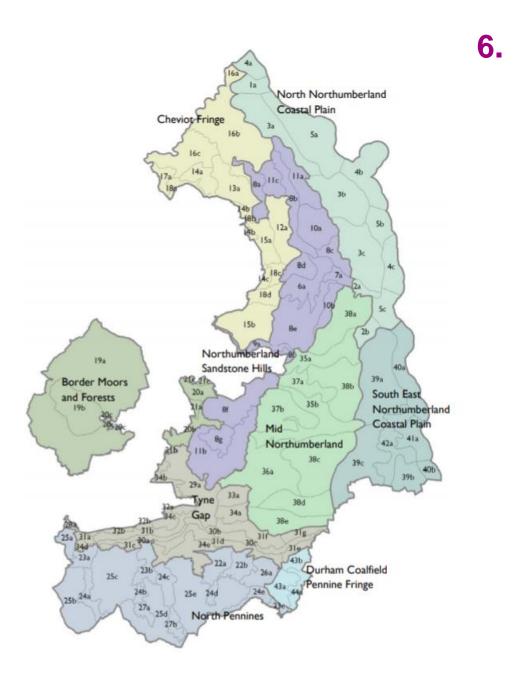


Figure 7.3: Landscape character areas within Northumberland

The landscapes which have been identified for management are agricultural and upland areas, and reflect the working rural landscapes of Northumberland. While they are often highly valued at a local level, these landscapes generally have a greater ability to absorb change, without significant detriment to their innate character. However, there remains a need to ensure that the character of these landscapes is maintained, and that changes are sympathetic and sustainable. The key qualities of these landscapes may still require a degree of protection, although there is greater scope for planning some change.

Planning has been identified as the guiding principle for landscapes in the south-east of the county, the forested uplands, and areas of intensive arable farming or former mineral extraction. These landscapes have already been heavily modified by the actions of people, and positive action is required to restore or enhance these areas. Again, there needs to be recognition of the underlying key qualities of the landscape, albeit that these may have been compromised in the past. Not all change will be beneficial, and management is required to ensure that change is sustainable, and results in a strengthening of landscape character.

Further information on the landscape character areas within Northumberland can be found in the Northumberland Landscape Character Assessment.⁶¹

Landscape Character Assessment for Northumberland National Park

An update of the Northumberland National Park Landscape Character Assessment was completed in Jun 2019.⁶²

The assessment adopts a holistic approach that considers the landscapes of Northumberland National Park as a mosaic of different landscapes character types and landscape character areas, each with particular characteristics and subject to particular forces for change. It is intended to provide an understanding of the area's landscape, through characterisation, together with advice on landscape change, through the preparation of strategy and guidelines material.

The landscape character areas in the National Park are a unique, geographically specific, units of a particular landscape character type, which share the same elements as the landscape character type, but at the same time have their own individual character and identity.

Figure 7.4 below highlights the Landscape Character Areas in the National Park. The Landscape Character Assessment presents detailed overviews of these areas.

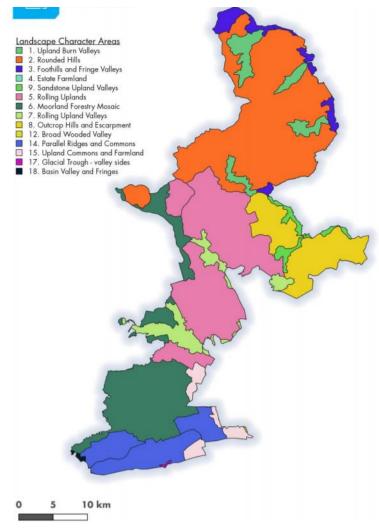


Figure 7.4: Landscape character types in the Northumberland National Park (from Landscape Character Assessment for the Northumberland National Park)

Page 282

⁶¹ Land use consultants (2010) Northumberland Landscape Character Assessment [online] available at: <a href="https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Planning-and-Building/planning%20policy/Studies%20and%20Evidence%20Reports/Landscape%20Green%20Spaces%20Studies/1.%20Landscape%20Character/Landscape-Character-Part-A.pdf (accessed 05/03/20)

ndscape%20Character/Landscape-Character-Part-A.pdf> [accessed 05/03/20]

62 Alison Farmer Associates (June 2019) Update of Landscape Character Assessment for Northumberland National Park
[online] available at: https://nnp-tacdesign.netdna-ssl.com/wp-content/uploads/2019/09/NNPA-022-Landscape-Character-Assessment.pdf [accessed 03/10/20]

Durham Landscape Character Assessment

The County Durham Landscape Character Assessment⁶³ identifies landscape types and character areas at three different levels - the regional, the sub-regional and the local.

County Character Areas are based on Natural England's Countryside Character Areas. There are 6 Countryside Character Areas in County Durham, all of which extend beyond its administrative boundaries. These are outlined in **Figure 7.5** below.

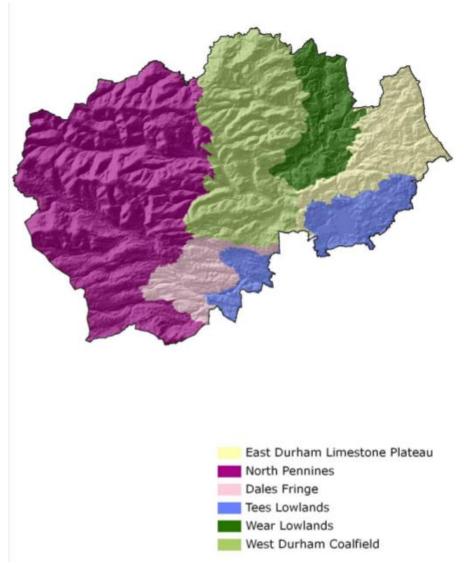


Figure 7.5: County Character Areas in Durham

Broad Landscape Types are landscapes with similar patterns of geology, soils, vegetation, land use, settlement and field patterns identified at a broad sub-regional level. As with County Character Areas, the boundaries between Broad Landscape Types are not always precise, as the change between one landscape and another can be gradual and progressive. The Broad Landscape Types are outlined in **Figure 7.6** below.

Further information on Landscape Character Areas and Landscape Types can be found in the County Durham Landscape Character Assessment.⁶⁴

Page 283

⁶³ Durham County Council (no date) The Landscape Classification [online] available at: http://www.durhamlandscape.info/media/13393/County-Durham-Landscape-Character-Assessment-Classification/pdf/CDLCAClassification.pdf [accessed 28/02/2020]
⁶⁴ Durham County Council (no date) The Landscape Classification [online] available at: <</p>

http://www.durhamlandscape.info/media/13393/County-Durham-Landscape-Character-Assessment-Classification/pdf/CDLCAClassification.pdf> [accessed 05/03/2020]

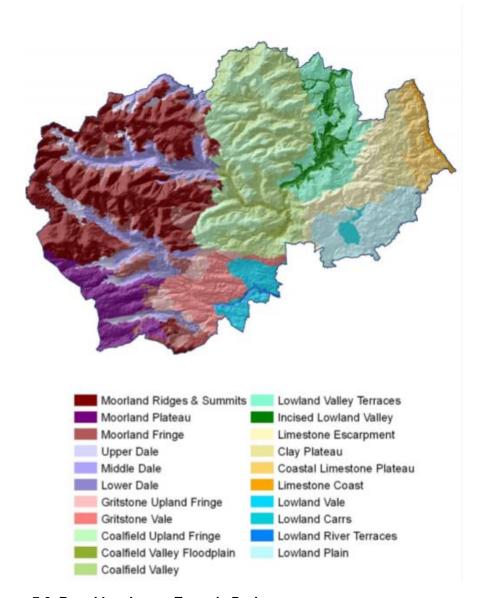


Figure 7.6: Broad Landscape Types in Durham

The County Durham Landscape Strategy⁶⁵ sets out an agenda for managing change in the future to help conserve and enhance what is valued most about the landscape while allowing it to evolve to meet new challenges.

Within the strategy, key issues on Durham landscape are discussed. Climate Change is a key issue that is discussed. Climate has a fundamental influence on landscape character. Much of the variety in the Durham landscape comes from the differences in climate between the colder wetter uplands of the west and the warmer, drier lowlands of the east. These differences affect both the natural vegetation and the way the land is managed and farmed. There is increasing evidence that the climate is changing due to a combination of natural forces and human activities, and particularly the production of 'greenhouse' gasses like carbon dioxide. Even with concerted action at a global scale it is likely that the climate will continue to change and this will bring new challenges to the landscape.

Other issues relating to the landscape character relate to biodiversity decline, conserving and restoring biodiversity, conserving geodiversity, conserving the historic environment and providing green infrastructure to access the countryside.

Within the strategy, objectives that relate to green infrastructure include:

⁶⁵ Durham County Council (2008) The County Durham Landscape Strategy [online] available at: < http://www.durhamlandscape.info/media/16093/County-Durham-Landscape-Strategy-Introduction/pdf/DURHAMLANDSCAPESTRATEGY2008Introduction.pdf> [accessed 28/02/20]
Page 284

- To promote the development of integrated Green Space and Green Infrastructure Strategies, and particularly for the semi-rural landscapes of the former coalfield areas;
- To ensure that development in the rural urban fringe is sustainable and where appropriate delivers wider environmental and social benefits;
- To promote the development of a coherent network of footpaths, green spaces, quiet lanes and greenways in the countryside around towns;
- To support and encourage the creation of natural green-space and community woodlands close to settlements;
- To support and encourage environmental improvement works in and around the county's towns and villages; and
- To support sustainable land management initiatives in the rural urban fringe.

Landscape: Summary of Future Baseline

New housing, employment and infrastructure provision has the potential to lead to incremental but small changes in landscape and townscape character and quality in the region. This includes from the loss of landscape features and areas with an important visual amenity value.

Increasing traffic levels associated with an increase in population has the potential to negatively impact landscape character.

Air Quality and Noise: Summary of Current Baseline

Air Quality

Petrol and diesel-engine motor vehicles emit a wide variety of pollutants, principally carbon monoxide (CO), nitrogen oxide (NO), nitrogen dioxide (N0₂), volatile organic compounds (VOCs) and particulate matter (PM₁₀ and PM_{2.5}), which have an increasing impact on urban air quality.

Emissions of PM₁₀ and PM_{2.5} in the UK have been generally falling since the 1990s. This decline has been attributable to a move away from coal to gas in both electricity generation and domestic and commercial combustion, and the introduction of emission standards for road vehicles. In England, 83% of AQMA designations are now associated with road transport.

There are a total of seven AQMAs found within the North East. Two of these are in Newcastle, one around the B1318 and the A189 between Gosforth and West Jesmond; and a second in central Newcastle stretching to the River Tyne. There is one AQMA in central Gateshead stretching north to the River Tyne. There are also two in South Tyneside; one at Lean Lane around the junction with the B1516 and the A19, and a second in West Harton along Boldon Lane.

Within County Durham there are two AQMAs: along Pelton Fell Road in Chester-Le-Street; and in central Durham along Sunderland Road (A181) from Framwellgate in the west to Gilesgate Moor in the east.

The location of AQMAs in the North East are illustrated in Figure 8.1.

These AQMAs are all subject to ongoing monitoring. In Newcastle the most recent Air Quality Annual Status Report⁶⁶ produced in 2018 showed that the concentration of pollutants within the AQMA still exceed the annual mean concentration objective for NO₂ at both the City Centre AQMA and Gosforth AQMA.

Air quality in the Gosforth AQMA has overall improved slightly, with two of the six monitoring locations below the NO₂ annual mean objective in 2017 compared to 2016. However, two monitoring locations continue to record NO₂ concentrations in exceedance of the annual mean objective.

⁶⁶ Newcastle City Council (2018) 2018 Air Quality Annual Status Report [online] available at: < https://www.newcastle.gov.uk/sites/default/files/Air%20Quality%20Annual%20Status%20Report%202018.pdf [accessed 28/02/20]

The trends recorded at City Centre AQMA show improvement at some locations and deterioration at others in terms of air quality. Outside, but close to, the City Centre AQMA, one monitoring location (DT32, City Road) continues to exceed the annual mean objective for NO₂. The exceedance outside the City Centre AQMA is an indication that the AQMA boundary may need to be amended.

In Gateshead, monitoring of NO₂ concentrations within and near the Town Centre AQMA indicated that most locations achieved objectives during 2005, but that there were some isolated exceedances, both inside and outside of the AQMA. In 2011 & 2012 the levels of NO₂ in Gateshead Town Centre fell slightly below the annual mean air quality objective, but not significantly.⁶⁷ Since 2011, the levels of NO₂ have fallen below the air quality annual mean objective and the monitoring data for 2017 shows that NO₂ levels continue to remain below the annual mean objective level within the AQMA. The monitoring data also indicates that there are no exceedances of the annual mean objective outside of the AQMA⁶⁸.

An AQMA was also declared in Portobello, Birtley in 2008, again this was due to measured levels of NO₂ exceeding the annual mean objective level of 40µg/m³. As air quality showed a sustained improvement and fell below the annual mean objective, the Portobello AQMA was revoked in 2012 following a Detailed Assessment⁶⁹.

There has been continued compliance with national air quality objective levels for nitrogen dioxide at Lindisfarne Roundabout/ Leam Lane and at the Boldon Lane/Stanhope Road AQMAs in South Tyneside.⁷⁰

The Chester-le-Street AQMA in Durham saw no exceedances in NO₂ in 2017 and it is proposed that the AQMA is now revoked. Whereas eight sites within the Durham City AQMA have recorded exceedances of the annual mean objective in 2017⁷¹.

Monitoring data obtained from each of the North East's local authorities has shown that there are still significant air quality problems related to NO₂.

In addition to impacts on human health, air pollution from both local and diffuse sources can impact on ecological receptors through acid and nitrogen deposition. Ecological receptors include any living organisms other than humans, the habitat which supports such organisms or natural resources which could be adversely affected by environmental contaminations. For the purposes of this SEA and the Transport Plan, those of most significance are those which have national and European statutory designation.

Noise

Noise Action Plans have been identified for a number of major routes within Newcastle upon Tyne and Durham. Noise Action Plans are designed to assist in the management of environmental noise providing the direction of travel for managing noise; however, they do not propose any specific noise mitigation measures. Noise Action plans have been identified at specific locations along the A69, A1, A167, A191, A1058, A194, A184, A1018, A19, A690, A690 and the A1(M). Noise also has potential to impact on designated sites of European and national importance such as SSSIs, SACs and SPAs both directly and indirectly.

⁶⁷ Gateshead Council (2020) Air quality and pollution [online] available at:

http://www.gateshead.gov.uk/Environment%20and%20Waste/protection/AirQuality/home.aspx [accessed 28/02/20]

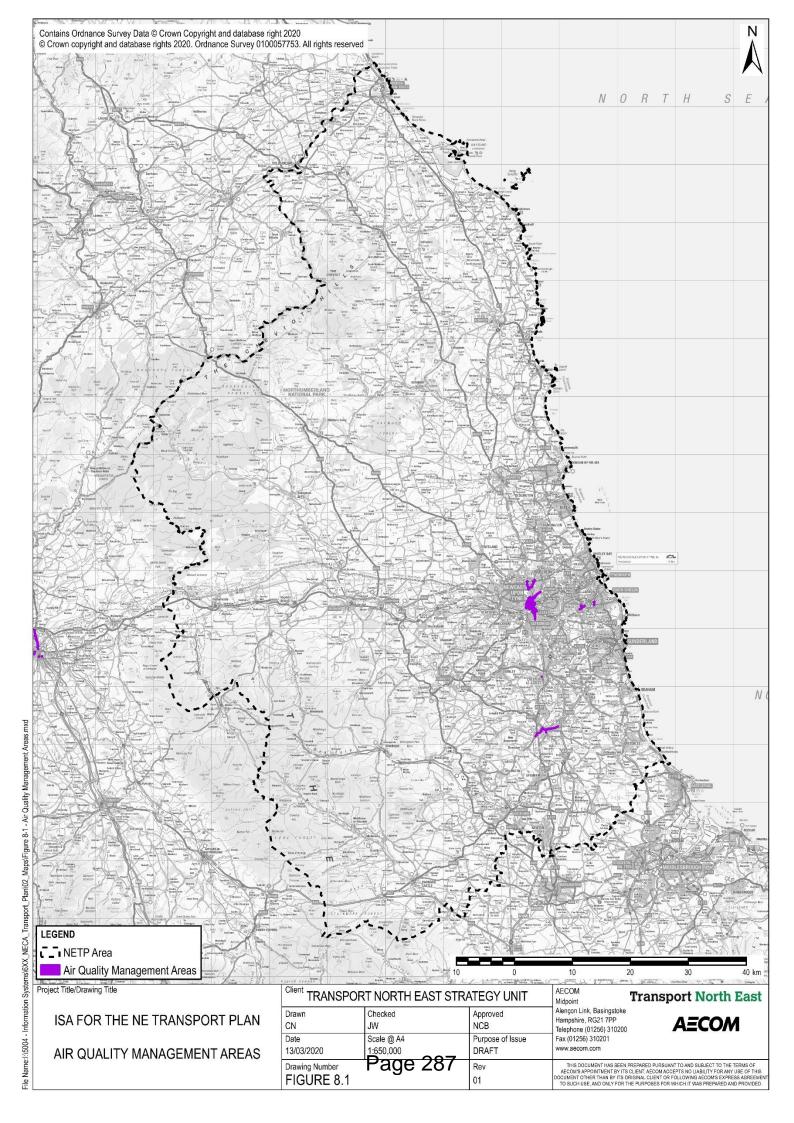
⁶⁸ Gateshead Council (2018) Air Quality Annual Status Report (ASR) [online] available at: https://www.gateshead.gov.uk/media/9230/2018-Air-Quality-Annual-Status-Report-ASR-/pdf/ASR_2018_Final.pdf?m=636681311264630000 [accessed 28/02/20]
69 Gateshead Council (2018) Air Quality Argust Status (2018)

⁶⁹ Gateshead Council (2018) Air Quality Annual Status Report (ASR) [online] available at: https://www.gateshead.gov.uk/media/9230/2018-Air-Quality-Annual-Status-Report-ASR-

[/]pdf/ASR 2018 Final.pdf?m=636681311264630000> [accessed 28/02/20]

70 South Tyneside Council (2018) 2018 Air Quality Annual Status Report (ASR) [online] available at: https://www.southtyneside.gov.uk/article/36142/Air-quality> [accessed 28/02/20]

⁷¹ Durham County Council (2018) 2018 Air Quality Annual Status Report (ASR) [online] available at: https://www.durham.gov.uk/media/24209/2017-Air-Quality-Annual-Status-Report-ASR-/pdf/2017AirQualityStatusReport.pdf [accessed 29/02/20]



Air Quality and Noise: Summary of Future Baseline

There are a number of areas, particularly within the major conurbations of Newcastle upon Tyne, South Tyneside, and Durham City where the concentrations of pollutants are higher than mean annual government set objectives, and consequently there are AQMAs in place. Due to the presence of AQMAs these areas are likely to see a management of the concentrations of air pollutants in the future.

Nationally there has been a downward trend in NO_2 pollution although this decline has not been as much as previously expected. The reasons for this are complex and being investigated by Defra. One contributing factor is that although newer vehicles have higher European emissions standards, the proportion of diesel vehicles in use in the UK has increased significantly (in 2000 only 14% of new cars sold in the UK were diesel but by 2010 this proportion had risen to 46%). Diesel vehicles have higher NO_2 emissions than petrol vehicles.

Final proposals were consulted on in October 2019 for the delivery of measures to improve air quality in Newcastle, Gateshead and North Tyneside in response to the air quality direction received from the Secretary of State (discussed above in section 0). This resulted in the intention to introduce a charging Clean Air Zone covering Newcastle city centre affecting non-compliant buses, coaches, taxis (both Hackney Carriages and private hire vehicles), heavy goods vehicles and vans, to be enforced from 2021. This has the potential to lead to changes in concentrations of air quality pollutants in Newcastle city centre and the surrounding areas.

An ongoing increase in the use of electric and plug-in hybrid vehicles has the potential to reduce emissions from transport. More stringent emission standards on manufacturers and the bringing forward of the ban on the sale of new petrol, diesel and hybrid cars to 2035 (and potentially to 2032) by the UK Government will help accelerate this trend.

Durham and Newcastle upon Tyne have a number of Noise Action Plans in place along A roads. This means that currently objective limits on ambient noise set by government are being exceeded; however these are likely to be managed with action plans in place.

Climate Change and Flood Risk: Summary of Current Baseline

The main source of greenhouse gas emissions from the transport sector is the use of petrol and diesel in road transport. The Department of Energy and Climate Change 2013 'UK Greenhouse Gas Emissions, Final Figures, February 2013' report⁷² identifies that between 1990 and 2013 there was relatively little overall change in the level of greenhouse gas emissions from the transport sector. It identifies that there was a slight increase up to 2007 and a slight decrease from 2008 onwards.

Source data from the Department of Energy and Climate Change suggests that the North East has higher per capita emissions in comparison to England as a whole since 2005. The North East has also seen a 54.3% reduction in the percentage of total emissions per capita between 2005 and 2016, greater than the reductions for England (37.6%).

The table below sets out the carbon dioxide emissions for industry, domestic, and transport sources, for each year from 2005 to 2013 in the North East. It also sets out the total per capita emissions per year and per capita emissions for road transport. As can be seen, there has been a steady decline in CO₂ emissions across all sectors. The area of largest decline has been in the industrial and commercial sectors (49.2% decrease) while the smallest decline has been in the transport sector (13.2% decrease). Of the local authorities in the North East, South Tyneside has the lowest carbon dioxide emissions from transport and Country Durham the highest.

Page 288

⁷² The Department of Energy and Climate Change (2013) UK Greenhouse Gas Emissions, Final Figures, [online] available at: ics.pdf [accessed 28/02/20]

Dand

Table: CO₂ emissions from the North East by source and year

Year	Industrial and commercial	Domestic	Transport	Of which roads	Total	Transport per capita	Road Trans- port per capita	Total per capita
	Total carb	on dioxide e	emissions (K	ilotonnes	CO ₂)	Per capita	emissions CO ₂)	(tonnes
2005	8,846	4,993	3,636	3,530	17,475	1.921	1.864	9.230
2006	8,774	4,930	3,582	3,474	17,285	1.888	1.831	9.111
2007	8,490	4,734	3,606	3,500	16,830	1.893	1.837	8.833
2008	8,411	4,748	3,429	3,323	16,588	1.795	1.739	8.681
2009	7,365	4,254	3,319	3,215	14,937	1.732	1.678	7.795
2010	7,825	4,540	3,275	3,170	15,640	1.701	1.646	8.120
2011	7,474	3,946	3,230	3,127	14,650	1.671	1.618	7.577
2012	6,789	4,258	3,207	3,103	14,255	1.654	1.601	7.353
2013	4,494	4,203	3,159	3,058	11,855	1.624	1.572	6.094
Total Percentage Change	-49.2%	-15.9%	-13.2%	-13.4%	-32.2%	-15.8%	-15.7%	-33.9%

Carbon dioxide from different sources of transport emissions varies between the councils within the North East and is dependent on the infrastructure present within the area, for example there are no carbon dioxide emissions from motorways within Northumberland or North Tyneside as there are no motorways within either of these areas. The table below sets out the carbon dioxide emissions from the transport sources in each of the council areas.

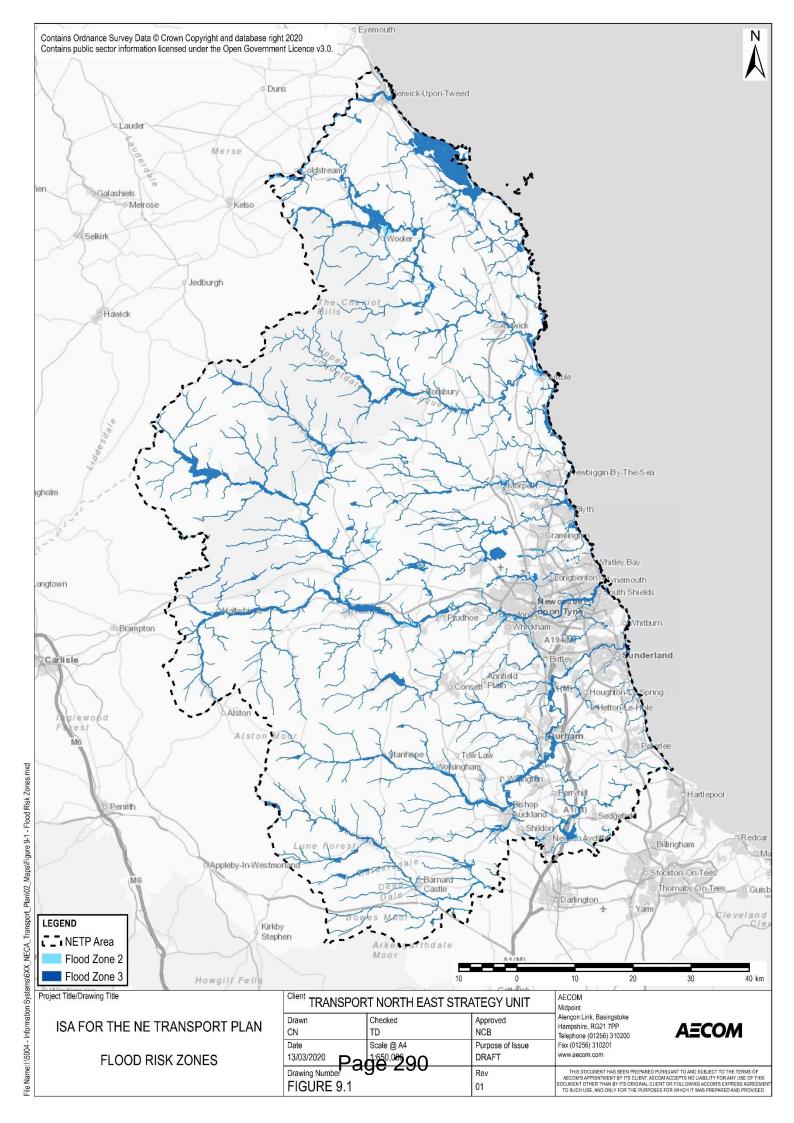
Table: CO₂ emissions by transport type within each local authority area

Transport sources kt CO₂ per year

County Durham 433.9 217.5 248.4 34.5 4.3 Gateshead 196.4 24.4 184.5 3.8 1.3 Newcastle 185.4 10.8 191.9 3.8 11.7 North Tyneside 148.5 - 132.1 4.6 1.3 Northumberland 431.4 - 123.0 34.4 2.8	Transport Total	Transport Other	Diesel Railways	Road Transport (Minor Roads)	Road Transport (Motorways)	Road Transport (A roads)	
Newcastle 185.4 10.8 191.9 3.8 11.7 North Tyneside 148.5 - 132.1 4.6 1.3 Northumberland 431.4 - 123.0 34.4 2.8	938.6	4.3	34.5	248.4	217.5	433.9	County Durham
North Tyneside 148.5 - 132.1 4.6 1.3 Northumberland 431.4 - 123.0 34.4 2.8	410.4	1.3	3.8	184.5	24.4	196.4	Gateshead
Northumberland 431.4 - 123.0 34.4 2.8	438	11.7	3.8	191.9	10.8	185.4	Newcastle
	286.4	1.3	4.6	132.1	-	148.5	North Tyneside
	591.6	2.8	34.4	123.0	-	431.4	Northumberland
South Tyneside 94.1 3.1 76.2 2.3 0.6	176.2	0.6	2.3	76.2	3.1	94.1	South Tyneside
Sunderland 202.1 9.9 182.9 0.9 1.5	397.2	1.5	0.9	182.9	9.9	202.1	Sunderland

Figure 9.1 sets out the risk of flooding from rivers and sea in each of the seven council areas which make up the North East.

Prepared for: Transport North East Strategy Unit



Climate Change and Flood Risk: Summary of Future Baseline

Climate change has the potential to increase the occurrence of extreme weather events in the North East with increases in mean summer and winter temperatures, increases in mean precipitation in winter and decreases in mean precipitation in summer. At a regional level the UK Climate Projections (UKCP18) team have estimated that the average temperature may increase by 1.5°C and 2.5°C in summer and winter, respectively; and that by the 2050's, under a medium emissions scenario – mean winter precipitation may increase by 30%73.

This is likely to increase the risks associated with climate change such surface water flooding. Additionally, climate change is predicted to cause rises in sea levels which will increase the risk of flooding from the sea in coastal areas. As such there will be an increased need for resilience and adaptation. It is likely that the risk of flooding to areas set out in Figure 9.1 will increase in severity and periodicity.

Climate change also has the potential for significant impacts on various habitats located within the North East. The Inter Agency Climate Change Forum produced a report on the summary of impacts to biodiversity⁷⁴ within the UK as a result of climate change. The report notes that assessing the impacts of climate change on terrestrial and freshwater biodiversity is not easy, as plants and animals are influenced by other pressures, such as atmospheric pollution and land use, and different factors can work in combination to bring about change. However, changes are beginning to be observed across a range of species and habitats in the UK that have been related to climate change. It notes that one of the primary observed impacts of climate change upon species within the UK has been a northward movement of many warmth-loving species, and some retreat of northerly distributed species. There have also been concomitant changes in abundance observed in some cases.

In terms of climate change mitigation, per capita emissions are likely to decrease as energy efficiency measures, renewable energy production and new technologies become more widely adopted. However, road transport and domestic sources are likely to be increasing contributors proportionally.

An ongoing increase in the use of electric and plug-in hybrid vehicles has the potential to reduce emissions from transport. More stringent emission standards on manufacturers and the bringing forward of the ban on the sale of new petrol, diesel and hybrid cars to 2035 (and potentially to 2032) by the UK Government will help accelerate this trend.

Population: Summary of Current Baseline

Population change

According to the most recent census data available, between the 2001 and 2011 census, the population growth seen in each of the administrative areas covering the North East is lower than that of the England average. Newcastle upon Tyne has shown the largest increase in population at 7.37%, this is 0.53% lower than that of the national average. In comparison Northumberland, County Durham, and Gateshead have shown a much slower population growth of 2.80%, 3.86%, and 4.53% respectively. The population in South Tyneside and Sunderland decreased by 3.05% and 1.89% respectively since the 2001 census. This is shown in the table below.

⁷³ Data released 26th November 2018 [online] available at: https://www.metoffice.gov.uk/research/collaboration/ukcp [accessed

<sup>28/02/20]
&</sup>lt;sup>74</sup> Natural England have produced a national biodiversity climate change vulnerability model which provides more information on a spatially explicit assessment of the relative vulnerability of priority habitats. Available [online] at: 1081749225472 [accessed 28/02/20]
Page 291 http://publications.naturalengland.org.uk/publication/5069

Table: Population change 2001 - 2011

Date	England	County Dur- ham	Gates- head	Newcastle upon Tyne	North Tyneside	Northumberland	South Tyneside	Sunderland
2001	49,138,831	493,470	191,151	259,536	191,659	307,190	152,785	280,807
2011	53,012,456	513,242	200,214	280,177	200,801	316,028	148,127	275,506
Populatio n Change 2001-2011	+7.9%	+3.85%	+4.53%	+7.37%	+4.56%	+2.80%	-3.05%	-1.89%

The table below outlines the population gender structure, and density of the population for the North East. With the exception of Newcastle upon Tyne, all areas have a slightly higher proportion of females compared to males. Northumberland has the lowest population density (0.6 people per ha) while Newcastle upon Tyne has the highest (25.2 people per ha). The average for the North East is 2.5 people per ha.

Table: Population gender structure / population density

	Male	Female	Total	Area (ha)	Density (people per ha)
North East	957,800	994,700	1,952,500	786,221	2.5
County Durham	254,200	263,600	517,800	223,270	2.3
Northumberland	154,300	161,700	316,000	507,835	0.6
Tyne and Wear	549,200	569,500	1,118,700	55,116	20.3
Gateshead	98,400	102,100	200,500	14,408	13.9
Newcastle upon Tyne	146,100	143,700	289,800	11,512	25.2
North Tyneside	98,000	104,800	202,700	8,518	23.8
South Tyneside	71,800	76,900	148,700	6,715	22.1
Sunderland	134,900	142,000	276,900	13,964	19.8

Age structure

The population age structure varies across the North East. All seven local authorities have a slightly lower proportion of the population within the 0-15 age group than the national average of 19%. North Tyneside, Gateshead, and South Tyneside all have 18% while the remainder have 17%. The majority of councils within the North East are comparable with the national average of residents within the 16-24 age group (12%); however both North Tyneside and Northumberland have a slightly lower proportion of residents within this group (10%). In contrast, Newcastle upon Tyne shows significantly more (20%).

The England average for the proportion of the population within the 25-44 age group is 28% and the North East average is 25%. All North East authorities show a lower proportion than the national average. Gateshead, Newcastle upon Tyne and North Tyneside are broadly comparable to the national average (27%), while South Tyneside, Sunderland, and County Durham all have a lower proportion, which is comparable to the North East average (25%). Northumberland shows the lowest number of residents in this age group (23%).

The national average within the 45-59 age group is 19% and the North East average is 21%. With the exception of Newcastle upon Tyne (17%) all other North East councils have a higher proportion of residents within this age category than the national average; of these Northumberland has the highest at 28%. This same pattern occurs in the 60+ age group; the England average for this group is 22%.

Newcastle has a lower proportion than this (19%), while the rest all have higher percentages. Northumberland again has the highest proportion (28%). This is shown in the table below.

Table: Age structure⁷⁵

	England	North East	County Durham	Gates- head	Newcastle upon Tyne	North Tyneside	Northumberland	South Tyneside	Sunderland
0-15	19%	18%	17%	18%	17%	18%	17%	18%	17%
16- 24	12%	12%	12%	11%	20%	10%	10%	11%	12%
25- 44	28%	25%	25%	27%	27%	27%	23%	25%	25%
45- 59	19%	21%	21%	20%	17%	21%	23%	22%	21%
60+	22%	24%	25%	24%	19%	24%	28%	25%	24%

Housing

Sunderland, South Tyneside, Newcastle upon Tyne, and Gateshead all have a lower percentage of the population owning properties than the national average. In contrast, all of the North East local authorities have a higher percentage of the population living in socially rented housing than the national average. With the exception of Newcastle upon Tyne, all local authorities also have a lower percentage of residents living in privately rented housing than the national average.

The ratio of median house price to median gross annual workplace-based earnings illustrates the relationship between the average income in the area to average house price in the area; the affordability ratio for the local council areas compared with the national average of 8 in 2018 was as follows⁷⁶:

• County Durham: 4.48 South Tyneside: 5.78

Gateshead: 5.32 Sunderland: 4.86

Newcastle upon Tyne: 5.75

Northumberland: 6.61 North Tyneside: 6.12

England: 8

The affordability ratios all councils within the North East are less than the average ratio of 8 for England. This suggests that homes are more affordable for local people in these areas than the national average.

It will be important that plan-making anticipates future demand for development and facilitates the delivery of housing and employment sites. A review of the most recent strategic housing market assessments (SHMA) are outlined below.

County Durham

The County Durham SHMA 2018⁷⁷ identified a housing need of 1,287 dwellings per annum. The recent average level of completions has been 1,308 dwellings per annum.

⁷⁵ ONS (2011) Census 2011, Age structure (KS102EW)

⁷⁶ Office for National Statistics (2018) House price to workplace-based earnings ration [online] available at: https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/ratioofhousepricetoworkplacebasedearningslowerq https://www.ons.gov.uk/peuprepopulational.accumularitileanmont.com
https://www.ons.gov.uk/peuprepopulational.acc

Gateshead and Newcastle

The Gateshead & Newcastle upon Tyne SHMA 2017⁷⁸ identified an annual need for Gateshead over the period 2015-30 of 535 dwellings per annum and 1,040 dwellings per annum for Newcastle upon Tyne for the same period.

North Tyneside

The SHMA for North Tyneside⁷⁹ identifies an OAHN of 792 dwellings per annum. This compares to an average annual completion rate of 425 over the period 2009/2010 – 2012/2013. The scale of delivery required to meet OAHN is a c. 86% increase in the historic average.

Northumberland

The Northumberland SHMA⁸⁰ which was partially updated in 2018 identifies a minimum local housing need of 717 dwellings per annum over the 10-year period 2016-2026. However, a need for 885 dwellings each year has been established in order to match the Council's ambitions.

South Tyneside

The SHMA for South Tyneside⁸¹ identifies a housing need of 494 dwellings per annum over the period 2008-2033. This compares to an average annual completion rate of 480 per year between 2007/2008 – 2011/2012. The scale of delivery should be much the same as historic completions.

Sunderland

The SHMA for Sunderland⁸² identifies a housing need of 768 dwellings per annum over the period 2015-2033. In 2015/2016 there were 889 net housing completions and in 2014/2015 there were 907 net housing completions.

Northumberland National Park

Northumberland National Park has an identified need of 160 dwellings over their 20-year planning period 2017-2037, an average of 8 per annum.

Education

The table below shows the highest level of qualification achieved by residents in the local authority areas compared with the England average.

Table: Highest level of qualification⁸³

Date	County Durham	Gates- head	Newcastle upon Tyne	North Tyneside	Northumberland	South Tyneside	Sunderland	North East	England
No qualifications	27.5%	28.0%	23.6%	23.7%	23.9%	28.0%	29.1%	26.5%	22.5%
Level 1 qualifications	13.4%	14.3%	11.3%	14.0%	13.7%	14.6%	15.5%	13.7%	13.3%

⁷⁸ Opinion Research Services (2017) Gateshead & Newcastle upon Tyne Strategic Housing Market Assessment 2078 [online] available at: < https://www.gateshead.gov.uk/media/7831/Strategic-Housing-Market-Assessment-SHMA-/pdf/SHMA-09-2017-gateshead-newcastle.pdf?m=636619965701470000> [accessed 28/02/20]
⁷⁹ North Tyneside Council (2014) 2014 Strategic Housing Market Assessment North Tyneside Council Final Report [online]

North Tyneside Council (2014) 2014 Strategic Housing Market Assessment North Tyneside Council Final Report [online] available at: https://my.northtyneside.gov.uk/sites/default/files/web-page-related-files/Strategic%20Housing%20assessment.pdf [accessed 03/03/2020]

Northumberland County Council (2018) Partial SHMA Update [online] available at: <a href="https://www.northumberland.gov.uk/NorthumberlandCountyCouncil/media/Planning-and-Building/planning%20policy/Studies%20and%20Evidence%20Reports/Housing%20Studies/2.%20SHMA/NCC-SHMA-June-Building/planning%20Policy/Studies%20and%20Evidence%20Reports/Housing%20Studies/2.%20SHMA/NCC-SHMA-June-Building/planning%20Policy/Studies%20and%20Evidence%20Reports/Housing%20Studies/2.%20SHMA/NCC-SHMA-June-Building/planning%20Policy/Studies%20and%20Evidence%20Reports/Housing%20Studies/2.%20SHMA/NCC-SHMA-June-Building/planning%20Policy/Studies%20and%20Evidence%20Reports/Housing%20Studies/2.%20SHMA/NCC-SHMA-June-Building/planning%20Policy/Studies%20And%20Evidence%20Reports/Housing%20Studies/2.%20SHMA/NCC-SHMA-June-Building/Planning%20Policy/Studies%20And%20Evidence%20Reports/Housing%20Studies/2.%20SHMA/NCC-SHMA-June-Building/Planning%20Policy/Studies%20And%20Evidence%20Reports/Housing%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/Planning%20Studies/P

^{2018.}pdf> [accessed 02/03/2020]

81 South Tyneside Council (2013) Strategic Housing Market Assessment [online] available at: < https://www.southtyneside.gov.uk/article/36020/Supporting-Documentation-and-Evidence-Base-Studies> [accessed 02/03/2020]

⁸² Sunderland City Council (2017) Strategic Housing Market Assessment [online] available at: <a href="https://www.sunderland.gov.uk/media/20441/Sunderland-Strategic-Housing-Market-Assessment-Update-2017-/pdf/22 Sunderland Strategic Housing Market Assessment Update (2017).pdf?m=636646119703700000> [accessed 02/03/20]

⁸³ ONS (2011) Census 2011, Highest Level of Qualification (QS501EW)

Date	County Durham	Gates- head	Newcastle upon Tyne	North Tyneside	Northumberland	South Tyneside	Sunderland	North East	England
Level 2 qualifications	16.0%	15.5%	12.5%	16.1%	16.5%	16.2%	16.2%	15.7%	15.2%
Apprentice- ship	4.2%	5.2%	3.4%	5.3%	4.5%	6.1%	5.0%	4.7%	3.6%
Level 3 qualifications	13.6%	11.3%	17.1%	11.9%	12.1%	12.0%	12.0%	13.1%	12.4%
Level 4 & above	21.5%	21.5%	27.2%	25.3%	25.6%	19.2%	18.2%	22.2%	27.4%
Other qualifications	13.4%	4.1%	4.9%	3.7%	3.8%	3.9%	4.0%	4.1%	5.7%

All council areas have a higher proportion of residents with no qualifications than the national average of 22.5%. South Tyneside has the highest proportion of residents with no qualifications (29.1%) with Newcastle upon Tyne and North Tyneside having an only slightly higher proportion than the national average (23.7%).

The national average for residents with Level 4 or above qualifications is 27.4%. In Newcastle upon Tyne, 27.2% of residents hold level 4 or above qualifications and as such, is broadly comparable with national averages. In contrast, the remainder of North East council areas have a lower proportion of residents holding level 4 qualifications. In particular, South Tyneside and Sunderland show a much lower proportion - 19.2% and 18.2% respectively - of residents with the highest levels of qualifications.

In comparison, with the exception of Newcastle, which is comparable with the national average, all council areas show a higher proportion of residents who have undertaken apprenticeships.

Employment

The table below demonstrates the occupation of working-age residents. The overall occupation profile suggests that there are fewer managers, directors and senior officials in the North East than the national average; and with the exception of Newcastle upon Tyne and North Tyneside, there are also fewer professional occupations.

Table: Employment occupation of residents aged 16-7484

	County Durha m	Gates- head	Newc- astle upon Tyne	North Tyne- side	Northu- mberla nd	South Tyne- side	Sunder -land	North East	Englan d
Managers, directors and senior officials	8.9%	8.4%	8.0%	8.5%	10.5%	7.8%	7.6%	8.6%	10.9%
Professional occupations	14.5%	15.2%	20.4%	17.7%	15.5%	13.2%	12.2%	15.2%	17.5%
Associate professional and technical occupations	10.7%	11.4%	10.8%	12.1%	11.5%	11.0%	9.9%	11.0%	12.8%
Administrative and secretarial occupations	11.3%	13.0%	11.3%	14.5%	11.5%	13.1%	12.7%	11.9%	11.5%
Skilled trades occupations	12.6%	11.4%	9.4%	10.5%	13.0%	12.6%	12.1%	11.9%	11.4%
Caring, leisure and other service occupations	10.3%	9.4%	9.0%	9.0%	10.6%	10.4%	10.0%	10.2%	9.3%
Sales and customer	9.2%	11.1%	11.4%	10.7%	8.6%	10.6%	12.3%	10.4%	8.4%

⁸⁴ ONS (2011) Industry 2011 (KS608EW) [online] available at:

 $\frac{\text{http://www.nomisweb.co.uk/query/construct/submit.asp?forward=yes\&menuopt=201\&subcomp}}{Page~295}$

service occupations									
Process plant and machine operatives	10.2%	8.3%	6.3%	6.9%	7.8%	9.5%	9.9%	8.7%	7.2%
Elementary occupations	12.3%	11.8%	13.4%	10.1%	11.0%	11.7%	13.3%	12.2%	11.1%

In contrast, with the exception of Newcastle upon Tyne and North Tyneside, there are higher proportions of people working in sales and customer service occupations, and also process plant and machine operatives than the national average.

Access and modes of transport

The table below illustrates the various methods employed by those commuting to work. The majority of council areas have lower proportions of residents working from home than national averages. In contrast Northumberland has a higher proportion of working residents who are employed from home compared to the North East and national averages. South Tyneside and Newcastle upon Tyne both show lower proportions of residents commuting by car than the national average. This may reflect that these are large conurbations with more comprehensive public transport networks.

In contrast, the remainder of the areas either have a similar proportion of residents commuting by car to the national average (Gateshead, North Tyneside) or higher than national average proportion of residents commuting by car. The majority of North East council areas also have a higher proportion of residents traveling by bus than national average. Regarding active travel all council areas have lower than national average bicycle use. In this respect, Gateshead, Northumberland, and Sunderland show the lowest level of bike use. In contrast travel by foot is broadly comparable to national average.

Table: Method of travel to work85

	County Durham	Gatesh ead	New- castle upon Tyne	North Tyne- side	Northu mberlan d	South Tyne- side	Sunderl and	North East	England
Work from home	4.2%	3.1%	3.3%	3.4%	6.3%	2.4%	2.5%	3.7%	5.4%
Undergroun d, metro, light rail, tram	0.1%	4.7%	5.4%	9.0%	0.5%	8.9%	2.3%	2.5%	4.1%
Train	0.9%	0.8%	1.2%	1.5%	1.3%	1.7%	0.8%	1.2%	5.3%
Bus, minibus or coach	6.1%	15.4%	18.6%	9.1%	5.2%	9.7%	12.7%	9.3%	7.5%
Taxi	0.7%	0.5%	0.9%	0.8%	0.4%	0.5%	0.7%	0.8%	0.5%
Motorcycle/ scooter/ moped	0.5%	0.4%	0.3%	0.5%	0.5%	0.5%	0.4%	0.4%	0.8%
Car or van	67.7%	57.4%	47.6%	57.5%	65.4%	56.6%	60.9%	61.7%	57.0%
Bicycle	1.0%	1.5%	2.8%	2.5%	1.5%	2.2%	1.3%	1.8%	3.0%
On foot	10.4%	9.2%	13.4%	8.3%	11.5%	9.4%	9.8%	10.6%	10.7%
Other method	0.6%	0.6%	0.7%	1.0%	1.0%	2.0%	0.8%	0.9%	0.6%

Prepared for: Transport North East Strategy Unit

⁸⁵ ONS (2011) Census 2011, Method of Travel to Work (QS701EW) Page 296

Population: Summary of Future Baseline

The slow rate of population growth in the North East, and in some areas, population decline is likely to continue. This will exacerbate the comparatively older population age structure than national average. As such it is important to support, create, and maintain future employment opportunities in the area to ensure older residents are supported, and the population age structure remains balanced. An effective transport system across the counties has a strong role to play ensuring a strong local economy and encouraging young people to move to, and stay within, the area.

Human Health: Summary of Current Baseline

Deprivation

Deprivation can directly affect people's health, and as such is an important determinant of general health of the population. There are a number of methods for estimating levels of deprivation. The 2011 census statistics measure deprivation across four 'dimensions' of deprivation⁸⁶ including: any member of a household not a full-time student is either unemployed or long-term sick; education (no person in the household has at least level 2 education, and no person aged 16-18 is a full-time student); health and disability (any person in the household has general health 'bad or 'very bad' or has a long term health problem); and housing (household's accommodation is either overcrowded, with an occupancy rating -1 or less, or is in a shared dwelling, or has no central heating).

Table: Households by deprivation dimensions

	Not deprived in any dimension	Deprived in 1 dimension	Deprived in 2 dimensions	Deprived in 3 dimensions	Deprived in 4 dimensions
County Durham	39.3%	30.8%	23.2%	6.4%	0.3%
Gateshead	38.8%	31.2%	22.6%	6.9%	0.4%
Newcastle	40.5%	31.2%	20.7%	6.9%	0.6%
North Tyneside	43.4%	31.1%	20.0%	5.2%	0.4%
Northumberland	43.6%	32.4%	19.3%	4.4%	0.3%
South Tyneside	36.5%	32.3%	23.7%	7.0%	0.5%
Sunderland	35.7%	31.9%	24.4%	7.4%	0.5%
North East	39.7%	31.6%	22.0%	6.3%	0.4%
England	42.5%	32.7%	19.1%	5.1%	0.5%

The table above shows household deprivation information across the North East, and England averages. Northumberland and North Tyneside have proportionally fewer households which are deprived in any dimension compared to the national average, while the remainder of the North East council areas have proportionally more. As such, all council areas have more households deprived in 2 and 3 dimensions than the national average. This suggests that overall, residents within the North East are more likely to experience deprivation than in other areas of the country.

Deprivation can also be measured using the English Indices of Deprivation (IMD)⁸⁷ which is a relative measure of deprivation mapped at the Lower Super Output (LSOA). LSOAs are statistical geographical areas with an average of approximately 1,500 residents.

⁸⁶ ONS (2011) Census 2011, Households by Deprivation Dimensions, 2011 (QS119EW)

⁸⁷ DCLG (2015) English indices of deprivation 2015 [online] available at: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015

There are 32,844 LSOAs in England. These are ranked from most deprived to least deprived whereby the LSOA with a rank of 1 is the most deprived, and the LSOA with a rank of 32,844 is the least deprived.

This information can then be divided into ten equal groups and displayed as deciles. LSOAs in decile 1 fall within the most deprived 10% of LSOAs nationally and LSOAs in decile 10 fall within the least deprived 10% of LSOAs nationally.

Figure 11.1 displays the average LSOA deprivation level across the North East authorities as deciles. County Durham, South Tyneside, and Sunderland all have a score of 4 which shows, on average, that the LSOAs within these authorities are in the 40% most deprived nationally. Newcastle and Gateshead both show slightly lower levels of deprivation as they sit on average within the 5th decile, while North Tyneside and Northumberland show the lowest levels of deprivation as these sit within the 6th decile.

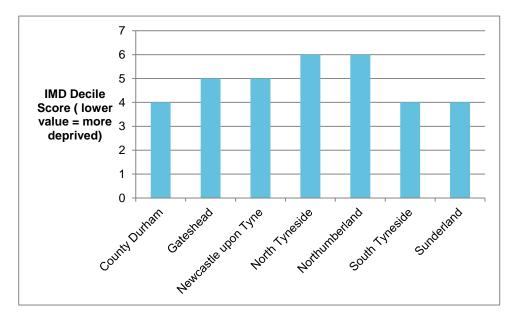


Figure 11.1: Average LSOA deprivation score across the North East authority areas

The values given here are averages across the whole of each council area, and as such, there will be LSOAs within each of these authorities with higher levels or lower levels of deprivation than these averages would suggest.

Figure 13.1 below presents a map of the overall distribution of Indices of Multiple Deprivation in the North East.

Life expectancy

Figure 11.2 shows the life expectancy at birth for males and females across the North East council areas and England averages.

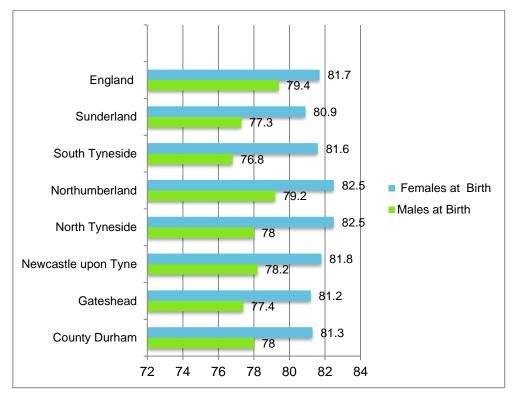


Figure 11.2: Life expectancy at birth for males and females⁸⁸

Northumberland and North Tyneside both have female life expectancy rates which are slightly longer than the national average, with a male life expectancy which is slightly shorter. The remainder of the North East council areas all have female life expectancy rates which are slightly shorter or comparable to the national average whereas male life expectancy is significantly shorter. South Tyneside is the area with the lowest male life expectancy, which is 2.6 years shorter than the national average.

Proportion of the population in good health

Figure 11.3 displays the proportion of the population within each category of health. With the exception of Newcastle, all areas have a lower proportion of residents who consider themselves to be in very good health than the national average. Correspondingly all areas have a higher proportion of people who consider themselves to be in bad health. Sunderland has the highest proportion of residents who consider themselves in bad, or very bad health.

Broadly speaking there is a similar proportion of people in fair health across all areas and this is slightly above the national average.

⁸⁸ Public Health England (2013) Health Profiles [online] available at: http://fingertips.phe.org.uk/profile/healthprofiles/data#page/0/gid/1938132695/pat/6/par/E12000001/ati/101/are/E06000047/iid/90641/age/1/sex/4
Page 299

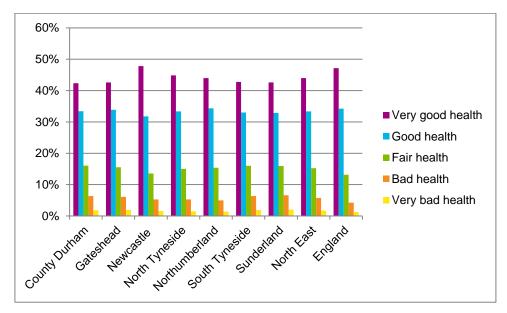


Figure 11.3 Population within each health category

Disability

The table below displays the prevalence of disability across residents in the North East council areas, as well as the North East and England averages. All council areas have a higher proportion of residents than the national average whose day to day activities are limited a lot by disability. Correspondingly all council areas have a lower proportion of residents whose day to day activities are not limited by disability than the national average.

Table: Disability89

	Day-to-day activities limited a lot	Day-to-day activities limited a little	Day-to-day activities not limited
County Durham	12%	11%	76%
Gateshead	11%	11%	78%
Newcastle upon Tyne	10%	9%	81%
North Tyneside	10%	11%	79%
South Tyneside	12%	11%	77%
Sunderland	12%	11%	77%
Northumberland	10%	11%	79%
North East	11%	11%	78%
England	8%	9%	82%

Obesity

The table below shows the proportion of adults classed as obese, and those that smoke in the North East and in England. Newcastle upon Tyne has a significantly lower proportion (20.5%) of obese adults than the national average (26.7%). North Tyneside and Northumberland also have slightly lower proportions of obese adults than national averages. In contrast, the remainder of the council areas all have a higher than national average proportion of obese adults. Sunderland has the highest levels of obesity at 28.6% of residents.

 $^{^{89}}$ ONS (2011) Census 2011, QS303EW - Long-term health problem or disability $\stackrel{89}{\text{Page}} 300$

Table: Adult obesity and smoking levels⁹⁰

	County Durham	Gates- head	New- castle upon Tyne	North Tynesid e	Northu mberlan d	South Tynesid e	Sunder- land	North East	England
Adult Obesity	27.3%	27.2%	20.5%	25.4%	26.3%	27.5%	28.6%	26.7%	27.3%
Adult Smokers	20.6%	21.0%	19.6%	18.6%	16.5%	19.5%	22.8%	18.0%	20.6%

In Northumberland 16.5% of residents smoke. This is lower than the national average of 18.0%. However, the other North East council areas have proportionally higher levels of smoking than the national average. Sunderland has the highest proportion with 22.8% of residents smoking.

Human Health: Summary of Future Baseline

Between 2000 and 2013 Life expectancy at birth in the North East increased by 2.4 years for females and 3.5 years for males.91 This increase in life expectancy is likely to continue (although it should be noted that recently, improvements have stalled). With a proportionally older population ailments associated with age such as cancer and dementia are likely to place an increasing burden on health care92.

An ageing population may increase the prevalence of disability in the population – which is currently higher than the national average; and the high proportion of smoking and obesity in some parts of the North East may also increase burden on healthcare. Deprivation in the North East council areas is also higher than the national average, and without improved access to socio-economic opportunities in the area, this may continue.

Equalities baseline

The baseline provides a profile of people within the North East with Protected Characteristics and provides an evidence base for particular issues identified that are likely to affect these groups. The baseline data draws on the population and health data discussed above, with additional information also included.

Age: young people and older people

All seven North East council areas have a slightly lower proportion of young people (less than 15 years old) in their population structures than the national average of 19%. The majority of council areas within the North East are comparable with the national average of residents within the 16-24 age group (12%); however both North Tyneside and Northumberland have a slightly lower proportion of residents within this group (10%). In contrast, Newcastle upon Tyne shows a significantly higher proportion (20%).

The national average within the 45-59 age group is 19% and the North East average is 21%. With the exception of Newcastle upon Tyne (17%) all other council areas have a higher proportion of residents within this age category than the national average; of these Northumberland has the highest at 28%.

The same pattern occurs in the proportion of the population over the age of 60; the England average for this age group is 22%, while Newcastle has a lower proportion than this (19%), the remainder of the North East council areas have a higher number of old people within their population structures. Northumberland again has the highest proportion (28%).

In summary, North East council areas generally have a lower proportion of younger people and a higher proportion of older people than the national average. The exception to this is the conurbation of

⁹⁰ Public Health England (2014) Health Profiles [online] available at: http://fingertips.phe.org.uk/profile/healthprofiles/data#page/0/gid/1938132694/pat/6/par/E12000001/ati/101/are/E06000047/iid/90641/age/1/sex/4 ⁹¹ lbid23

⁹² Select Committee on Public Service and Demographic Change (2013) Ready for Ageing? [online] available at: $\frac{\text{http://www.parliament.uk/business/committees/committees-a-z/lords-select/public-services-committee/report-ready-for-ageing/Page 301}$

Newcastle upon Tyne, which has a significantly higher proportion of younger people and a slightly lower proportion of older people than the national average.

BAME

With the exception of Newcastle upon Tyne, the council areas in the North East have a significantly higher proportion of residents who identify as white British than the national average. Subsequently there are a proportionally lower number of residents belonging to a BAME group in the majority of the council areas than the national average; however, Newcastle has comparable, and in some cases higher numbers, of residents identifying as Bangladeshi, 'other' Asian, or Arab than the national average. Additionally, Newcastle also has a significantly higher Chinese population (2.15%) compared to the national average of 0.72%. This is presented in the table below.

Table: Ethnic Groups⁹³

	County Durham	Gates- head	New- castle upon Tyne	North Tyne- side	Northu m- berland	South Tyne- side	Sunder- land	North East	England
White: British	96.58%	94.08%	81.92%	95.09%	97.17%	95.07%	94.81%	93.63%	79.75%
White: Irish	0.24%	0.30%	0.65%	0.30%	0.26%	0.21%	0.22%	0.31%	0.98%
White: Gypsy or Irish Traveller	0.09%	0.04%	0.06%	0.01%	0.05%	0.01%	0.03%	0.06%	0.10%
White: Other White	1.25%	1.85%	2.86%	1.23%	0.94%	0.65%	0.87%	1.33%	4.58%
White and Black Caribbea n	0.19%	0.21%	0.30%	0.22%	0.16%	0.22%	0.20%	0.23%	0.78%
White and Black African	0.06%	0.13%	0.31%	0.19%	0.07%	0.15%	0.09%	0.14%	0.30%
White and Asian	0.21%	0.26%	0.57%	0.30%	0.20%	0.30%	0.22%	0.31%	0.63%
Other Mixed	0.14%	0.18%	0.35%	0.19%	0.10%	0.22%	0.14%	0.19%	0.53%
Asian/ Asian British: Indian	0.27%	0.46%	1.81%	0.55%	0.30%	0.43%	0.63%	0.61%	2.63%
Asian/ Asian British: Pakistan i	0.09%	0.31%	2.27%	0.16%	0.11%	0.29%	0.24%	0.76%	2.10%
Asian/ Asian British: Banglad eshi	0.05%	0.12%	1.67%	0.34%	0.09%	1.04%	0.75%	0.42%	0.82%
Asian/As ian British: Chinese	0.31%	0.53%	2.15%	0.43%	0.14%	0.16%	0.56%	0.55%	0.72%

 $^{^{\}rm 93}$ ONS (2011) - KS201EW - Ethnic group [online] available at: http://www.nomisweb.co.uk/home/search.aspx?context=&term=KS201EW ${\color{red}Page~302}$

	County Durham	Gates- head	New- castle upon Tyne	North Tyne- side	Northu m- berland	South Tyne- side	Sunder- land	North East	England
Asian/As ian British: Other	0.23%	0.45%	1.76%	0.42%	0.20%	0.31%	0.48%	0.53%	1.55%
Black /Black British: African	0.09%	0.45%	1.66%	0.29%	0.06%	0.21%	0.39%	0.42%	1.84%
Black/ /Black British: Caribbea n	0.03%	0.04%	0.08%	0.05%	0.04%	0.04%	0.04%	0.05%	1.11%
Black /Black British: Other Black	0.02%	0.04%	0.10%	0.03%	0.01%	0.03%	0.04%	0.04%	0.52%
Arab	0.09%	0.14%	0.93%	0.09%	0.02%	0.38%	0.11%	0.23%	0.42%
Any other ethnic group	0.07%	0.40%	0.53%	0.12%	0.06%	0.27%	0.20%	0.20%	0.62%

Disabled people

All council areas in the North East have a higher proportion of residents whose day to day activities are limited a lot by disability than the national average. The areas which have particularly high prevalence of disability are Sunderland, South Tyneside, and County Durham. These all have disability rates 4% higher than the national average.

Newcastle upon Tyne has a higher proportion of people whose day to day activities are not limited by disability than the national average; however the remainder of the council areas in the North East have a lower proportion of residents whose day to day activities are not limited by disability than the national average. The table below displays the prevalence of disability across residents in the North East.

Sex/gender

The Equalities Act requires the assessment to investigate different barriers to, and potential for, advancing equality of opportunities for all across genders. The table below shows that the majority of council areas in the North East have a similar proportion of male to females as the national average (49% male, 51% female). However, although Newcastle has an even split between the genders, both North Tyneside and South Tyneside show a slightly lower number of males (48%) and correspondingly higher proportion of females (51%).

Table: Population structure, male to female numbers

Council area	Males	Females
County Durham	49%	51%
Gateshead	49%	51%
Newcastle upon Tyne	50%	50%
North Tyneside	48%	52%
Northumberland	49%	51%
South Tyneside	48%	52%
Sunderland	49%	51%
North East	49%	51%
England	49%	51%

The Equalities Act also requires the public authority to protect the rights of and advance equality of opportunity for those who have undergone gender reassignment. However, there is currently no data on this available for the North East. Regarding the estimation of the proportion of Transgender people within a population; a 2008 report⁹⁴ produced for the European Region of the International Lesbian and Gay Association notes:

"There is simply no publicly available statistical data on which to make a firm statement. Estimates range from about 1 in 11,000 to as many as 1 in 20 in the male population"

The report notes that there are many difficulties in getting an accurate population measurement, such as defining the criteria by which the population is measured. On this basis it is likely that a detailed population figure can only be attained through survey work. In the context of the NETP, it is unlikely that people having undergone gender reassignment/ transgender people will experience significant equalities effects.

Sexual orientation

The Plan will also need to consider equalities effects on the lesbian, gay, bisexual population of the North East area. The ONS Integrated Household Survey (IHS) recently introduced questions on sexual orientation. Experimental data from the 2014 survey indicates that across the UK, 1.1% of adults identify as gay or lesbian, 0.5% as bisexual, and 0.3% as 'other'. London as a region has the largest proportion of adults identifying as Lesbian, Gay, or Bisexual (LGB), at 3.2%. However no data specific to the North East is available from this survey.⁹⁵ It is unlikely that groups with this protected characteristic will experience significant equality effects from the NETP.

Religion

The table below shows the proportion of residents belonging to different religious groups located in the council areas of the North East, the North East region as a whole, and England. With the exception of Newcastle upon Tyne, councils within the North East have a higher proportion of residents identifying as Christian than the national average of 59.38%. In contrast, Newcastle upon Tyne and North Tyneside both have a higher proportion of residents who identify has having no religion compared to the North East and national averages. Broadly speaking, there are lower proportions of residents belonging to other religions across the North East than the national average; however Newcastle upon Tyne has a higher proportion of Muslim residents (6.27%) than the North East (1.8%) and England (5.02%).

Page 304

⁹⁴Transgender EuroStudy: Legal Survey and Focus on the Transgender Experience of Health Care (2008) [online] available at: http://www.pfc.org.uk/pdf/eurostudy.pdf

⁹⁵ ONS (2014) Integrated Household Survey, January to December 2013: Experimental Statistics, [online] available at: http://www.ons.gov.uk/ons/dcp171778_379565.pdf

Table: Religious Groups⁹⁶

	County Durha m	Gates- head	New- castle upon Tyne	North Tyne- side	Northu m- berland	South Tyne- side	Sunder- land	North East	England
Christian	72.04%	66.97%	56.44%	63.84%	68.56%	70.27%	70.29%	67.52%	59.38%
Buddhist	0.20%	0.21%	0.61%	0.22%	0.18%	0.15%	0.20%	0.24%	0.45%
Hindu	0.12%	0.25%	1.12%	0.26%	0.11%	0.17%	0.22%	0.30%	1.52%
Jewish	0.04%	1.50%	0.24%	0.05%	0.05%	0.04%	0.03%	0.17%	0.49%
Muslim	0.38%	1.05%	6.27%	0.74%	0.32%	1.93%	1.32%	1.80%	5.02%
Sikh	0.12%	0.18%	0.44%	0.18%	0.16%	0.29%	0.30%	0.23%	0.79%
Other religion	0.30%	0.26%	0.27%	0.26%	0.31%	0.24%	0.19%	0.26%	0.43%
No religion	20.90%	23.85%	28.32%	28.09%	23.93%	21.09%	21.91%	23.40%	24.74%
Religion not stated	5.92%	5.73%	6.30%	6.37%	6.38%	5.82%	5.55%	6.08%	7.18%

Rurality Baseline

Spatial pattern of rural and urban areas

The following section provides an overview of the rural-urban classification, or the 'rurality'. This term refers to the extent to which an area has been classed as urban or rural. For the purposes of this report the 2011 Rural-Urban Classification for output areas in England has been used.⁹⁷

The 2011 Rural-Urban Classification classed urban areas as those which are connected built up areas identified by Ordnance Survey mapping, and that have resident populations above 10,000 people. Rural areas are those that are not urban, i.e. consisting of settlements below 10,000 people, or are open countryside. **Figure 13.2** displays the 'rurality' of the North East. This is shown at the Lower Super Output Area (LSOA) scale and has been split into urban and rural areas, both sparse and not sparse. The hierarchal structure of this classification is shown in **Figure 13.1**.

Office for National Statistics (2011) Rural Urban Classification [online] available at: https://www.gov.uk/government/collections/rural-urban-classification [accessed 05/03/20]

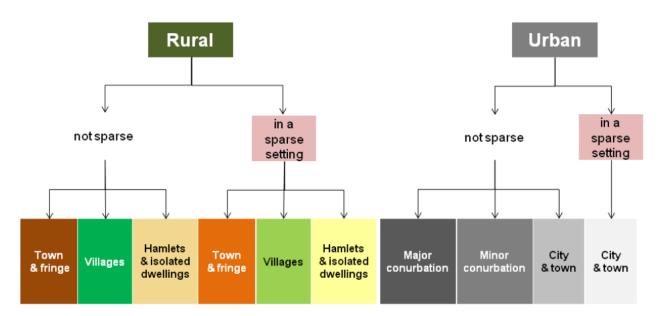


Figure 13.1: Hierarchy of the 2011 Rural-Urban Classification⁹⁸

Northumberland shows the highest proportion of land area which is classified as 'rural', 'sparse' and less sparse village hamlet' and 'isolated dwellings', as well as 'sparse town and fringe' comprising the majority of the county. County Durham shows the next highest proportion of rurality, and with the highest proportion of 'less sparse town and fringe' settlements.

Sunderland, with the exception of a small area of less sparse town and fringe, is entirely covered by land classed as urban. South Tyneside is classed as entirely urban, while the majority of North Tyneside is also urban with small areas of town and fringe. Newcastle upon Tyne and Gateshead are composed predominantly of urban areas with smaller areas classed as less sparse town and fringe, and less sparse village hamlets and isolated dwellings.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/239478/RUC11user_guide_ 28_Aug.pdf [accessed 05/03/20]

⁹⁸ Office for National Statistics (2013) The 2011 Rural-Urban Classification For Small Area Geographies: A User Guide and Frequently Asked Questions (v1.0)

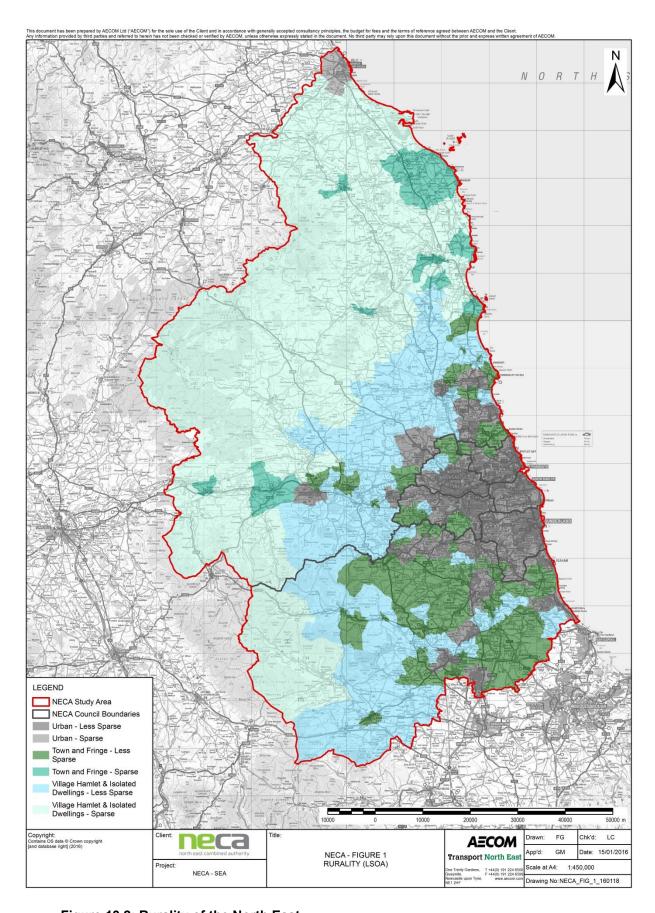


Figure 13.2: Rurality of the North East

Method of travel to work

The table below shows the methods of travel to work within the North East and national averages, split between urban and rural residents. Headline findings show that across the board more residents in rural areas work from home than in urban areas. The largest proportions of these are found in County Durham, Northumberland and Gateshead. Car usage is also higher across rural council areas than those in urban areas. A higher proportion of residents are generally found to travel on foot or by bicycle in urban areas than rural ones – which may be a reflection of shorter travel times and distances. With the exception of North Tyneside, bus travel is also lower in rural areas.

Table: Rural/urban methods of travel to work

Urban methods of travel to work

	County Durham	Gates- head	Newcast le upon Tyne	North Tyne- side	Northum berland	South Tyne- side	Sunder- land	England
Work from home	3.3%	2.9%	3.3%	3.4%	3.8%	2.4%	2.5%	4.5%
Underground/metr o/tram	0.2%	5.1%	5.4%	9.3%	0.4%	8.9%	2.3%	4.9%
Train	1.0%	0.8%	1.2%	1.6%	1.2%	1.8%	0.8%	5.8%
Bus, minibus or coach	6.3%	15.6%	18.7%	8.9%	6.3%	9.7%	12.7%	8.6%
Taxi	0.8%	0.5%	0.9%	0.9%	0.5%	0.5%	0.7%	0.6%
Motorcycle/scoote r/moped	0.4%	0.4%	0.3%	0.5%	0.5%	0.5%	0.4%	0.8%
Car or van	65.9%	56.6%	47.3%	57.1%	65.2%	56.6%	60.8%	54.5%
Bicycle	1.2%	1.5%	2.8%	2.5%	1.7%	2.2%	1.3%	3.2%
On foot	12.2%	9.5%	13.6%	8.5%	12.4%	9.4%	9.8%	11.3%
Other method	0.7%	0.6%	0.7%	1.1%	0.8%	2.0%	0.8%	0.6%

Rural methods of travel to work

	County Durham	Gates- head	Newcast le upon Tyne	North Tyne- side	Northum berland	South Tyne- side	Sunder- land	England
Work from home	5.3%	5.6%	4.4%	3.2%	9.0%	4.2%	4.9%	9.5%
Underground/ metro/tram	0.1%	0.4%	3.3%	2.4%	0.5%	7.4%	0.0%	0.3%
Train	0.7%	0.6%	0.8%	0.5%	1.4%	0.7%	0.6%	3.1%
Bus, minibus or coach	5.9%	12.4%	12.4%	13.1%	4.0%	8.1%	9.6%	2.4%
Taxi	0.5%	0.5%	0.6%	0.4%	0.3%	0.4%	0.4%	0.2%
Motorcycle/scoote r/moped	0.5%	0.6%	0.5%	0.8%	0.5%	1.1%	0.1%	0.7%
Car or van	69.7%	66.4%	62.8%	66.3%	65.6%	57.0%	70.5%	68.6%
Bicycle	0.7%	1.2%	1.7%	1.9%	1.2%	2.5%	1.2%	1.7%
On foot	8.4%	5.3%	6.5%	4.4%	10.6%	9.9%	4.3%	8.2%
Other method	0.6%	0.6%	1.3%	0.8%	1.1%	1.4%	0.7%	0.7%

Population age structure

The table below displays the population structure across the North East and in England for both rural and urban areas. Headline findings show that across all council areas within the North East there is a lower proportion of the population in the 0-15 age group in rural areas than urban ones, with the exception of South Tyneside. This difference is most pronounced in Sunderland and Northumberland.

This trend continues through the 16-24 and 25-44 age groups. In contrast there are slightly more residents in the 45-59 age group in rural areas than urban ones, and significantly more over the age of 60. This difference is most pronounced in Newcastle upon Tyne, North Tyneside and Sunderland.

Table: Rural/urban population structure

Urban Population Structure

			•	торин	ation otraotare			
	County Durham	Gates- head	Newcastle upon Tyne	North Tyneside	Northumberland	South Tyneside	Sunderland	England
0- 15	17.1%	17.8%	17.1%	17.9%	18.0%	17.5%	17.5%	19%
16- 24	13.9%	11.0%	20.0%	10.0%	10.5%	11.5%	12.4%	12%
25- 44	24.7%	27.6%	26.8%	27.1%	23.9%	24.5%	25.3%	28%
45- 59	20.4%	20.0%	17.4%	21.3%	21.6%	21.9%	21.2%	19%
60+	23.8%	23.6%	18.7%	23.7%	26.0%	24.6%	23.5%	22%

Rural Population Structure

	County Durham	Gateshead	Newcastle upon Tyne	North Tyneside	Northumberland	South Tyneside	Sunderland	England
0-	17.2%	16.8%	17.8%	15.9%	15.9%	18.5%	13.7%	19%
15	17.270	10.0%	17.070	15.9%	15.9%	10.5%	13.770	1976
16-	10.1%	9.7%	9.0%	8.1%	8.9%	13.5%	8.4%	12%
24	10.170	0.170	0.070	0.170	0.070	10.070	0.470	1270
25- 44	24.7%	23.6%	25.3%	22.7%	21.6%	26.1%	23.4%	28%
45- 59	21.9%	22.4%	21.1%	20.7%	23.6%	20.8%	24.5%	19%
60+	26.2%	27.4%	26.8%	32.6%	29.9%	21.1%	29.9%	22%

Prevalence of disability

The table below displays the extent to which disability limits day to day activities in the North East and in England, for both rural and urban areas. With the exception of South Tyneside, across the board more residents feel that their day to day activities are not limited by disability in urban areas than in rural areas. While conversely, With the exception of South Tyneside, a slightly higher proportion of residents living in rural areas feel that their day to day activities are limited a lot by disability when compared to those living in urban areas. South Tyneside is again the exception to this, as a higher proportion of urban residents feel that their day to day activities are limited a lot by disability than in rural South Tyneside.

Table: Rural/urban disability prevalence

Urban disability prevalence

	Day-to-day activities limited a lot	Day-to-day activities limited a little	Day-to-day activities not limited
County Durham	12.1%	11.2%	76.7%
Gateshead	11.4%	10.7%	77.9%
Newcastle upon Tyne	9.5%	9.2%	81.3%
North Tyneside	10.1%	10.4%	79.5%
South Tyneside	12.3%	11.0%	76.7%
Sunderland	12.4%	11.0%	76.6%
Northumberland	10.3%	10.8%	78.9%
England	8.4%	9.2%	82.4%

Rural disability prevalence

	Day-to-day activities limited a lot	Day-to-day activities limited a little	Day-to-day activities not limited
County Durham	12.5%	11.6%	75.9%
Gateshead	11.8%	11.2%	77.1%
Newcastle upon Tyne	11.6%	11.4%	77.0%
North Tyneside	10.7%	12.7%	76.5%
South Tyneside	8.7%	8.7%	82.7%
Sunderland	12.6%	11.0%	76.4%
Northumberland	9.2%	11.1%	79.8%
England	7.8%	10.0%	82.2%

Using ONS statistics, deprivation is discussed in the context of household deprivation dimensions which measure deprivation across four 'dimensions' of deprivation⁹⁹ including: any member of a household not a full-time student who is either unemployed or long-term sick; education; health and disability; and housing deprivation. The table below sets out these deprivation dimensions in the North East for both rural and urban households.

Headline findings from this data show that Northumberland, South Tyneside, and Sunderland all have slightly higher proportions of rural households which do not experience any dimension of deprivation compared with urban ones. In contrast County Durham, Newcastle, North Tyneside, and Gateshead

⁹⁹ ONS (2011) Census 2011, Households by Deprivation Dimensions, 2011 (QS119EW)

all have higher proportions of urban households which do not experience any dimension of deprivation compared with rural ones.

Looking at data for households which are deprived in 3 and 4 dimensions, across the board urban areas show higher proportions of deprived households, this difference is most marked in Gateshead and South Tyneside.

Table: Rural/urban household deprivation dimensions

Urban deprivation

			opiitation		
	Not deprived in any dimension	Deprived in 1 dimension	Deprived in 2 dimensions	Deprived in 3 dimensions	Deprived in 4 dimensions
County Durham	39.4%	30.7%	23.1%	6.5%	0.3%
Gateshead	38.7%	31.2%	22.6%	7.1%	0.5%
Newcastle	40.6%	31.1%	20.7%	6.9%	0.7%
North Tyneside	43.5%	30.9%	19.9%	5.3%	0.4%
Northumberland	42.3%	32.0%	20.2%	5.2%	0.3%
South Tyneside	36.5%	32.3%	23.7%	7.0%	0.5%
Sunderland	35.7%	31.9%	24.4%	7.5%	0.5%
		Rural de	eprivation		
	Not deprived in any dimension	Deprived in 1 dimension	Deprived in 2 dimensions	Deprived in 3 dimensions	Deprived in 4 dimensions
County Durham	39.2%	30.9%	23.3%	6.3%	0.3%
Gateshead	40.3%	31.9%	22.1%	5.3%	0.3%
Newcastle	39.9%	32.1%	22.1%	5.6%	0.4%
North Tyneside	41.0%	34.2%	21.2%	3.5%	0.1%
Northumberland	45.2%	32.8%	18.2%	3.6%	0.2%
South Tyneside	37.9%	35.2%	23.3%	3.6%	0.0%
Sunderland	38.4%	34.2%	21.5%	6.0%	0.0%

Deprivation can also be measured by the Index of Multiple deprivation (IMD). This is an overall relative measure of deprivation created by combining seven domains of deprivation (Income Deprivation; Employment Deprivation; Education, Skills and Training Deprivation; Health Deprivation and Disability; Crime; Barriers to Housing and Services; and Living Environment Deprivation).

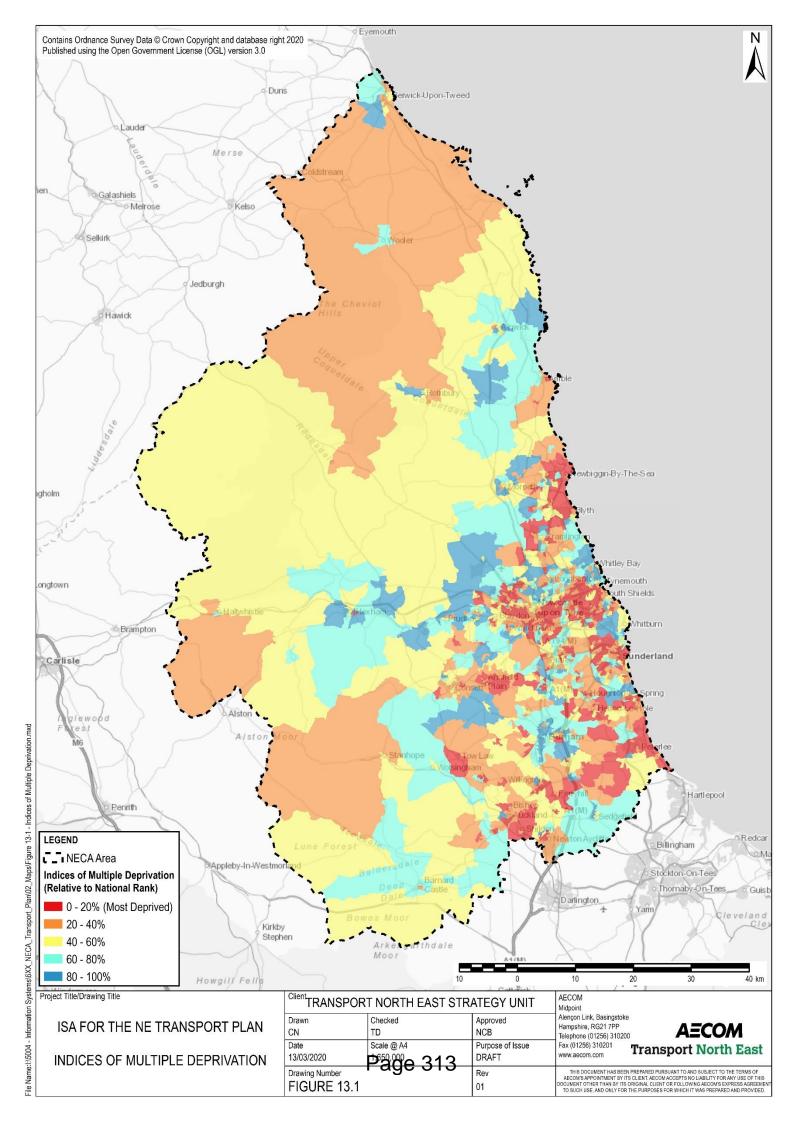
Prepared for: Transport North East Strategy Unit

Figure 13.1 displays IMD scores as deciles at the LSOA scale. The deciles are calculated by ranking the 32,844 LSOAs in England from most deprived to least deprived and dividing them into 10 equal groups. LSOAs in decile 1 fall within the most deprived 10% of LSOAs nationally and LSOAs in decile 10 fall within the least deprived 10% of LSOAs nationally.

As shown in **Figure 13.1** the highest levels of deprivation are concentrated in the south east of the North East, in particular in the 'sparse urban' areas of Sunderland, South Tyneside, and Newcastle upon Tyne, which contain LSOAs that fall within the most 20% deprived nationally.

In Northumberland there are large areas of 'less sparse village hamlet & isolated dwellings', and in County Durham there are larger areas of 'less sparse town and fringes' which both show much lower levels of deprivation. Many of these areas are in the least 30% deprived LSOAs nationally. Conversely, in much of northern Northumberland there are many LSOAs classed as 'sparse village hamlet & isolated dwellings' which are in the 40% most deprived nationally. This particularly relates to the However, this masks significant deprivation issues with regards to access to services and facilities, as reflected by higher IMD scores relating to the 'Barriers to Housing and Services' domain.

From this it can be seen that, generally, areas that are rural but 'less sparse' typically show the lowest levels of deprivation.





North East Transport Plan

Habitat Regulations Assessment

North East Joint Transport Committee

March 202°

Quality information

Prepared by	Checked by	Verified by	Approved by
Georgia Stephens	Isla Hoffmann Heap	Dr James Riley	Dr James Riley
Graduate Ecologist	Senior Ecologist	Technical Director	Technical Director

Revision History

Revision	Revision date	Details	Authorized	Name	Position
0	8/03/21	For committee	JR	James Riley	Technical Director

Prepared for:

North East Joint Transport Committee

Prepared by:

AECOM Limited Midpoint, Alencon Link Basingstoke Hampshire RG21 7PP United Kingdom

T: +44(0)1256 310200 aecom.com

© 2021 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1.	Introduction	1
Backo	ground to the project	1
	slation	
This F	Report	2
2.	Methodology	3
Introd	duction	3
HRA -	Task 1 – Likely Significant Effects (LSE)	3
Confir	irming Other Plans and Projects That May Act 'In Combination'	4
3.	Relevant Impact Pathways	6
Air qu	uality	6
Noise/lighting during construction and operation		
Water	r Quality	8
4.	Test of Likely Significant Effects	9
App	endix A Likely Significant Effects Test	11
Tab	oles	
	2.1. LSE Test for Policies	11
IDNA	2 / 1 SE 1891 INF INITIATIVA	

Habitats Regulations Assessment for the North East Transport Plan

This page is intentionally blank.

1. Introduction

Background to the project

- 1.1 AECOM was appointed by the North East Joint Transport Committee to assist in undertaking a Habitats Regulations Assessment (HRA) for the North East Transport Plan 2021 2035 (NETP). The aim of this HRA is to assess whether the implementation of the NETP will result in Likely Significant Effects (LSEs) or Adverse Effect on Integrity on European sites (Special Areas of Conservation, SACs, and Special Protection Areas, SPAs). As a matter of UK Government policy, Ramsar sites) that are located within or adjacent to the North-East of England. LSEs are deemed to be present where the implementation of a policy or transport intervention might realistically prevent a European site from reaching its conservation objectives.
- 1.2 This is the first region-wide Transport Plan for the seven local authority areas in the North East, covering two Combined Authorities, brought together by the North East Joint Transport Committee:
 - The North East Combined Authority (comprising Durham, Gateshead, South Tyneside and Sunderland)
 - The North of Tyne Combined Authority (comprising Newcastle upon Tyne, North Tyneside and Northumberland)
- 1.3 The HRA of the NETP is required to determine if there are any realistic linking pathways present between a European site and the NETP and where Likely Significant Effects cannot be screened out, an analysis to inform Appropriate Assessment is then undertaken to determine if adverse effects on the integrity of the international sites will occur as a result of the NETP alone or in combination with other projects and plans.

Legislation

1.1 The UK left the EU on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 ("the Withdrawal Act"). The Withdrawal Act retains the body of existing EU-derived law within our domestic law. From 1 January 2021, the UK is no longer a member of the European Union. However, Habitats Regulations Assessment continues, as set out in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. The legislative basis for HRA is provided in Figure 1 below.

Figure 1: The legislative basis for HRA

Conservation of Habitats and Species Regulations 2017 (as amended)

The Regulations state that:

"A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that sites conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site".

- 1.2 The first step is to determine whether there is likely to be a significant effect. Over time the phrase 'Habitats Regulations Assessment' has come into wide currency to describe the overall process set out in the Habitats Directive from screening through to Imperative Reasons of Overriding Public Interest (IROPI). This has arisen in order to distinguish the process from the individual stage described in the law as an 'Appropriate Assessment'.
- 1.3 In spring 2018 the 'Sweetman' European Court of Justice ruling¹ clarified that 'mitigation' (i.e. measures that are specifically introduced to avoid or reduce a harmful effect on a European site that would otherwise arise) should **not** be taken into account when forming a view on likely significant effects. Mitigation should

instead only be considered at the Appropriate Assessment stage. This HRA has been cognisant of that ruling.

This Report

1.4 Chapter 2 of this report explains the process by which the HRA has been carried out. Chapter 3 provides scientific background on the impact pathways considered relevant to Transport Plans. Chapter 4 and Appendix A explore Likely Significant Effects (LSEs) resulting from the policies and packages of measures proposed in the NETP.

2. Methodology

Introduction

2.1 The HRA will be carried out with reference to the general EC guidance on HRA² and in summer 2019 the UK government published general guidance on HRA³. These will be referred to in undertaking this HRA. Figure 2 below outlines the stages of HRA according to current Ministry of Housing, Communities and Local Government guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the Plan until no significant adverse effects remain.



Figure 2: Four Stage Approach to Habitats Regulations Assessment. Source GOV.UK, 2019.

- 2.2 There is already a considerable body of evidence available regarding these European sites. The evidence available includes:
 - HRA work undertaken for Local Plans in the area
 - The UK Air Pollution Information System (<u>www.apis.ac.uk</u>) which identifies the vulnerabilities of particular European sites to air quality impacts
 - Conservation Objectives, Site Improvement Plans and Supplementary Advice for all European sites, identifying the key threats and pressures for those sites.

HRA Task 1 – Likely Significant Effects (LSE)

2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Likely Significant Effect (LSE) test - essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

² European Commission (2001): Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

³ https://www.gov.uk/guidance/appropriate-assessment

"Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"

- 2.4 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites. This stage is undertaken in Chapter 4 of this report and in Appendix A.
- 2.5 This stage is intended as a brief, high level analysis intended primarily to focus the rest of the assessment on those policies or interventions which pose a credible pathway for effect. Case law has established that with regard to this test, 'likely' really means 'possible' and a 'significant' effect is one where reasonable scientific doubt remains as to whether it would affect the ability of a European site to achieve its conservation objectives. The likely significant effect test consists of two parts: firstly, determining whether there are any interventions that could result in negative impact pathways and secondly determining whether there are any European sites that might be affected. First each policy and intervention is categorised on the basis of whether it can be dismissed from consideration, primarily because it will not promote or deliver development, for example by focussing entirely on promoting sustainable transport initiatives, or because it is remote from European sites, or insufficient information is available within the NETP to undertake an analysis at this Transport Plan level. There is then consideration of which European sites could be affected by that intervention based on their known sensitivities and the presence of any linking impact pathways.
- 2.6 While the precautionary principle must be applied, the Court of Appeal ruled in the Boggis judgment that there should be 'credible evidence that there was a real, rather than a hypothetical, risk'4. This is particularly relevant to intentionally very high-level plans such as transport plans, which contain lengthy lists of initiatives but are intended solely to set the framework for each initiative to be fully explored and designed at lower tiers in the planning process (e.g. planning applications). For this reason, the NETP, like all transport plans, provides very little detail on the specific schemes that it includes. This inherently limits the level of assessment possible in the NETP HRA.
- 2.7 On these occasions the advice of Advocate-General Kokott⁵ is key. She commented that: 'It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure'.

Confirming Other Plans and Projects That May Act 'In Combination'

- 2.8 It is a requirement of the Regulations that the impacts of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.
- 2.9 For example, in the context of the NETP, a reasonable question might be whether the Local Plans of other nearby authorities might have an in-combination effect with the NETP being assessed. This synergistic effect may potentially lead to higher recreational pressure in European sites or encouraging higher volumes of private car travel along European sites, potentially leading to an increase in atmospheric pollution.
- 2.10 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e. to ensure that those projects or plans (which in themselves may have minor impacts) are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in combination assessment is therefore of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential.

49http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN

⁴ Court of Appeal case C1/2009/0041/QBACF Citation No [2009] EWCA Civ. 1061

⁵ Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph

- 2.11 The NETP will occur alongside the following other strategic planning documents including other transport plans and Local plans:
 - County Durham Plan (2020)
 - Northumberland County Council Local Transport Plan 2011 2026
 - Northumberland County Council Consolidated Planning Policy Framework
 - Planning for the Future, Core strategy and Urban Core Plan for Gateshead and Newcastle upon Tyne (2010 – 2030)
 - Sunderland City Council Core Strategy and Development Plan 201 2033 (2020)
 - South Tyneside Council Core Strategy (2007)
 - South Tyneside Council Development Management Policies (2011)
 - North Tyneside Local Plan (2017)
 - Darlington Borough Council Core Strategy DPD 2011 2026 (2011)
 - Hartepool Local Plan (2018)
 - Stockton-on-Tees Borugh Council Local Plan (2019)
 - Stockton-on-Tees Borough Council Joint Minerals and Waste Core Strategy and Policies and Site Development Plan Documents (2011)
 - Middlesborough Publication Local Plan (2018)
 - Redcar & Cleveland Local Plan (2018)
 - Scarborough Local Plan (2017)
 - Ryedale Local Plan Strategy (2013)
 - Hambledon District Council Plan 2019 2023 (2020/21)
 - Selby Preferred Options Local Plan 2021
 - Selby District Core Strategy Lolcal Plan (2013)
 - Selby District Local Plan (2005)
 - Harrogate District Local Plan 2014 2035
 - Richmondshire District Council Local Plan 2012 2028
 - Craven Local Plan 2012 2032
- 2.12 Where Local Authorities do not have a separate transport plan to support the Local Plan, sustainable transport policies will be included within the Local Plans for these authorities in the majority of cases. While the focus of these policies is primarily to promote sustainable modes of transport, they also include improvements to the road network that might increase the use of private vehicles. Furthermore, there is the potential that such plans may increase recreational patterns and / or water runoff effects in combination. Therefore, these documents were also considered in this HRA.

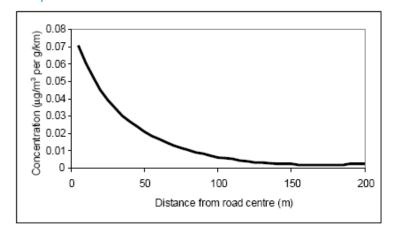
3. Relevant Impact Pathways

3.1 There are no standard criteria for determining the ultimate physical scope of an HRA. Rather, the source-pathway-receptor model should be used to determine whether there is any potential pathway connecting development to any European sites. No initiatives or interventions in the North East Transport Plan will involve direct losses of any European sites. Therefore, the following impact pathways are expected to be relevant to the HRA of the North East Transport Plan given the scope of the interventions.

Air quality

- 3.2 The principal pollutant of concern to habitats is oxides of nitrogen (NOx) emitted from combustion and particularly vehicle exhausts. According to the World Health Organisation, the critical NOx concentration (critical threshold) for the protection of vegetation is 30 µgm⁻³. In addition, ecological studies have determined 'critical loads' of atmospheric nitrogen deposition (that is, NOx combined with ammonia NH₃) for key habitats within the European sites in the study area.
- 3.3 Throughout this HRA it is considered that an increase in rail usage means the potential for a decrease in cars and HGV's and is therefore a positive step for air quality. The Department of Transport have made the following comment on air quality issues as they relate to the transfer of freight movements from road to rail, which supports the approach we intend to take: "It should be noted that in terms of total transport emissions, rail transport accounts for less than 1% of the total. Therefore, even with the most rail orientated transport options, perhaps doubling the rail kilometres, the potential for any significant impact on emissions will lie mainly with the saving in emissions from road transport brought about by modal transfer, rather than those generated by rail. Hence, it is suggested that emissions from rail sources can be scoped out in most cases".
- 3.4 With regard to pollution from road traffic, the Department of Transport's Transport Analysis Guidance states that, "Beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant". See Figure 3 below.

Figure 3. Generalised model of traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT)



- 3.5 This is therefore the distance that will be used throughout the HRA in order to determine whether European sites are likely to be significantly affected by road development under the North East Transport Plan, in line with guidance in the Design Manual for Roads and Bridges.
- 3.6 The following European sites within the study area (Newcastle, North Tyneside, Northumberland, County Durham, Gateshead, South Tyneside and Sunderland) lie within 200m of major roads:

⁶ The critical load is the rate of deposition beyond which research indicates that adverse effects can reasonably be expected to occur

⁷ Department of Transport (2004). Transport Analysis Guidance: Regional Air Pollution. www.webtag.org.uk/archive/feb04/pdf/feb04-333.pdf

- Castle Eden Dene SAC (adjacent to the A19 and A1086)
- Durham Coast SAC and Northumbria Coast SPA (within 200m of the A182 at Seaham, the A1086, A183 and A1018);
- River Tweed SAC (crossed by the A1 west of Berwick-upon-Tweed and the A697 in several locations)
- Border Mires, Kielder, Butterburn SAC (adjacent to the A68)
- North Pennine Moors SAC and SPA (crossed by the A686 and within 200m of the A689 and A66)
- 3.7 The HRA therefore considers the potential for schemes outlined in the North East Transport Plan to either improve air quality on these links (such as by maximising sustainable transport initiatives) or to contribute to a deterioration in air quality.

Noise/lighting during construction and operation

- The factors that influence a species response to a disturbance are numerous, but three key factors are species sensitivity, proximity of disturbance sources and timing/duration of the potentially disturbing activity. Regarding construction noise impacts on waterfowl and waders, AECOMs professional experience is that noise impacts are unlikely to arise from noise-generating activities located more than c.200m from the qualifying bird species. Studies indicate that noise levels in excess of 84 dB(A) typically elicit a flight response in birds⁹ and the same research recommends that construction noise levels are kept below 70 dB to avoid excessive disturbance of birds¹⁰.
- 3.9 The noisiest construction activity is generally impact piling, where a hammer is dropped on the pile. This has a typical maximum noise level of 100-110dB at 1m from source. Noise attenuates by 6dB for every doubling of distance, such that impact piling typically results in noise levels below 70 dB at distances of more than 100m from source. Therefore, a 200m separation between construction activity and the SPA/Ramsar should generally ensure no disturbance arises through this pathway. This does not obviate the need for project-level HRA for individual applications but will aid in determining whether initiatives are likely to raise conflict with SPAs through this pathway.
- Studies have found that operational roads can lead to a reduction in the bird abundance within adjacent hedgerows - Reijnen et al (1995) examined the distribution of 43 passerine species (i.e. 'songbirds'), of which 60% had a lower density closer to the roadside than further away¹¹. Such impacts have been reported up to 1km away due to more intense sources such as busy highways 12. There are several possible reasons for this, including direct disturbance and the possibility that calls are masked by road noise.
- Increased road traffic can be accompanied by increased noise impacts although large changes are required. For example, a 25% increase in traffic on an existing road will result in only a 1dB(A) increase in noise even at the roadside, with a 100% increase needed to result in a 3dB(A) increase at the roadside the lowest increase in noise that is thought to be even perceivable by humans and birds. As such changes in traffic flow or speeds are unlikely to result in increased disturbance of sensitive wildlife unless they are very large: a doubling in total flows is unlikely to materially increase noise exposure even close to the road.
- Disturbance from visual intrusion such as lighting is likely to be most relevant if the road is immediately adjacent to an SPA or certain SACs (e.g. those designated for bat species). Road schemes may result in an increase in roadside lighting. Lighting is only likely to be an issue if the North East Transport Plan results in the introduction of street lighting to roads within close proximity of these European sites which are currently unlit. Any proposed new bridges over the River Tweed SAC would also potentially require consideration of impacts on the salmon or lamprey interest of the SAC through (for example) underwater noise.

⁹ Cutts N & Allan J. 1999. Avifaunal Disturbance Assessment. Flood Defence Works: Saltend. Report to Environment Agency).

¹⁰ Cutts, N., Phelps, A. and Burdon, D. (2009) Construction and waterfowl: Defining Sensitivity, Response, Impacts and Guidance. Report to Humber INCA, Institute of Estuarine and Coastal Studies, University of Hull

¹¹ Reijnen, R. et al. 1995. The effects of car traffic on breeding bird populations in woodland. III. Reduction of density in relation to the proximity of main roads. Journal of Applied Ecology 32: 187-202

¹² Reijnen, R. Foppen, R & Veebaas G. (1997) Disturbance by traffic of breeding birds: evaluation of the effect and considerations in planning and managing road corridors. Biodiversity and Conservation 6, 567-581 (1997)

Page 325

- 3.13 With regard to HRA, noise and lighting are only considered an issue if they affect European sites designated for vulnerable animal interest (particularly birds and bats) rather than their habitats. This potentially applies to two European sites within the study area:
 - Northumbria Coast SPA;
 - Teesmouth & Cleveland Coast SPA;
 - Northumberland Marine SPA; and
 - North Pennine Moors SPA.
- 3.14 The construction of entirely new roads and railways can result in significant disturbance impacts depending on the existing noise and lighting environment. However, no such construction is proposed close to any SPA's or SAC's designated for bat interest features in the NETP.

Water Quality

- 3.15 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:
- 3.16 At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour.
 - Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing available nitrogen.
 - Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life.
- 3.17 Sewage and some industrial effluent discharges contribute to increased nutrients in the European sites and particularly to phosphate levels in watercourses. However, these will not be associated with Transport Plan interventions. Road and rail schemes can, however, result in pollution (such as runoff of sediment, hydrocarbons and salt spray from de-icing) of aquatic, marine and riverine European sites during construction and operation, if they occur within close proximity of that site.

4. Test of Likely Significant Effects

- 4.1 The Likely Significant Effects (LSEs) screening assessment is presented in Appendix A. Green shading in the 'Screening outcome' column indicates that a package (and its schemes or projects) have been determined not to lead to LSEs on European sites due to an absence of a linking impact pathway.
- 4.2 Note that where distances to European Site boundaries are given, this represents the shortest straight-line distance to the European site boundary. For the schemes / projects the distance to European sites is measured from the centre of the settlement. For specific road-related schemes, the distance to the European site is measured from the scheme itself where this is known. It is to be noted that due to the nature of the transportation schemes / projects, the distances are approximate. To summarise Appendix A, no policies or schemes were concluded to have result in Likely Significant [adverse] Effects on European sites.
- 4.3 The A1 as it crosses into Scotland traverses the River Tweed on an existing bridge at the boundary between the River Tweed SAC (above the tidal limit) and the Tweed Estuary SPA/Berwickshire & North Northumberland Coast SAC. However, the inclusion of initiative EX06b is not specific as to what will happen to that bridge to facilitate the dualling of the A1 into Scotland since that is a matter to be determined at the scheme (planning application) level. Moreover, the scheme is being developed by Highways England rather than Transport for the North East and would be consented by The Planning Inspectorate. As such, the inclusion of this initiative in the NETP is effectively simply an expression of support.
- 4.4 Similarly, initiative EX09 was also screened out. While the A69 does cross the River Eden SAC this is 41km west of Hexham and it is very unlikely this part of the A69 would be part of the Affected Road Network for this scheme. Moreover, the scheme is being developed by Highways England rather than Transport for the North East and would be consented by The Planning Inspectorate. As such, the inclusion of this initiative in the NETP is effectively simply an expression of support.
- 4.5 The same is true of initiative EX30. The North Pennine Moors SAC and SPA lies adjacent to the A66 west of Barnard's Castle, so dualling of the road could potentially lead to various construction and operational effects on both designations. However, the plan is not explicit as to what will happen to this stretch of the A66 (a small section of the overall length of A66 to be covered by the project) since that is a matter to be determined at the scheme (planning application) level. Moreover, the scheme is being developed by Highways England rather than Transport for the North East and would be consented by The Planning Inspectorate. As such, the inclusion of this initiative in the NETP is effectively simply an expression of support.
- 4.6 Potential for impacts from relocation of the North Shields Ferry to Fish Quay (initiative NX22a) on the Northumbria Coast SPA and Ramsar site was considered, but Fish Quay is an existing operational quay (just as the North Shields Ferry is existing and operating) and is situated over 500m from the nearest part of Northumbria Coast SPA which lies beyond The Narrows and in the marine environment (River Tyne Entrance). As such, no likely significant effect is identified. This will be revisited at the individual scheme level for any planning application.
- 4.7 Finally, initiatives ST43 (A1018 Multi-Modal Corridor Improvements) and ST44 (A183 Multi-Modal Corridor Improvements) were considered regarding their potential to affect North Pennine Moors SPA/SAC and Durham Coast SAC/Northumbria Coast SPA/SAC respectively. However, a conclusion of no likely significant effect was reached primarily due to the non-specific nature of these packages of measures (and for ST43 the fact that they appear to relate specifically to the stretch of road in South Tyneside and thus remote from the North Pennine Moors SAC/SPA). This must be investigated further at the scheme level as specific interventions are developed but in line with Advocate-General Kokott's opinion mentioned earlier, the NETP proposals must be evaluated at the (broad and non-specific) level that they exist in the plan.
- 4.8 Consideration was given for the potential for 'in combination' effects with other plans and projects, particularly the plans mentioned in paragraph 2.11 of this report. However, all the initiatives in the NETP were screened out due to their non-specific nature, remoteness from European sites, absence of impact pathways or (for the Highways England schemes mentioned above) that fact that they are not in the direct control of Transport North East either as developer or as consenting body. As such, no [adverse] 'in

combination' effects have been identified. Indeed, any cumulative and in combination effects that do exist are likely to be positive as the primary theme of the NETP is to maximise sustainable transport.

Appendix A Likely Significant Effects Test

Table 1. LSE Test for Policies

Policy	Screening outcome
We will enable people to make greener and healthier travel choices whenever they can and ensure our sustainable network takes everyone where they need to go at a price they can afford. We must ensure all our actions improve transport across the region and deliver to the objectives of this Plan so we are greener, more inclusive, healthier, safer and our economy thrives.	No Likely Significant Effect. This policy is likely to be positive for European sites by reducing atmospheric pollution and (potentially) traffic noise.
We will help more people use active travel by making the cycle network better across the North East. This will include being flexible in how we use road space to help cyclists and pedestrians	No Likely Significant Effect. This policy is likely to be positive for European sites by reducing atmospheric pollution and (potentially) traffic noise.
We will initiate actions to make travel in the North East net carbon zero and improve transport safety and security.	No Likely Significant Effect. This policy is likely to be positive for European sites by reducing atmospheric pollution and (potentially) traffic noise.
We will improve bus travel and attract more passengers with new rapid bus corridors. This will include changing how road space is used to help buses move more quickly.	
We will work with our partners to make travelling and moving goods around our region more efficient and greener.	
We will take action to continue to support the Shields Ferry and develop potential improvements where possible.	No Likely Significant Effect. This policy is likely to be positive for European sites by reducing atmospheric pollution and (potentially) traffic noise.
We will initiate actions to make travel in the North East net carbon zero and improve transport safety and security;	No Likely Significant Effect. This policy is likely to be positive for European sites by reducing atmospheric pollution and (potentially) traffic noise.
We will help more people reach the sustainable transport network with more 'on demand' solutions; and	
We will work with our partners to make travelling and moving goods around our region more efficient and greener	
we must make our roads flow better for goods and essential car journeys. We must strengthen use of cleaner, greener cars, vans and lorries.	No Likely Significant Effect. This policy is likely to be positive for European sites by reducing atmospheric pollution and (potentially) traffic noise. While faster vehicle speeds can result in increased exhaust emissions, reduced congestion can result in significantly improved emissions.
We must invest in Metro and local rail to extend and improve the network.	No Likely Significant Effect. This policy is likely to be positive for European sites by reducing atmospheric pollution and (potentially) traffic noise. Overall, development of rail is likely to be positive in reducing overall NOx emissions.
will take action to drive our partners to make travelling and moving goods around our region more efficient and greener.	
We must work with partners to make movement of people and goods to and from our region, more efficient and greener.	No Likely Significant Effect. This policy is likely to be positive for European sites by reducing atmospheric pollution and (potentially) traffic noise.
We must work with partners to strengthen connections from destinations in our region to everywhere in the UK and beyond.	
We will embrace new technologies to meet our transport objectives and set innovation challenges to industry, creating new opportunities with our network as the testbed.	No Likely Significant Effect. This policy is likely to be positive for European sites by reducing atmospheric pollution and (potentially) traffic noise. For example, there are emergent technologies for actively removing NOx from atmosphere that could have a positive effect on European sites as well as human health.

Table 2. LSE Test for Initiatives

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
1	DU03	Walking and cycling improvements in Durham City Centre	Durham County Council	NA	Package of proposals that seeks to enhance walking, cycling, public transport and driver information on Durham City.	£20,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
2	DU06	A692 all user improvements, including for sustainable modes	Durham County Council	Gateshead Council	Corridor based improvement world along the A692 in Gateshead and Durham, comprising a package of small scale measures aimed at relieving congestion, improving road safety and improving sustainable transport movement. In Gateshead - Widening to provide addditional capacity on Lobley Hill Bank	£4,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
³ Page 3	DU07	A694 all user improvements, including for sustainable modes	Durham County Council	Gateshead Council	Corridor based improvement works along the A694 in Gateshead and Durham comprising a package of small scale measures aimed at relieving congestion, improving road safety and improving sustainable transport movement. Includes a extension to the the bus lane to improve access to the A694. The proposal will also move the bus lane from the near to off side of the northbound carriageway 'Reconfiguration of Swalwell Bridge roundabout	£7,200,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
330	DU08	A167 all user improvements, including for sustainable modes	Durham County Council	Gateshead Council	Includes Corridor based improvement works along A167 Durham Road between Gateshead and Chester le Street with the principle aim of improving sustainable transport movement along the corridor. Capacity enhancement and pedestrian/cyclist connectivity improvements at this congested junction, fed by the A167 and Arnison Centre traffic. Capacity enhancement and pedestrian/cyclist connections at three junctions along the A167, to facilitate housing growth. Rushyford, Central Avenue and Ricknall Lane. 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.	£11,500,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
5	GA02	All user improvements on this important corridor (A695) along the Tyne Valley	Gateshead Council	Northumberland County Council	The proposal is for corridor based improvement works along the A695 corridor in Gateshead and Northumberland comprising a package of small scale measures aimed at relieving congestion,	£912,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					improving road safety and improving sustainable transport movement.									
6	GA03	Small scale cycling imjprovements (Gateshead)	Gateshead Council		Package of small scale improvements and additions to the cycle network across Gateshead assisting to deliver the Council's Cycling Strategy.	£1,000,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
⁷ Page 331	GA04	Gateshead Central Integrated Transport Improvements	Gateshead Council	N/A	Reconfiguration of road network in and around Gateshead town centre to reduce severance and dominance of road traffic. 'Includes; Reconfiguration of Bensham Road roundabout: Removal of flyover and construction of tree lined boulevard £75m Upgrading of pedestrian, cycle and public transport environment on key link to Tyne Bridge Urban Core Pedestrian Improvements £2m Exemplar neighbourhood footbridge, Link between town centre and freight depot site: £3m Bensham Road bus lane extension - Extension of bus lane between Coatsworth Road and Chester Place - £300,000 Quay Development Access Road - Cost TBC	£83,300,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
8	GA05	Blaydon station to town active travel link	Gateshead Council	Newcastle City Council	Potential improvements at Blaydon rail station. The pedestrian bridge is being replaced conecting the town with the railweay station and phase 2 will be onwards over the river	£12,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
10	GA08	Traffic signals repair across Gateshead	Gateshead Council	Regional Traffic Signals Team	Traffic signals across the network are in need of repair	£1,000,000.00	Next 5 years	6) Maintaining and renewing our transport network.	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
11	NX01	Gateshead Interchange Refurbishment	Nexus	Gateshead Council	Refurbishment of all elements of the interchange	£16,500,000.00	Next 10 years	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
12	NX03	Upgrading Heritage Stations on Tyne and Wear Metro	Nexus	All Local Authorities	upgrading of Cullercoats, Whitley Bay, Monkseaton and West Monkseaton Metro stations with a distinctive historical lineage dating back to the North Eastern Railway/LNER	£20,000,000.00	Next 10 years	4) Local rail and metro	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
13	NX04	Monument Metro Station Refurbishment	Nexus	Newcastle City Council	refurbishment of Monument Metro station to match the standard of other recent station upgrades in Newcastle city centre	£30,000,000.00	Next 10 years	4) Local rail and metro	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
14	NX05	Regent Centre Interchange Upgrade	Nexus	Newcastle City Council	Refurbishment of the Metro area and the upgrading of the bus area with five new waiting shelters and removal of the canopy over the roadway outside the station entrance, improvements to the car park	£6,093,000.00	Shovel Ready	4) Local rail and metro	Yes	Provide infrastructure to bring businesses here	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
15	NE01	Airport access upgrades to facilitate housing growth and the onward success of the airport	Newcastle City Council	Highways England	Development of a link road to Newcastle Airport between A696 and Brunton Lane, to enable development of Newcastle Airport EZ and Newcastle housing sites	£15,000,000.00	Next 10 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
16	NE24	Tyne Bridge and Central Motorway Major Maintenance	Newcastle City Council	TfN	Major maintenance to the Tyne Bridge	£35,000,000.00	Shovel Ready	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	"Ribbon Cutters" or regional significance	None	None	Screened out due to remote location in relation to European Sites
Page 33	NEO2	Maintenance to Urban Core Distributor Route and all user improvements	Newcastle City Council	N/A	Package of maintenance and junction improvements to roads on the Urban Core Distributor Route.	£20,000,000.00	Next 5 years	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
18	NE03	Ponteland Road Corridor sustainable and housing improvements	Newcastle City Council	N/A	Upgrades to junctions on key roads to West of Newcastle in order to enable development	£7,350,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
19	NE04	Scotswood Bridgehead accessibility improvements in Newcastle	Newcastle City Council	N/A	Upgrades to northern end of Scotswood Bridgehead	£4,200,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
20	NE05	Rotary Way junction upgrade and cycling improvements`	Newcastle City Council	N/A	Investment and upgrade around the A1-Rotary Way-Great North Road junction to enable local plan development	£12,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
21	NE06	Cycle City Ambition 3 programme to invest in corridor improvements	Newcastle City Council	N/A	Further programme of investment in strategic cycling infrastructure, including the urban core and routes into North Tyneside, Gateshead and Northumberland	£22,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
22	NE07	Newcastle Station : High Speed Ready	Newcastle City Council	Network Rail	Investment to unlock the potential around Newcastle Central Station for the arrival of High Speed 2, including access improvements to Stephenson Quarter (Southern Entrance)	£45,000,000.00	Next 10 years	7) National and international connectivity	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
23	NE08	Newcastle Urban Core Pedestrian and Cycling Improvements	Newcastle City Council	N/A	Investment in pedestrian and cycle upgrades identified in Core Strategy and linked to urban development-Northumberland Street; Camden Street Bridge; Forth Yards	£13,000,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
24	TNE24e	Invetsigating a new Strategic River Crossing	Transport North East	Relevant Authority	As identified in original NECA Options report	£40,000,000.00	Beyond 10 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out as this potential river crossing is in Gateshead and thus remote from European sites
25	NT01	Improvements to cycling and walking routes in North Tyneside	North Tyneside Council		Build new and improved infrastructure to cater for increased demand for cycling and encourage model shift, particularly on journeys to and from work, including A191 and A188/A189 corridors	£10,700,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
[*] Page 333	NT02	Access improvements to A19 employment corridor for all road users	North Tyneside Council	N/A	Improvements to access A19 employment corridor, facilitates the full occupation of Cobalt Business Park and supports delivery of the Murton Gap housing site. Cycling and walking route improvements and public transport measures in the A19 corridor, with remodelling of junctions Replace the existing unfit for purpose public right of way crossing of the A19 and provide a safer, more expedient and accessible sustainable link (bridge or underpass)	£24,300,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	Air Quality, Noise disturbance	Castle Eden SAC (directly adjacent to the A19)	Screened out since this initiative relates to the section of the A19 in North Tyneside, which is remote from Castle Eden Dene SAC
28	NT04	North Bank of the Tyne Enterprise Zone accessibility improvements	North Tyneside Council	Transport for the North	Access improvements to Swans site and Port of Tyne, including improvements for abnormal loads. Cycling and walking improvements in the corridor.	£4,750,000.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
29	NT05	Corridor improvements to facilitate improved access for all road users (A192 Foxhunters to Tynemouth Pool)	North Tyneside Council	N/A	Corridor improvements including cycling and walking and congestion measures, linking A191-A192 Foxhunters junction and A1058-A192 Tynemouth Pool junction, supporting links to Cobalt Business Park and Local Plan aspirations to develop Murton Gap area.	£4,684,107.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
30	NT07	North Shields regeneration (Public Realm improvements)	North Tyneside Council	N/A	Extending links into the town centre by more sustainable modes; wider public realm and transport connectivity improvements including links north from Fish Quay and associated with Shields Ferry landing relocation. 2. Infrastructure to improve accessibility to the Fish Quay area, including public transport, cycling and walking.	£10,000,000	Next 5 years	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	Noise/lighting during construction/operation	Northumbria Coast SPA	Screened out. This initiative is primarily about improving landbased sustainable transport connections within North Shields. The Shields Ferry already operates and its pier is remote from (3km upstream of) the nearest part of the SPA

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
31	EX01	Upgrades to Seaton Burn/Fisher Lane A1/A19 Junctions	Highways England	North Tyneside Council	Upgrades to improve long-term capacity	tbc	Next 10 years	7) National and international connectivity	Yes	Connect communities to opportunities	N/A	None	No	Screened out since this initiative relates to North Tyneside, which is remote from European sites
32	EX04	Upgrades to Moor Farm Junction	Highways England	Northumberland County Council	Upgrades to improve long-term capacity	tbc	Next 10 years	7) National and international connectivity	Yes	Connect communities to opportunities	N/A	None	No	Moor Farm Junction in South Cramlington is remote from European sites
[™] Page 334	NO01	Facilitating growth of Ponteland and addressing congestion	Northumberland County Council	N/A	The A696 is part of the Primary Road network in Northumberland. It forms an important strategic route with the A68 for traffic from Newcastle to Edinburgh and serves the Army Training Facilities at Otterburn Camp. The scheme objectives are to provide an alternative route for through traffic including heavy goods vehicles and MoD convoys thus reducing delay to traffic through the village. Emissions on the existing route through the town centre will also be reduced, leading to improved traffic flow with less stationary traffic. Reduced traffic will create an improved town centre environment which will encourage other forms of sustainable travel including walking and cycling with the National Cycle Network Route 10 passing through the town.	£80,000,000.00	Next 10 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
34	NO02	Delivering improved all user connections to Blyth to reduce congestion, improving bus journey time reliability, and creating the space for high quality segregated cycle corridors	Northumberland County Council		The two main roads into Blyth, the A193 Cowpen Road and A1061 Laverock Hall Road provide access to the Port of Blyth and are heavily trafficked with over 20,000 vehicles a day on each road and suffer from congestion during peak periods. This creates journey time reliability issues for the numerous express bus services connecting Blyth with the Tyne and Wear conurbation. In addition, this limits the opportunity for safe cycling and walking connections within the town. A relief road for Blyth will create additional radial capacity for Blyth, reducing congestion, improving bus journey time reliability, and creating the space for high quality segregated cycle corridors identified through the Local Cycling and Walking Infrastructure Plan for the town.	£45,000,000.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	Potential impacts of air quality and/or noise/lighting disturbance	Northumbria Coast SPA & Ramsar; Northumberland Marine SPA	Screened out. The details of the initiative are intentionally broad but are primarily concerned with sustainable transport improvements within the urban area of Blyth. While Northumberland Marine SPA does extend into the Blyth Estuary in urban Blyth it is designated to protect seabird fishing waters. There are no clear impact pathways to European sites

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
35	NO03	Critical rural road maintenance Programme (countywide)	Northumberland County Council		To repair and strengthen key roads underpinning the rural and regional economy including access to key tourist destinations (Hadrian's Wall World Heritage site, Northumberland National Park including International Dark Skies Park), timber extraction and quarrying.	£6,500,000.00	Shovel Ready	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
36	NO04	Gilsland Railway Station	Northumberland County Council	Network Rail	The proposal is to reopen the Gilsland Railway Station on the site of the former station.	£33,400,000.00	Next 10 years	4) Local rail and metro	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
37	NO05	Cramlington Station improvements	Northumberland County Council	Network Rail	Infrastructure improvements required to facilitate improved frequency of service from station and better station facilities.	£250,000.00	Next 10 years	4) Local rail and metro	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
Page 335 ^{ss}	NO06	Delivering improved all user connections on this route (A1068 Fisher Lane) between South East Northumberland and Tyne and Wear.	Northumberland County Council	N/A	The scheme involves the upgrading of the remaining single carriage section of the A1068 Fisher Lane (approximately 1 mile) to dual carriageway standard between the C366 Blagdon Lane and the A19 Seaton Burn junction, a segregated cycleway from Seaton Burn to Cramlington linking to the new development areas, cycleways and a new roundabout at the A1068/Blagdon Lane junction, removing a congestion pinch point on this key strategic route into Tyne & Wear, improving cycle provision, bus journey time reliability and access at the A1068/Blagdon Lane junction.	£9,000,000.00	Next 10 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
39	SU02	Coalfield regeneration route – improving access for industry and business whilst reducing HGV conflict with other road users and improving journey time and road safety	Sunderland City Council	Durham County Council	To provide a by-pass of Fencehouses and improve access to the existing industrial and business sites at Sedgeletch, Dubmire, and Rainton Bridge. Three parts. 1) Proposal to provide a new link road through the Coalfields area connecting A182 west of Shiney Row with B1284 at Rainton Bridge. 2) Hetton By Pass and Murton Lane improvements Link to Hetton Lyons. 3) Complete East Durham Link between the B1285 and the A19 via the Hawthorn employment site and bypassing Murton Village. This scheme is intended to reduce conflicts between HGVs and local traffic, improve road safety and reduce congestion.	£60,000,000.00	Beyond 10 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
40	SU03	Sunderland Strategic Transport Corridor SSTC4 - Upgrades to Wessington Way / A19 junction	Sunderland City Council		Improvements to A1231 between north bridgehead of Northern Spire Bridge (SSTC Phase 2) and junction with A19 in order to improve journet times for road users and increase the reliability of public transport	£46,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
41	SU04	Sunderland Strategic Transport Corridor (SSTC5) Port to the City	Sunderland City Council		Improvements to A1018 between southern bridgehead of Wearmouth Bridge and the roundabout junction of Hendon Road with Commercial Road. Proposed single carriageway road linking SSTC / A1018 Southern Radial Route with the Port of Sunderland to improve East-West links and strategic connectivity between the Port and the A19.	£39,200,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
Page	SU06	A690 alll user highway improvements	Sunderland City Council	N/A	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. Farringdon By-Pass Option to provide congestion relief on A690 Durham Road	£13,500,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
e 336	SU07	St Michael's Way/High Street West journey time improvement and congestion pinch-point relief to improve road safety, bus priority and improve pedestrian safety	Sunderland City Council	N/A	Removal of congestion pinch point on St Michaels Way, providing journey time saving and congestion relief.	£700,000.00	Next 5 years	5) Road infrastructure	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to remote location in relation to European Sites
45	SU08	A182 Route Action Plan including congestion pinchpoint junction schemes; including a suite of bus, cycle and pedestrian improvements.	Sunderland City Council	N/A	Houghton Road (A182) / Coaley Lane Junction: Removal of Congestion Pinch point and Collision Mitigation: £1.2m Hetton Road (A182) / Gillas Lane Junction: Removal of Congestion Pinch point and Collision Mitigation: £1m Station Road (A182) / North Road (B1284) Four Lane Ends Junction: Removal of Congestion Pinch point and Collision Mitigation: £4m	£6,200,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
46	SU10	Improving Strategic Cycle Networks in Sunderland	Sunderland City Council	N/A	Sunderland has a strong transport policy (LTP, DfT) imperative and political support for the continued development of a strategic cycle network across the city. The five Regeneration Area Committees/Place Boards have formally supported and endorsed the initiative. The project will be embedded in and strongly support the integrated development of transport for Sunderland, and will be linked to a regional cycle network in accordance with LTP3 policy. Strategic Transport Corridors with frustrated expressed and latent demand and opportunity for modal shift and equitable active	£14,500,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					access from residential to work service and education trip generators.									
					A19 Corridor: £2m A1018 Corridor: £2m Coalfields: £2m West/East City Centre £4.5m North: £2m Washington: £2m									
47	EX28	Major upgrade to the East Coast Mainline	Transport for the North	Network Rail	Major upgrade via East Coast Main Line (and Leamside) to include provision 9tph hig speed passenger services	ТВС	Beyond 10 years	7) National and international connectivity	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
	EX06a	A1 Dualling to Ellingham	Highways England	Northumberland County Council	Two RIS2 Highways England schemes (Morpeth to Felton, Alnwick to Ellingham) to deliver dualling to Ellingham	ТВС	Next 5 years	7) National and international connectivity	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
Page 337 49	EX06b	A1 Dualling to Scotland	Highways England	Transport for the North	Completion of the dualling of the A1 from Ellingham north into Scotland	TBC	Next 10 years	7) National and international connectivity	Yes	Connect communities to opportunities	N/A	Air Quality and Noise/lighting during construction/operation, and water quality	River Tweed SAC, Berwickshire & North Northumberland Coast SAC	Screened out. The A1 as it crosses into Scotland traverses the River Tweed on an existing bridge at the boundary between the River Tweed SAC (above the tidal limit) and the Tweed Estuary SPA/Berwickshire & North Northumberland Coast SAC. However, the inclusion of this initiative is not specific as to what will happen to that bridge to facilitate the dualling of the A1 into Scotland since that is a matter to be determined at the scheme (planning application) level. Moreover, the scheme is being developed by Highways England rather than Transport for the North East and would be consented by The Planning Inspectorate. As such, the inclusion of this initiative in the NETP is effectively simply an expression of support.
50	EX07	A1(M) Barton to Chester-Le-Street widening (J56-J57 and J60-J63)	Highways England	Transport for the North	Requires further studies but looking at capacity improvements on the A1 between Barton and Chester Le Street	ТВС	Beyond 10 years	7) National and international connectivity	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to remote location in relation to European Sites

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
51	EX08	A19 junction improvements and capacity upgrades in North Tyneside, Sunderland and County Durham	Highways England	North Tyneside Council	Incorporates: -A19 Seaton Burn Junction Improvements; -A19-A193 Howdon interchange signalisation; -A19 junction and on-line improvements between Killingworth interchange and Coast Road/Silverlink interchange -A19/A1056 Killingworth -A19/B1404 Seaton Lane to A19/A183 Chester Road; -A19 Expressway and Gap Closures between Sunderland and Tees Valley; -A19 / A168 Expressway	TBC	Next 5 years	7) National and international connectivity	Yes	Provide infrastructure to bring businesses here	N/A	Air Quality, Noise disturbance	Castle Eden SAC (directly adjacent to the A19)	Screened out since this initiative relates to the sections of the A19 in North Tyneside and connecting into Tees Valley that are remote from Castle Eden Dene SAC
³³ Page 338	EX09	A69 route improvement, potential dualling and/or climbing lanes and targeted junction improvements (including the B6351 Hexham west junction)	Highways England		A69 route improvements	ТВС	Beyond 10 years	7) National and international connectivity	Yes	Provide infrastructure to bring businesses here	N/A	Air Quality and Noise/lighting during construction/operation	River Eden SAC (outside plan boundary)	Screened out. While the A69 does cross the River Eden SAC this is 41km west of Hexham and it is very unlikely this part of the A69 would be part of the Affected Road Network for this scheme. Moreover, the scheme is being developed by Highways England rather than Transport for the North East and would be consented by The Planning Inspectorate. As such, the inclusion of this initiative in the NETP is effectively simply an expression of support.
55	SU11	Sunderland Station capacity improvements and track layout improvements	Sunderland City Council	Network Rail	Sunderland Station and Sunderland Station track layout improvements and North Ticket Hall	£75,000,000.00	Next 10 years	4) Local rail and metro	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
56	EX14	Durham Coast Line (route upgrade and service improvements)	Network Rail	NERMU	Durham Coast Line (route upgrade and service improvements) to facilitate local rail connectivity to Darlington and York	ТВС	Next 10 years	7) National and international connectivity	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
57	NO07	Northumberland Line - Opening	Northumberland County Council	Network Rail	Upgrade and passenger service re- instatement	£166,000,000.00	Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
58	GA09	East Gateshead Station	Gateshead Council	Network Rail	Station to serve the Gateshead Quays development	£20,000,000.00	Next 10 years	4) Local rail and metro	Yes	Healthy and vibrant places	N/A	None	None	Screened out due to nature of development
60	EX16	Improving Rail Connectivity in Northumberland	Network Rail		Enhancements to service frequency in Northumberland on ECML		Next 5 years	7) National and international connectivity	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
61	EX17	Expanding the number and role of Community' stations	Transport North East	Community Rail Bodies	Through Rail Devolution regenerate underused stations as community hubs		Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
62	EX12	Tyne Valley journey time improvements	Network Rail	Network Rail	Introduce improvement to reduce the end to end journey time to be more competitive with car based journeys.		Next 5 years	7) National and international connectivity	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
63	EX25	Local rail Diesel fleet replacement – regional	Transport North East	Northern Operator	Support Northern in bid to secure funding for carbon zero fleet		Next 5 years	4) Local rail and metro	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
64	EX18	Delivering a North East Rail Concession	Transport North East	DfT	Work with DfT to secure local rai l concession/s		Next 5 years	4) Local rail and metro	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
65	EX19	Improved facilities at information at North East stations	Transport North East	Network Rail			Shovel Ready	4) Local rail and metro	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
66	EX26	Integrated and Smart Ticketing project	Transport for the North	N/A	IST Project?		Next 5 years	7) National and international connectivity	Yes	N/A	N/A	None	None	Screened out due to nature of development
Page 339			Sunderland City Council	N/A	To provide bus priority measures resulting in journey saving time with priority to public transport. To improve pedestrian links. To provide a gateway to the University and the City. Better CCTV and UTMC connectivity. Phases include: Phase 1 Greenwood Road junction	£2,100,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
68	SU43	Chester Road bus corridor	Sunderland City Council	N/A	Phase 2 Grindon Lane Junction	£1,800,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
69			Sunderland City Council	N/A	Phase 3 Springwell Road (Broadway) roundabout	£2,500,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
70			Sunderland City Council	N/A	Phase 4 The Royalty gyratory	£1,500,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
71	TNE04	Regional Intelligent Transport System Package	Transport North East	N/A	Intelligent Transport Systems (ITS) Package will provide traffic signal upgrades at 160 junctions, and 165 pedestrian crossings, in order that full UTMC interventions can be enabled remotely. The upgrades will enable buses to be given a hurry call on their approach to the junction, improving bus reliability and journey speeds. The upgrades will also enable optimised traffic flows when buses are not present,	£19,060,756.00	Next 10 years	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					delivering improvements to air quality. The package will also provide an improved bus real-time information systems that will enable buses to be accurately located in real-time and ensure they benefit fully from hurry calls at signalised junctions. The package will also enable improved real-time information about buses to be made available to passengers through various channels									
73	GA10	West Tyneside cycle route (bridge over ECML)	Gateshead Council	Network Rail	New bridge over East Coast Main Line between Chowdene and Team Valley	£1,000,000.00	Next 10 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
Pagĕ 340	TNE02	Air Quality systems upgrade in Tyneside	Transport North East	N/A	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. The opportunity is to integrate this new demand data with our real-time air quality monitoring to invest in a better-than-realtime decision support tool for traffic management. This would be a UK-first deployment of an existing tool and also present the opportunity to integrate with air quality prediction so that authorities are provided with both information on likely air pollution and traffic flows in the future. This will mean they are empowered to take network management and other decisions which will minimise exposure of residents and travellers to air pollution and also expedite the movement of traffic on the network.	£100,000.00	Next 5 years	5) Road infrastructure	Yes	Enhance North East business advantage	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
75	NX08	Enhancing Public Transport passenger information	Nexus	Operators	Addressing the perception of reliability and convenience of public transport, as highlighted through market research, through the provision of accurate and easy to access information.	£16,000,000.00	Shovel Ready	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
76	NE10	Newcastle Smart Corridors	Newcastle City Council	N/A	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	£19,000,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
77	TNE01	Regionwide Travel behaviour change package	Transport North East	N/A	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).	£1,493,240.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to distance from European Sites

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
78	NX10	Increased Park and Ride at Public Transport stations (Metro, Rail, Ferry and Bus)	Nexus		Consideration to extending park and ride facilities at multi-modal interchanges across the North East region. Not just limited to metro stations, but also bus / train stations. With improvements required at Hebburn, Tyne Dock, East Boldon and Fellgate within South Tyneside.	£25,000,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
79	ST04	Traffic Signal Improvements in South Tyneside	South Tyneside Council	Transport North East	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.	£1,000,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
81	SU13	Riverside' Multi Storey Car Park. – A new modern parking facility to incorporate EV infrastructure and satellite mobility-hub facilities in order to support the Riverside Sunderland regeneration scheme	Sunderland City Council	N/A	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	£3,000,000.00	Next 5 years	5) Road infrastructure	Yes	Healthy and vibrant places	N/A	None	None	Screened out due to remote location in relation to European Sites
Päge 341	TNE03	10 strategic bus corridors delivered	Transport North East	N/A	Bus Measures package as identified through the TCF Bus Measures Study	£20,000,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out. Overall bus improvements may have a positive impact on European sites by reducing congestion and pollution on the road network. While specific schemes may be located close to European sites, this is unknown at this stage and is a matter to be determined and resolved during scheme development.
83	SU14	Vaux-Stadium Village Footbridge	Sunderland City Council	N/A	New high level pedestrian footbridge linking the Vaux development site and the City centre with Stadium Village. Estimates for a bridge at this location will vary widely depending on the required width and quality.	£31,750,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
84	SU15	Kier Hardie Way All user improvements	Sunderland City Council	N/A	Improvements to A1290 Kier Hardie Way between Camden Street and the Wheatsheaf, including converting to dual carriageway with improvements for Public Transport and sustainable modes.	£30,000,000.00	Next 10 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
85	SU16	Stadium Village -St Peters Subway	Sunderland City Council	N/A	5.5m wide subway below Wearmouth Bridge North Approach linking St Peters area and Bonnersfield development site with St Peters Metro Station and Stadium Village.	£3,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
86	SU17	Continued improvements to access the IAMP area including off-road cycle facilities to accommodate expected increase in traffic and stimulate economic development	Sunderland City Council	Soyth Tyneside Council	Proposed dualing of A1290 link to A195, including new bridge crossing over the Leamside Line.	£35,000,000.00	Next 5 years	5) Road infrastructure	Yes	Enhance North East business advantage	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
87	SU20	Sunderland City Centre ANPR cameras	Sunderland City Council	N/A	St Mary's Boulevard - Southern Bridgehead to St Michael's way	£30,000.00	Next 5 years	Helping people to make the right travel choice	Yes	Healthy and vibrant places	Wider programme of smaller, but important	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
											schemes			
88		Sunderland City Centre ANPR cameras	Sunderland City Council	N/A	St Michael's Way - St Mary's Boulevard to A690 Durham Road	£40,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
89		Sunderland City Centre ANPR cameras	Sunderland City Council	N/A	West Wear Street - to White House Road	£40,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
90		Sunderland City Centre ANPR cameras	Sunderland City Council	N/A	White House Road to A690 Durham Road (Priestman Rdbt)	£60,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
91 U	SU21	Queen Alexandra Bridge (A1231) / Camden Street Gyratory improvements. To provide congestion relief and bus priority	Sunderland City Council	N/A	Major Event Management Project. Incorporating improvements to signals and cycling network - Reconfiguration of junction to facilitate removal of Gyratory and straight through access on to A1231 westbound	£2,500,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
Page 342	SU22	Hetton Downs Access Road. Improving connectivity for local residents and supporting new mixed-use residential development	Sunderland City Council	N/A	New Link Road to assist delivery of the Hetton Downs Action Plan. And the delivery of new housing.	£890,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out. Hetton Downs is remote from European sites
93	SU24	Penshaw / Philadelphia / Sedgeletch Link Road – supporting economic development and addressing gaps in the strategic cycling network	Sunderland City Council	N/A	Open area to residential/Industrial development	£2,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out. Penshaw, Philadelphia and Sedgeletch are remote from European sites
94	SU25	Queen Alexandra Bridge southern bridgehead junction. Simplification of existing arrangements to improve pedestrian and cycle crossing facilities	Sunderland City Council	N/A	Replace Existing Roundabout with signalised junction to improve journey reliability for all users.	£1,500,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
95	SU26	Toll Bar Bus priority improvements	Sunderland City Council	N/A	Junction re-alignment to improve operational capacity and provide bus priority	£1,250,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	Air quality	Durham Coast SAC/ Northumbria Coast SPA	Screened out. This bus priority initiative is likely to be positive for air quality and Toll Bar Road is well over 200m from either European site
96	SU28A	Reducing the highway maintenance Backlog	Sunderland City Council	N/A	The council's Highway Asset Plan indicates a backlog of maintenance of over £140m, in order to improve this position and to reduce the backlog further investment is required.	£25,000,000.00	Shovel Ready	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
97	SU28B	Upgrading existing traffic signals in Sunderland	Sunderland City Council	Regional Traffic Signals Team	The signals asset is ageing and around 50% of the 155 signal installations are close to, or beyond, design life. This means that not only is the physical state of the equipment generally poor; but also the technology is aged. The asset is fulfilling its basic requirement of	£7,500,000.00	Shovel Ready	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					regulating traffic flows, but is doing so in a basic/unintelligent/isolated manner. With modern, intelligent, networked equipment and design, there would be substantial gains in efficiency for highway users by reduction of delays/stopping/speed alterations. Additionally, modern LED aspects use substantially less energy, leading to reduced revenue costs as well as measurable carbon savings.									
98	SU29	Improving strategic links between University of Sunderland and Sunderland city centre	Sunderland City Council	N/A	Environmental / public realm improvements providing strategic links between Sunderland University and City Centre.	£2,500,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
[®] Page	SU30	Energy Generation and Storage Projects in Sunderland	Sunderland City Council	N/A	Funding secured to provide roof mounted solar PV at Jack Crawford House, Washington BC, Sunderland Software Centre, Evolve Business Centre, and Transit Shed 7 at the Port. Solar Car Ports to be ports to be provided at Jack Crawford House and Evolve BC. Battery storage facility to be provided at Jack Crawford House and new Parsons depot Planning application submission currently being prepared for this financial year.	£1,197,070.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
343	SU31	Enforcement of 'engine idling' at taxi ranks and bus stops	Sunderland City Council	N/A	Undertake enforcement of engine idling at Taxi Ranks and bus stands/stops.	£50,000.00	Shovel Ready	5) Road infrastructure	Yes	Healthy and vibrant places	N/A	None	None	Screened out due to nature of development
101	SU32	Installation of environmental monitoring systems at traffic junctions	Sunderland City Council	N/A	Installation of emission monitoring equipment at key traffic signalised junctions.	£95,000.00	Shovel Ready	Helping people to make the right travel choice	Yes	Healthy and vibrant places	N/A	None	None	Screened out due to nature of development
102			Sunderland City Council	N/A	Holmeside Bus Gate	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
103	CUIDO	New 'Bus, Cycles & Electric Vehicles only' lanes across	Sunderland City Council	N/A	Ryhope Road - Victoria Avenue to Mowbray Road	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
104	- SU33	Wearside	Sunderland City Council	N/A	Ryhope Road - Ryhope to Toll Bar junction	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	Air quality	Durham Coast SAC/ Northumbria Coast SPA	Screened out. Rye Hope Road and the junction with Toll Bar Road are well over 200m from either European site
105			Sunderland City Council	N/A	John Street - West Wear Street to St Thomas Street	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites

Code for map	Scheme	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
106			Sunderland City Council	N/A	Fawcett Street - Athenaeum Street to St Thomas Street	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
107			Sunderland City Council	N/A	A1231 Wessington Way - Northern Spire to Camden Street Gyratory	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
108			Sunderland City Council	N/A	St Mary's Boulevard - Eastbound and Westbound	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
109			Sunderland City Council	N/A	St Michaels Way - Eastbound and Westbound	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
Page			Sunderland City Council	N/A	Queen Alexandra Bridge - Bus, cycle and EV's only	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
je 344	SU34	Conversion of A690 'No Car Lane' to 'Bus, Cycles & Electric Vehicles only'	Sunderland City Council	N/A	Existing No Car Lane does not fully encourage the use of alternative modes of transport. Conversion to a Bus Lane, Cycles and Electric vehicles only can address this.	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
112	SU35	Creation of a digital Smart City Parking System	Sunderland City Council	N/A	A Smart City Parking System that will optimise parking utilisations, payment revenues and enforcement while reducing congestion and pollution. To showcase cutting edge parking guidance and frictionless parking payments with the aim of improving the management of existing parking assets and enhance the user experience of parking.	£540,000.00	Shovel Ready	1) Helping people to make the right travel choice	Yes	Healthy and vibrant places	N/A	None	None	Screened out due to nature of development
113			Sunderland City Council	N/A	Bus Lane camera enforcement equipment and back office	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
114	SU36	Smart Bus infrastructure including bus shelter information and other improvements	Sunderland City Council	Nexus	Real time bus information at bus shelter infrastructure and key points throughout City centre, Park Lane Interchange, Hetton Interchange and Washington "The Galleries"	£100,000.00	Shovel Ready	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
115			Sunderland City Council	N/A	Improved bus detection to "Hurry Call" traffic signals	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
118	SU39	Dynamic route management - providing journey time data from multiple sources	Sunderland City Council	N/A	Dynamic Route Management providing Journey Time data from multiple sources including ANPR, Bluetooth, Wi-Fi, FCD and SCOOT to give a holistic view of network performance. Linked to Variable Message Signs.	£170,000.00	Shovel Ready	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
119	SU40	Temperature monitoring road sensors	Sunderland City Council	N/A	Introduction of in carriageway road temperature monitoring sensors at various key locations commencing on SSTC 3.	£150,000.00	Next 5 years	Helping people to make the right travel choice	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
122	GA21	Highway structures major maintenance	Gateshead Council	N/A	Major maintenance works to highway structures across Gateshead	£5,000,000.00	Shovel Ready	6) Maintaining and renewing our transport network.	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to remote location in relation to European Sites
123	GA23	Gateshead Local Cycling and Walking investment proposals	Gateshead Council	N/A	Under developed cycle route network acting as a deterrent to increased cycle use.	£2,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
Page	GA29	Portobello to Washington footbridge access improvements	Gateshead Council	Highways England	Improve approaches to the bridge on both sides of the A1 to make the route more open and inviting to users, whilst also providing a ramped access for cyclists and street lighting	£300,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
ງe 3⁵45	GA30	Bill Quay pedestrian link to a future Metro Station	Gateshead Council	N/A	Pedestrian link from Gullane Close in Bill Quay to proposed Metro Station at Westburn	£100,000.00	Next 10 years	2) Upgrading North East Active Travel Infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
126	GA32	High Spen to Greenside cycle route	Gateshead Council	N/A	Provision of 3m wide off road shared use path between High Spen and Greenside alongside Spen Lane to provide sustainable transport routes in the outer west	£660,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
127	GA33	Upgrading the National Cycle Routes in Gateshead	Gateshead Council	N/A	Upgrading of NCN cycle routes to meet current standards	£2,500,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
128	GA37	Heworth Interchange refurbishment	Gateshead Council	Nexus	Remodelling of Heworth Interchange GA37b: Cycle Hub - £500,000	£10,500,000.00	Next 10 years	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	N/A	None	None	Screened out due to nature of development
129	GA45	A195 Follingsby Roundabout Improvements	Gateshead Council	Highways England	Improvements to ensure access for all users to the employment area at Follingsby, including potential future park and ride	£10,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
130	GA46	New Derwent Walking and Cycle Crossing at Metrogreen	Gateshead Council	N/A	New crossing of River Derwent at Metro Green	£1,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	Water quality	Northumbria Coast SPA	Screened out. MetroGreen is over 16km upstream of the SPA and the SPA is beyond the tidal limit and within the marine environment. As such no realistic impact pathway exists.

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
131	GA47	Derwent Cycle Route Improvements	Gateshead Council	N/A	Various cycle improvements linked to housing development in west Gateshead	£310,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
132	NO08	New Alnwick Bus Station	Northumberland County Council	N/A	Construction of a new fit for purpose Bus Station and associated facilities.	£1,000,000.00	Next 10 years	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
133	NO09	New Blyth Bus Station	Northumberland County Council	N/A	Construction of a new fit for purpose Bus Station and associated facilities.	£1,000,000.00	Next 10 years	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
Page	NO11a	Facilitating the growth of Newbiggin and Ashington, improving public and active travel routes, capacity and addressing congestion	Northumberland County Council	N/A	Road network improvement scheme - provision of a new link road between Newbiggin and Ashington	£1,000,000.00	Next 10 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	Air Quality and Noise/lighting during construction/operation	Northumbria Coast SPA/ Ramsar and Northumberland Marine SPA	Screened out. Any link road connecting Ashington to Newbiggin- by-the-Sea will be at least 600m from Northumberland Marine SPA (designated for seabird fishing open water habitat) and even further from Northumbria Coast SPA, on the opposite side of Newbiggin.
e 346	NO11b	Facilitating the growth of Morpeth, improving public and active travel routes, capacity and addressing congestion	Northumberland County Council	N/A	Limited east west connectivity through Morpeth resulting, specifically in capacity constraints at A197/A192 Mafeking roundabout. This has a significant impact on journey time reliability on what is a key strategic bus route	£1,000,000.00	Next 10 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
136	NO11c	Facilitating the growth of Cramlington, improving east west public and active travel capacity and addressing congestion	Northumberland County Council	N/A	Proposed route consists of two separate lengths of road the north of the town centre which would complete the link from Station Road roundabout in the west to the B1505 or A189 Spine Road in the east. This can link into the existing extensive network of cycle connections across the town.	£1,000,000.00	Next 10 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to remote location in relation to European Sites
137	NO11d	Facilitating the growth of Cramlington, improving public and active travel capacity and addressing congestion	Northumberland County Council	N/A	Road network improvement scheme- provision of a new link road at Lancastrian Road Cramlington.	£1,000,000.00	Next 10 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to remote location in relation to European Sites
138	NX11	Small Metro Station Upgrades systemwide	Nexus	N/A	Comprehensive refurbishment and remodelling to support FMZ and deterioration of the customer experience, including accessibility, access to information, perception of safety and cleanliness, reduction in vandlism and grafitti	£20,000,000.00	Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
139	NX12	Upgrade and refurbishments of bus infrastructure including stations and stops, systemwide	Nexus	N/A	Upgrade and refurbishments of Bus infrastructure including stations and stops	£20,000,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
140	NX13	Airport Metro Station Refurbishment	Nexus	Newcastle Airport	Refurbishment of the station and remodelling of the ramp to ensure compliance with accessibility regulations, improved information and ticketing options	£8,000,000.00	Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
141	NX14	Team Valley Bus based park and Ride	Nexus	N/A	New park and ride site at Team Valley	£8,000,000.00	Next 10 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
142	NX15	Creating Electric Vehicle charging points across Nexus car parks	Nexus	Transport North East	EV charging infrastructure at all Nexus owned car parks	£1,000,000.00	Shovel Ready	5) Road infrastructure	Yes	Enhance North East business advantage	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
143	NX16	Installing Solar panels at Nexus infrastructure	Nexus	N/A	Installation of PV on Metro infrastructure	£1,000,000.00	Shovel Ready	5) Road infrastructure	Yes	Enhance North East business advantage	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
Page	NX17	New cycle parking hubs at Metro and bus stations	Nexus	N/A	Increase availability of secure cycle parking and Metro and Bus stations	£5,000,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
e 347	EX20	Increasing local rail frequency in Durham	Transport North East	Durham County Council	Chester le Street hourly service	ТВС	Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
146	EX40	Upgrades to Active travel routes to all NE rail stations	Transport North East	All Authorities	improve walking /cycling routes to rail stations.	£500,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
147	EX22	Rationalise local rail and metro fares and ticketing	Transport North East	NERMU/A	Through Rail Devolution rationalise local 'rail ' fares and ticketing to reflect local economic reality.	N/A	Shovel Ready	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
148	EX23	Intriducing earlier and later local rail services systemwide	Transport North East	TfN	achieve minimum standards regarding first and last train times to match working patterns and leisure needs,	N/A	Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
149	EX24	Small scale local rail reliability measures networkwide	Transport North East	TfN	Through line of route improvements plans implement small scale improvements to improve service reliability.	N/A	Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
151	NE14	Scotswood Road Bus Priority	Newcastle City Council	Newcastle City C/A	Bus lanes and priority for Scotswood Road in conjunction with any new strategic crossing in the West	£1,000,000.00	Next 10 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
152	NE15	Low Traffic Neighbourhoods (Citywide)	Newcastle City Council	Newcastle City C/A	Delivery of Low Traffic Neighbourhoods/Healthy Metro & bus areas designed to provide filtered permeability	£20,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
153	NE17	Skinnerburn Road Maintenance	Newcastle City Council	Newcastle City C/A	Structural Maintenance scheme on Skinnerburn Road	£10,000,000.00	Next 10 years	6) Maintaining and renewing our transport network.	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
154	NE18	Central Newcastle - Walking, Cycling and Public Transport improvements	Newcastle City Council	N/A	Investment in public transport, walking and cycling to enable traffic-free and zero carbon central Newcastle	£25,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
155	NE19	Flood and Climate Resilience (Newcastle citywide)	Newcastle City Council	N/A	Maintenance of highway structure, gullies and culverts to provide greater resilience to climate change	£6,000,000.00	Next 5 years	6) Maintaining and renewing our transport network.	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
¹⁵⁶ Раде	NE24	A696/A167 and Airport Junction upgrade	Newcastle City Council	Highways England	Improvements to junctions to account for growth at Airport and nearby housing sites	£2,000,000.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to remote location in relation to European Sites
ge 348	NE21	New PT Route delivered to the West of Newcastle	Newcastle City Council	Nexus	New Westbound public transport from Central Station/St James, either using Forth Banks alignment or any other	£40,000,000.00	Beyond 10 years	4) Local rail and metro	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
158	NE22	Delivery of local walking and cycling improvements across Newcastle	Newcastle City Council	N/A	Investment in top priority LCWIP routes and junctions	£37,539,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
159	EX05	White Mare Pool Slip Road Improvements	Highways England	South Tyneside Council	Slip Road Improvements at White Mare Pool as identified by Highways England / Systra Major Junction Improvements at the White Mare Pool Junction (A194M, A194, A184)	£250,000,000.00	Beyond 10 years	7) National and international connectivity	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to remote location in relation to European Sites
160	ST12	Improved Cycling Links to Tyne Pedestrian Tunnel	South Tyneside Council	North Tyneside Council	Improved connections on both the South and North side of the Tyne Pedestrian Tunnel	£2,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
162	ST14	Highway Maintenance Backlog	South Tyneside Council	N/A	The council's Highway Asset Plan indicates a backlog of maintenance of over £80m, in order to improve this position and to reduce the backlog further investment is required.	£50,000,000.00	Shovel Ready	6) Maintaining and renewing our transport network.	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
164	ST16	Commercial Road Multi-Modal Corridor Improvements	South Tyneside Council		Strategic Transport Improvements throughout Commercial Road to facilitate development at Holborn Riverside.	£12,000,000.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
165	ST32	A185 upgrade to support the Port of Tyne	South Tyneside Council	N/A	This scheme provides multimodal improvements along the A185 including a section of dualling from the Arches through to the Tyne Tunnel on the A19 corridor. It is intrinsically linked to the operation and performance of Port of Tyne and IAMP.	£20,000,000.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to remote location in relation to European Sites
166	ST22	A19 Southbound Lane Gain / Lane Drop	South Tyneside Council	Highways England	Introduction of an additional carriageway between the A185 and A194 junctions on the A19 Southbound to aliveate congestion. This scheme also benefits Non Motorised Users and is intrinsically linked to the operation and performance of Port of Tyne and IAMP.	£5,000,000.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to remote location in relation to European Sites
167	ST23	A185 / Howard Street Multi Modal Corridor Improvements	South Tyneside Council		Consideration to strategic junction improvements at the Howard Street / Tunnel Portal to improve traffic movements	£2,500,000.00	Next 10 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to remote location in relation to European Sites
174	TNE05	Go Smarter to School - sustainable travel projects	Transport North East		Active Travel / Sustainable Transport Promotion within Schools	£5,000,000.00	Shovel Ready	Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
Page 349	TNE28	Delivery of a North East Bus Partnership	Transport North East	N/A	Regional Bus Partnership (L) showing how to; Give communities greater involvement in their bus services (L). Make the case for highway schemes that include bus priority (M). Manage the road network to help buses (M) Bid for low and zero emission buses (M) Provide information to passengers by digital means and at stops (L). Tackle anti-social behaviour including extending the public transport hate crime charter to buses (L). Link bus services with cycling and walking routes and demand- responsive solutions (M). Improve bus driver customer-care (L) A consistent regional bus brand and marketing (L); Linked to Partnership working understanding and addressing safety concerns on and near public transport and demand responsive transport and implementing action plans	£25,000,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
178	DU11	New Bus Station and Multi Storey Car Park in Bishop Auckland including sustainable building measures	Durham County Council	NA	Visitor numbers are expected to increase by 750,000 over the next decade. A new fit for purpose bus station and car park provision is required. The new bus station and multi storey car park to be rebuilt	£15,000,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to remote location in relation to European Sites

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description on the existing bus station site,	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					making better use of the space. The proposals will facilitate economic growth in the area									
179	DU12	Eastern Sustainable Access Corridor	Durham County Council	NA	Visitor numbers are expected to increase by 750,000 over the next decade. The link road and car park provides the second phase of the car park provision. The proposals will facilitate economic growth in the area	£20,000,000.00	Next 5 years	5) Road infrastructure	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
180	DU13	Active mode and capacity improvements at A688 junctions	Durham County Council	NA	South west Bishop Auckland suffers much traffic congestion related to the popularity of Bishop Auckland Retail Park. The proposals across a number of junctions and links are to alleviate congestion and improve air quality, as well as improving pedestrian connectivity. They will also facilitate further economic growth in the area.	£5,000,000.00	Shovel Ready	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
Päge 350	DU15	Road safety, capacity and pedestrian connectivity improvements at J60 A1(M)	Durham County Council	Highways England/Tees Valley Combined Authority	Capacity and road safety measures at the junction, also linking to TVCA's MRN bid. Measures to mitigate queueing back onto the A1(M) from the southbound off slip. Also to reduce congestion on the eastbound approach to the junction. Road safety measures at the right turn pocket to Bradbury Services. The congestion largely relates to commuting towards Teesside.	£3,000,000.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
183	DU17	Active mode connectivity , public transport reliability and capacity improvements at A693 Stanley	Durham County Council		The proposal focuses on improvements to the A693/Oxhill and A693/Asda junctions. The junctions adjoin the Stanley A693 Bypass, which is a 40-mph dual carriageway, through the town. The A693 links North West Durham (including the settlement of Consett) and the A1M (J63) at Chester-Le- Street, offering a key west to east link. In combination with the A693/Oxhill junction improvements, the Asda Roundabout would be signalised, with capacity enhancements in the form of extra lanes. The proposal would involve strip widening both to the inner and outer rings of the roundabout, with additional lanes around the gyratory. The number of lanes on the A693 eastbound approach would increase from two to three, and from two to four on the westbound A693 approach. The proposal is shown in the attached Local Pinch Point Fund submission. In combination with the Oxhill junction proposal, it would significantly reduce congestion, with an overall journey time	£6,100,000.00	Shovel Ready	5) Road infrastructure	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to remote location in relation to European Sites

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
Page 351					betterment of 38% across the wider network in the PM Peak in the future design year of 2031, as detailed in B.3. The proposal would much improve journey times for local buses, with the bus station in the town centre impacted by congestion. The scheme would facilitate potential for future economic growth, with future employment and housing growth constrained by congestion issues. The proposal would have no significant risks, delivered all within public highway and no legal processes required. A potential external DfT Pinch Point grant in additional to a local contribution would likely cover the costs of £6.1m, with the proposal Very High Value for Money with a BCR of 4.5. The signalisation would offer a more controlled environment for vehicles entering the gyratory, therefore achieving road safety benefits, in a accident cluster location. At grade pedestrian/cyclist pedestrian crossing facilities would also be implemented, offering an alternative to the existing unpopular subway, therefore improving severance issues. Improved walking and cycling links could also be provided throughout the town, including connections to the nearby Coast to Coast route. It is understood a decision on the									
184	DU16	Improvements to the national Cycle Network Route 1 in County Durham	Durham County Council	Sustrans	Pinch Point EOIs has been delayed until Autumn 2020, due to the wider COVI-19 issues. NCN1 Improvements in Durham - a series of works to improve the quality of the route including upgrading to take into account biodiversity and appearance of a section of National Cycle Network Route 1 which runs between Seaham and Stockton. To include: • Seaham to A19 – Improvements to this section to include resurfacing and widening. • The Moonscape – Implement a preferred route to include resurfacing and widening. • Pesspool Woods – Replace the current boardwalk with a suitable, safe and to standard alternative. Improving the lead into and exit from the woods. • Making habitat improvements along the route where appropriate. • Removing any barriers along the route which prevent access for all non-motorised users.	£1,000,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
185	NT13	A191 all user improvements	North Tyneside Council	N/A	Improve capacity and cycling and walking provision in the A191 corridor west of the A19.	£2,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
187	NT18	Improving Wallsend town centre public realm delivery and improve accessibility for all users	North Tyneside Council	N/A	Public realm, public transport corridor and cycling and walking improvements, e.g. enhanced links to Metro	£2,500,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
188	NT19	Improving Whitley Bay town centre public realm delivery and improve accessibility for all users	North Tyneside Council	N/A	Public realm, public transport corridor and cycling and walking improvements, e.g. enhanced links to Metro	£500,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Healthy and vibrant places	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
189	NT20	Local Cycle and Walking improvements across North Tyneside	North Tyneside Council	N/A	Improvements within town centres based on the Local Cycling and Walking Infrastructure Plan (LCWIP) to deliver a package of improvements for walking and 'last mile' cycling in town centres	£500,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
Page	NT22	Improvements to strategic cycling and walking routes in North Tyneside phase 2 (A192 and A1058)	North Tyneside Council	N/A	Build new and improved infrastructure to cater for increased demand for cycling and encourage modal shift, particularly on journeys to and from work, including A192 and Coast Road corridors	£11,400,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
je 3∯2	NT23	Improvements to strategic cycling and walking routes in North Tyneside phase 3 (A186, A193 and B1318)	North Tyneside Council	N/A	Build new and improved infrastructure to cater for increased demand for cycling and encourage modal shift, particularly on journeys to and from work, including A186, A193 and B1318 corridors	£12,100,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
191	NX19	Metro Essential renewals (post 2025)	Nexus		Programme of essential renewal of the Metro infrastructure post 2025 and the end of the current funding arrangement (10 year programme) Also includes £5m for track improvement works at Howdon	£250,000,000.00	Next 5 years	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
192	NX20	Metro Signalling System upgrade	Nexus		Replacement of the Metro signalling system	£150,000,000.00	Next 10 years	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
193	NX21	Upgrade of Switchgear at Nexus Substations	Nexus		Upgrade of switchgear at substations	£20,000,000.00	Next 5 years	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
194	NX22	Ferry asset renewal programme	Nexus		maintenance of the Ferry landings, vessels and improved passenger faculties, information and accessibility	£20,000,000.00	Next 10 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
197	NX26	Development of a Multimodal smart ticketing solution for the region	Nexus		Development and implementation of a multi modal smart product through either smart cards or EMV	£8,000,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
202	W19	New Bridges to remove severance e.g. Blaydon / Newburn, A194M/Follingsby, A1 Coalhouse	Gateshead Council	Highways England	New Bridges over key motorway / A road infrastructure	£5,000,000.00	Next 10 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out. Bridges crossing A roads in Gateshead will be remote from European sites
206	W82	Access to the HGV Compressed Natural Gas (CNG) facilities in Gateshead.	Gateshead Council	Northern Gas Networks	Focused on access improvements to the CNG plant in Team Valley	£500,000.00	Next 5 years	5) Road infrastructure	Yes	Enhance North East business advantage	N/A	None	None	Screened out. These access improvements in Gateshead will be remote from European sites
²⁰⁸	TNE18	Electric Vehicle Infrastructure – Repair and improve current infrastructure. It's in disrepair. Consider gaps in the network (Particularly those without access to home charging)	Transport North East		This project will install 26 EV chargers across the North East; 16 chargers will be installed in pairs to create mini hubs, while the other 10 chargers will be installed individually, four of which will be reserved for use by taxis only. The location of the charging points will be determined through an enabling study, and sites will be chosen based on the requirement for the charging infrastructure to be easily accessible to a range of different users; this will entail a set of criteria likely to include: - Proximity to residential areas which lack off-street parking; - Proximity to major employment sites; and, - Proximity to popular tourist attractions.	£4,600,000.00	Shovel Ready	5) Road infrastructure	Yes	Enhance North East business advantage	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
ge 353 ²⁰⁹	TNE19	Delivering the residual Transforming Cities Fund ask	Transport North East		The region made a compelling case for investment in public and sustainable transport demonstrated through our Transforming Cities Fund submission with a very positive BCR from the Business case. We gratefully received a settlement of £198m. Extending this by £113m would deliver substantial benefits including the delivery of schemes derived from Local Cycle and Walking Investment Strategies.	£71,000,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
210	TNE21	Regional Transport Model and Monitoring package	Transport North East		Development of a regional transport model for analysis and decision making together with monitoring tools	£500,000.00	Shovel Ready	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
211	TNE22	Revenue and Maintenance Funding for Metro, Bus, Rail, Ferry and Highways	Transport North East		Revenue funding to recover from Covid 19 impacts on Metro, Ferry, Bus and Regional Reail	£600,000,000.00	Shovel Ready	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
213	NX28	Bringing contactless payment to Metro	Nexus		To make Metro travel simple and convenient by introducing the ability to pay by contactless card or device with capped daily fares being charged. This would obviate the need to visit a ticket machine reducing the risk from any contamination introduced by touching. This introduces the ability to turn up and go without needing to make any ticketing provision in advance. For this to be introduced	£10,000,000.00	Shovel Ready	1) Helping people to make the right travel choice	Yes	Provide infrastructure to bring businesses here	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					there would need to be investment in hardware at the gatelines and validators and also the back office to collect the taps and calculate and collect the best value fare.									
215	NX30	New Metro Stations	Nexus		Improve access to the Metro system to those are disconnected from it. Reduce congestion on highway network. Reduce carbon emissions. Connect areas of new growth and development to the Metro network.	£70,000,000.00	Next 10 years	4) Local rail and metro	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
216	NT24	A193 Wallsend Road Bridge deck replacement and repairs	North Tyneside Council	N/A	Deck replacement of A193 Wallsend Road Bridge, removing the risk of network disruption in the event of asset failure.	£5,000,000.00	Next 5 years	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
217	TNE26	Permanent solutions for emergency active travel measures	Transport North East		Permanent solutions for emergency active travel measures	£9,000,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out as measures appear to be in the Penshaw/Shiney Row area of Sunderland and thus remote from European sites
Page 35	TNE29	Hotspot funding to improve conditions for pedestrians and cyclists	Transport North East		Identify and Sponsor a hotspot fund to quickly react to changing demands on the network and progress against any design faults	£1,500,000.00	Next 5 years	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
223	EX32	Addressing the severance of major infrastructure working with infrastructure providers; 1b) Continuing to mitigate the impacts of major infrastructure schemes through a clear package of designated fund schemes	Highways England		Addressing the severance of major infrastructure working with infrastructure providers;	n/a	Next 5 years	7) National and international connectivity	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
225	EX34	Autonomous vehicle tests on the strategic network	Highways England		Autonomous vehicle tests on the strategic network	N/A	Next 5 years	7) National and international connectivity	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
226	EX35	Enhancing the Electric Vehicle offer on the strategic road network	Highways England		Enhancing the EV offer on the strategic road network	N/A	Next 5 years	7) National and international connectivity	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
228	EX37	Ensuring targeted investment in digital connectivity when making physical alterations to works	DfT		Ensuring targeted investment in digital connectivity when making physical alterations to works	N/A	Next 5 years	7) National and international connectivity	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
229	DU19	Burnigill Bank ECML Maintenance	Durham County Council		Structural repairs related to an ongoing landslip and subsidence. Protects the highway and the ECML from ongoing damage. If there was a closure would divert traffic on a significant rerouting via the A167 and A690, which are both part of the MRN. Also through the Nevilles	£5,000,000.00	Shovel Ready	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					Cross junction which is congested and is designated within the AQMA									
230	DU20	Reopening of Ferryhill Line and Stillington Line to passenger services to Teesside.	Durham County Council		Reopening of Ferryhill Station. New ideas fund application made. £50k required for further feasibility/economics work. Eventual scheme could be £12m.	£15,000,000.00	Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
232	DU28	Public transport connectivity improvements between Consett and Tyneside	Durham County Council		Connectivity improvements along the Derwent Valley Line	£200,000,000.00	Next 10 years	4) Local rail and metro	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
234	DU21	Environmental, road safety, and air quality benefits within Toft Hill.	Durham County Council		Rerouting of A68 away from village centre, reducing impacts of general through traffic and a high % of HGVs adjaent to residential properties. Improved journey times, road safety and air quality/noise.	£15,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
Page	DU22	Environmental, road safety, and air quality benefits within Barnard Castle.	Durham County Council		Bypass away from Town Centre, , reducing impacts of general through traffic and a high % of HGVs adjaent to residential and commercial properties properties. Improved road safety related to pinchpoint with listed structure and vehicular overhang onto footwasy	£15,000,000.00	Next 10 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to remote location in relation to European Sites
ge 355	DU23	A689 Sedgefield to Wynyard active mode route improvements	Durham County Council		Upgraded/new off carriageway track connecting Sedgefield and Wynyard growth area	£3,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
237	DU24	Bishop Auckland to Barnard Castle active mode route improvements	Durham County Council		Upgraded/new off carriageway track connecting Bishop Auckland and Barnard Castle	£2,500,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
238	DU25	Great North Cycle Route improvements in County Durham	Durham County Council		A167 cycling improvements - from Newton Aycliffe to Chester le Street	£3,600,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
239	DU26	A177 cycling improvements, linking Coxhoe with Net Park	Durham County Council		A177 cycling improvements, linking Coxhoe with Net Park employment site and Sedgefield	£1,500,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
240	DU27	Belmont to Newton Hall active mode route improvements	Durham County Council		Cycling route improvements via Belmont Viaduct, linking North and east Durham employment sites	£4,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
Page 356	ST07	Strategic Transport Corridors: All user improvements along strategic corridors in South Tyneside	South Tyneside Council		Strategic Transport and Cycle Corridor Upgrades as part of a LCWIP upgrade Upgrades to Traffic Signals / ITS. Upgrades to junctions to improve flow and conditions for pedestrians A184 Strategic Cycling Improvements Cycling Improvements on the A184 from Testo's to White Mare Pool NCN 14 Cycling Improvements Cycling Improvements to NCN14 within South Tyneside. A185 Cycling Improvements Cycling Improvements along the A185 corridor. NCN 1 Route Upgrade Realignment of NCN 1 within South Tyneside along the A183 corridor. A194 Cycling Corridor Cycling improvements along Western approach connecting the Arches/A194 schemes to South Shields. A1300 Cycling Corridor Cycling Improvements along the A1300 Corridor (John Reid Road to the Coast) A184 Cycling Improvements Cycling Improvements along the A184 from East Boldon to the A1018 junction. South Shields Cycling Improvements South Shields Town Centre Cycling Improvements.	£20,000,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
242	ST38	Delivery of School Streets approach - focus on reducing car trips and improving the environment	South Tyneside Council		Delivery of a range of transport initiatives to support children going back to school with a particular focus on reducing car trips and improving the environment	£3,000,000.00	Shovel Ready	Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
243	NX31	New payment technologies for Metro	Nexus		New payment technology to accelerate the introduction of cashless and contactless payment options which will minimise contact with ticket machines, barriers and physical cash.	£10,000,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Enhance North East business advantage	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
244	NT25	Murton Gap - New Metro stations in North Tyneside	North Tyneside Council	Nexus	Development of new stations on the Northern Metro loop, and associated infrastructure/ equipment, linked to key sites in the North Tyneside Local Plan (Murton Gap)	£12,000,000.00	Next 10 years	4) Local rail and metro	Yes	Connect communities to opportunities	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
245	TNE27a	Targeting an Increase in Active Travel across the Region Active Travel Strategy leading to a active travel grid of improvements	Transport North East		Sponsoring the delivery of a regionwide Active Travel Strategy which leads to the delivery of a connected grid of active travel interventions including cycle parking strategies delivered to the highest design standards between destinations across the region. Design standards to be developed with users in mind and leaving no users behind, for example including walkers, cyclists and those that use outdoor space for sports	£20,050,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
246	TNE27b	Access to Active Travel Equipment scheme	Transport North East		Identifying and supporting the development of access to equipment schemes such as cycle grants or loans / cycle to work or education schemes for those not in full time employment. This includes exploring a Cycle to Work Alliance	£140,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
247	TNE27c	Active Travel Ambassadorial Programme	Transport North East		Walking and cycling ambassadorial programme implemented and a region wide behavioural change initiative delivered to cement best practice. Through Behaviour Change programmes encourage an active last mile to improve awareness of health benefits. Investing in Wow Walk to School, Modeshift STARS for schools and STARS for workplaces, schools, colleges, communities and neighbourhoods, leisure and tourism	£300,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
248	TNE27d	Sponsoring cycle training in schools	Transport North East		Sponsoring Cycle training programmes in schools and available in the community with group rides	£2,500,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
Page 35	TNE27e	Improved mapping and promotion of the Active Travel network	Transport North East		Sponsoring the development of outward facing promotional material, including an interactive map perhaps integrated with an app development and highlighting a network of servicing locations for equipment	£150,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
250	TNE27f	Active Travel Evaluation	Transport North East		A common approach to monitoring and evaluating use on the active travel network, linked to a placed based management approach	£1,000,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
251	TNE31	Integrating health and transport planning with active travel prescriptions	Transport North East		A clear action plan around initiatives between the NHS, Public Health Directors and Transport North East around spend to save initiatives to encourage activity	£50,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
252	TNE30	Accessibility Audits Fund	Transport North East		Accessibility Audits Fund– Through the Behaviour Change initiative established an active travel forum with capabilities to undertake accessibility audits working with stakeholders to address any issues on the network.)	£1,500,000.00	Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
254	TNE07	Next Generation Stations programme to upgrade our interchanges	Transport North East		Next generation stations and interchange upgrades programme A package of upgraded and new interchanges, stations and stops assimilated by Transport North East in partnership with promoters and Operators to test and trial design and technology solutions	£2,000,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
255	TNE27g	Roadside marketing and on vehicle branding	Transport North East		Linked to behaviour change programmes, taking targeted action around roadside marketing and on vehicle branding; Campaigns to celebrate the role of public transport working with operators around the place in everyday lives.	£100,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					Working with operators around seamless connectivity to tourist attractions via public transport, this includes marketing and ticketing offers developed in collaboration with Visit North East England, Chamber of Commerce and operators;									
256	TNE07	Coach Action Plan	Transport North East		Developing a coach action plan by 2022	£30,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
257	TNE33 TNE33b	Bus Infrastructure Measures	Transport North East		A package of bus infrastructure measures including upgrading bus shelters to and agreed standard, bus rapid transit, priority schemes and targeted action built around regular monitoring around performance;	£100,000,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
258	TNE34a	Decarbonising Public Transport	Transport North East		Innovation Securing funding and looking at alternative funding and finance options to support the greater roll out of low emission vehicles and vessels, incorporating electric, gas and hydrogen solutions;	£1,000,000.00	Shovel Ready	3) Bus, ferry and first and last mile	Yes	Enhance North East business advantage	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
Page 3	TNE34b	A regional energy Package	Transport North East		Innovation - A regional energy package focused on generating energy on our transport assets, depots, stops and stations	£1,000,000.00	Next 10 years	6) Maintaining and renewing our transport network.	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
260	TNE08	Park and Ride Strategy	Transport North East		Establishing a strategy for effective park and ride sites and enhancements to existing and new multii-modal park and ride schemes;	£50,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
261	TNE21b	Prioritising Public Transport through Intelligent Traffic Systems - Regionwide	Transport North East		Utilising traffic infrastructure and monitoring capabilities to prioritise public transport services	£1,000,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
262	TNE34c	Demand Responsive Micromobility Transport trials	Transport North East		Innovation - Demand Responsive Transport – investigating and testing micromobility solutions with New forms of last mile connectivity integrated into our transport network Increase car club coverage in areas which are less commercially desirable to operators as part of an integrated transport system and Provide EV car club coverage at ports, airport and hotels for tourists together with enhancing public transport coverage to tourist destinations	£5,000,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
Page 3	TNE16	Customer Experience Strategy	Transport North East		A customers journey starts before they have even left the house. To make effective decisions customers we need to both provide the incentives to travel sustainably and break down the barriers from which to do so. We intend to develop a strategy which develops a high level accessibility standard for the region together with knitting together all aspects of the journey storyboard, setting expectations arounhd how the transport plan will operate. This strategy will set out a framework for ideas around, 1) Information and Ticketing; 2) Access to stations the public transport network; 3) Safety, access and security on the public transport network; 4) Access to destinations The second component will be built around an access audit framework with an application to a number of case study locations. A linked idea is that the strategy will be supported by funds in order to garner new ideas and make changes to the network to improve the quality and access of the system.	£5,500,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
359 264	NX29	Delivery of North East Connect and improving calling patterns of local rail services	Transport North East		Sponsoring a programme to organize the delivery of North East Connect, ECML calling patterns, Bishop and Tyne Valley journey times, TCF Rail station elements, Northumberland Line to connect underserved communities	£75,000,000.00	Shovel Ready	4) Local rail and metro	Yes	Provide infrastructure to bring businesses here	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
266	TNE17	Freight Guage Clearance	Transport North East		Freight gauge clearance -Work closely with Network Rail and private sector to improve line speeds along freight routes	£10,000,000.00	Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
267	TNE36	Metro and Local Rail Enhancements and Extensions	Transport North East		Local Rail Enhancements package (Cobalt Link, South of Tyne and Wearside Loop, West Newcastle/Gateshead Links, Airport Link) Iinks to Infrastructure Corridors in the Bluepint	£2,500,000,000.00	Next 10 years	4) Local rail and metro	Yes	Provide infrastructure to bring businesses here	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
268	TNE22	Transport Maintenance	Transport North East		Continued transport maintenance funding and targeting decarbonisation solutions and maximising technology for asset management;	£600,000,000.00	Shovel Ready	6) Maintaining and renewing our transport network.	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
271	TNE38	Innovation Challenge Fund for Smart Places	Transport North East		Creation of an innovation challenge fund to develop and trial smart place applications with SMEs, start- ups and social enterprises	£250,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Enhance North East business advantage	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
272	DD06	Regionwide Infrastructure Mapping Application	Transport North East		Deliver a Regional infrastructure and asset map which enables connectivity solutions to unlock further strategic growth sites	£250,000.00	Next 5 years	Helping people to make the right travel	Yes	Enhance North East business advantage	Wider programme of smaller, but	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					(housing and employment) to be realised. This will include an online platform to enable local trade, deliveries and international exports			choice			important schemes			
273	TNE10	Comprehensive ticketing and information package - including single smart transport payment system	Transport North East		Sponsor the delivery of a Comprehensive cross modal ticketing, information and planning services, solution built in partnership with authorities and operators; Build on and integrate available data sources to help travellers and staff better manage and plan journeys on our network in real time; Enhance back office systems including UTMC technologies to build databases and tools for transport planners to continually enhance the offer to travellers; Deliver a single smart transport payment system that works across all modes and incentivises sustainable travel choices; Adopt strategies and technologies to reduce the cost of maintaining and operating of ticketing and information assets whilst enhancing customer experience	£16,000,000.00	Shovel Ready	1) Helping people to make the right travel choice	Yes	Provide infrastructure to bring businesses here	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
Page 360 ⁷⁴	TNE10	Regionwide mapping and realtime information package for pubic transport	Transport North East		Utilise state-of-the-art mapping, real time information and price comparators to give a full range of transport options for users; provide users with information on the environmental impact of their transport choices; able to be extended to retailers and other commercial providers to allow discounts for using sustainable forms of travel	£200,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Provide infrastructure to bring businesses here	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
275	TNE39	Regional Autonomous Vehicles testbed	Transport North East		Increase regional capability and capacity in data analytics to support data-led connectivity initiatives including an autonomous vehicle testbed	£1,000,000.00	Next 10 years	Helping people to make the right travel choice	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
276	TNE10c	Upgrades to the two Urban Traffic Management Control for command and control of the network	Transport North East		Upgrades to the two Urban Traffic Management Control systems to: integrate and link with neighbouring areas and Highways England; incorporate Cooperative Intelligent Transport Systems and incorporate improvements in Artificial Intelligence giving accurate count and vehicle classification data for our network	£1,000,000.00	Next 5 years	1) Helping people to make the right travel choice	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
279	TNE13d	Addressing Severance of the Road network through targeted approaches	Transport North East		Targeted approaches to reduce the severance of the road network. Linked to severance and active travel initiatives look to undertake a review of crossing facilities and a package of Designated Fund measures	£20,000,000.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
280	TNE13c	Integrate taxi services with other public transport provision	Transport North East		Integrate taxi services with other public transport provision	£50,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
281	TNE13e	Creation of a North East road strategy for all users.	Transport North East		Create a regionwide road strategy and road safety strategy for the Strategic, Major and Key Road networks	£50,000.00	Shovel Ready	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
282	TNE13a	Increasing Strategic Maintenance budgets	Transport North East		Secure additional strategic highways maintenance budget harnessing technology to monitor, deliver targeted improvements to keep the network operating for all	£60,000,000.00	Next 5 years	6) Maintaining and renewing our transport network.	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
283	TNE35	Future Fuels Innovator	Transport North East		Run an Innovator programme to examining future fuel technologies for all road vehicles	£250,000.00	Next 10 years	5) Road infrastructure	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
285	TNE40	Freight consolidation	Transport North East		Freight consolidation to reduce duplicated road miles and promote alternatives road freight distribution	£500,000.00	Next 5 years	5) Road infrastructure	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to nature of development
286	TNE24b	Using technology to improve connectivity to our Ports and Airport	Transport North East		Freeflowing routes to our ports and airport through enhanced connectivity, autonomous vehicles and environmental performance initiatives enabling free and smart port status	£1,000,000.00	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
² Page	TNE13f	Increased Lorry Parking and Servicing opportunities across the region	Transport North East		Work with Highways England to study the need for more service provision, including lorry parking, on or adjacent to the region's Strategic Road Network	N/A	Next 5 years	5) Road infrastructure	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
e 361	EX29	Ports and Airports Access Strategy	Transport North East		Produce a strategy to improve sustainable travel choices to our air and seaports	£50,000.00	Next 5 years	7) National and international connectivity	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
289	EX10	High Speed Gateways in the region	Network Rail		Ensuring the region is high speed ready as high quality gateways to the region	N/A	Next 10 years	7) National and international connectivity	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
291	EX30	A66 Dualling	Highways England		Dualling of the A66 between Scotch Corner and Penrith	N/A	Next 10 years	7) National and international connectivity	Yes	Provide infrastructure to bring businesses here	N/A	Air Quality and Noise/lighting during construction/operation	North Pennine Moors SPA and SAC	Screened out. The North Pennine Moors SAC and SPA lies adjacent to the A66 west of Barnard's Castle, so dualling of the road could potentially lead to various construction and operational effects on both designations. However, the plan is not explicit as to what will happen to this stretch of the A66 (a small section of the overall length of A66 to be covered by the project) since that is a matter to be determined at the scheme (planning application) level. Moreover, the scheme is being developed by Highways England rather than Transport for the

AECOM 43 Prepared for: Transport North East Strategy Unit

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
														North East and would be consented by The Planning Inspectorate. As such, the inclusion of this initiative in the NETP is effectively simply an expression of support.
292	EX27	A194 White Mare Pool Interim Measures to improve flow	South Tyneside Council	Highways England	Small scale improvements to traffic flow to account for Local Plan housing growth	£5,000,000.00	Shovel Ready	5) Road infrastructure	Yes	Enhance North East business advantage	N/A	None	None	Screened out due to remote location in relation to European Sites
²⁹³ Page	ST39	A184 Multi-Modal Corridor Improvements	South Tyneside Council	Highways England	A184 Corridor Improvements between Testo's and Local Highway Network - £2m - £5m - There is still a desire to have 2 lanes of traffic travelling between Testo's and the Abingdon Way junction. Previously enlisted as Local Growth Funded scheme, but not delivered due to the Testo's Major scheme being on site.	£5,000,000.00	Next 10 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
B 36294	ST40	Strategic Corridor Improvements between Testo's and Boldon Asda junctions	South Tyneside Council		Strategic Improvements between the Testo's Roundabout through to Boldon Asda junction	£7,500,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
295	ST41	Abingdon Way / Hedworth Lane Multi Modal corridor improvements	South Tyneside Council		Abingdon Way / Fellgate Avenue / Hedworth Lane Junction Improvements	£1,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
TBC	NO12	Northumberland LCWIP	Northumberland County Council		Capital investment targeted at improving the walking and cycling networks in the 12 main towns of Northumberland. Proposed schemes will vary from townto town and would involve physical segregation of road users; traffic calming and road safety measures; providing dropped kerbs and tactile paving and improved crossing facilities, essentially improving the safety and convenience of walking and cycling and supporting a shift in the way we travel.		Next 5 years	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
ТВС	NO13	Belford Station	Northumberland County Council	Network Rail	The proposal is to construct a new station to serve the village of Belford and the surrounding catchment area of north Northumberland. Since the previous station closed demand for travel from Belford and the surrounding area for travel to school, college, university and employment in	£14,070,000.00	Next 5 years	4) Local rail and metro	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development

AECOM 44 Prepared for: Transport North East Strategy Unit

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					Morpeth, Cramlington and Tyneside has increased. The average journey time by bus into Newcastle for school pupils and students around two hours. Rail travel would reduce this to just over an hour. With the existing train service, a departure from Belford at around 07.00 would arrive in Newcastle at around 08.14 in time for a full day's work or study. The first arrival by bus into Newcastle departs from Belford at 08.07, arriving in the city centre at 10.20, but involves a change at Alnwick. The first through bus from Belford to Newcastle is at 09.32 arriving at 11.20. Therefore there are poor public transport options for students and workers, and the existing public transport connectivity provides no incentive for visitors to travel by									
Page 363	NO14	Enhanced service between Berwick and Newcastle	Northumberland County Council	Network Rail	means other than the private car. The proposal is for a new hourly service to serve stations between Newcastle and Berwick-upon-Tweed on the East Coast Mainline. Currently, residents of Pegswood, Widdrington, Acklington and Chathill have a choice of just one morning commuter train and one evening return train. This is wholly inadequate and does not reflect the needs of part time workers or those who have variable finish times. Although located on the East Coast Main Line, the existing Cramlington station is currently only used by Northern Rail services. The current timetable offers one journey per hour to either Newcastle or Morpeth and two in both the AM and PM peaks. The first service leaves Cramlington to Newcastle at 08:09 followed by an hourly service from 09:04 and with the last service departing a 21:54. This does not meet the objectives of Transport for The North's long term rail strategy.	£15,790,000.00	Next 5 years	4) Local rail and metro	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
ТВС	NO15	Future extensions for the Northumberland Line	Northumberland County Council	Network Rail	Improving accessibility to South East Northumberland by rail.		Next 10 years	4) Local rail and metro	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development
	DU29	Reopening of Whorlton Bridge to NCN 165 and local connectivity	Durham County Council		Recently closed to NMUs before, following further detailed assessments, after a closure to vehicular traffic in 2018. Whilst not previously carrying significant amounts of traffic, it does have a significant diversion. Also acts as a key NMU route. And has significant history which may make it an attractive proposition. It	£5,000,000.00	Next 5 years	6) Maintaining and renewing our transport network.	Yes	Provide infrastructure to bring businesses here	N/A	None	None	Screened out due to nature of development

AECOM 45 Prepared for: Transport North East Strategy Unit

Code for map	New Scheme No	Scheme name	i Promoter i	condary Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
				is a Grade 2 listed structure and a scheduled monument. It is the UK's oldest road suspension bridge with the deck totally supported by its original iron chains. It is also the UK's earliest surviving example of an iron chained suspension bridge with twin battered masonry pylons at each end.									
Page 364	DU30	Bowburn Industrial Estate Sustainable Access Corridor	Durham County Council	The proposal to protect a corridor for a future Bowburn Industrial Estate Access Road has been accepted for a number of years. It has previously been suggested that such a road would serve both current and planned development in the area and potentially offer a modest reduction in the amount of traffic using the A177. It has also been suggested that this corridor should be promoted as an industrial access road. The proposals at Integra 61 are bringing forward significant new industrial and housing development. Some of the associated traffic generated from the development could avoid using part the A177 through Bowburn if a highway connection were provided along the line of the protected corridor. As the development is built out the impact of the associated additional traffic will monitored and at some point in the future an industrial estate access road will be required. In order to ensure that the option of providing this road remains, the Durham Plan has safeguard the proposed route on the policies map. The layout of the scheme at Integra 61 that received planning permission does include a stretch of road which would link to the new access road if it is required.	£4,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
	DU31	Local Cycle and Walking Investment Package	Durham County Council	LCWIP across the region	£27,500,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
	GA48	Small Scale Highways Improvements	Gateshead Council	Measures are aimed at relieving existing problems on the network associated with existing junctions. These will provide benefits to general traffic, but are targeted at relieving identified problems for bus operation and also cycle and pedestrian movement	£1,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to nature of development
	GA49	A195 Bus Lane	Gateshead Council	The bus lane is on a section of the A195 Lingey Lane providing the main bus connection between IAMP/Follingsby and Heworth Interchange. The northbound link	£1,200,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	Wider programme of smaller, but important	None	None	Screened out due to nature of development

AECOM 46 Prepared for: Transport North East Strategy Unit

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
					currently experiences significant peak time congestion with delays of up to 8 minutes for bus services. As such it is considered of strategic importance and can be viewed as one element in an overall package of sustainable transport improvements to this major developing employment area. It will meet the transport plan objectives relating to commuting trips and access to employment centres, and reducing carbon emissions. It will also support accessibility and social inclusion and will promote sustainable access to the Urban Core, with its air quality problems.						schemes			
Page 365	NX22a	Ferry Asset Renewal Programme - North Shields	Nexus		The proposal relates to the relocation and renewal of the ferry landing at North Shields. The existing landing will soon be beyond repair and requires replacement. It presents the opportunity to relocate the new landing at North Shields Fish Quay to stimulate economic regeneration at that location.	£7,200,000.00	Next 5 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	"Ribbon Cutters" or regional significance	Water quality, disturbance	Northumbria Coast SPA	Screened out. Fish Quay is an existing operational quay (just as the North Shields Ferry is existing and operating) and is situated over 500m from the nearest part of Northumbria Coast SPA which lies beyond The Narrows and in the marine environment (River Tyne Entrance). As such, no likely significant effect is identified. This will be revisited at the individual scheme level for any planning application.
	NX22b	Ferry - Royal Quays Landing study	Nexus		To explore a Ferry Landing at Royal Quays	£8,000,000.00	Next 10 years	3) Bus, ferry and first and last mile	Yes	Connect communities to opportunities	N/A	None	None	Screened out due to nature of development
	DU32	Stockton and Darlington railway active mode route connecting to Shildon and Witton Park	Durham County Council		The development of a cycling and walking route is seen as a key way of restoring the emotional and physical connection of local people with their railway heritage, engaging with the many people and communities that live within and around this asset.	£5,500,000.00	Shovel Ready	2) Upgrading North East Active Travel Infrastructure	Yes	Connect communities to opportunities	"Ribbon Cutters" or regional significance	None	None	Screened out due to nature of development
	ST42	A194 Multi-Modal Corridor Improvements	South Tyneside Council		Strategic Transport Improvements throughout the A194 corridor Cycling improvements along Western approach connecting the Arches/A194 schemes to South Shields.	£6,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	None	None	Screened out due to remote location in relation to European Sites
	ST43	A1018 Multi-Modal Corridor Improvements	South Tyneside Council		Strategic Transport Improvements throughout the A1018 Corridor	£5,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	Air Quality and Noise/lighting during construction/operation	North Pennine Moors SPA/SAC	Screened out due to the non-specific nature of this package of measures and the fact that this appears to relate specifically to the stretch of road in South Tyneside and thus remote from the SAC/SPA. This must therefore be investigated further at the scheme level as specific interventions are developed

AECOM 47 Prepared for: Transport North East Strategy Unit

Code for map	New Scheme No	Scheme name	Promoter	Secondary Promoter	Scheme description	Total cost	Timescales for Delivery	Proposed Work Programme	Included	Blueprint Category	Intracity Fund Category	Relevant Impact Pathways	Relevant European Designated Sites	Screening outcome
	ST44	A183 Multi-Modal Corridor Improvements	South Tyneside Council		Strategic Transport Improvements throughout the A183 Corridor	£5,000,000.00	Next 5 years	5) Road infrastructure	Yes	Connect communities to opportunities	Wider programme of smaller, but important schemes	Air Quality and Noise/lighting during construction/operation	Durham Coast SAC and Northumbria Coast SPA/ Ramsar	Screened out due to the non-specific nature of this package of measures. The road corridor does lie within close proximity to the SPA/SAC but potential impacts must be investigated further at the scheme level as specific interventions are developed. Measures could be positive for the Durham Coast SAC if they reduce congestion, improve use of sustainable transport and thus improve air quality.

AECOM 48 Prepared for: Transport North East Strategy Unit







North East Joint Transport Committee, Overview and Scrutiny Committee

Date: 25 March 2021

Subject: Joint Transport Committee Forward Plan and Scrutiny Work

Programme

Report of: Policy and Scrutiny Officer

Executive Summary

The purpose of this report is to provide an update on the suggested work programme for 2021/22 for the Joint Transport Overview and Scrutiny Committee.

Recommendations

The Overview and Scrutiny Committee is recommended to:

i. Comment on and agree the suggested work programme.

1. Background Information

- The Joint Transport Committee (JTC) Forward Plan is a document which the Joint Transport Committee is required to maintain under the Combined Authorities (Overview and Scrutiny, Access to Information and Audit Committees) Order 2017. The Forward Plan for the Joint Transport Committee, and its Subcommittees is published on both the North East Combined Authority's website and on the North of Tyne Combined Authority's website. It lists the decisions that the Joint Transport Committee and its Officers intend to take in the coming months and must include all decisions to be made in the next 28 days. The JTC Forward Plan template contains specific information relating to each decision, including the date the decision will be made, a brief explanation of the topic, the consultation to be undertaken, and contact details of the author. The JTC Forward Plan template has recently been updated and includes further information including if the decision is a 'Key Decision' and if an item will be discussed in private.
- 1.2 Details of each decision are included on the JTC Forward Plan 28 days before the report is considered and any decision is taken. This supports the transparency of decision making across the Joint Transport Committee and allows members of the public to see the items that will be discussed. There are special procedures for circumstances where publication for the full 28 clear day period is impractical or where there is special urgency. Both of these procedures involve the Chair of the Overview and Scrutiny Committee and would be reported to the committee at the next meeting.

Role of Overview and Scrutiny

- 1.3 The Joint Transport Committee, Overview and Scrutiny Committee has been established in accordance with Schedule 2 (4) of The Newcastle Upon Tyne, North Tyneside and Northumberland Combined Authority (Establishment and Functions) Order 2018.
- 1.4 The Joint Transport Committee, Overview and Scrutiny Committee can examine any decisions of the Committee be that by the JTC itself or a subcommittee, constituent authority, or officer holding delegated authority. This Scrutiny occurs in public and ensures democratic and public accountability.
- 1.5 One of the main functions of this Committee is the review and scrutiny of 'Key Decisions' made by the Joint Transport Committee and its Officers. The relevant regulations set out a test for what should be considered a Key Decision being those which are most significant in financial or other terms. This is explained in the Decision-Making Protocol of the North East Combined Authority that was adopted by the Joint Transport Committee for its use at its inaugural meeting in November 2018.

Requests for Special Urgency/General Exception

1.6 In accordance with the Decision Making Protocol, it was agreed by Members that the request of any Short Notice Procedure that involved the Chair of the Overview and Scrutiny Committee would be reported at the next Committee. The table below

shows the number of requests made since the last meeting was held:

Type of Short Notice Procedure	Number of Requests since previous Committee						
Requests for Special Urgency	0						
Request for General Exception	0						

Details of requests for Special Urgency and General Exception can be found at this website https://northeastca.gov.uk/decision-making/forward-plan/special-notice-and-urgency-provisions/.

Annual Work Programme – Approach for ongoing overview and scrutiny of Transport Plan

- 1.7 The OSC met informally on 22 February 2021 to discuss the consultation feedback on the draft Transport Plan.
- During this discussion the Committee noted key aspects that they wanted the JTC to consider in adopting the plan and wrote a letter to JTC to this effect.

The key points raised where:

- 1. Positive view on level and approach of engagement
- 2. Environmental considerations
- 3. COVID Recovery and Funding
- 4. Rail and cycling infrastructure
- 1.9 From this meeting a working group was established from volunteers from the committee to discuss an approach for ongoing oversight and scrutiny of the Transport Plan when it comes into effect.
- The working group met on 11 March 2021 and recognised that that the Transport Plan gives the OSC clarity of the policy framework it is operating within and focus for the future.
- The Transport Plans objectives and policy statements can provide structure to the OSC's Work Programme over the next few years, by enabling it to focus on a particular area in each meeting.
- The working group discussed an approach to structuring future meetings which involved receiving and debating an overview on progress being made on the Transport Plan and its objectives, planned future actions, and then providing the opportunity to scrutinise particular areas of the plan in more detail.
- 1.13 The scheduling of these areas of would be informed by whichever is the most advanced in the development of its delivery plan. This would provide the OSC the opportunity to have an effective and productive input into the delivery of the Plan. By the end of each meeting, the OSC should understand the Objective and its delivery plan so it is then able to monitor it and assist in providing ideas/proposals

- to support delivery or overcome obstacles (e.g. by identifying alternative actions for consideration by the JTC).
- 1.14 There is the opportunity to use, where appropriate, external input into the OSC meetings when considering the objectives and specific issues that may be on interest to certain groups.
- 1.16 It should be noted that the work programme covers items that will be discussed at the meetings. It does not preclude 'deeper dives' providing more focused scrutiny of particular topics by a sub-group of the committee outside of these meeting dates. These topics can be raised with the Chair and Scrutiny Officer at any time.

2. Annual Work Programme – Update

2.1 The Committee is asked to review and agree the suggested work programme.

3. Reasons for the Proposals

- To provide an opportunity for Committee members to input on any additional items as part of continued planning for the Work Programme for 2021/22.
- 3.2 The work programme will be refreshed and updated at each meeting of the Committee throughout the year.

4. Alternative Options Available

4.1 There are no alternative options available.

5. Potential Impact on Objectives

5.1 Development of a work programme and review and scrutiny of decisions in the JTC Forward Plan will contribute towards the development and implementation of the policy framework of NECA, NTCA, Nexus and the North East LEP as well as providing appropriate challenge to decisions taken.

6. Financial and Other Resources Implications

6.1 No financial or other resource implications are identified at this stage.

7. Legal Implications

7.1 There are no specific legal implications arising from these recommendations.

8. Key Risks

8.1 There are no key risks associated with the recommendations made in this report.

9. Equality and Diversity

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

10. Crime and Disorder

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

11. Consultation/Engagement

11.1 On-going consultation takes place with Officers and Scrutiny Members across the local authorities that make up the Joint Transport Committee, in regard to the items for the Annual Work Programme as Appendix 2.

12. Other Impact of the Proposals

The proposals consider the wider impact and take into account the Principles of Decision Making. They allow Members consideration of the items on the JTC Forward Plan and allow them the opportunity to have an overview of all performance, decision making and developments across the Joint Transport Committee structure.

13. Appendices

13.1 Appendix One – Annual Work Programme

14. Background Papers

14.1 None.

15. Contact Officers

15.1 Gavin Armstrong, Policy and Scrutiny Officer

Email: gavin.armstrong@northeastca.gov.uk Telephone Number: Tel No: (0191) 4247537

15.2 Mike Barker

email: mikebarker@gateshead.gov.uk

Telephone: (0191) 433 2100

16. Sign off

• The Proper Officer for Transport: ✓

Head of Paid Service: ✓

- Monitoring Officer: ✓
- Chief Finance Officer: ✓

17. Glossary

NECA - North East Combined Authority
 North East LEP - North East Local Enterprise Partnership
 NTCA - North of Tyne Combined Authority

Joint Transport Committee: Overview and Scrutiny Work Programme March 2021

Standing Items for each Committee Meeting:

- Declaration of Interest
- Minutes of Previous Meeting
- JTC Forward Plan and Work Programme Report

Source of work programme and items of importance:

The Overview and Scrutiny Committee obtains work programme items from the following sources:

- a) Items submitted by Members of the Committee (and including items referred by other members of the Combined Authorities):
- b) Suggestions from Officers
- c) The Budget and Policy Framework; Transport Plan
- d) The JTC Forward Plan;
- e) The Proper Officer for Transport
- f) Evidence for any policy review work regarding Transport

Suggested Work Programme 2021-2022

Meeting Date	Subject
June 2021	 COVID 19 response and recovery update
	 Transport Plan monitoring approach - update
	 Overview - Transport Plan progress
	 Scrutiny -Transport Plan – objective area (TBC)
	 Proposed Work Programme Framework 21/22

Please note that the framework for the 2021/22 work programme will be populated during the June and subsequent meetings.

It should be noted that the work programme covers items that will be discussed at the meetings. It does not preclude 'deeper dives' providing more focused scrutiny of particular topics by a sub-group of the committee outside of these meeting dates. These topics can be raised with the Chair and Scrutiny Officer at any time.

