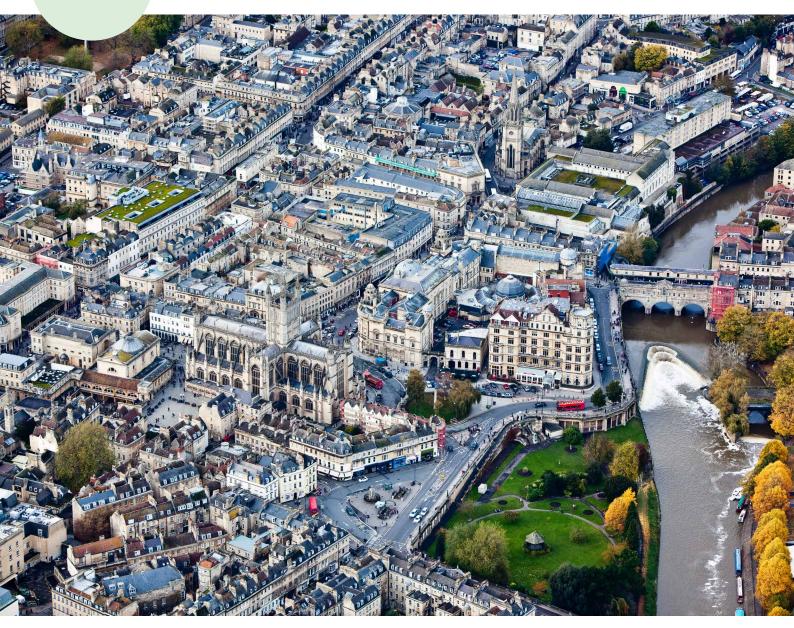
Bath & North East Somerset Council

Improving People's Lives

JOURNEY TO NET ZERO



Reducing the environmental impact of transport in Bath

CONTENT

1	INTRODUCTION	03
2	GIVING PEOPLE A BIGGER SAY	14
3	OUR CURRENT PROJECTS	16
4	OUR DEVELOPING AND FUTURE PROJECTS	32
5	SUMMARY & NEXT STEPS	53

INTRODUCTION

01



TO IMPROVE PEOPLE'S LIVES

To improve the lives of people is the overriding purpose of Bath and North East Somerset Council (B&NES). It provides the foundation of our Corporate Strategy (The Strategy) which is the 'golden thread' and drives everything we do. The Strategy has two core policy themes:

- Tackle the climate and ecological emergency
- Give people a bigger say

The Strategy is underpinned by three principles that shape the delivery of the purpose and policies:

- Prepare for the future
- Deliver for local residents
- Focus on prevention

CLIMATE AND ECOLOGICAL EMERGENCY

The inclusion of the climate and ecological emergency as one of our core policy themes demonstrates our commitment to do what is needed to overcome this challenge.

Climate change, caused mainly by carbon dioxide (CO₂) emissions, is having a harmful effect on our planet. Whilst carbon emissions in other sectors have declined, emissions from transport have been broadly stable for the last 30 years.

There is a growing realisation across society that the climate emergency is real, is happening, and cannot be ignored. The understanding that real change is required, and that it must start now and continue into the future, has grown to span all generations.

Alongside other local authorities in the West of England region, B&NES has declared a climate emergency and committed to achieving carbon neutrality by 2030. This means that by 2030, we will need to be able to balance our carbon emissions to ensure that the level of greenhouse gas we release into the atmosphere is no greater than the amount we remove.

In March 2019, B&NES declared a Climate Emergency, which included a commitment to become carbon neutral by 2030. Transport currently accounts for 29% of carbon emissions in the B&NES area. The B&NES Climate Emergency Outline Plan identified the scale of change required to meet the carbon neutrality target. There are many potential pathways to achieving this target. For example, one scenario would require:

- 7% decrease in the number of car journeys across the local authority area
- 25% reduction in kilometres travelled per person by car each year
- Electric cars: 76% pure battery, 14% petrol hybrid
- Buses: 76% electric, 24% hybrid
- Rail: 37% of freight rail is electric, 100% passenger rail is electric

This is not just a local priority. At a national level, the Department for Transport (DfT) released Decarbonising Transport: A Better, Greener Britain¹ in July 2021. This details the path to net zero transport including commitments from central Government to increase cycling and walking, a green bus revolution, decarbonising

our railways, zero emission cars, vans, motorcycles, and scooters, and accelerating maritime and aviation decarbonisation. There are several national-level levers which will significantly impact on carbon emissions at a local level including advancements in technology, restrictions on sales of petrol and diesel vehicles and decarbonising bus and rail fleets.

We are equally committed to doing everything within our power to provide the necessary infrastructure and policies within Bath and the wider North East Somerset District to ensure that we achieve our target of becoming carbon neutral by 2030. As residents, we can all do our bit, supporting our ambition with every trip that we make on foot, by bike or by public transport instead of by car.

We need to work together to play our part in making our planet a cleaner, greener place to live

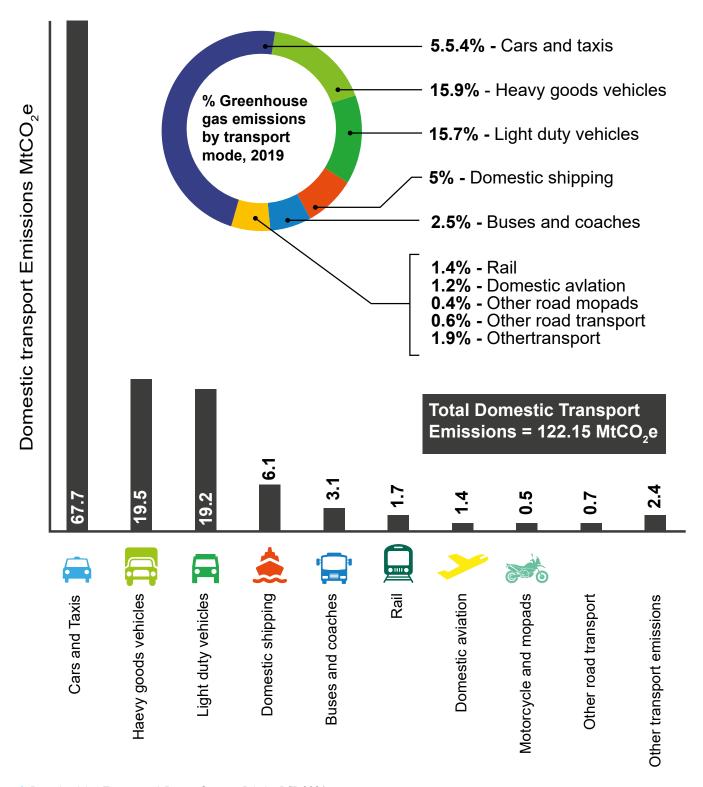


Net Zero - what does it mean and how do you measure it?

'The Government target is for at least a 100% reduction in greenhouse gas emissions (compared to 1990 levels) in the UK by 2050. This can be achieved by a combination of emission reduction and emission removal.' (Net zero and the different official measures of the UK's greenhouse gas emissions, Office of National Statistics, 2019)

As 'Net Zero' is a combination of emissions and removal of greenhouse gases, the objective for 2030 is not to reach zero transport-related emissions, but to reduce emissions by an amount that allows the residual emissions to be absorbed by, or removed from, the environment.

UK domestic transport emissions 2019²



WHAT IS THE JOURNEY TO NET ZERO: REDUCING THE ENVIRONMENTAL IMPACT OF TRANSPORT IN BATH?

The Journey to Net Zero: Reducing the Environmental Impact of Transport in Bath sets out a plan to tackle some of the biggest challenges our society faces: combating climate change, improving air quality, improving health and wellbeing and tackling congestion.

The current ways in which we travel will not get us to carbon neutrality by 2030. This plan sets out the changes needed to our transport system to create places we want to live and work; with better connected, healthier and genuinely sustainable communities. We have placed people at the centre of the Journey to Net Zero, focusing on providing transport infrastructure and environments that will encourage the use of sustainable modes by making them a genuine alternative to the car. This will involve reducing the dominance of the private car while maintaining access for those whose needs cannot easily be met by more sustainable modes. This plan focuses primarily on the City of Bath, but also recognises the importance of the travel corridors between the city and the wider district.

Planning for people will result in places for people; planning for cars will result in places dominated by cars 29

Chartered Institute Highways and Transportation

This journey has already begun. We are already pursuing an ambitious, wide-ranging programme of projects to support travel within Bath, the wider district and the region. This plan sets out the steps that we have already taken and those that we are currently working on. But these alone are not enough to deliver carbon neutrality. The targets in the Climate Emergency Outline Plan demonstrate the scale of change required, so we have identified future projects that will support us on our journey to carbon neutrality. In this plan we have considered at a high-level the potential scale of carbon reduction that the future projects could deliver. As the projects identified in this plan develop, we will consider their impact on reducing carbon in more detail, and estimate the quantified impacts. We will continue to work with the West of England Combined Authority (the Combined Authority) to develop more advanced techniques for recording and monitoring the impacts of our transport projects, to allow us to measure performance against emission targets.

In 2020 the Combined Authority released the Joint Local Transport Plan 4² (JLTP4) to set the vision for transport in the region to 2036. JLTP4 recognises the challenges faced by the region in terms of growth in travel demand and the increased need to improve the offer of more sustainable modes of transport as well as climate challenges. JLTP4 remains the umbrella document for regional policy and is the source of the region's major scheme list. Where appropriate, schemes identified in JLTP4 have been included within this plan.



An evidence-based approach

In November 2014, B&NES approved the Getting Around Bath Transport Strategy ⁴. This Strategy set out the vision and objectives for transport in the region. To reflect the importance of the climate emergency declaration on our future ambitions, this vision and objectives have been updated:

Vision

Bath will enhance its unique status by adopting measures that promote sustainable transport and decision making, whilst reducing carbon emissions and the intrusion of vehicles, particularly in the historic core. This will improve the quality of life for local people, enable more economic activity and growth, while enhancing the special character and environment of the city.

Objectives



Reducing vehicle carbon emissions to achieve carbon neutrality by 2030



Improving air quality and health



Promoting sustainable mobility



Supporting and enabling economic growth, competitiveness, and jobs



Widening travel choice



Widening access to opportunities: jobs/learning/training



Safeguarding and enhancing the unique historic environment and World Heritage Site status



Improving quality of life in the city



The Journey to Net Zero: Reducing the Environmental Impact of Transport in Bath builds on the 2014 Transport Strategy to support targets to reach carbon neutrality by 2030. In April 2020, the Journey to Net Zero Phase 1: Current and Future Report⁵ (Current and Future Report) was published by B&NES, setting out the current and future situation for transport into, out of and around Bath, and the need for significant and focused improvements. This report looks at the ways in which we currently travel, and provides the evidence base that underpins the consideration of future transport measures set out in this plan.

This plan forms the second part of our Journey to Net Zero report, identifying measures to overcome the challenges identified in the Current and Future Report. When combined, these reports:

- Identify the problems that currently affect travel in the district
- Identify solutions to improve and promote sustainable travel in, around and into the city

The plan considers projects in three groupings based on level of development:

- Current projects these are projects that are already underway and are either being developed by the Council or have been delivered. These projects have been consulted on, and assuming the resource and funding is available will be delivered (if they have not already)
- Developing projects these are projects which are under development and are subject to consultation and approval
- Future projects these are emerging projects that are not currently under development, but could be pursued by the Council in order to support the ambition to achieve carbon neutrality by 2030

These projects include those being developed and consulted on by the West of England Combined Authority in conjunction with ourselves. Projects in development and future projects will be consulted on in detail in the future, ensuring that local people are able to give their views on the proposals.

Within the Plan projects are considered in terms of their delivery timescale:

Short-term	Medium-term	Long-term
1-2 years	3-6 years	7-10 years+

Context of the Plan

In 1987 the City of Bath was celebrated on the United Nations' Educational, Scientific and Cultural Organisation's (UNESCO) list of World Heritage Sites in recognition of its 'outstanding universal values'. But over the past century, the increasing dominance of the motor car has damaged its character and quality of public space and life across the city.

The ancient road network within the city centre was not designed to cater for the competing demands of cars, buses, coaches, and heavy goods vehicles. Dense traffic generates high levels of dangerous air pollution, whilst causing costly delays to journeys, and making it harder to get around on foot and by bike.

The declaration of the climate emergency provides an unparalleled opportunity to look at Bath as a whole and to develop a coherent, long-term vision and plan for transport in the city.

No single mode of transport will be dominant. Instead, people will have a choice between a range of modes of transport – each of them accessible, viable and sustainable.

To plan for the change required, we first need to understand the characteristics of travel in Bath. During the development of the plan, the coronavirus pandemic has had a significant societal impact on the way we travel, live and work. The experience of the pandemic shows that in certain conditions, people's travel behaviour can change rapidly. The long-term impacts of the pandemic on travel are unknown, so the data and analysis presented and discussed within this chapter is pre-pandemic. Monitoring data that we have collected recently shows that traffic levels are nearing 90% of pre-pandemic levels⁶, suggesting that the need for sustainable transport remains.

Why We Travel

On average, each person in England makes 953 trips per year with an average trip length of 10.9 kilometres and an average journey time of 23 minutes⁷. With a population of 193,000 in B&NES, this equates to over 2 billion kilometres travelled per year in the district.

Almost half of weekday travel within Bath is for commuting, with an additional 20% for business travel⁸. Shopping accounts for 12% of travel with the remainder split evenly between education, leisure, and recreational purposes. The dominance of commuting trips is even more marked at peak times, comprising around two thirds of all trips.

- 4. Journey to Net Zero: Reducing the Environmental Impact of Transport in Bath Phase 1: Current and Future Report, B&NES, 2020
- 6. B&NES Weekly Traffic Monitoring Report, 2021

How We Travel

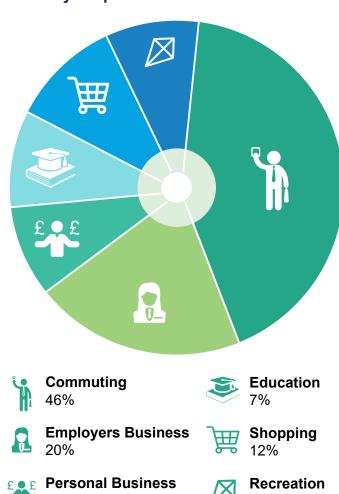
For residents of Bath, 45% of journeys to work use sustainable modes and 47% travel by car (as driver or passenger), with the remaining 8% of Bath residents working from home. However, when considering people who work in Bath but could live elsewhere, the proportion of car usage increases to 53%. Car use is highest when considering the wider B&NES area where 60% of residents commute by car9.

The Getting Around Bath Transport Strategy 10 set targets for increased use of bus, rail, walking and cycling by 2020. These targets have been exceeded for all modes but rail. There has been a rapid increase in the use of sustainable modes in the last 10 years in B&NES. However, this still accounts for only a small proportion of overall travel.

With growth in car usage during this time, and to meet the scale of change required to respond to the climate emergency targets, it is clear that further work is required to promote and support the use of sustainable modes of travel.

The Current and Futures Report acts as the evidence upon which the measures identified in this plan are based. It provides further detail on travel demand and issues within the B&NES area.

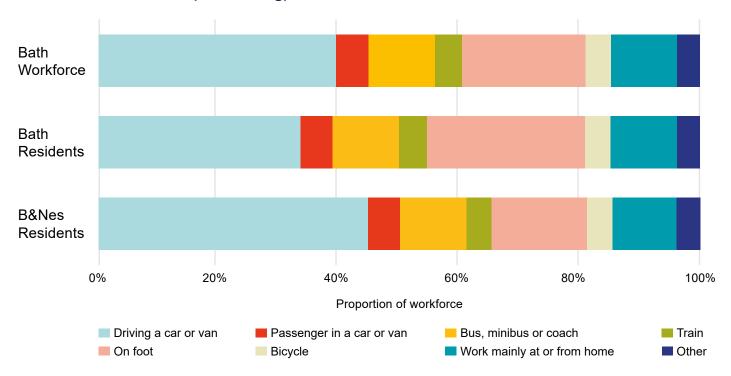
Journey Purpose of travel in Bath 11



8%



Mode of travel to work (commuting) in Bath¹²

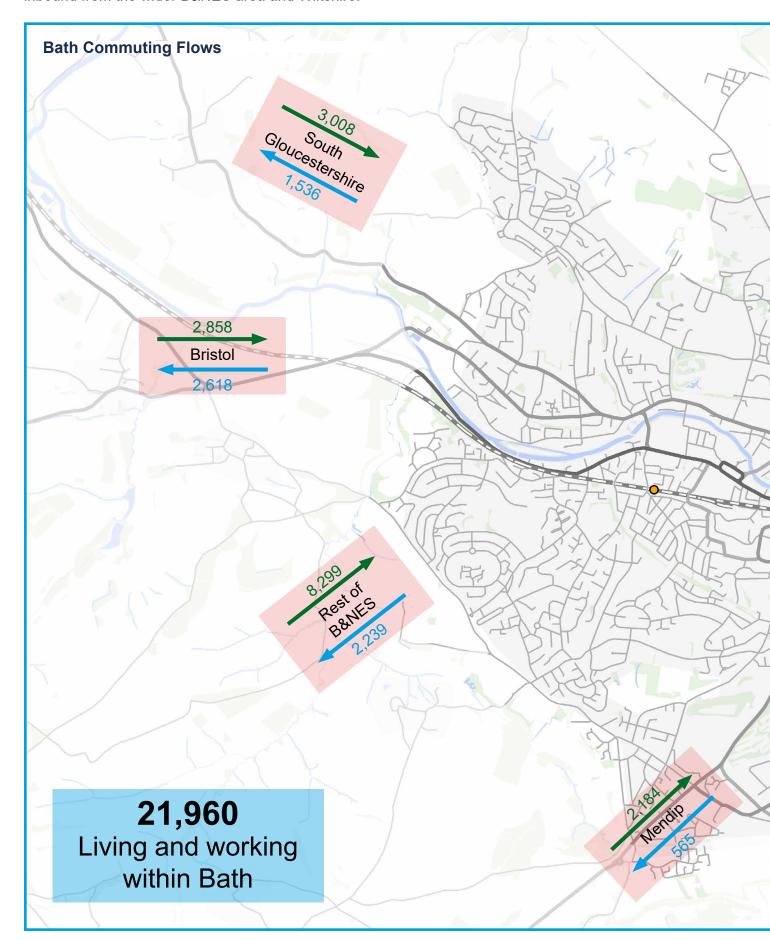


^{7. 2019} National Travel Survey (Table: NTS0101), 8. Transport Delivery Action Plan for Bath Phase 1: Current and Future Report, Bath and North East Somerset Council, 2020, 9. 2011 Census (Table QS701EW), 10. Getting Around Bath: A Transport Strategy for Bath, B&NES, 2014, 11. Transport Delivery Action Plan for Bath Phase 1: Current and Future Report, Bath and North East Somerset Council, 2020,

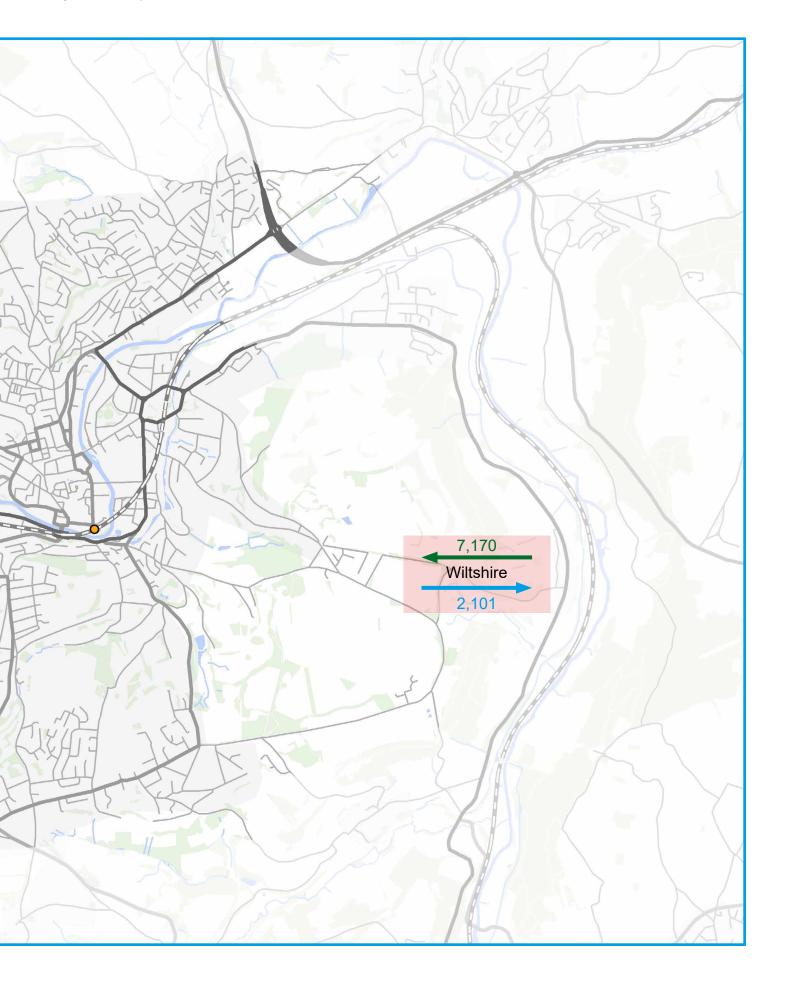
^{12. 2011} Census (Table QS701EW)

Where We Travel

Nearly 22,000 people who live in Bath also work in the city. There are also over 28,000 commuting trips into the city each day from the wider area, with almost 12,000 outbound ¹³. The top five inbound and outbound commuting flows to Bath are shown in the figure below. The highest demand routes are inbound from the wider B&NES area and Wiltshire.



Considering this alongside how we travel demonstrates the importance of providing sustainable transport options both within the City of Bath but also on the key corridors connecting Bath to the wider region and beyond.



WHY DO WE NEED THE JOURNEY TO NET ZERO: REDUCING THE ENVIRONMENTAL IMPACT OF TRANSPORT IN BATH?

Transport is not just about how you get around. It is something that fundamentally shapes our towns, our cities, our countryside, our living standards, our health and our whole quality of life. It can shape all these things for good – or for bad. ??

Decarbonising Transport, Department for Transport (DfT) The number of people living in the West of England is forecast to grow significantly by 2036. Currently transport accounts for 29% of carbon emissions in B&NES¹⁴. Without changes in the way we travel, emissions are predicted to increase by almost a quarter by 2036 across the West of England¹⁵.

With over half of journeys to work in Bath currently made by car there is a need to increase travel by less polluting, sustainable modes, and also reduce the number of overall trips we make. 1 in 3 car journeys in Bath start and end within the city, equating to 50,000 car movements a day¹⁶. These are trips that for many could be undertaken by bus, bike, walking or scooting. In addition, 75% of people driving to work in Bath are doing so from outside the city¹⁷. This demonstrates a need for more sustainable modes of travel for trips to, from and within Bath.

Over-reliance on cars is not only impacting climate change, but also our health and wellbeing through poor air quality and inactivity, and our businesses through congestion and time spent queuing which reduces productivity. Congestion leads to longer, unreliable journey times for everyone, while low speeds and time struck in traffic queues increases emissions further.



14. Climate Emergency Outline Plan (2019), Bath and North East Somerset Council, 15. JLTP4, 16. Transport Delivery Action Plan for Bath Phase 1: Current and Future Report, Bath and North East Somerset Council, 2020, 17. Transport Delivery Action Plan for Bath Phase 1: Current and Future Report, Bath and North East Somerset Council, 2020

There is anticipated to be a 13% increase in the number of people living in the B&NES area by 2036 (ONS Population Projections

for Local Authorities, ONS (2036 compared to 2018)

There is anticipated to be a 25% increase in the number of trips across the West of England by 2036 (Joint Local Transport Plan 4,

West of England Combined Authority, 2020)

There are over 300 premature deaths a year in the West of England due nitrogen dioxide emissions (Joint Local Transport Plan 4, West of England Combined Authority, 2020)

In B&NES 92% of nitrogen dioxide emissions are from

road traffic (Transport Delivery Action Plan for Bath Phase 1: Current and Future Report, Bath and North East Somerset Council, 2020)

The annual cost of congestion in the West of England is £300m. (Joint Local Transport Plan 4, West of England Combined Authority, 2020)

Without changes in the way we travel, by 2036 we could see the following across the West of England¹⁸:

- ↑ 40% Increase in delays
- ↑9% Increase in journey times
- ↑74% Increase in time spent queuing in traffic

Key considerations

To successfully deliver the required changes, we must consider several B&NES-specific factors:

- Protecting Bath's status as a World Heritage Site
- 2 The significant number of listed buildings
- The presence of a network of historic vaults beneath the city centre, and the impact of this on delivering infrastructure at street level
- 4 The landscape and townscape, including hilly terrain and narrow streets
- 5 The River Avon which bisects the city, with relatively few crossings
- 6 The reliance of local economy on tourism
- 7 Higher levels of car ownership in B&NES than the national average



Giving people a bigger say is one of the two core policies within our Corporate Strategy. To inform the development of the plan, a public consultation was held in early 2021 to give the people of B&NES an opportunity to have a say on their priorities for transport in the next 10-years.

Following a series of stakeholder workshops, we established a set of transport themes that considered the challenges identified in the Current and Futures Report:

- Better public transport options delivering a range of public transport options to improve connectivity for all
- Providing for travel by bike and on foot reducing the intrusion of vehicles to enable a bike and pedestrian friendly city
- Creating improved places to live and work creating better connected, healthier and more sustainable communities through the more efficient use of road space
- Cleaner, greener school travel enabling healthier, safer and greener ways to travel to and from school
- Supporting future mobility exploit the opportunities presented by evolving transport technology, to improve physical connectivity
- Connecting Bath to rural communities and market towns improving connectivity on routes between Bath and the wider district

In our previous consultation on these themes, respondents were asked to select the transport themes of most importance to them. From the 1,000+ responses, the most popular themes included:

- Better public transport options
- Providing for travel by bike and on foot

The consultation report¹⁹ provides a summary of the outcomes of the consultation, with the figure below showing some of the most common phrases used in responses.

This plan is structured around the transport themes described above. For each we consider what measures we are already committed to, those we are currently developing and the future projects which we may need to deliver the step-change required. We will seek your views on the future projects as they develop to ensure we are meeting the needs of local people.

Consultation Responses Word Cloud

Car upper bristol road traffic heavy good vehicle residential area cycle lane north road cycle path Cycle children cleveland bridge people blue bage holder london road clean air zone electric car COUNCIL mph speed limit city city centre air pollution Cycling pavement lower bristol road car driver car use bus route many people rural area air quality cyclist bike traffic light road vehicle private car car park wick hill public transport pedestrian rural community street parking hus bus services electric vehicle scooter parking space north east somerset



66 It's not about stopping people doing things; it's about doing the same things differently. ??

Decarbonising Transport, Department for Transport (DfT)

This chapter sets out our current committed projects under each of the transport themes. These are projects that are already underway, have been consulted on and have committed funding.

BETTER PUBLIC TRANSPORT OPTIONS

Delivering a range of public transport options to improve connectivity for all.

Why is it important?

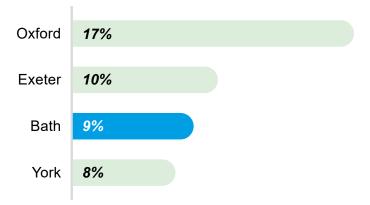
Public transport is essential for accessing employment and education, services, shopping and leisure. It should be frequent, reliable, fast, accessible, safe, comfortable, and link up the places that people live and want to go. In order to provide a realistic alternative to cars, it is essential that public transport services are punctual and have priority over general traffic to offer competitive journey times. When possible, we will seek to have the powers to enforce moving traffic offences, such as banned turns, stopping in box junctions and driving in bus and cycle lanes. These offences all impact the general operation of our network including on bus journey times.

Longer journeys can combine walking and cycling with public transport, ensuring all journeys can be made in an environmentally friendly and space-efficient way, reducing congestion and improving air quality.

Public transport can encompass a number of modes including bus, rail, e-bikes and e-scooters and mass transit, along with integrated ticketing solutions to allow users to plan, book and pay for multiple modes of transport in one go. These multiple modes can be connected via multi-modal transport interchanges, building on the concept of Park and Ride sites but with access to a wider range of services.

The proportion of residents taking the bus to work in comparison to similar cities is shown in the figure below. These cities have been identified based on similarities to Bath in terms of size and historic nature.

Proportion of residents taking the bus to work²⁰.



Only 1 in 11 commutes in the West of England are by public transport. (Joint Local

Transport Plan 4, West of England Combined Authority, 2020)

Total UK emissions from cars is 22 times higher than from buses/coaches.

(Decarbonising Transport A Better, Greener Britain, Department for Transport, 2021)

75 cars are taken off the road by one full double decker bus. (The Future of Bus: Policy and Fiscal Interventions as Part of a National Bus Strategy, Campaign for Better Transport, 2019)

There were 14.7 million bus journeys in B&NES

in 2018-19 (77 per person).

(Department for Transport Bus Statistics (Table BUS0109 & BUS0110)

The average cost of running a car in the UK is £3,081. (https://www.

nimblefins.co.uk/cheap-carinsurance/average-cost-run-car-uk)



As part of the consultation in early 2021, more than half of respondents considered improved public transport options to be important, with universal, integrated ticketing and provision of mobility hubs being the most supported concepts. Around half of respondents considered better bus services to be important, with use of cleaner fuels and improved coordination of bus services as the most important concepts.

What are we doing about it?

MetroWest Phase 1

MetroWest Phase 1 is the first of an ambitious programme of major projects to enhance the local rail network across the West of England. The overall aim is to introduce fast and frequent metro rail services across the local area. This includes making better use of existing local passenger lines and freight lines, reopening viable disused lines, and increasing both the size of the local passenger rail network and the frequency of train services. In 2019 there were significant timetable changes that saw the introduction of 43 additional high-speed, long-distance services every weekday, an increase of almost 29% from May 2019.

Phase 1 of the MetroWest project includes upgrading the Bath Spa to Bristol Temple Meads line to provide half-hourly services through the provision of an additional stopping service between Bristol Temple Meads, Keynsham, Oldfield Park, Bath Spa and Westbury. This is forecast to generate over half a million new passengers a year. Work has already taken place to increase the platform capacity at Bath Spa station to provide the required capacity for increased passenger numbers.

To date, over £26m has been invested in the West of England in developing MetroWest which remains our rail priority.

Other themes supported: Connecting Bath to rural communities and market towns

2 Development of the Bus Service Improvement Plan

In October 2021 the West of England Combined Authority and North Somerset Council submitted the Bus Service Improvement Plan (BSIP) to central Government. The BSIP sets out the region's plans to improve bus services, showing how we will meet requirements at a national level that are set through the National Bus Strategy and how we will develop a well-connected sustainable transport network.

The BSIP, which was developed in partnership between the Combined Authority, constituent unitary authorities, North Somerset Council and bus operators, sets several targets:

- Reduce average bus journey times on designated corridors by 2% by 2025 and 10% by 2030
- Achieve 95% of services running on time (no more than one minute early or five minutes late) by 2030
- Return to pre-pandemic patronage levels by 2025 and grow patronage by 24% by 2030
- Increase passenger satisfaction to 89% for 2025 and 95% for 2030
- By 2023 all buses operating in the BSIP area will meet the Euro VI emission standard and by 2035 all buses will be zero emission – with the ambition to bring this forward to 2030

Some of the schemes within Bath that have been included in the BSIP are set out in Our Developing and Future Projects. In addition to larger schemes targeting bus priority, we will also seek to improve communication with operators and passengers about roadworks and increase bus shelter cleaning and maintenance standards.

As part of the BSIP, the Combined Authority and North Somerset Council have committed to developing an Enhanced Partnership (EP) with local bus operators and highway authorities in 2022.

What is an Enhanced Partnership²¹?

An Enhanced Partnership is a statutory partnership between one or more local transport authorities and their local bus operators that sets out how they will work together to deliver BSIP outcomes in a defined geographical area. An EP is formed by two parts:

- An EP plan a clear vision of the improvements to bus services that the EP is aiming to deliver, mirroring the BSIP
- One or more EP schemes an accompanying document that sets out the requirements local services must meet to achieve the BSIP outcomes

The local transport authority has the formal responsibility for making the scheme, but at set points they must seek the support of a proportion of bus operators in order to proceed with their proposals.

Delivery timescales: Plan submitted in 2021, covers period from 2021 to 2030

Other themes supported: Connecting Bath to rural communities and market towns.

3 West of England Combined Authority 10 Year Rail Delivery Plan

In December 2020 the Combined Authority and Network Rail released a joint Rail Delivery Plan. This Plan aims to enhance local rail services, providing people with better access to jobs and services. Within the B&NES region, the Plan includes the MetroWest initiatives as well as a commitment to bringing railway stations up to a MetroWest standard regarding accessibility. This includes full step-free access, seating, shelters, wayfinding, easy walking and bike access, disabled parking, improvements to security including CCTV and lighting.

Delivery timescales: Plan released in 2020, covers period from 2020 – 2030

Other themes supported: Providing for travel by bike and on foot

PROVIDING FOR TRAVEL BY BIKE AND ON FOOT

Reducing the intrusion of vehicles to enable a bike and pedestrian friendly city.

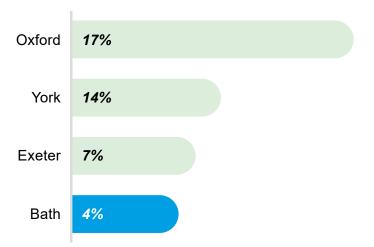
Why is it important?

Travel by bike is an environmentally friendly and cost-effective way to move around. It contributes to both physical health and mental wellbeing whilst also encouraging the use of community destinations and local amenities. E-bikes now also provide a great solution for cycling up some of Bath's steeper hills, opening up new areas to explore.

The DfT published Gear Change: A Bold Vision for Cycling and Walking²² in July 2020, which outlines the Government's commitment to improving provision for bike users and increasing cycling levels making it the natural first choice for many journeys alongside walking. Safer streets will support more residents in carrying out daily activities by bike.

The proportion of residents cycling to work in Bath in comparison to similar UK cities is shown in the figure below.

Proportion of residents cycling to work²³



As part of the consultation in early 2021, more than half of respondents considered supporting and enabling bike users to be important, with segregated routes into and within the city being the most supported concepts.

Nearly all journeys start and end with walking, meaning that the needs of a pedestrian must be considered as a priority across the whole journey, starting from home. Once the car has been left at home, other car journeys become much less likely.

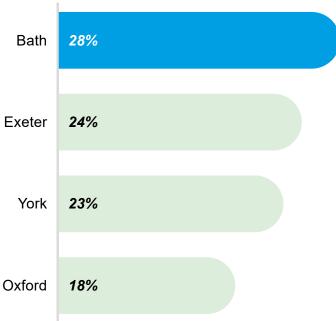
Walking has no environmental impact, is free, and takes up the least amount of road space of all modes. It also benefits the physical and mental health of the individual.

A better designed, safer, cleaner and more accessible pedestrian environment will make walking the preferred mode for short journeys around what is a relatively compact city. This will reduce pressure on public transport and the need to use a vehicle.

In the 2014 Getting Around Bath Transport Strategy²⁴, we set out our ambition to make Bath the 'most walkable city' in the UK, with 85% of respondents to the Strategy's consultation supporting this objective.

This is demonstrated with Bath having a high proportion of residents who walk to work in comparison to similar UK cities is shown in the figure below.

Proportion of residents walking to work²⁵



As part of the public consultation in early 2021, just over half of respondents considered improving pedestrian movement to be important, with all concepts being strongly supported.

Cycling to work reduces risk of premature death by 41%. (Gear Change:

A Bold Vision for Cycling and Walking, Department for Transport, 2020)

One third less road space needed for bike users compared to driving. (Cycling

and Walking Investment Strategy, Department for Transport, 2017)

Improving infrastructure has been seen to increase cycling demand by up

to 62%. (Outcomes of the Cycling City and Towns

Programme: Monitoring Project Report, 2017)

20-30% fewer cases of depression if people walked for 20 minutes every day.

(Walking Action Plan: Making London the World's Most Walkable City, Transport for London, 2018)

35% of journeys in B&NES that would take under 25 minutes to walk are done by car. (2011

Census (Table DC7701EWla) & Journey Time Statistics: Notes and Definitions, Department for Transport, 2019)

In city centres, 40% more money is spent by pedestrians than car drivers. (Walking

Action Plan: Making London the World's Most Walkable City, Transport for London, 2018)

What are we doing about it?

1 Delivery of the Local Cycling and Walking Infrastructure Plan

The West of England Local Cycling and Walking Infrastructure Plan (LCWIP) was adopted in June 2020. It identifies walking and cycling routes which have been prioritised for future investment.

The West of England LCWIP is a significant and exciting first step towards transforming active travel in the region, proposing investment of £411 million over the next 16 years for walking and cycling routes. The aim is to provide high quality infrastructure to support our transition to a region where walking and cycling are the preferred choice for shorter trips, and support access to public transport.

Within Bath, the LCWIP proposes the creation of several new walking and cycling key routes that enable travel on foot and on bike across the city. The plan proposes the allocation of £105 million to improving 30 local high streets and £306 million for upgrades along 55 continuous cycle routes.

The LCWIP marks the start of more investment in cycling and walking facilities across B&NES and work will continue to develop these first steps into a holistic cycle network for the city. Our wider ambitions for cycling are including in the Our Developing and Future Projects chapter.

Delivery timescales: Plan adopted in 2020, covers period from 2020 – 2036 **Other themes supported:** Creating improved places to live and work

2 Bath Quays Bridge

A new pedestrian and cycle bridge over the River Avon is due to open in 2022, reconnecting the riverside area to the city and providing a direct and viable alternative to the existing routes along the A36 Lower Bristol Road.

The bridge will connect Bath Quays North and South, a new office-led mixed use development, as well as connecting communities on the south of the river to the city centre. It is the first new crossing over the River Avon in a century. The bridge spans approximately 60m and has a deck width of 4.5m.

The bridge is part funded by Cycle City Ambition Funding along with investment from the West of England Combined Authority through Local Growth Funding.

Delivery timescales: Short-term

Other themes supported: Creating improved places to live and work

3 Loan bike scheme

The B&NES loan bike project is funded by the Council and operated by local bikes shops. It allows B&NES residents or people who work in the area to trial a bike for two to four weeks depending on availability. The scheme is intended to encourage people to swap from car to bike, and lets residents try a bike before investing in their own.

The successful scheme has been operating for six years, with post-use feedback over the last 12 months describing the project as very good (82%) or good (17%) whilst 42% of customers report that they will definitely buy a bike as a result of the loan.

The increasing popularity of this project has meant that the fleet is heavily oversubscribed during three seasons of the year (288 bookings in the six months ending October 2021) despite no active promotion for the last three years. During the winter months the bikes are lent to businesses, organisations and schools in B&NES for three months for use as staff pool or commuting bikes.

Between April and September last year the public loan bike project was suspended, and all bikes were advertised as being available for key workers whose commuting was disrupted due to coronavirus pandemic. Within seven days all bikes were booked out with notable recipients being the Royal United Hospital, Dorothy House, and Avon Fire and Rescue.

Delivery timescales: Implemented

Other themes supported: Creating improved places to live and work



CREATING IMPROVED PLACES TO LIVE AND WORK

Creating better connected, healthier and more sustainable communities through the more efficient use of road space.

Why is it important?

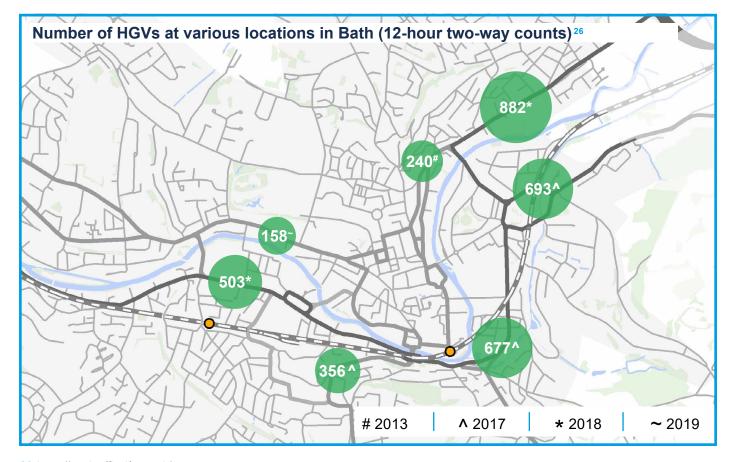
Bath's road network occupies a large proportion of the city's public space but is dominated by vehicles. Streets are places where people and communities should be able to connect and interact.

Bath City Centre is a vibrant area with significant movement activity and dynamic spaces. The city centre is considered to be accessible to residents and visitors alike, but the level of vehicle accessibility has traditionally been to the detriment of more sustainable modes. Bath's economy and residents rely on the efficient movement of goods in and out of the city. However, this must, and can, be done in a way which is not detrimental to quality of life or the urban environment. The police have asked us to improve security by reducing vehicle accessibility to public spaces and key buildings. Although the primary objective is security, these changes are in line with the Council's Liveable Neighbourhood strategy.

Through more efficient use of road space, better connected, healthier and more sustainable communities can be created. Public areas become desirable destinations, not just thoroughfares, easily accessible by sustainable modes, making more vibrant and liveable places.

As part of the consultation in early 2021, reallocation of road space, a network of key routes and removing traffic from the city centre were the most supported concepts in delivering improved places to live and work. Around half of respondents considered fewer Heavy Goods Vehicles (HGVs) to be important, with reducing road freight in the city centre and implementation of zero emission last mile delivery services being the most supported concepts.

The typical numbers of HGVs on Bath's roads are shown in the figure below.



What are we doing about it?

1 Bath Clean Air Zone

Transport is widely acknowledged as a key contributor to poor air quality. Introduced in March 2021, the Clean Air Zone (CAZ) charges all higher emission vehicles except private cars and motorcycles which drive into or near the city centre. The scheme is primarily aimed at reducing nitrogen dioxide levels.

We monitor the scheme on a quarterly basis. The April-July 2021 Monitoring Report identified that the CAZ is having its intended effect of improving vehicle compliance, changing behaviours and improving the city's air quality in general. The average nitrogen dioxide concentrations across monitoring sites within the CAZ were found to be 12.6% lower than the same period in 2019, with similar reductions found in the Bath urban area outside the zone's boundary. Traffic flows are 9% lower in the CAZ area compared with the same period in 2018, although it is noted that the coronavirus pandemic continues to impact on travel behaviours.

Delivery timescales: Implemented

Other themes supported: Supporting future mobility

Bath City Centre Security Project

Keeping our streets and spaces safe and secure from the threat of terrorism is an important part of our role as your local council. Since 2016, we have worked closely with Avon and Somerset Police and Counter Terrorism Security Advisors on protection work designed to improve overall public safety and strengthen protection in areas of high footfall.

In 2020, we put forward a proposal to introduce permanent measures in Bath City Centre with the purpose of improving security. The aim was to achieve a viable balance between the need for security to reduce the risk of vehicle-borne terrorist attacks, and the needs of local residents, businesses and service providers for vehicle access to the inner-city core area. The measures include access restrictions to vehicles during certain times of the day, in particular on streets with the highest footfall in the city, and purposedesigned street furniture. As part of these proposals detailed consideration is being given to special vehicles or road uses (i.e., blue badge holders, Emergency Service vehicles, postal service vehicles).

Delivery timescales: Short-term

Other themes supported: Providing for

travel by bike and on foot



3 Liveable Neighbourhoods

What are Liveable Neighbourhoods?

A liveable neighbourhood is a simple and cost-effective way to reduce through-traffic while maintaining vehicle access to homes and businesses. Liveable neighbourhoods promote and prioritise walking, cycling and public realm improvements, without disadvantaging people with mobility restrictions. Liveable neighbourhoods are not new. They have been successfully introduced across the world to improve residential environments and solve traffic issues. They are developed collaboratively with communities to turn streets that are noisy, polluted and dangerous into pleasant, safe places to live and work.

Liveable Neighbourhoods will breathe new life into residential areas by reducing the dominance of motor vehicles within our communities. They rebalance highway space so that vehicles have only the space they absolutely require and the remainder is used to create safer, pleasant outdoor environments in which people can relax, socialise and enjoy spending time. They are places where people can safely walk and cycle and allow local high streets to become lively and more prosperous places.

The following delivery areas have been identified for the first phase of Liveable Neighbourhoods. This includes locations in the wider North East Somerset area as improving local connections will increase connectivity to transport hubs which will impact on onward travel to Bath:

- Mount Road
- Great Pulteney Street/St Johns Road area
- Whitchurch and Queen Charlton
- Circus/Lower Lansdown/Marlborough Building/Royal Victoria Park/Cork Street area
- Oldfield Lane and First/Second/Third Avenues
- · Walcot Phase 1: London Road, Snow Hill, Kensington Gardens and adjacent roads
- Church Street and Prior Road Park
- Chelsea Road
- Entry Hill
- Southlands
- Morris Lane/Bannerdown
- New Sydney Place
- Edgerton Road/Cotswold Road
- Temple Cloud
- Lyme Road/Charmouth Road

The detail of the measures in each of these locations will be informed by community engagement in collaboration with Ward members, residents' associations, businesses, other organisations and individual advocates in the areas concerned.

Delivery timescales: Short to medium-term

Other themes supported: Providing for travel by bike and on foot

4 Bath High Street Renewal Programme

We have secured £1.24m Love our High Streets grant funding from the Combined Authority to be spent over five years on improving Bath City Centre, including Milsom Street and Kingsmead Square. This programme aims to improve the experience for both residents and visitors, which includes pedestrian and street furniture improvements.

The Bath High Street Renewal project will support our Liveable Neighbourhoods ambitions and help transform two key areas in the city into accessible, vibrant areas to shop, eat and relax. A range of measures, including bringing vacant shops back into use for cultural and arts initiatives or as popup shops, adding parklets (transforming parking into community spaces including benches and planters), green wall planting and encouraging outdoor seating for cafes and restaurants, as well as a programme of public art, events and performance is proposed to improve the high street experience for residents and visitors.

We are looking to secure further funding to support a Phase 2 project to bring animation, temporary arts and commercial uses to vacant shops in Bath, Keynsham and Midsomer Norton.

Status: Current

Delivery timescales: Short to medium-term

Other themes supported: Providing for travel by bike and on foot

5 Freight consolidation, e-cargo bike and last mile delivery support

Business e-Cargo bike loans

Since its inception in October 2020, the business e-Cargo bike loan project has seen 20 participants. Each of the four e-Cargo bikes owned by the Council may be borrowed for up to five months in a "try before you buy" free loan scheme. These bikes are managed in the same manner as the public loan bike scheme. Feedback from users of the scheme was that they saved twice the amount of car mileage as the bike mileage they used because they could use cycle paths and combine trips.

CAZ e-Cargo bike local delivery service

From January 2022, the Council will be subsidising approved e-cargo bike operators to offer discounted parcel rates, making e-cargo bike delivery competitive with the rates offered by traditional couriers. This will help take more polluting vans off city-centre streets to improve air quality and reduce congestion. Different e-cargo bike operators will offer different services, so when the scheme launches you can talk directly to our approved operators to find out how best they can serve your needs. You will receive a discounted rate from the e-cargo operator, similar to your normal van delivery rate, and the Council will make up the difference.

The Council recently won £700,000 of funds for this initiative from central Government and this will be spent on subsidising parcel rates and on promoting the scheme. This will initially run as a trial for six months, and then a further 30 months if it's successful. From there, with growing demand, it is assumed that e-cargo bike operators will be able to continue to offer competitive rates without the Council's help.

Last Mile Delivery

We have supported the courier company Wego since January 2020 through a Go Ultra Low grant to provide a last mile delivery service in and around Bath's Clean Air Zone. With the operation now using two micro-consolidation hubs to the east and west of the CAZ, the service typically delivers over 1,500 parcels per month to the final destination of a much longer logistics journey.

Delivery timescales: Implemented

Other themes supported: Providing for travel by bike and on foot, Supporting future mobility.

6 M4 to Dorset Coast Connectivity Study

As part of the Government's Road Investment Strategy (RIS2) the DfT committed to a strategic study on road connectivity between the M4 corridor and the Dorset Coast. The A36 and A46 form part of the Strategic Road Network (SRN) – comprising England's motorways and some A roads – and both serve the B&NES area. The study is currently being carried out by National Highways and stems from concerns raised by stakeholders that the volume of traffic using the A36 and A46 is leading to problems of congestion, road safety and air quality, and is impacting on the Bath World Heritage Site. The study is therefore considering whether there is a case to adopt alternative corridors as the main strategic route for the area.

To date, a number of potential different routes have been identified that could provide alternatives to the A36/A46. National Highways will then consider a range of potential options both against the objectives of the scheme and in terms of deliverability, and report the recommendations in late summer 2022.

Delivery timescales: Short-term

Other themes supported: Connecting Bath to rural communities and market towns, Better public transport options .



CLEANER, GREENER SCHOOL TRAVEL

Enabling healthier, safer and greener ways to travel to and from school

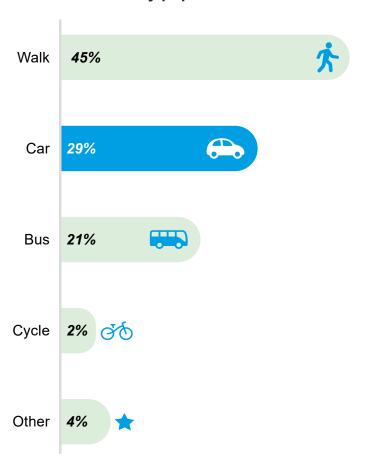
Why is it important?

Schools are one of the most productive areas for encouraging sustainable travel, with children particularly aware of environmental challenges and eager to walk or cycle.

School pupils should have the opportunity to travel to and from their place of education in healthier, safer and greener ways by removing existing barriers and providing new opportunities for travel.

The modal split for pupils travelling to school in B&NES is shown in the figure below.

Travel to school by pupils in B&NES²⁷



As part of the Journey to Net Zero consultation in early 2021, respondents strongly supported all concepts presented in providing cleaner, greener school travel.

51% of trips between 8am and 9am are related to education

(Reclaiming City Streets for People: Chaos or Quality of Life?, European Commission, 2004)

80% of boys and 72% of girls are physically inactive (Reclaiming

City Streets for People: Chaos or Quality of Life?, European Commission, 2004)

60% of parents are worried about traffic speeds outside schools when their children walk to school (Reclaiming City

Streets for People: Chaos or Quality of Life?, European Commission, 2004)

What are we doing about it?

1 Providing support and guidance to schools to promote sustainable transport

This includes trialling new technology (e.g., the HomeRun app), the walking bus toolkit, grants for site and service provision and inhouse 'Bikeability' cycle training for children and adults, the setting up of a district-wide co-operative for active travel to school, and additional support for year 6 pupils ahead of their transition to secondary school.

Delivery timescales: Implemented

Other themes supported: Providing for travel by bike and on foot

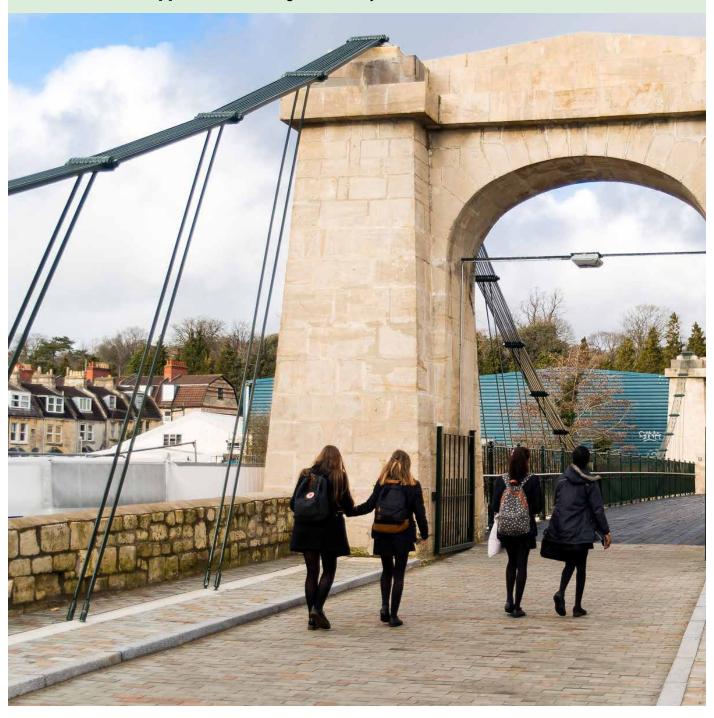
2 School travel plans

The Council is providing support for schools in developing and maintaining online School Travel Plans using Modeshift STARS, the national accreditation scheme that recognises schools that demonstrate excellence in supporting sustainable travel. 27 schools in B&NES have achieved the accreditation, and the two schools in the West of England to have achieved the gold accreditation are located within B&NES.

The Modeshift STARS is a continual activity in terms of the work we undertake with schools to help them educate children in travelling sustainably to school. The Council's dedicated School Travel Plan Officer is always looking at new initiatives to raise awareness and provide information to allow people to make informed choices about the way children travel to and from school.

Delivery timescales: Implemented

Other themes supported: Providing for travel by bike and on foot



SUPPORTING FUTURE MOBILITY

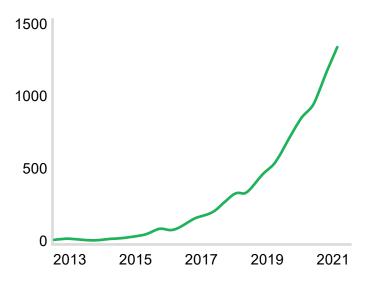
Exploit the opportunities presented by evolving transport technology, to improve physical connectivity.

Why is it important?

For Bath to maintain its status as a vibrant city with a strong economic footprint, it is essential for the city to be resilient and capable of adapting to changes in transport and mobility. These changes have come about largely as a result of advances in digitisation and the emergence of new technologies and business models. Bath's transport network must be ready to exploit the opportunities presented by evolving transport technology.

Figure below shows the significant increase in ownership of ultra-low emission vehicles across the local authority area in recent years.

Ultra-low emission vehicles licensed in B&NES²⁸



2.5 million e-scooter rides undertaken across the region since launch (West of England

Monitoring Statistics)

Six private cars are removed from the road with the introduction of one car club

vehicle. (https://como.org.uk/project/

west-yorkshire-and-york/)

As part of the consultation in early 2021, widescale electric vehicle charging, integrated public and shared transport services and electric-based shared transport schemes were the most popular concepts for supporting resilient mobility.



What are we doing about it?

1 Voi e-scooter trial

The Voi e-scooter trial forms part of the Future Transport Zone being pursued by B&NES in collaboration with the West of England Combined Authority (see Our Developing and Future Projects). The trial provides hop-on/hop-off e-scooters in Bath, enabling alternative ways of getting around the city. The trial started in October 2020 and in its first year saw 2.5 million rides across the West of England. The 12-month trial has been extended to March 2022.

Following a successful launch within Bath, the operating area was expanded to include Oldfield Park and Bathwick. When first introduced, the scheme included 50 scooters in Bath – but given the success of the trial this has now doubled to 100. In Bath there have been 104,000 rides and 262,500km travelled by scooters.

Upon completion of the trial, the DfT, Combined Authority and B&NES, in conjunction with Voi will take a view on the future of e-scooters in the region.

Delivery timescales: Implemented

Other themes supported: Better public

transport options



2 Go Ultra Low West

This initiative seeks to encourage wide-spread use of electric cars, vans and bikes. The West of England contains more than 300 public use charge-points, and this is growing. Through Go Ultra Low West over 120 new charge point connections are being installed to significantly increase the size of the current public charging network.

Backed and owned by the three West of England local authorities and North Somerset Council, using in depth local knowledge and direct feedback from residents, the Revive network has been created to meet the public charging needs of the region. Revive offers a mix of 50kW rapid chargers, together with 7kW and 22kW fast chargers. Plans are also in place to provide a Rapid Electric Vehicle Charging hub in central Bath that will allow drivers to recharge their cars in minutes rather than hours.

We are working with West of England car club providers to install charging points for electric car club vehicles, so that those people who don't need a car all the time can still benefit from electric technology. We also provide 50% match funding for charge points to be installed in businesses as part of the Go Ultra Low West initiative.

West of England residents were offered the opportunity to try out an electric vehicle (EV) for two weeks, for only the cost of the electricity used. This gave people the full experience of using an EV, helping people to feel more confident about switching to an EV in the future. From February 2018 to April 2021 a total of 144 EV loans were completed, with drivers covering 40,680 zero emission miles. 61% of participants planned to buy an EV within two years.

Delivery timescales: Implemented

Other themes supported: Providing for travel by bike and on foot

CONNECTING BATH TO RURAL COMMUNITIES AND MARKET TOWNS

Improving connectivity on routes between Bath and the wider district

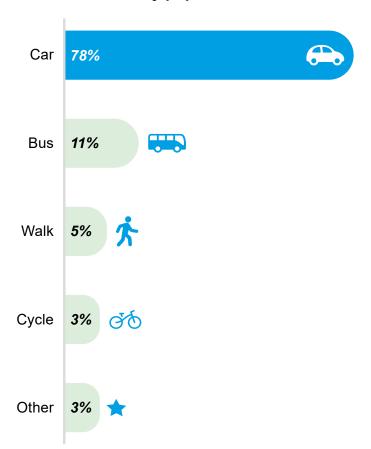
As part of the consultation in early 2021, 41% of respondents considered connecting Bath to rural communities and market towns to be important, with safe cycle routes the most supported concept.

Why is it important?

We want to ensure that those living in rural areas are given equal consideration in terms of accessing Bath as those who live in the city itself. We are committed to improving the connectivity of isolated rural communities.

As shown in the Where we Travel section, there are more commuting journeys into/out of Bath than within the city itself. The greatest inbound and outbound flows are from the wider B&NES area. Figure below shows the modal split of journeys to work for residents of rural B&NES. It shows that the overwhelming majority commute to work by car. Twinned with the scale of inbound and outbound commuting from the wider B&NES area, this highlights the need for more sustainable travel options on these key corridors.

Travel to school by pupils in B&NES²⁹



25% of rural B&NES residents travel to the city of Bath for

WOrk (2011 Census (Table WF01BEW))

75% of people driving to work in Bath do so from outside

the city (Transport Delivery Action
Plan for Bath Phase 1: Current and Future
Report, Bath and North East Somerset
Council, 2020)

47% of UK workers worked from home during April 2020

(ONS)

What are we doing about it?

Historically funding has been focussed on the more densely populated areas within the City of Bath area. However B&NES are embarking on a series of corridor studies which will consider what is required to improve connectivity by public transport, walking and cycling along key corridors to/ from market towns and rural communities and Bath. These studies are captured within the next chapter.



66 We must make public transport, cycling and walking the natural first choice for all who can take it. ??

Decarbonising Transport, Department for Transport (DfT)

This chapter sets out our developing and future projects. The developing projects are those that are currently in motion in terms of their development and are still subject to consultation and approval.

In addition to the projects we are already pursuing, whether these are committed or in motion, we are aware that we will need to go further in order to reach our ambition of being carbon neutral by 2030. Therefore, from a transport perspective we need to consider additional, bolder ideas that will enable us to promote and facilitate modal shift and behavioural change and drive the scale of the change required.

The projects presented are based on this ambition, best practice in both the United Kingdom and the rest of the world, and our city's unique status and history. These emerging projects will need to be developed in detail, and we will work with residents of B&NES to ensure we are meeting your needs and giving you a bigger say in the future of transport in the district.

These projects take account of both regional and local policies. The local policies applied to project development include, but are not limited to:

Corporate Strategy 2020-202430

Climate Emergency Outline Plan³¹

Existing and emerging Bath and North East Somerset Local Plans

Getting Around Bath Transport Strategy 32

Health and Wellbeing Strategy 33

Balancing Your Needs – A Parking Strategy for B&NES 34

Public Realm and Movement Strategy 35

Bath Pattern Book 36

World Heritage Site Management Plan 37

Bath City Riverside Enterprise Area

Green Infrastructure Strategy 38/39

Low Traffic Neighbourhood Strategy 40

We have also included projects that the Combined Authority is leading in partnership with us. Where projects are not within our gift, we will continue to work alongside the Combined Authority and transport operators to secure the outcomes and improvements we need.

We have grouped the developing and future projects by the transport themes, although there is considerable cross-over and many projects or initiatives will serve to support a number of the themes.

BETTER PUBLIC TRANSPORT OPTIONS

Upgrading of Bath's park and rides to multi-modal interchanges

The JLTP4 supports increasing travel options on arterial routes and reducing private car travel. As part of that, we will investigate the further high-quality, sustainable travel options for the City of Bath to expand, complement and/or offer alternatives to existing sites at Lansdown, Odd Down and Newbridge. Potential improvements could include:

- Improved signage to increase visibility
- Direct buses from sites to key destinations such as the University of Bath and Royal United Hospital
- Long distance bus services to terminate at these transport interchanges
- Mobility hubs (as per the Future Transport Zone Delivery)

Status: Developing

Delivery timescales: Medium to long-term

Other themes supported: Providing for travel by bike and on foot, Creating improved places to live and work.

Potential scale of carbon impact: Medium

30. Corporate Strategy 2020 – 2024, B&NES, 2020, 31. Climate Emergency Outline Plan, B&NES, 2019, 32. Getting Around Bath: A Transport Strategy for Bath, B&NES, 2014, 33. Bath and North East Somerset Health and Wellbeing Strategy, B&NES, 2015, 34. Balancing Your Needs: A Parking Strategy for Bath & North East Somerset, B&NES, 2018, 35. Creating the Canvas for Public Life in Bath: Public Realm and Movement Strategy, B&NES, 2010, 36. Creating the Canvas for Public Life in Bath: Pattern Book, B&NES, 2015, 37. The City of Bath World Heritage Site Management Plan 2016 – 2022, B&NES, 2016, 38. Valuing People, Place and Nature: A Green Infrastructure Strategy for Bath and North East Somerset, B&NES, 2013, 39. West of England Joint Green Infrastructure Strategy 2020 – 2030, West of England Combined Authority, 2020, 40. Low Traffic Neighbourhood Strategy, B&NES, 2020

Bus shelter and stop improvements

In addition to the bus stops that are being upgraded as part of the BSIP or other major programmes, we will be upgrading bus stops within the city as well as across the districts. We will be applying the Combined Authority's Bus Stop Design Standards when developing our proposals to ensure that the upgraded bus stops are accessible to all. Our starting point for these upgrades would be bus stop assessments to determine the current state of bus stops and identify what improvements are required.

The improvements could include, but are not limited to, the following:

- Better lighting
- Better security
- Real time passenger information
- High-quality waiting and seating areas
- WiFi
- Location of pedestrian crossings
- Location of bus stops
- Bike and/or e-scooter parking

Status: Developing

Delivery timescales: Medium-term

Other themes supported: Connecting Bath to rural communities and market towns.

Potential scale of carbon impact:

Medium

West of England Mass Transit

What is mass transit?

We want to deliver an attractive, high-quality transport solution offering seamless journeys for everyone. Mass transit is a type of public transport network that provides high-capacity, fast, frequent and reliable services that are predominantly segregated from other traffic.

This could include over or underground routes and consist of several different types of transport in an integrated system.

The West of England Combined Authority is leading work to deliver a new and ambitious mass transit system. This will revolutionise the way people move around the region, dramatically improving congestion and improving air quality by encouraging modal shift. A variety of transport options are being assessed to understand which technologies might work best for the region.

Route options will be developed across B&NES, Bristol, North Somerset and South Gloucestershire that have the potential to connect the highest volumes of people, city and town centres, and employment hubs.

Status: Developing

Delivery timescales: Long-term

Other themes supported: Providing for travel by bike and on foot, Connecting Bath to rural communities and market towns.

Potential scale of carbon impact:

High

4 Bath Mass Transit

In addition to the West of England Mass Transit programme, we are considering the potential for mass transit within the City of Bath area itself. The intention of this study is to understand whether there is a case to investigate mass transit in the city further. There are several constraints to delivering mass transit in Bath including a small population size compared to other places that have successful systems, and the constraints as a result of the historic nature of the city.

This evidence-based study is currently underway and will consider the various types of mass transit technologies and their applicability in the context of Bath, as well as whether there is the potential demand to make the system financially viable and sustainable.

Status: Future

Delivery timescales: Long-term

Other themes supported: Creating improved places to live and work.

Potential scale of carbon impact: High

What does this mean for me?

- If travelling to Bath by car, enhanced multi-modal interchange facilities will provide the opportunity to complete your journey quickly, more directly and conveniently by whatever type of transport suits you.
- Mobility hubs will connect you into the wider transport network, even from smaller rural settlements. This will greatly improve accessibility to services by sustainable modes of transport.
- Bus stop upgrades will provide a waiting area that is not only accessible by all modes, but it will also provide an area in which users will feel safe and have access live travel information and WiFi.
- Universal, integrated ticketing will make it easy to purchase a ticket to get from A to B, even if the journey requires use of different operators along the way.
- An enhanced public transport system will provide an excellent alternative to the car for all journeys, but especially for existing car journeys of between 10 to 20 kilometres in distance, which contribute the majority of carbon emissions.



PROVIDING FOR TRAVEL BY BIKE AND ON FOOT

Active Travel Fund Tranches 2 and 3

In May 2020, the Government announced funding for emergency active travel schemes. The first round of funding (Tranche 1) was for temporary highway schemes to aid social distancing, and to reallocate existing road space to help enable more journeys by walking and bike. We installed several measures within a matter of weeks, including the following:

- Pavement widening at 15 locations in Bath.
- Turning Keynsham High Street and a number of roads in Bath City Centre into pedestrian and cycle zones.

Following the success of the Tranche 1 projects, we have, through the West of England Combined Authority, been allocated Tranche 2 funding by the DfT to implement active travel schemes on Upper Bristol Road and Beckford Road. Proposals include:

- New parallel crossings
- New cycle lanes separated from motor traffic
- Junction improvements providing for bikes and pedestrians
- Footway widening
- Continuous footways giving more priority to pedestrians crossing side roads

Looking ahead, we have also submitted a bid to the DfT for funding through Tranche 3 of the Active Travel Fund. If successful, this will allow for improved provision for bike users and pedestrians between Bath University and Combe Down in the form of:

- Improved road crossing facilities for pedestrians and bike users at each end of Copseland.
- Upgraded shared use path through Rainbow Wood and Claverton Down and upgrade of existing zebra crossing to a parallel crossing for pedestrians and cyclists.

Status: Developing

Delivery timescales: Short-term (Tranche 2), Medium-term (Tranche 3) **Other themes supported:** Creating improved places to live and work.

Potential scale of carbon impact: Low

2 Bath River Line

Covering 10km, the Bath River Line seeks to provide a linear park, connecting the green spaces of Bath with a high-quality route for walking and biking. The project is centred around the River Avon, and will offer opportunities to stop, sit back and enjoy the beauty of the river, the city, and the landscape beyond. There will be places to play and places to meet, places for art and spaces to discover Bath's rich heritage. The wildlife found along the river will be celebrated and protected.

The size of the Bath River Line project means we will progress it in phases. The first phase covers the western section, from Newbridge to Bath Quays. The second phase will consider the eastern section from Pulteney Weir to Batheaston, which we will define following further consultation. A final phase will consider the central section, from Bath Quays to Pulteney Weir.

Status: Developing

Delivery timescales: Medium-term

Other themes supported: Creating improved places to live and work.

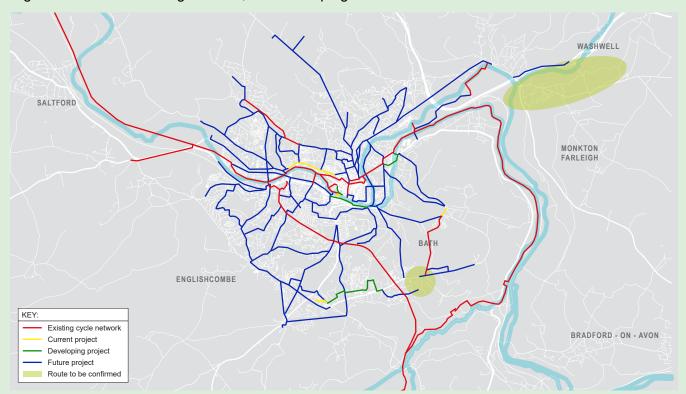
Potential scale of carbon impact: Low

3 Promotion and investment in travel by bike

Routes for bikes

The West of England LCWIP (discussed in Our Current Projects) provides the foundation for future cycle routes in Bath and the region. In addition to the routes currently being delivered under the LCWIP programme, we will push forward to deliver additional routes.

The map below shows the scale of our ambition to encourage travel by bike, providing the appropriate infrastructure to promote this as a realistic, and safe, means of travel. The routes are organised into our existing network, our developing schemes and our future ambitions.



Bike storage

Initiatives to improve bike storage include:

- On-street residential cycle hangers to provide secure bike storage for residents of flats and houses, especially conversions for multiple occupancy dwellings (conversion of one parking space can offer six bike-spaces).
- Secure bike and e-bike storage at local key destinations such as schools, transport hubs, stations, local shops.
- Ensure residents have access to secure bike and e-bike storage close to their homes.

E-bikes and e-cargo bikes

We will promote and support the use of e-bikes and e-cargo bikes through:

- Supporting bike hire programmes.
- Providing sufficient parking and charging facilities.
- Focusing on the use of these for first mile and last mile journeys and trips to school.

Status: Future

Delivery timescales: Medium to long-term

Other themes supported: Connecting Bath to rural communities and market towns.

Improvements to the pedestrian experience

This would build upon the existing and developing projects within B&NES such as Top of Town Transport Study and Milsom Quarter Masterplan. It would expand this focus to cover not just the city centre but to tie in with Liveable Neighbourhood projects as well.

It could include the following:

- Pedestrian infrastructure improvements as a result of road space reallocation including continuous footways, improved crossings, improved footways, wider footways.
- Reduced junction widths to increase the prominence of pedestrians at crossings
- Further development of the City of Bath Information System.
- Localised public realm improvements to improve the environment and journey quality for pedestrians.

Status: Future

Delivery timescales: Medium to

long-term

Other themes supported: Creating improved places to live and work.

Potential scale of carbon impact: Medium

5 Improvements to disabled access

For disabled people getting around a town or city can be very challenging. We are seeking to improve accessibility for disabled transport users across the B&NES district. In addition to provision of blue badge parking, as part of the City Centre Security proposals we are looking to undertake works to the streetscape to improve access for disabled people.

We will apply the principles set out in DfT's Inclusive Transport Strategy⁴¹. This includes ensuring that taxis are accessible and fit for purpose when assessing licensed vehicle applications. We will seek to explore examples of best practise and technologies that other cities have successfully put in place that allow disabled people to travel seamlessly across the network and consider whether we can adopt these in Bath. We will continue to work with the DfT in developing any future trials relating to autonomous vehicles as well as the development of transport apps for disabled users (including Mobility as a Service which is covered under the Supporting Future Mobility section). We aim to work with interested parties to identify ways of improving the shopping and visitor experience within the town centre for disabled people, using new technologies where appropriate. We will be referring the 2021 City Centre Disabled Access Audit as our starting point for developing improvements.

Status: Future

Delivery timescales: Medium to long-term

Other themes supported: Creating improved

places to live and work.



- Bath has the potential for a significant proportion of trips on foot and bike within the city, making journeys to key destinations safer, more convenient and more comfortable for all.
- Improved transport infrastructure will separate pedestrians, bike users and scooter users from motorised vehicles, allowing safer travel on the same routes by reducing the potential for conflict, and reduce the fear and intimidation caused by large vehicles.
- Connecting Bath into a fully signposted network of safe cycle routes across the city that are largely separated from other traffic and link the places people live with work, leisure, shopping and education destinations.
- Safe, convenient and direct cycle routes from the surrounding areas, providing access to Bath's facilities for those living outside the city.
- Secure cycle storage at key destinations across the city, allowing you to park your bike with confidence.
- Increased walking and biking will improve physical and mental health and wellbeing, with less stressful journeys without congestion or parking challenges.
- Reduced traffic in the city centre will allow the creation of safe and attractive outside space for walking, shopping and socialising, with safer and more convenient road crossings.
- Conversion of single parking spaces into cycle hangars for secure storage of up to six bikes in locations where private individual bike storage may be difficult (e.g. flats and terraced houses) will make it easier and more secure to cycle.
- Opportunities to share, buy and lease bikes and e-bikes, supported where practical by financial measures will make cycling accessible for more people.



CREATING IMPROVED PLACES TO LIVE AND WORK

Innovative parking provision

In April 2021, we consulted on linking the new charging structure for residents' parking to a vehicles level of carbon dioxide emissions with additional surcharges for diesel vehicles. A further consultation related to the Traffic Regulation Order was undertaken in November 2021. If implemented, this scheme could be in place in January 2022.

We will be providing more car club bays in areas that need it, but also identifying future areas of potential demand for the installation of bays in partnership with car club providers, ensuring that those we partner with share our net zero ambitions.

Additionally, more on-street and off-street charging points for electric vehicles will be provided in residential areas, including charging provision for car club bays and in community and mobility hubs. This component of the project will be led by the Combined Authority as they seek to deliver on the Government's Decarbonisation Plan⁴² to increase electric vehicle charging provision for all, while taking solutions for disabled parking into account. While the project is still in its infancy, we will seek to work in partnership with them and assess innovative charging technology that will have the least amount of impact on users and the streetscape, including issues such as trailing cables and the perception of reserved on street parking.

Status: Developing

Delivery timescales: Short to

medium-term

Other themes supported: Supporting future mobility.

Potential scale of carbon impact: Medium

2 Sustainable transport and public realm improvements package

In the JLTP4, we set out our commitment to invest in our town centre's public realm and address the balance of transport and movement in favour of sustainable modes. We will be proposing improvements that promote regeneration and encourage walking, biking, public transport. The delivery of these improvement packages will be in:

- Keynsham: including the completion of the link from the Somerdale cycle bridge via the River Avon towpath to the Keynsham Peninsula; and strategic biking routes to and from Bath, north and east Bristol, and the Bristol-Bath strategic cycle network.
- Midsomer Norton
- Somer Valley
- Links to the Somer Valley Enterprise Zone, with the A37 to the west.

Status: Developing

Delivery timescales: Medium-term

Other themes supported: Better public transport options, Providing for travel by bike and on foot.

Potential scale of carbon impact: Low

3 Bath Top of Town Transport and Movement Study

Working in collaboration with the Milsom Quarter Masterplan, this project seeks to reduce and remove car access and enable public realm improvements and pedestrian/visitor accessibility along:

Milsom Street

Broad Street

Walcot Street

Trim Street

It also seeks to manage car parking and remove through traffic, possibly making cross city centre movements unachievable. The study is considering a long-term option, which is discussed in the Future Projects section of this report.

Status: Developing

Delivery timescales: Medium to long-term

Other themes supported: Providing for travel by bike and on foot, Better public transport options.

Potential scale of carbon impact: High

Milsom Quarter Masterplan

The ambition is to transform and re-imagine the future of Milsom Quarter, creating a more vibrant and diverse part of the city with a greater mix of uses, activity and residential development to redefine and increase the sense of community and local purpose. We want to invest in a better commercial offer, and increased footfall and usage of the Milsom Quarter area by both local people and visitors, promoting the area as an opportunity for regional-scale investment.

Transport will form an important element of this transformation including the provision of safe walking and cycling routes to, through and within the Milsom Quarter whilst also facilitating bus accessibility and reducing the impact of cars and service vehicles. Milsom Street as well as the roads adjacent to it are subject to an additional 'Top of Town' Transport and Movement Study which will further enhance the travelling experience for both residents and visitors to the area.

Status: Developing

Delivery timescales: Medium

to long-term

Other themes supported:

Providing for travel by bike and on foot.

Potential scale of carbon impact: Medium

5 Traffic cells

This is a long-term option to achieve the combined aspirations of the Bath 'Top of Town' Transport and Movement Study, the Milsom Quarter Masterplan, the City Centre Security and Liveable Neighbourhoods projects. Traffic cells change the way in which the city centre is accessed by dividing it into a number of segments. Vehicular access to each segment is limited to one or two locations on the outer boundary and vehicles are prevented from travelling across the inner boundaries between segments. Movements between the segments is unrestricted and enhanced for public transport, pedestrians and cyclists.

In Bath, this would involve the creation of four city centre traffic cells which would remove all through-traffic from the 'Top of Town' and the wider city centre – unlocking significant public realm benefits in the historic core of Bath, a World Heritage Site. This initiative would include the areas across the entire Top of Town area, Grand Parade and High Street, Dorchester Street, James Street West and Green Park Road. As the project develops, access for people with mobility difficulties will be fully considered.

The creation of the traffic cells could be seen as one of the final steps in transforming the city centre, with the City Centre Security project delivering the first step followed by the Bath 'Top of Town' Transport and Movement Study and Milsom Quarter Masterplan.

The combination of all these projects will enable a wider reallocation of road space with significant improvements to active travel, public transport facilities and the public realm.

Status: Future

Delivery timescales: Long-term

Other themes supported: Better public transport options, Providing for travel by bike and on foot.

Potential scale of carbon impact: High







6 Liveable Neighbourhoods - Next Generation

We are already developing the Liveable Neighbourhoods concept in B&NES with the first phase of locations identified (see Our Current Projects). The next step would provide an opportunity to increase the number and size of the initial Liveable Neighbourhood areas as a next step. As part of this, we will identify and assess key arterial routes to develop a circulation plan similar to the one developed in Ghent, which is discussed in the case study below. These would then become the key routes for traffic cells that control access for general traffic to an area through specific or single points.

On the arterial traffic routes, we will seek to provide priority for bikes, and where possible seek to separate bikes, pedestrians and public transport from general traffic. Cross and radial traffic cell/liveable neighbourhood connectivity would be retained and enhanced for active and sustainable transport options.

Case Study: The Ghent Circulation Plan

Ghent in Belgium is an historic, vibrant and growing city. It has 260,000 residents and contains UNESCO World Heritage Sites. In 2017 the city launched the Ghent Circulation Plan, which prevents motor traffic from crossing the city centre. The small Belgian city showed it was possible to make significant changes overnight.

The Plan has led to a 12% decrease in car traffic during the rush hour, a 25% increase in bicycle users, 8% increase in public transport, with retail sales increasing by between 2% and 10%.

The total cost of the scheme was a relatively modest £3.4m. The Plan was implemented as a whole "overnight", which was seen as the easiest way to deliver the proposed changes.

Status: Future

Delivery timescales: Long-term

Other themes supported: Providing for

travel by bike and on foot.

Potential scale of carbon impact:

Medium

Bath Clean Air Zone and Air Quality Management Area reviews

Through continuous monitoring of the current Clean Air Zone (CAZ), additional local measures could be introduced if necessary, to address poor air quality in the following areas as determined by legal limits or local requirements:

- Bath
- Keynsham
- Saltford
- Temple Cloud
- Farrington Gurney

The CAZ will need to be retained for a period to demonstrate it is a long-term improvement or to achieve local requirements. The CAZ is therefore being kept under continual.

Status: Future

Delivery timescales: Long-term

Other themes supported: Providing for travel by bike and on foot.



8 Demand management

Travel demand management is a multi-faceted approach to reducing vehicular traffic and promoting sustainable modes of travel. There are a range of measures that could be considered for demand management based on the three pillars of sustainable travel: capacity creation, network management and behavioural change in alignment with our net zero journey. We will seek to apply the DfT's Travel Demand Management Toolkit 43, published in March 2021, which sets out a five-step process in the identification and implementation of possible measures.

Demand management measures could include, but are not limited to:

- Car sharing
- Public transport discounts or ticketing incentives
- Workplace Parking Levy
- Congestion charging or road user charging
- Traffic signal improvements
- Enhanced VMS to car parks (short and long stay)
- Staggered start times for business and places of education
- Review business travel planning that could reduce vehicle journeys
- Establishment of Local Hub Networks to encourage shorter journeys that could be undertaken by sustainable modes

Status: Future

Delivery timescales: Long-term

Other themes supported: Connecting Bath to rural communities and market towns, Better public transport options, Providing for travel by bike and on foot.

Potential scale of carbon impact: High

Travel Demand Management Toolkit five-step process:

- Collect and analyse data
- Identify possible solutions
- Implement solutions
- Marketing, communications and engagement
- Monitor, evaluate and adapt

9 Coach strategy

The development of a coach strategy is a commitment within the JLTP4. Given its historic nature and heritage assets, Bath is a prime destination for tourists, and tourism is a key element of our local economy. However, the volume of visitors travelling into Bath impacts on our transport system and the environment in the city centre.

The high volume of coaches can have a detrimental effect, with impacts on noise, air quality and visual impact, as well as unofficial parking. There is therefore a need to improve the management of coaches, which includes embracing new technologies for better enforcement and monitoring, better pedestrian routes and wayfinding between coach drop-off/pickup areas and the city centre, and more efficient movement and parking. It is also important that Bath continues to be attractive for coach tourism and leisure to sustain the tourist economy, so we want to provide facilities to enable visitors arriving by coach to do so in a safe, convenient and comfortable manner.

Status: Future

Delivery timescales: Medium-term

Other themes supported: Better public transport options.

Potential scale of carbon impact: Low





66 This is not taking away choice but changing the relative merits of the choices available. 99

Decarbonising access through supply-led demand, Transport Times, Glenn Lyons

10 Rail freight distribution site

The provision of a rail freight distribution site has been enshrined within the B&NES Placemaking Plan⁴⁴ as part of Policy ST4. The policy has safeguarded land at Westmoreland Station Road as a rail freight facility and interchange. The railhead at Westmoreland Station Road has been used to transfer and transport compacted waste and may have the potential to be used in the transportation of aggregates in the future.

Status: Future

Delivery timescales: Long-term

Other themes supported: Supporting future mobility



Road freight package

Building on the successful delivery of the Freight Consolidation, e-Cargo Bike and Last Mile Delivery Support project discussed in Our Current Projects, we would seek to further restrict HGV movements through freight consolidation and access restrictions whilst promoting and growing the e-cargo bike offer. This could include the provision of dedicated corridors as well as the potential for freight to be transported on buses. It would also align with and support our ambition for a rail freight distribution centre as well as the Freight Strategy that the Western Gateway are developing for the wider region.

Status: Future

Delivery timescales: Medium-term

Other themes supported: Supporting

future mobility

Potential scale of carbon impact: Medium

- Reallocating road space to people on foot benefits the trade of adjacent shops.
- An increasingly pedestrian focused city centre
 will create a vibrant and liveable location for a
 variety of activities, from working, to shopping,
 to living, while maintaining bus, taxi, bike,
 scooter and disabled access to ensure that
 Bath is a destination for all.
- Travel into the city along key corridors by sustainable modes will be enhanced, making it much easier to enjoy all parts of the city regardless of where you live.
- Car clubs will provide non-car owners with access to a vehicle for when needed, at a reasonable price.
- Existing car owners may choose to switch to using a car club, removing parked cars from the road which on average are parked 96% of the time.
- Both on-street and off-street electric vehicle charging will support the transition towards electric vehicles, making it more convenient than the current trip to a petrol station.
- The provision of off-street electric vehicle charging locations at community and transport hubs could facilitate more local economic activity with people potentially going to local shops and cafes while vehicles charge.
- The significant economic benefits brought by tourists arriving on coach will still be enjoyed, but coaches will not intrude upon the city's environment or into the lives of its residents.
- A rail freight facility would have the potential to remove a significant number of heavy goods vehicles from road corridors into the city, providing space for other modes including public transport, walking and cycling.
- Consolidation centres will stop heavy goods vehicles entering the city when the delivery could be undertaken by a smaller light goods vehicles or e-cargo bikes instead, improving road conditions and air quality, and reducing the cost of deliveries.
- e-cargo bikes and other zero emission last mile delivery services will provide easy access to the city centre and other hard-to-reach areas.
- Through working with businesses, better timed and managed city centre deliveries will ensure that freight movements do not exacerbate congestion at busy times and will make for more efficient deliveries to the benefit of hauliers and delivery recipients.

CLEANER, GREENER SCHOOL TRAVEL

1 Independent travel to school

Our ambition is for all secondary school pupils to be able to travel independently to school whether by bus, on foot, or by bike, in both urban and rural areas. We would like to break the cycle of parents driving their children to school because of real or perceived threats to their safety. To do this, we will look at improvements to walking and biking facilities close to schools and develop:

- High-quality routes
- Good crossing facilities
- Reduced traffic speeds
- Good levels of security and lighting
- Secure bike storage at school sites

Public transport is the other area we aspire to address, which should enable pupils and parents to travel to school independently. We will actively lobby and work with Government, the Combined Authority, bus operators, schools and parents to ensure that:

- School pupils have the appropriate tools to use public transport (knowledge, technology).
- There is capacity on our buses to take school children.
- Bus travel is affordable, safe and better co-ordinated to ensure the pupils gets to school on time and are able to get home again.
- Waiting areas provide adequate protection for pupils in bad weather conditions and hours of darkness (especially winter).

Case Study: Colinton Primary School, Edinburgh 45

In 2015, Colinton Primary School was chosen as one of 11 schools to pilot School Streets for eight months. School Streets involve restricting pick-ups/drop-offs by car, implementing speed restrictions and traffic calming, in order to create an improved environment around the school. Colinton Primary School was selected due to its pre-existing road safety issues and high volume of pick-ups/drop-offs. The scheme was in operation during pick-up/drop-off times during term time.

The pilot was a success with positive impacts experienced not only on the street subject to measures, but also for neighbouring streets. The study found a significant decrease in traffic volume and more importantly average speed, with this falling to 15mph or below on all streets within a 1-2 block radius of the school.

Exemptions existed for local residents, minimising disruption and enabling them to enjoy the benefits of the measures too.

Status: Future

Delivery timescales: Medium to long-term

Other themes supported: Providing for travel by bike and on foot, Better public transport options.

Potential scale of carbon impact: Low

- New walking and cycling facilities near schools will encourage more children to walk or cycle rather than be driven.
- Further support for public transport journeys to improve accessibility and reliability for those who live too far away to walk or cycle.
- Harmful pollution levels around schools will be reduced, protecting children's health.
- Road safety around schools will be improved by parking management, traffic calming and speed restrictions.
- A shift to walking, cycling and public transport will reduce congestion more generally across the city at peak times, as well as improving the environment for residents on streets within close proximity to schools.



SUPPORTING FUTURE MOBILITY

West of England Future Transport Zone Trial and Delivery

The West of England Combined Authority in partnership with the unitary authorities won a funding bid from the DfT to trial various aspects of Future Transport Zones including new mobility services, modes and models. We have been selected to trial the following initiatives:

- Micro-mobility which comprises e-cargo and e-scooter trials within Bath City Centre.
- Data Hub a regional data warehouse to improve transport planning and management).
- Mobility as a Service (MaaS) platform which allows users to plan, book and pay for multiple modes of transport in one go.
- **Mobility stations** which comprises mobility hubs and mobility points at major transport hubs in Bath (dependent on the success of trials elsewhere in the region).

We envisage that these trials will facilitate a significant modal shift. If the trials are successful, we are already planning to undertake further trials and ultimately the more permanent delivery of these initiatives and potential expansion to wider areas.

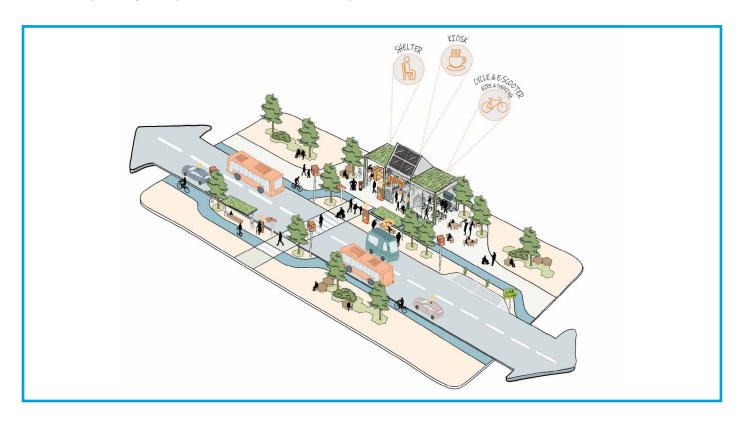
Status: Developing

Delivery timescales: Short to medium-term

Other themes supported: Better public transport options, Providing for travel by bike and on foot.

Potential scale of carbon impact: High

- Journeys across multiple modes or operators will become seamless with new technologies to enhance the experience.
- Electric shared transport schemes will provide the opportunity to make ad-hoc journeys easily and cheaply, using the type of transport that suits you.



CONNECTING BATH TO RURAL COMMUNITIES AND MARKET TOWNS

A4 (Bristol to Bath) Strategic Corridor Programme

The Bristol to Bath Corridor programme began in April 2021 and proposes new bus, cycling and walking improvements along the A4 corridor between Bristol and Bath. The vision for the programme is to provide "A high quality segregated and prioritised public transport and cycling corridor that will provide for reliable services to encourage people to use sustainable transport modes for short and mid-distance journeys and contribute to tackling the climate emergency through modal shift".

The programme proposes a fast, at least five-minute frequency, reliable, high quality, zero-emission 'turn-up and go' bus service between Bristol Temple Meads and Bath Station along the A4 serving high quality bus stops. The programme proposes a continuous, direct, high-quality cycle route between Bristol and Bath which is separated from general traffic and buses.

The Programme also includes proactively applying the community connections concept approach, which seeks to identify improvements that would enable local people to cycle and walk to facilities, families and friends, and to access the new high frequency bus service along the A4. The latter component proactively ties into the B&NES and BCC ambition for liveable neighbourhoods.

Potential infrastructure improvements to support the community connections element could include:

- New biking and pedestrian crossings
- Upgrades to existing biking and pedestrian crossings
- New off-road bike tracks
- New on-road bike tracks
- Modal filters

Status: Developing

Delivery timescales: Medium-term

Other themes supported: Better public transport options, Providing for travel by bike and on foot, Creating improved places to live and work.

Potential scale of carbon impact: Medium

2 A367 (Bath to Somer Valley) and A37 (Bristol to Somer Valley) Corridor Studies

These studies have been identified as high priority investment corridors within the recent BSIP submission. Both projects are currently underway and are in the early stages of development. They seek to improve transport links from Somer Valley into both Bath (along the A367) and Bristol (along the A37), with bus priority at potentially the following key locations:

- Whitchurch
- Farrington Gurney
- Radstock
- Red Lion roundabout
- Bear Flat

There is also the opportunity to provide bike infrastructure to connect rural communities in Bath, Bristol as well as rural villages to the main corridors. Relating to this, our ambition it to provide transport hubs and/or Liveable Neighbourhoods in:

- Whitchurch
- Farrington Gurney
- Midsomer Norton
- Odd Down
- Radstock (Liveable Neighbourhood only)
- Bear Flat (Liveable Neighbourhood only)

Status: Developing

Delivery timescales: Medium-term

Other themes supported: Better public transport options, Providing for travel by bike and on foot, Creating improved places to live and work.

Potential scale of carbon impact:

Medium

3 A4 Bath to East Access Improvements Programme

There is a longstanding and increasing need to reduce private car trips into Bath including from the east. This ambition is recognised through this corridor programme, which is included in the B&NES Local Plan and Joint Local Transport Plan 4 (JLTP4) and developed in partnership with the West of England Combined Authority.

The programme seeks to provide the foundation for a number of multi-modal improvements that would provide realistic travel options in terms of access to Bath from the East. In the past, we have assessed the option of park and ride to the east but were unable to progress it as no suitable site could be identified. Included within this programme is the East of Bath Express scheme, which is discussed below, and improvements for those travelling by bike.

East of Bath Express Feasibility Study

The existing X31 bus service, which currently runs between Bath and Chippenham bus stations, experiences long journey times during the peak period (in excess of one hour). The aim of this feasibility study was to understand and assess the potential for a high frequency, direct metrobus style service, providing direct links to Bath and Chippenham with bus priority, and with small transport hubs, accessible by bike, providing car and bike parking along the corridor.

The East of Bath Express was included as a scheme within the BSIP discussed previously in this report. The feasibility study is due to conclude shortly, and if demonstrates that the scheme is feasible, will be continued as part of the BSIP.

Status: Developing

Delivery timescales: Medium-term

Other themes supported: Better public transport options, Providing for travel by bike and on foot, Creating improved places to live and work.

Potential scale of carbon impact: Medium

Inter-urban sustainable transport links

This would build on the A4, A37 and A367 corridor studies by going one step further in terms of improving connectivity between our main settlements. Our district is predominantly rural and while the majority of the population live in Bath, there is a significant proportion of our population living across the rural areas and so we need to provide sustainable connectivity to these communities.

The project will identify, review, develop and assess proposals to potentially link:

- Midsomer Norton to Keynsham
- Chew Valley to Somer Valley to Peasedown St John

Status: Future

Delivery timescales: Long-term

Other themes supported: Providing for travel by bike and on foot, Creating improved places to live and work, Better public transport options.



5 Rural connectivity

We recognise that a significant proportion of traffic into Bath is generated from the surrounding rural areas. We will provide an affordable and realistic alternative to the car for people living or working in these areas. We will consider the following journeys:

- From the north along the A46, the A431 to Kelston and Lansdown Road
- From the south along the A367, A36 and B3110
- From the west along the A39 and A4; taking account of the other projects along the latter corridor

The primary aim would be to improve bus services along these radial corridors, linking them into the city centre or multi-modal interchange sites so that they become a viable alternative to the car. This aligns with the ambition of both B&NES and the Combined Authority as set out in the BSIP, the Combined Authority's Bus Strategy as well as the national guidance included Bus Back Better, the Governments Bus Strategy. This will be a step-change in the provision of services to and from these areas in terms of service directness, frequency and cost.

Our intention is to take it one step beyond that by making these improved radials routes more accessible through:

- Improvements to biking and walking facilities to access the bus corridors.
- Delivery of rural mobility hubs that improve connectivity between modes, and could include working hubs to reduce the need to commute into the city itself.
- On-demand responsive bus services where villages are too far to walk or bike from to access the radial corridors.
- Upgraded bus stops.
- Provision of e-bikes, e-scooters and other modes.

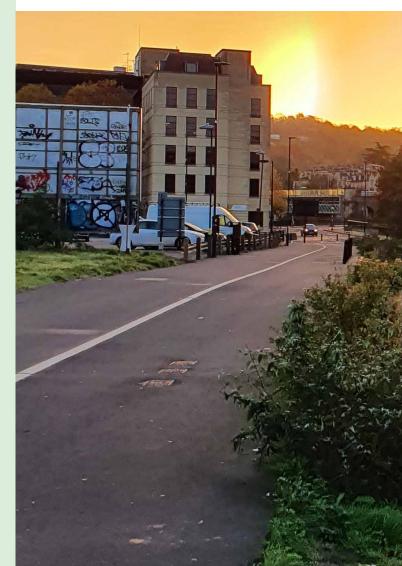
Status: Future

Delivery timescales: Long-term

Other themes supported: Better public transport options, Providing for travel by bike and on foot, Creating improved places to live and work.

Potential scale of carbon impact: Medium

- Express bus routes along the main roads into Bath serving rural communities, market towns and mobility hubs would providing quick journeys into Bath. The facilities provided at the mobility hubs would provide and promote interchange between different modes allowing more people to cycle and walk to fast, direct and convenient bus services into Bath.
- Demand responsive bus services would complement the express bus routes and transport hubs by providing for those in smaller communities that are not within walking and cycling distance of transport links.
- Improved links and facilities for bike users to access the existing cycle network would enable trips by bike into Bath and to other key destinations.
- Local work hubs and 20-minute communities will offer the workforce greater flexibility in where they work, reducing the need for commuter journeys into Bath, saving both time and money.





66 We must listen – and we must act– and we must choose wisely.

UN Secretary-General, COP26 Conference 2021

Combined, the Current and Futures Report and this plan culminate in the Journey to Net Zero: Reducing the Environmental Impact of Transport in Bath. It identifies the challenges that the district faces in terms of transport both now and in the future, and also the measures required to overcome these to support the realisation of the Councils' core policy theme *to tackle the climate and ecological emergency*.

Journey to Net Zero Summary							
		Level of mmitme			Tł	nemes	
Project	Current	Developing	Future	Better Public Transport Options	Providing for travel by bike and on foot	Creating improved places to live and work	
Development of the BSIP	/			/			
MetroWest Phase 1	/			/			
10 Year Rail Delivery Plan	/			/	/		
Delivery of the LCWIP	/				/	/	
Bath Quays Bridge	/				/	/	
Loan bike scheme	/				/	/	
Bath Clean Air Zone	/					/	
Liveable Neighbourhoods	/				/	/	

This plan collates the projects that the Council is already committed to, as well as those that are in motion and future projects that we may consider and develop in order to meet our aims. The table below summarises the projects contained within this plan, showing where in the three stages of development they are, their timescales for delivery and a high-level rating of the potential cost and carbon impacts of them.

supported			De	elivery 1	timesca	ile	For dev and f proj	
Cleaner, greener school travel	Supporting future mobility	Connecting Bath to rural communities and market towns	Implemented	Short term	Medium term	Long term	Carbon impact (low, medium or high)	Cost scale (1 = lower, 5 = very high)
		\		✓				
		/		~				
					/			
					/			
				/				
			/					
	/		/					
				~				

Journey to Net Zero Summary (continued)		Level o			Themes		
Project	Current	Developing	Future	Better Public Transport Options	Providing for travel by bike and on foot	Creating improved places to live and work	
Bath City Centre Security Project	/				/	/	
Bath High Street Renewal Programme	/				/	/	
Freight consolidation, e-cargo bike and last mile delivery support	/				/	/	
M4 to Dorset Coast Connectivity Study	/			/		/	
School travel plans	/				>		
Providing support and guidance to schools to promote sustainable transport	/				/		
Voi e-scooter trial	/			/			
Go Ultra Low West	/				/		
Upgrading of Bath's park and rides to multi-modal interchanges		/		/	/	/	

supported			De	elivery 1	timesca	ale	and f	eloping uture ects
Cleaner, greener school travel	Supporting future mobility	Connecting Bath to rural communities and market towns	Implemented	Short term	Medium term	Long term	Carbon impact (Iow, medium or high)	Cost scale (1 = lower, 5 = very high)
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	/		/					
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/			/					
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Journey to Net Zero Summary (continued)		Level o			Th	nemes
Project	Current	Developing	Future	Better Public Transport Options	Providing for travel by bike and on foot	Creating improved places to live and work
Bus shelter and stop improvements		/		/		
West of England Mass Transit		/		/	>	
Bath Mass Transit			\	\		/
Active Travel Fund Tranches 2 and 3		/			>	/
Bath River Line		/			>	/
Promotion and investment in travel by Bike			/		>	
Improvements to the pedestrian experience			/		>	/
Improvements to disabled access			/		/	/
Innovative parking provision		/				/

supported			De	elivery 1	timesca	ale	and f	eloping uture ects
Cleaner, greener school travel	Supporting future mobility	Connecting Bath to rural communities and market towns	Implemented	Short term	Medium term	Long term	Carbon impact (Iow, medium or high)	Cost scale (1 = lower, 5 = very high)
		/			/		Medium	2
		<				\	High	5
						/	High	5
				~			Low	2
					/		Low	3
		/			~		Medium	4
					✓		Medium	2
					/			2
	/				/		Medium	2-3

Journey to Net Zero Summary (continued)		Level of			Th	nemes
Project	Current	Developing	Future	Better Public Transport Options	Providing for travel by bike and on foot	Creating improved places to live and work
Sustainable transport and public realm improvements package		/		\	/	/
Bath Top of Town Transport and Movement Study		/		/	/	/
Milsom Quarter Masterplan		/			/	/
Traffic cells			/	>	>	/
Liveable Neighbourhoods - Next Generation			>		>	/
Bath Clean Air Zone and Air Quality Management Area Reviews			/			/
Demand management			/			/
Coach Strategy			/			/
Rail Freight Distribution Site			/			/

suppo	Supported Delivery timescale			and f	future ojects			
Cleaner, greener school travel	Supporting future mobility	Connecting Bath to rural communities and market towns	Implemented	Short term	Medium term	Long term	Carbon impact (Iow, medium or high)	Cost scale (1 = lower, 5 = very high)
					>		Low	2-3
					~		High	3
					~		Medium	2
						/	High	2
						\	Medium	2
	/			✓			Medium	1
		/				/	High	2-3
					/		Low	2
	/					/	Medium	3

Journey to Net Zero Summary (continued)		Level o			Themes			
Project	Current	Developing	Future	Better Public Transport Options	Providing for travel by bike and on foot	Creating improved places to live and work		
Road Freight Package			\			\		
Independent travel to school			>	>	>			
West of England Future Transport Zone Trial and Delivery		/		\	>			
A4 (Bristol to Bath) Strategic Corridor Programme		/		/	\	/		
A4 Bath to East Access Improvements Programme		/		>	>	\		
A367 (Bath to Somer Valley) and A37 (Bristol to Somer Valley) Corridor Studies		/		/	/	/		
Inter-urban sustainable transport links			/	/	/	/		
Rural connectivity			/	/	/	/		

supported			De	elivery 1	timesca	ale	and f	eloping uture ects
Cleaner, greener school travel	Supporting future mobility	Connecting Bath to rural communities and market towns	Implemented	Short term	Medium term	Long term	Carbon impact (Iow, medium or high)	Cost scale (1 = lower, 5 = very high)
	/				>		Medium	3
\					>		Low	2
	/			~			High	3
		/			/		Medium	4
		/			/		Medium	2
		/			/		Medium	2
		/				/	Medium	3
		/				/	Medium	2-3

NEXT STEPS

The Journey to Net Zero provides an overarching, holistic plan, setting out our portfolio of existing transport projects and providing the foundation to begin developing future initiatives in more detail. The timescales for delivering on our climate emergency declaration are short, this means we need to continue to deliver projects at pace to support this target.

The committed projects and those in motion are already being developed by B&NES and are at various stages of the project development lifecycle as detailed in this Plan. You may have already been asked your views on some of these projects, or you may be asked in the near future. Working alongside the West of England Combined Authority, we will continue to pursue the developing and future projects.

Where the developing projects demonstrate they are feasible and have the appropriate outcomes to meet our objectives we will seek to deliver them. The future projects are earlier in this lifecycle, and require more detailed consideration of their scope and feasibility within the B&NES area. As part of this further development, we will ask for your views to understand what you would like to see, and what would encourage you to travel more sustainably.

We will continue to, or begin to, develop business cases that will seek to secure the funding necessary to start the delivery of these projects. The Journey to Net Zero is primarily focused on the City of Bath, but also recognises the importance of the travel corridors between the city and the wider district. Going forwards, we will produce a summary of this Plan outlining what the measures identified will mean for those living in the wider area.

We will continue to monitor our progress against our target to reach carbon neutrality by 2030, and as projects become clearer will undertake a more detailed, quantified assessment of their likely impacts on modal shift and carbon.







Improving People's Lives