County Council
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Item 10, Appendix A

West Sussex Transport Plan 2022-2036
Final Draft for Adoption

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Executive Summary

1. Introduction

1.1 The County Council has a statutory duty to prepare a Local Transport Plan and in West Sussex the Local Transport Plan is known as the West Sussex Transport Plan (WSTP).

1.2 The Government expects Local Transport Plans to become the focus of transport funding discussions between central and local government. Local Transport Plans are expected to set out holistic place-based strategies for improving transport networks, proposed projects for investment, and explain how key objectives will be achieved.

1.3 The WSTP is the County Council's main policy on transport and supports delivery of Our Council Plan and its priorities. The WSTP sets out how the County Council, working with its strategic partners particularly in relation to funding, intends to address key challenges by improving, maintaining and managing the transport network in the period to 2036.

1.4 The WSTP builds on the local plans prepared by the Local Planning Authorities (LPAs) and is supported by a series of thematic strategies such as the Road Safety Framework, Bus Strategy, Walking & Cycling Strategy, Rights of Way Management Plan, Highway Infrastructure Asset Management Plan and Bus Service Improvement Plan which guide day-to-day operational matters. As these thematic strategies and plans are reviewed, where necessary, they will be updated to take account of the WSTP.

1.5 The WSTP also includes a monitoring framework that will be used to monitor performance over time and if necessary, to initiate a review of the Plan. This process of monitoring and management will allow delivery of the Plan to respond to changes in legislation, policy and delivery of outputs and outcomes, as necessary.

1.6 The Draft WSTP was published for consultation between 16 July and 8 October 2021 and feedback was used to inform changes to the Plan.

The Challenge

1.7 The transport network, comprised of infrastructure and services, is an enabler of movement by a range of modes of transport. The transport network enables people to access education, healthcare, employment and leisure facilities. It also enables businesses to access staff and customers, and visitors to come to West Sussex.

1.8 Transport network demand (i.e. usage) changes over time but a 'predict and provide' approach (i.e. building road capacity to cater for forecast traffic growth) could have a negative impact upon other challenges. Use of the transport network and issues that affect transport network performance can contribute to economic performance and environmental issues such as climate change. Parts of West Sussex are also protected for their environmental qualities. Therefore, the challenge is to enable and accelerate the shift to more sustainable patterns of travel behaviour. In order to deliver the priorities of Our Council Plan, transport network improvements need to address all of our economic, social and

environmental objectives while taking advantage of the opportunities provided by digital infrastructure.

1.9 The scale of the challenge to decarbonise the transport network is significant and one which the County Council cannot achieve alone. At least in the short term, there will also be considerable uncertainty about the long-term impacts of the COVID-19 pandemic that will need to be taken into account. Decarbonising the transport system will require a step change in the approach to investment and a more integrated approach to spatial and transport planning. Success in meeting this challenge be dependent on the actions of the County Council alongside third parties involved in funding and delivery. It will also be dependent on transport network users making zero or low carbon emission choices about how to travel.

1.10 Changes to the transport network will take place alongside maintenance of existing assets which is important for all road users. As assets are renewed, opportunities to take advantage of technological advances will be explored to ensure that renewals programmes also help to deliver the vision and objectives of this Plan.

2. Key Issues

2.1 A number of key issues have been identified that the Plan seeks to address:

- Climate change
- Local environmental impacts
- Spatially variable economic performance
- Development and regeneration pressures and opportunities
- Growing and ageing population
- Public health and well-being
- Access to services
- Transport network performance issues

3. Vision and Objectives

3.1 Our vision is:

"A West Sussex transport network in 2036 that works for communities in the Coastal West Sussex, Gatwick Diamond and Rural West Sussex economic areas by helping to address the spatial economic challenges of the County, level up the coastal economy and provide access to employment and services countywide.

The transport network will be on a pathway to achieve net zero carbon emissions by 2050 through more local living, increased use of electric vehicles and reduced use of fossil-fuels. It will also be safer, more efficient and resilient overall with more walking, cycling and use of public or shared transport and less congestion on major routes that connect West Sussex towns with Gatwick Airport, London and nearby cities.

The transport network will connect communities and allow residents to live healthy lifestyles with good access to the West Sussex coast and the protected South Downs, High Weald and Chichester Harbour.

Active travel modes, public or shared transport will be attractive options in built up areas and between towns, and rural communities will have access to the services they need.

Transport impacts such as air pollution, noise and rat-running on adjacent communities and the environment will be minimised to protect a quality of life that reflects the characteristics of the County."

3.2 In order to deliver the vision, we have developed seventeen objectives that will need to be achieved. These have been used to develop the five thematic and eight area transport strategies contained within the Plan that will ensure West Sussex is healthy, protected, connected and prosperous.

4. Thematic Transport Strategies

4.1 Our vision and environmental, social, economic and transport objectives will be delivered through five thematic strategies and area transport strategies for each planning area in West Sussex.

Active Travel Strategy

4.2 Our active travel strategy is intended to facilitate greater use of active travel modes (e.g. walking and cycling). Our approach and priorities are to extend and improve the network of active travel facilities, providing segregation where necessary, which will require funding and partnership working to identify priorities and deliver improvements. If opportunities arise, we will work with partners to deliver skills training and promotion initiatives.

Shared Transport Strategy

4.3 Our shared transport strategy (i.e. buses, community transport and mobility solutions) is intended to facilitate a more efficient and customer focused bus network, using community transport and new mobility solutions where possible and viable. Our approach and priorities are to work with operators to explore new models of service delivery and identify and deliver improvements to services, infrastructure and the customer interface. If opportunities arise, we will support partners to renew vehicle fleets, deliver promotional initiatives and explore new fares and ticketing arrangements.

Rail Strategy

4.4 Our rail strategy is intended to set out how we want the railway to be improved. This includes identifying priorities that will help the rail network to perform a strategic role in the transport network, providing connectivity between towns in West Sussex and other regional economic centres, and work with regional partners to promote their inclusion in future rail investment programmes.

Access to Gatwick Airport Strategy

4.5 Our access to Gatwick Airport Strategy includes supporting initiatives that will increase sustainable transport mode share for passengers and employees and ensure community needs are taken into account.

Road Network Strategy

4.6 Travel behaviour in West Sussex is currently dominated by fossil fuel propelled car travel so we are planning to change this by enabling increased use of electric vehicles and sustainable modes of transport. Our approach is to improve the efficiency of the most strategically important local roads and provide facilities for active travel and shared transport services, supported by use of demand management techniques. These improvements are also expected to contribute to improving road safety and resilience to the effects of climate change.

4.7 Where improvements are proposed to trunk roads that are managed by National Highways, this will be subject to their decision-making and processes. However, this Plan sets out what is important to the County Council in taking forward these schemes.

4.8 Giving active travel and shared transport greater priority on local roads that do not form part of the County Strategic Road Network is expected to increase their mode share at a faster rate than traffic growth. If major improvements are being made to the road network, our approach is to ensure they enhance biodiversity. Impacts on other aspects of the environment will be avoided and where this is not possible, impacts will be minimised.

5. Area Transport Strategies

Adur

5.1 Our transport strategy for the Adur area (in no particular order) is to:

- improve the performance of the A27;
- facilitate the introduction of on-street electric vehicle charging infrastructure, initially in Shoreham followed by other areas;
- increase space for active travel through infrastructure improvements on priority routes such as A259;
- use traffic signal technology to give priority to shared transport where services operate frequently;
- use on-street parking and traffic management techniques to manage demand;
- deliver Air Quality Action Plans in Shoreham and Southwick;
- tackle inappropriate use of unsuitable routes using behavioural initiatives; and,
- work with strategic partners to deliver faster rail services to Worthing, Chichester, Brighton and the Solent cities in the long term.

Arun

5.2 Our transport strategy for the Arun area (in no particular order) is to

- improve the performance of the A27;
- upgrade the A29, A259 and A284 including infrastructure for active travel and shared transport modes;
- facilitate the introduction of on-street electric vehicle charging infrastructure, initially in Littlehampton followed by other areas;
- improve active travel facilities within existing communities and between settlements, particularly on priority routes and where strategic development is planned;
- dedicate space for shared transport priority where land is available;
- support new frequent shared transport services linking various planned strategic developments as they come forward;
- use on-street parking and traffic management techniques in Bognor Regis, Littlehampton, Arundel and Barnham to manage demand;
- tackle inappropriate speed and use of unsuitable rural routes using behavioural initiatives; and
- work with strategic partners to deliver faster rail services from Barnham to Brighton and the Solent cities in the long term.

Chichester

5.3 Our transport strategy for the Chichester area (in no particular order) is to:

- improve the performance of the A27;
- upgrade the A259 between Chichester and Bognor Regis including infrastructure for active travel and shared transport modes;
- facilitate the introduction of on-street electric vehicle charging infrastructure, initially in Chichester City followed by other areas;
- improve active travel facilities within existing communities and between towns such as Chichester, Selsey, Bognor Regis and the Bourne area, particularly on priority routes and corridors where strategic development is planned;
- increase space for active travel in the A286 Chichester ring road and A285 Westhampnett Road corridors;
- deliver Air Quality Action Plans in Chichester;
- use traffic signal technology to give priority to shared transport where services operate frequently but space is limited;
- support the introduction of a Dynamic Demand Responsive Transport service initially connecting rural communities west of Chichester with the City, linking various planned strategic developments in Chichester and Arun districts;
- use on-street parking and traffic management techniques to manage demand in Chichester City;

- tackle inappropriate speed and use of unsuitable rural routes using behavioural initiatives; and
- work with strategic partners to deliver faster rail services between Chichester, Worthing Brighton and the Solent cities in the long term.

Crawley

5.4 Our transport strategy for the Crawley area (in no particular order) is to:

- provide bus priority at signal-controlled junctions;
- improve efficiency and giving greater priority to active travel and shared transport at three A2011 junctions;
- improve public transport interchange facilities at Crawley, Three Bridges and Gatwick Airport;
- prioritise active travel modes as development takes place;
- deliver priority cycle routes;
- deliver Air Quality Action Plans in Crawley;
- work with partners to ensure that shared transport modes are an attractive option for travel to Gatwick Airport and use on-street parking and traffic management techniques to discourage pick-ups and drop-offs;
- facilitate the introduction of on-street electric vehicle charging infrastructure, initially in areas of Crawley that are reliant on on-street parking followed by other areas;
- use on-street parking and traffic management techniques to manage demand in Crawley; and
- work with strategic partners to improve rail services to Brighton and London and the Arun Valley line in the long term.

Horsham

5.5 Our transport strategy for the Horsham area (in no particular order) is to:

- deliver improvements largely within existing highway land to provide bus priority at signal-controlled junctions;
- deliver small scale 'tactical' highway improvements on the A24 and A264 as development comes forward in advance of strategic improvements in the medium and long term depending on the development strategy;
- facilitate the introduction of on-street electric vehicle charging infrastructure, initially in Horsham, Billingshurst, Southwater, Colgate and Rusper followed by other areas;
- prioritise active travel modes where development takes place;
- increase space for active travel through infrastructure improvements on priority routes;
- deliver Air Quality Action Plans in Storrington and Cowfold;

- give greater priority to shared transport services on strategically important corridors in the medium term;
- investigate an integrated approach to resolving capacity issues on the A264;
- consult on removing a section of the A272 from the PRN;
- tackle use of inappropriate rural routes using behavioural initiatives; and
- work with strategic partners to improve rail services to London and along the Arun Valley Line in the long term.

Mid Sussex

5.6 Our transport strategy for the Mid Sussex area (in no particular order) is to:

- improve the performance of the A22, A23, A264, A272 and A2300;
- facilitate provision of on-street electric vehicle charging infrastructure, initially in East Grinstead, Lindfield, Ardingly and Balcombe followed by other areas;
- prioritise active travel modes in the towns as development takes place;
- increase space for active travel increase space for active travel through infrastructure improvements on priority routes such as between Haywards Heath and Burgess Hill;
- deliver Air Quality Action Plans in Hassocks;
- deliver improvements largely within existing highway land to provide bus priority where possible and viable including priority at signal-controlled junctions;
- improve interchange facilities at Burgess Hill and Wivelsfield stations;
- improve public realm in Haywards Heath and Burgess Hill town centres;
- use on-street parking and traffic management techniques to manage demand, particularly in Burgess Hill, East Grinstead and Haywards Heath;
- use behavioural initiatives to tackle inappropriate speed and use of unsuitable rural routes; and
- work with strategic partners to improve rail services to Brighton and London in the long term.

South Downs National Park

5.7 Our transport strategy for the South Downs National Park (in no particular order) is to:

- deliver improvements largely within existing highway land;
- facilitate the provision of on-street electric vehicle charging infrastructure once high priority areas are complete;

- deliver small scale 'tactical' highway improvements (e.g. signal upgrades that could include bus vehicle detection);
- consult on removing a section of the A272 from the PRN;
- increase space for active travel through infrastructure improvements on priority routes;
- deliver Air Quality Action Plans in Midhurst;
- pilot new delivery models for shared transport services;
- use behavioural initiatives to tackle air quality issues in Midhurst, speeding and use of inappropriate routes;
- improve public transport services by giving them greater priority on A24 in the medium term; and
- explore the potential for new active travel crossing facilities of the A24.

Worthing

5.8 Our transport strategy for the Worthing area (in no particular order) is to:

- improve performance of the A27 in Worthing;
- facilitate provision of on-street electric vehicle charging infrastructure, initially in central Worthing followed by other areas;
- small scale 'tactical' highway improvements (e.g. signal upgrades that could include bus vehicle detection) to keep traffic moving;
- increase space for active travel through infrastructure improvements on priority routes;
- deliver Air Quality Action Plans in Worthing;
- use on-street parking and traffic management techniques to manage demand and air quality issues;
- improve public transport interchange facilities;
- new active travel crossings of the A27; and
- work with strategic partners to deliver faster rail services between Worthing, Chichester, Brighton and the Solent cities in the long term.

6. Implementation & Monitoring

6.1 An initial five-year action plan has been included that will be reviewed annually. The Plan will be fundamentally reviewed every five years to consider whether or not any changes are required to our strategies or priorities.

6.2 Implementation of the Plan will involve consultation with relevant stakeholders at key stages as interventions are developed. Consultation and engagement initiatives will be designed to suit the needs of the affected communities, including hard to reach groups. This will help to ensure the impacts on communities and all users of the transport system are taken into account alongside other factors including the vision and objectives of the Plan and all relevant impact assessments.

6.3 The County Council is unlikely to be able to deliver the Plan alone as it has neither the resources, statutory powers nor funding to do so. Therefore, we will work in partnership with other organisations such as Transport for the South East in the public, private and third sector to help deliver the Plan.

6.4 As a statutory consultee in the land-use planning system, the County Council will work with LPAs and developers to deliver a vision-led approach to development planning and the delivery of associated infrastructure.

6.5 Given the constraints on the County Council's resources, it may be that some actions cannot be progressed or that they need to be delivered in a different way. In the event that there is insufficient funding or other resources to deliver every ambition, then we will prioritise by considering the following:

- Statutory duties;
- Alignment with corporate policies;
- Affordability;
- Value for money; and
- Deliverability.

6.6 The Plan includes a commitment to setting a carbon emission reduction target in 2022 and a set of measures and indicators that will be monitored and reported in an annual monitoring report and used to guide decision-making as the Plan is implemented.

1. Introduction

1.1 The County Council is the Local Transport Authority for West Sussex and has a statutory duty to prepare a Local Transport Plan. Local Transport Plans are expected to set out holistic place-based strategies for improving transport networks, proposed projects for investment, and explain how key objectives will be achieved. In West Sussex the Local Transport Plan is known as the West Sussex Transport Plan (WSTP).

1.2 The WSTP is the County Council's main policy on transport. The WSTP supports delivery of Our Council Plan and its priorities which have informed development of the vision and objectives. The WSTP sets out the County Council's vision and objectives for the transport network and how the County Council, working with its strategic partners, intends to address environmental, social, economic and transport challenges. This will guide decisions about how to improve, manage and maintain the transport network in the period to 2036.

1.3 The WSTP is supported by a series of thematic strategies and plans such as the Bus Strategy, Walking & Cycling Strategy, Rights of Way Management Plan, Highway Infrastructure Asset Management Plan and Bus Service Improvement Plan which guide day-to-day operational matters. As these thematic strategies and plans are reviewed, where necessary, they will be updated to take account of the WSTP.

1.4 This WSTP builds on the three previous transport plans. The WSTP also builds on the local plans prepared by the Local Planning Authorities (LPAs), which guide decision-making through the statutory land-use planning system on the location and scale of development to meet identified needs. Given that the strategies, policies and proposals in local plans will have an impact on the transport network, it is expected that the LPAs will give significant weight to the WSTP when they review their plans.

1.5 The WSTP also provides a basis on which the County Council will engage in the planning system, including commenting on draft local plans and planning applications. However, although the WSTP sits alongside local plans and it can be material consideration in planning decisions, it is not part of the statutory development plan and it does not replace the policies in the local plans that will be used to determine planning applications.

1.6 The WSTP also includes a monitoring framework that will be used to monitor performance over time and if necessary, to initiate a review of the Plan. This process of monitoring and management will allow delivery of the Plan to respond to changes in legislation, policy and delivery of outputs and outcomes, as necessary.

1.7 The County Council works with other local transport authorities in the South East as a constituent member of a Sub-national Transport Body known as Transport for the South East (TfSE). TfSE has developed a Transport Strategy for the South East that sets out its ambitions for the transport network up to 2050. This is intended to guide future decisions

on strategic transport investment and has been taken into account in the development of this WSTP.

The 'Challenge'

1.8 The transport network, comprised of infrastructure and services, is an enabler of movement by a range of modes of transport. The transport network enables people to access education, shopping, healthcare, employment and leisure, as well as enabling leisure activities such as walking and cycling in their own right. Efficient movement of goods and people on the transport network enables businesses to access labour and customer markets, and also visitors to come to West Sussex.

1.9 Transport network demand (i.e. usage) changes over time due to demographic change, planned development and in response to economic activity and changes in travel and consumer attitudes/behaviour. As travel behaviour in West Sussex is currently dominated by use of fossil fuel propelled vehicles, this is contributing to global climate change and requires urgent change. A 'predict and provide' approach (i.e. building road capacity to cater for or exceed forecast traffic growth) could exacerbate other challenges (e.g. air quality, health and well-being, and reaching net zero carbon/climate change mitigation). Therefore, the challenge is to enable and accelerate the shift to more sustainable patterns of travel behaviour. To do this and deliver the priorities in Our Council Plan, improvements to the transport network will need to address all of our economic, social and environmental objectives and facilitate a more sustainable transport system and patterns of travel behaviour over time.

1.10 The scale of the challenge to decarbonise the transport system is significant and one which the County Council cannot achieve alone. It will require a step change in the scale of investment and the design of improvements to transform the transport network to support a shift to using sustainable modes of transport and zero or low emission vehicles. This may require a fundamental shift in the way that funding for investment in the transport network is collected, planned and managed. However, as such changes would be dependent on central Government, this Plan assumes that the current arrangements will remain broadly similar. It will also require a more integrated approach to spatial and transport planning to reduce the need to travel by car and support the shift to zero or low emission modes of transport. Success in tackling this challenge will be dependent on the actions of the County Council and the actions of third parties involved in funding and delivery, and also transport network users making zero or low carbon emission choices about how to travel.

1.11 Transport network demand can be influenced by digital infrastructure that can provide access to goods and services potentially reducing the need to travel, and this has been amplified by the impacts of the COVID-19 pandemic. The focus for the WSTP is on the transport network but opportunities to use digital infrastructure in addition to, or instead of, improvements to the transport network will also be considered.

1.12 The COVID-19 pandemic which began in late 2019 had a dramatic impact on travel behaviour due to a slowdown in economic activity and changing

travel to work and leisure patterns. Travel patterns changed rapidly due to an increase in working and shopping from home, and requirements for social distancing in public places including on public transport and the impact of Government economic support packages. There is considerable uncertainty about the short, medium and long-term impacts of the pandemic on travel behaviour. This uncertainty will need to be taken into account in the design and development of interventions delivered to achieve the vision and objectives of this Plan.

1.13 Issues that affect transport network performance and connectivity can reduce business productivity, restrict access to employment, education and services (e.g. healthcare and leisure facilities) and discourage visitors and inward investment. Transport network performance also influences travel choices which can lead to pollution or rat-running on less suitable routes in urban and rural areas which can affect adjacent communities. Therefore, the WSTP needs to consider transport network issues that occur now or are likely to occur during the plan period to 2036.

1.14 Parts of West Sussex are protected for their environmental qualities. Development, including new or improved transport infrastructure, has the potential to have environmental impacts, including on these protected areas. The challenge we face in developing and delivering this Plan is to balance the environmental, social and economic impacts in a way that is sustainable for future generations.

Supporting Documents

1.15 An evidence base summary document has been published alongside the WSTP. This outlines the main national, regional and local policies that have influenced the Plan. It also summarises the evidence that has been gathered and analysed to inform the development of the vision, objectives and strategies.

1.16 To guide the development of the Plan, a Sustainability Appraisal (SA) has been undertaken which meets the requirements of the Environmental Assessment of Plans and Regulations 2004 (the SEA Regulations), the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations), and the Equality Act 2010. The SA also includes a Health Impact Assessment and is available alongside the WSTP.

2. Spatial portrait

Population and the Economy

2.1 West Sussex covers 199,000 hectares and has a population of 858,900 (2018 estimate). The majority of the population lives in the ten largest towns, yet 42% of the County's resident population, and over half of its businesses are located in rural areas. 87% of the rural population live in small towns and villages, with 13% living in hamlets and dispersed farms and houses[1].

[1] WSCC: West Sussex Life (https://www.westsussex.gov.uk/westsussexlife accessed May 2021)

2.2 In West Sussex, the main coastal urban areas are, from west to east; Bognor Regis, Littlehampton, Worthing and Shoreham-by-Sea. Chichester is located in the south west of the County. Development in the east of the County is concentrated around Haywards Heath and Burgess Hill close to the boundary with East Sussex and in the north-east of the County around Horsham, Crawley, and East Grinstead close to the boundary with Surrey.

2.3 The largest centres of population are Crawley and Worthing (around 110,000 each) in 2018[2]. Bognor Regis has a population of almost 65,000 people, and Horsham has a population of about 50,000 people. Burgess Hill, Chichester, East Grinstead, Haywards Heath, Lancing/Sompting, Littlehampton, and Shoreham/Southwick have populations of between 25,000 and 45,000 people. Selsey is a small town (around 10,000 residents) located on the Manhood Peninsula. The small town of Midhurst (about 5,000 people) is a centre for the rural north-western part of the County.

Key Economic Areas in West Sussex

2.4 The West Sussex economy is characterised by three sub-areas that overlap in some places. They are often referred to as the Gatwick Diamond, Rural West Sussex and Coastal West Sussex economic areas.

Gatwick Diamond

2.5 The Gatwick Diamond plays an important role in supporting the national and regional economy as it includes Gatwick Airport which, although significantly impacted by the effects of the COVID-19 pandemic, is a key economic driver. The area crosses the Surrey/West Sussex boundary and covers the M23/A23/Brighton Main Line corridor from Redhill (in Surrey) to the northern boundary of Brighton & Hove, and includes the West Sussex towns of Crawley, Horsham, East Grinstead, Haywards Heath and Burgess Hill plus parts of the High Weald AONB and South Downs National Park (SDNP).

Rural West Sussex

2.6 In some places overlapping with Coastal West Sussex and the Gatwick Diamond, Rural West Sussex is a more sparsely populated area that contains villages and smaller market towns, the largest of which is Midhurst. The SDNP covers the vast majority of the area and the economy is characterised by a mix of types of businesses.

Coastal West Sussex

2.7 The West Sussex coastal authorities of Adur, Arun, Chichester and Worthing include the towns of Bognor Regis, Littlehampton, Selsey, Shoreham and Worthing as well as the inland settlements of Chichester and Arundel. The area includes Chichester Harbour AONB and largely adjoins the SDNP although this overlaps in some places. The coastal economy is characterised by below average economic performance overall

[2] WSCC: West Sussex Life (https://www.westsussex.gov.uk/westsussexlife accessed May 2021)

relative to the rest of West Sussex. There are some places within this area that require regeneration.

Transport Network in West Sussex

2.8 The transport network in West Sussex is comprised of active travel facilities (i.e. those for walking, cycling, horse-riding and micro-mobility), shared transport services (i.e. buses, community transport and mobility solutions), railways, roads, ports and airports.

Active Travel Facilities

2.9 In 2021, there were 75km (47 miles) of cycleway and 7,497km (4,658 miles) of footway in West Sussex.

2.10 National Cycle Network (NCN) routes 2, 20, 21, 82, 88, 223, 228 are located fully or partially in West Sussex.

2.11 There are over 4,000km (2,500 miles) of Public Rights of Way (PRoW) in West Sussex, which includes footpaths (1,717 miles), bridleways (733 miles), restricted byways (81 miles) and byways open to all traffic (BOATs) (8 miles). There are also long-distance trails which partially follow PRoW such as the South Downs Way and Downs Link. In the near future, the planned England Coast Path will be a new long-distance trail through the County.

2.12 There is one on-street bike hire scheme located in Worthing which is currently operated by Donkeybike, as well as Brompton bike hire facilities at some railway stations in West Sussex.

Shared Transport Services

2.13 The bus network in West Sussex is largely operated on a commercial basis with two large operators; Metrobus (incorporating the Crawley Fastway Bus Rapid Transit) and Stagecoach, plus a number of smaller operators. 85% of the bus mileage is provided on a fully commercial basis by bus operators. The remaining 15% of bus mileage is financially supported by the County Council utilising funding from a range of sources. Bus mileage in West Sussex is approximately 13.5 million miles per annum. The bus connections provided across the County linking the towns in the north, along the West Sussex coast, across rural West Sussex and to neighbouring areas play an important role in economic development and promoting accessibility, although there are fewer services in rural areas.

2.14 The County Council spends approximately £1.8m per annum supporting conventional bus services that are not commercially viable. Contributions from large employers support bus services further by £3.4m, but developer contributions are limited. If bus services are not commercially viable when funding ends, this can result in services being lost or reduced.

2.15 The annual number of bus passengers in West Sussex increased from 24.4m in 2010/11 to 26.1m in 2018/19.

2.16 A range of different Community Transport operators exist in West Sussex offering a mix of dial-a-ride and scheduled services using different vehicle types. Most operators cover a relatively small area with the exception of CT Sussex which will soon operate countywide.

Railways

2.17 In West Sussex, the rail network is comprised of the Brighton Main Line, Arun Valley Line, Horsham – Dorking Line, East Grinstead branch of the Oxted Line and the West Coastway Line that includes branch lines to Littlehampton and Bognor Regis.

2.18 West Sussex is well served by rail connections with rail forming the backbone of the public transport network. The connections provided to London, the Gatwick Diamond, West Sussex coast, and across rural West Sussex play a key role by enabling economic activity and providing accessibility. The rail network is particularly important for access to London due to its competitive advantage over other modes of travel.

2.19 There are 38 railway stations in West Sussex and there were close to 56m entries and exits in 2018/19[3]. In 2018/19, the busiest station by some margin was Gatwick Airport with 21.2m entries and exits and the quietest was Faygate with 8,298 entries and exits. Some village stations, notably Hassocks and Barnham had over 1m entries and exits in 2018/19 and play an important role in serving their surrounding rural communities. Usage of West Sussex railway stations grew every year between 2010/11 and 2018/19.

2.20 There are 113 level crossings in West Sussex, comprised of 59 road crossings (public and private) and 54 Public Right of Way crossings.

Roads

2.21 The National Strategic Road Network (SRN) comprised of motorways and trunk roads is managed by National Highways. In West Sussex this includes the M23, A27 and most of the A23. The A27 is the only part of the National SRN running east – west south of the M25. Due to its location, it serves both a strategic role as well as being heavily used as a local distributor road with short trips and heavy cross flows at junctions.

2.22 The local road network in West Sussex comprises of the County Strategic Road Network (CSRN) and most other local roads. In 2021, the County Council's carriageway assets were made up of 4,034km (2,506miles) of road of which approximately 840km (522miles) is classified A and B class, 7.5million sqm of footways, 726 road bridges, 34 subways and 60 footbridges.

Road classification

2.23 All roads in West Sussex are classified depending on the role they fulfil as part of a road hierarchy. Road classification helps to identify the most suitable routes for reaching a destination by identifying roads that are best suited for traffic. Road classification does not determine the minimum capacity or design of a road.

2.24 The Primary Route Network (PRN) designates roads between places of traffic importance across the UK, with the aim of providing easily identifiable routes to access the whole of the country. Primary routes are

[3] Office of Road and Rail estimates of station usage

marked using green signs with white and yellow text. The PRN is constructed from a series of locations (primary destinations) selected by the Department for Transport, which are then linked by roads (primary routes) selected by the County Council. The primary destinations in West Sussex are; Bognor Regis, Chichester, Crawley, East Grinstead, Gatwick Airport, Horsham and Worthing. In West Sussex the PRN is shown on figure 2 in Appendix C.

2.25 The most important roads in West Sussex form the CSRN which is shown on figure 3 in Appendix C. The CSRN links the ten largest urban areas and is intended to attract the majority of medium and long-distance travel and freight movements. The CSRN includes all roads on the PRN plus the most important of the other 'A' class roads. National and local road signing is designed to support this role.

2.26 In order to focus investment on the most important local roads, the Government has also defined a Major Road Network (MRN) made up of strategically important local roads based on levels of usage. The MRN in West Sussex is shown on figure 4 in Appendix C. The MRN is expected to be reviewed every five years in line with the Government's investment planning cycle.

Electric Vehicle Charging Infrastructure

2.27 In October 2021, there were 211 publicly accessible electric vehicle charging points in West Sussex including 45 rapid (43kw or above) chargers[4]. The charging points tend to be located in or near urban areas and there are clusters of facilities in Crawley and Worthing.

Freight

2.28 Freight and logistics enable efficient bulk transportation of goods between suppliers and customers. On most roads in West Sussex, heavy and light goods vehicles make up a small proportion of total traffic volume. West Sussex is home to Gatwick Airport and Shoreham Port which are international gateways of national and regional significance and a focus for freight movements. As rail freight in West Sussex is currently low and train paths and infrastructure for consolidation to rail are limited, the majority of freight movements are by road.

Ports

2.29 Shoreham Port is a trust port operated by Shoreham Port Authority. It includes a combination of port-owned and private terminals that largely handle bulk cargo such as construction materials. The port also provides facilities for a fishing fleet and leisure craft.

2.30 Littlehampton Harbour is a trust port operated by Littlehampton Harbour Board. The port caters for yachting, sport fishing and leisure fishing. There are two commercial wharves that are largely used for transporting construction materials.

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[4] DfT: Electric Vehicle Charging Device Statistics (http://maps.dft.gov.uk/ev-charging-map/ accessed April 2021)

Airports

2.31 Gatwick Airport is a nationally significant asset serving the important London market and is a major attraction to businesses and people looking to locate and do business in the UK, stimulating business growth through connections to international markets and attracting inward investment. Located to the north of the County, the Airport is served well by road (via the M23/A23), rail (via the Brighton Mainline) and local bus services.

2.32 In 2019, Gatwick Airport catered for 46.6m passengers; over 47% of whom used public transport to access the Airport. In 2020 passenger numbers reduced to 10.2m as a result of the COVID-19 pandemic[5].The Airport is also a major employer and prior to the pandemic 24,100 employees were directly employed at the Airport[6].

2.33 West Sussex also has a number of smaller airfields across West Sussex, including Brighton City Airport at Shoreham, and Goodwood near Chichester, which are predominantly used for leisure aircraft.

Car Clubs

2.34 There are two car clubs in West Sussex; one in Chichester and one in Horsham both operated commercially by Co Wheels following initial public sector support. A Worthing Car Club is also expected to be established in the area in the near future.

Taxi / Ride-hailing / Ride-sharing

2.35 Taxi or private hire vehicles are widely available across West Sussex operated by the private sector.

2.36 Ride-sharing is available through westsussexcarshare.com in some locations, typically linked to employers or development.

2.37 Uber operate a ride-hailing service in some parts of West Sussex, particularly in the Crawley/Gatwick area and some coastal towns.

Highways Technology

2.38 Several Intelligent Transport System tools are already being used in West Sussex. There are variable message signs showing the number of available off-street parking spaces in several towns, electronic displays at bus stops giving the predicted time of arrival of buses and permanent traffic counters monitoring the use of the road network.

3. Policy Context

3.1 This Plan sits within a wider policy context and is influenced by a range of policies. The main policies and strategies that have influenced this Plan are at the national, regional and local level.

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[5] Gatwick Airport Key Facts

[6] Gatwick Airport Ltd: Gatwick's Economic Value (https://www.gatwickairport.com/globalassets/publicationfiles/business_and_community/all_public_publications/economy/gatwick-economic-value-report-2021.pdf accessed May 2021)

National Policy

3.2 There is no single national policy for transport. Instead, national transport policy is comprised of a range of policy papers, statements, strategies and plans that set out the Government's objectives for transport and are summarised in the Evidence Base Document. These exist alongside the National Planning Policy Framework and a series of national policy statements that set out the Government's policies to guide decision-making on national road, rail, port and airport projects.

3.3 In 2021, the Government published a Transport Decarbonisation Plan (TDP) setting out commitments and actions for each mode of transport as part of a Plan to achieve the legally binding target to achieve net zero emissions of all greenhouse gases by 2050. The TDP sets out the Government expectation that Local Transport Authorities will set carbon reduction targets. The Government's strategic priorities, which are expected to guide the Government's investment decisions relating to transport, at least in the early part of the plan period, are:

1. Accelerating modal shift to public and active transport;
2. Decarbonising road transport;
3. Decarbonising how we get our goods;
4. Making the UK a hub for green transport technology and innovation;
5. Place-based solutions to emissions reduction; and
6. Reducing carbon in a global economy.

Regional Policy

3.4 TfSE has developed a vision and Transport Strategy that aims to shape the South East as a region economically, technologically and environmentally over the next 30 years, whilst changing the way transport investment takes place. TfSE's key principles, in effect, the strategic objectives that they are seeking to achieve through the strategy, are:

- Supporting economic growth, but not at any cost;
- Achieving environmental sustainability;
- Planning for successful places;
- Putting the user at the heart of the transport system; and
- Planning regionally for the short, medium and long term.

3.5 Coast to Capital Local Enterprise Partnership (C2C LEP) published its second Strategic Economic Plan in 2018 called Gatwick 360° The Coast to Capital Strategic Economic Plan 2018-2030. This aims for a network of functional economic hubs stretching from Croydon to Greater Brighton and including parts of East Surrey and the whole of West Sussex. Promoting better transport and mobility is one of eight priorities for the Coast to Capital area. In 2020, the LEP also published a Build Back Stronger Smarter and Greener Plan to support recovery from the COVID19 pandemic, partially through strategic investments in the transport network.

Local Policy

3.6 The West Sussex Climate Change Strategy 2020 aims for County Council operations and services to reach net zero carbon emissions by 2030. There are five key commitments but the two which are most relevant to this Plan are to:

- Mitigate the effects of climate change by reducing carbon emissions; and
- Adapt and be resilient to a changing climate.

3.7 The County Council have agreed an Economy Reset Plan for the period 2020-2024 in response to the impact and challenges posed by the COVID-19 pandemic. The Reset Plan is an update of the Economic Growth Plan 2018-2023 and sets out priorities for supporting the recovery of the West Sussex economy. These include strategic transport investment to protect and revive Crawley and the Gatwick Diamond economy and the Coastal West Sussex towns.

3.8 The County Council has published a Creating Healthy and Sustainable Places Framework for West Sussex 2021 that sets out how development, including transport infrastructure and services, can help to deliver healthier and more sustainable places.

3.9 The County Council uses a range of operational policies and strategies to manage day-to-day delivery of the highways and transport service. As they are updated periodically, they will take this Plan into account. The main publications that are relevant to this Plan are:

- WSCC Road Safety Framework (2016-26) which outlines the County Council's vision for road safety.
- WSCC Bus Strategy (2018-26) that sets out the County Council's aims and objectives for local bus and community transport in West Sussex.
- WSCC Cycling & Walking Strategy (2016-26) that sets out the County Council's aims and objectives for active travel in West Sussex.
- WSCC Electric Vehicle Strategy (2019) that sets out the County Council's strategy to increase take up of electric and ultra-low emission vehicles.
- WSCC Rights of Way Management Plan 2018-2028 that sets out the County Council's approach to managing the Public Rights of Way (PRoW) network.

3.10 The West Sussex Intelligent Transport System Strategy was last revised in July 2008 and is due to be reviewed in 2022 to become the new 'Highways Technology Strategy'. It will set out how technology can be used to help deliver the vision and objectives of this Plan.

3.11 The West Sussex Tree Plan was adopted in 2020 and aims to maintain and protect trees, many of which are on the public highway and protect woodlands, as well as improve tree cover in West Sussex.

3.12 Local Cycling & Walking Infrastructure Plans (LCWIPs) identify proposals for cycle and walking infrastructure improvements. LCWIPs or equivalent documents have been developed or are in the process of being developed

for West Sussex, and for Adur, Arun, Chichester, Crawley, Horsham, Mid Sussex, SDNP and Worthing.

3.13 Local plans, prepared by the LPAs in West Sussex, set out policies to guide land use and future planning decisions. Local plans are in place for all areas of West Sussex, although some authorities are in the process of reviewing these documents. All the adopted local plans allocate sites for development and include policies encouraging use of sustainable modes of transport. Where necessary, local plans identify transport infrastructure or services that need to be improved to mitigate development impacts and are supported by evidence confirming their viability and deliverability. As strategic developments and infrastructure improvements are typically planned over long periods of time, it is likely to be some time before the strategies in this Plan will be visible in new developments.

3.14 Neighbourhood plans are in place in many areas and may influence transport network demand as developments come forward. Neighbourhood plans often set out how parish housing allocations in local plans will be met in the plan area and provide development management policies that apply in the plan area. They also allow communities to set out aspirations for new or improved infrastructure.

3.15 Areas of the County that are designated for their landscape quality (i.e. South Downs, High Weald and Chichester Harbour) also have statutory management plans that guide development in these areas. As interventions are developed in these areas to improve the transport network, these plans must be taken into account which will influence the options for improvement.

3.16 It is anticipated that during the life of the plan, new plans and strategies such as Local Nature Recovery Strategies (Environment Act 2021) will come forward that may need to be taken into account or present opportunities. These will be considered in the development of initiatives or considered when the plan is reviewed.

4. Key Issues

4.1 The following section outlines the key issues including pressures, challenges and opportunities for the environment, economy, people and the transport network that have influenced the development of our vision and objectives for the Plan.

Climate Change

4.2 The transport sector is a major contributor of carbon emissions which are causing global climate change including rising global temperatures, changing weather patterns and sea level rise, and there is increased public awareness of this issue. In April 2019, the County Council acknowledged the threat of climate change and passed a motion pledging to try to reach net zero carbon emissions by 2030. UK domestic greenhouse gas emissions reduced by 44% between 1990 and 2019, this has not been matched by the transport sector which is now the largest

contributor, accounting for 28% of UK domestic emissions in 2018[7]. While greenhouse gas emissions from transport are reducing, progress is not currently fast enough to achieve the Government's legally binding target to achieve net zero emissions by 2050. The scale of change required to achieve decarbonisation in this timescale will be a significant challenge for the transport sector.

4.3 In a county with large rural areas such as West Sussex, shared transport and active travel modes are not currently considered viable for many journeys due to the travel distances and the currently available infrastructure and services. Mass electrification of the vehicle fleet will be needed to achieve the Government's target. However, this is unlikely to be viable for some vehicle types such as heavy goods vehicles and assumes the emissions associated with network construction and vehicle production can be successfully mitigated. In order to achieve the Government's target, substantial investment in infrastructure for electric and other low carbon emission fuels will be required alongside behaviour change to increase use of shared transport and active travel modes which are a more efficient form of transportation than private vehicles.

4.4 As with forecasting of any kind, there is some uncertainty around future climate change impacts and whether these could be more, or less, extreme than expected. However, at outlined in the West Sussex Climate Change Strategy 2020, it is likely that there will be an increase in occurrences of extreme weather events such as flooding and extreme heat events. The County has a history of fluvial, coastal, surface water and groundwater flooding which affect the transport network, so climate change is likely to exacerbate this issue. Therefore, it will be necessary to adapt the transport network to cope with the effects of climate change (i.e. to make it more resilient to extreme weather events).

Local Environmental Impacts

4.5 The transport network is a source of environmental contaminants which can be transported through air or water. Key road network related sources include tyre and brake wear, exhaust emissions, and oil and fuel deposits which can pollute the environment. Many habitats of nature conservation importance in the UK are sensitive to air pollution, including from oxides of nitrogen (NOx), as well as to nitrogen deposition. Transport is one of the largest sources of NOx emissions[8] and is also a source of Particulate Matter. Contaminants may also pass into water bodies and groundwater impacting water quality and ecology. Traffic noise and artificial light, including from street lighting, are both also known to disrupt ecosystems, for example street lighting disrupts conditions for nocturnal animals. Improvements to the transport network

[7] DfT: Transport and Environmental Statistics 2021 Annual report (2021) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/984685/transport-and-environment-statistics-2021.pdf

[8] Natural England: Potential risk of impacts of nitrogen oxides from road traffic on designated nature conservation sites (2016) http://publications.naturalengland.org.uk/publication/6331846246793216

need to be designed in ways that take these issues into account to protect and where possible and viable, enhance the local environment.

4.6 West Sussex is a desirable place to live and work, with an attractive coastline, the protected landscapes of the South Downs National Park and the High Weald and Chichester Harbour Areas of Outstanding Natural Beauty, attractions, and cultural assets. There are pressures on the natural and built environment from population growth and increased transport movements which are contributing to issues such as loss of biodiversity. Improvements to the transport network may require land that is protected or may have negative impacts on protected areas. The transport network can impact landscape character, tranquillity and the built and historic environment. Tranquillity is a perceptual quality of the landscape that is influenced by things that people can both see and hear around them[9]. Careful planning is needed to ensure transport improvements take these issues into account so that the environment and quality of life in West Sussex is protected and, where possible and viable, enhanced.

Variable Economic Performance

4.7 There is variable economic performance across the County, with the Gatwick Diamond outperforming coastal and rural areas. In 2019, Gross Value Added (GVA) was measured at £13.0m for West Sussex (north east), as opposed to £11.7m for West Sussex (south west)[10]. The Gatwick Diamond which includes Gatwick Airport, benefits from the strongest transport links to London and the rest of the UK. The quality of strategic transport connections in the Coastal West Sussex area is relatively poor which impacts business productivity and attractiveness of the area as a place to do business. There is potential for improvement that would enhance connectivity to the nearby cities of Portsmouth, Southampton and Brighton & Hove.

4.8 Some areas of West Sussex such as Crawley are dependent on in-commuting to support the economy, while weaker transport links and a peripheral location hinder economic performance in Coastal West Sussex. Dependency on private cars to access employment in some parts of the County can also hinder access to job opportunities, contributing to unemployment and social inequality. As levels of homeworking have increased due to the COVID-19 pandemic and technological improvements, this has highlighted the potential for increased home-working in future to reduce pressure on the transport network if this can be sustained in the long term.

4.9 The COVID-19 pandemic has had a major impact on national, regional and local economic performance, and is having a disproportionate impact on

[9] South Downs National Park Authority: Tranquillity Study (2017) https://www.southdowns.gov.uk/wp-content/uploads/2017/03/13-04-17-South-Downs-National-Park-Tranquillity-Study.pdf

[10] ONS: Regional gross value added (balanced) by industry: all ITL regions https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/nominalandrealregionalgrossvalueaddedbalancedbyindustry

some business sectors (e.g. transport, tourism, leisure and retail) and areas (e.g. Crawley) that are reliant on these sectors. There is considerable uncertainty about how different business sectors will recover. There is potential for the recovery to support the Government's clean growth agenda which is likely to be a focus for central Government investment in the short term.

4.10 There are transport issues associated with particular industries in different areas of West Sussex. Agricultural industries are more dominant in rural areas, while construction industries tend to be more dominant in coastal parts of the County. Both of these industries have a greater dependence on road freight movements, but are in areas with a generally lower standard of road infrastructure.

4.11 There are also pressures from leisure and tourism-related transport movements, for example in rural and coastal areas, with a lower standard of transport network connections. This needs to be considered as supporting recovery and growth in the visitor economy is a priority for the County Council.

Development and Regeneration Pressures and Opportunities

4.12 The transport network in West Sussex is expected to cater for increased transport movements as planned development and regeneration initiatives takes place. Sites for over 76,000 new homes are allocated in adopted local plans across West Sussex from the early 2010s through to the early 2030s alongside packages of strategic infrastructure improvements to mitigate severe cumulative impacts. Even if high levels of sustainable transport mode share are achieved at development sites, there is still expected to be an overall increase in the number of trips on the transport network. As local plans are reviewed additional sites are expected to be allocated for development and further mitigation measures will be identified.

4.13 Requirements for future development cannot all be accommodated within existing urban areas so local plans typically allocate a mix of brownfield (i.e. previously developed) and greenfield edge of settlement sites to accommodate development. In some cases, this will significantly change the scale of some settlements; e.g. large villages becoming similar in size to small towns. This presents challenges in terms of the requirement for transport to access existing employment sites and public transport hubs as this places additional demands on existing routes and services. Development could increase commuting if suitable jobs are not created locally at a similar rate to housing delivery or inhabited by home-workers, while the provision of jobs local to development sites does not guarantee that they will be taken by local residents. There are also challenges with specific industries such as mineral extraction that are dependent on roads as opportunities to move freight by rail are limited.

4.14 Planned development presents opportunities to change and embed more sustainable travel behaviour and contribute funding towards transport network improvements (including resilience improvements) which will benefit existing users, as well as mitigate the transport and environmental impacts of development. While a number of major schemes and junction improvements are planned to mitigate development, developer-led

highway mitigation schemes are not intended to resolve pre-existing issues. This can result in gaps between development-led mitigation and those required to address cumulative impacts and/or pre-existing issues. There is also a challenge to ensure that these schemes do not overprovide capacity which could lead to unmanaged traffic growth.

Growing and Ageing Population

4.15 The population of West Sussex is projected to increase by 115,100 from 858,900 to 973,900 or by 13% over the period 2018-2043, compared to an increase of 8.9% for the South East region over the same period[11]. The highest level of population projected growth is amongst the over 65-year olds, with an increase of 99,400 or 51% expected in this age group; higher than the national and regional average. This is expected to present a number of challenges to the transport network including; increased isolation for older people who are no longer able to drive, particularly in areas with limited transport services; changing public transport and service access needs; an increase in the proportion of non-fare paying concessionary bus travel passengers; and a greater number of people with reduced mobility.

Public Health and Wellbeing

4.16 Nearly two-thirds of adults in England are overweight or obese while a third of children leaving primary school are overweight or obese[12]. Child obesity is a particular concern, as children living with obesity are more likely to become adults living with obesity and have a higher risk of morbidity, disability and premature mortality in adulthood[13]. Inactivity due at least in part to travel choices, is a potential cause of obesity.

4.17 Nationally, there are an estimated 28,000 to 36,000 deaths each year attributed to human-made air pollution[14]. Where air pollutants exceed or are likely to exceed air quality objectives resulting in Air Quality Management Areas (AQMAs) and this is related to traffic, the County Council has a statutory duty to work with the relevant District or Borough Council to develop and deliver action plans for these AQMAs. While air quality in West Sussex is generally good and improving, as of March 2021

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[11] WSCC: West Sussex Life (http://www.westsussex.gov.uk/westsussexlife accessed March 2021)

[12] NHS: Long Term Plan (https://www.longtermplan.nhs.uk/online-version/chapter-2-more-nhs-action-on-prevention-and-health-inequalities/obesity/#:~:text=Nearly%20two%2Dthirds%20of%20adults,500%20extra%20calories%20per%20day accessed March 2021)

[13] NHS: Childhood Obesity Guidance (https://www.gov.uk/government/publications/childhood-obesity-applying-all-our-health/childhood-obesity-applying-all-our-health accessed March 2021)

[14] PHE: Review of interventions to improve outdoor air quality and public health (2019) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938623/Review_of_interventions_to_improve_air_quality_March-2019-2018572.pdf

there were eleven Air Quality Management Areas (AQMAs). Nitrogen dioxide levels within some long-standing AQMAs across West Sussex are now within or approaching compliance. However, a small number of AQMAs are expected to remain for some time due to the levels of exceedance and the absence of solutions that are deliverable in the short-term.

4.18 Nitrogen dioxide related air pollution problems are forecast to continue to improve, strongly influenced by improvements in national vehicle emission standards and the move towards electric vehicles. However, there is a growing body of evidence about the significant health implications of particulate matter (PM) on human health, with non-exhaust pipe emissions (including from brake dust, tyres and road surfaces) expected to continue and possibly increase due to increased weight of electric vehicles.

4.19 There is some national evidence that life satisfaction has declined in recent years and there is increased focus on mental health and well-being. The causes of mental health issues can be complex and multi-faceted and unlikely to be caused solely by the transport network. However, accessibility issues including access to green and blue spaces, air, noise and light pollution, and the amount and quality of time spent commuting are potential contributory factors.

4.20 Traffic noise, can also result in a number of health problems, including sleep disturbance, poorer work and education performance, hearing impairment and cardiovascular effects[15]. Noise Important Areas (NIAs) have been mapped by DEFRA for the motorway and 'A' road network, as well as rail network, at locations where noise could affect local residents. There are locations where there is a duty for highway authorities to investigate noise action plans for these issues, however there are limited resources available to consider these issues across the large number of NIAs[16]. Light pollution can also affect public health through disruption to sleep patterns.

Access to Employment and Services

4.21 Across parts of West Sussex, in particular rural areas, there are access issues for people without access to private transport that can result in social inequality. This can limit access to employment, education, service and leisure opportunities, and result in isolation and marginalisation, while the cost of public transport can also be a barrier to use, particularly those

[15] WHO: Environmental Noise Guidelines for the European Region (https://www.euro.who.int/en/health-topics/environment-and-health/noise/environmental-noise-guidelines-for-the-european-region accessed June 2021)

[16] Within West Sussex, 291 noise important areas have been identified by DEFRA through its Round 3 mapping, 23 of these which are related to rail noise, 65 of these have been identified in relation to the Strategic Road Network which are the responsibility of National Highways, and 204 of which are wholly or partially related to the local highway authority road network, most of which are wholly related.

on low incomes or seeking employment. This has been exacerbated by the closure of services such as banking and health facilities away from larger urban areas. The financial viability of rural bus services is often marginal and has been further impacted by the effects of the COVID-19 pandemic on travel behaviour and confidence. There is potential for transport network infrastructure and service investment to overcome these barriers to access by adopting new technology and service delivery models.

4.22 The extent to which increasing digital access, future technologies, and new models of rural transport provision will address or potentially exacerbate access issues is unclear. It is also unclear how future vehicle automation and the rise in e-scooters and e-bikes will influence levels of physical activity with potential implications for public health. There is a need to ensure that the transport network adapts to these emerging mobility solutions in ways that avoid potentially negative consequences.

Transport Network

Walking

4.23 The vast majority of the community will walk at some point during every journey as part of the door-to-door journey either as a primary mode of travel or in combination with another mode such as bus or train. Walking is important as a mode of transport in its own right, but also as a popular leisure activity, particularly in rural areas where the extensive PRoW network provides access to the countryside. Walking supports the objectives of this Plan because it is low cost, produces no emissions and provides health benefits to users, and can be a more efficient way of using highway space delivering economic benefits.

4.24 While walking is possible for many people, there are elements of walking infrastructure which do not meet all needs including those of some people with reduced mobility. Examples include where paths are absent, narrow, in poor condition, use inadequate materials, there are obstructions, or where crossing facilities are inadequate or absent, for example across major roads and railways.

4.25 The network of infrastructure in West Sussex for walking is extensive and generally provides a good standard of provision that could accommodate increased use in most areas without the need for costly and time-consuming capital investment. However, crossing roads and railways can be challenging in places where facilities are limited or non-existent, which can require long detours that make walking less convenient than it would otherwise be. There are opportunities to improve the connectivity and coherence of the network by improving crossing facilities for pedestrians either in isolation or in combination with facilities for other modes of transport such as cycling or horse-riding.

Cycling

4.26 Cycling supports the objectives of this Plan because it is low cost, produces no emissions while in use and provides health benefits to users, and can be a more efficient way of using highway space delivering economic benefits. The Government has recognised the importance of

active travel and this is likely to be a priority for investment alongside the creation of Active Travel England (ATE) that is intended to raise standards and promote best practice.

4.27 Cycling levels are currently low and not on an increasing trajectory in many places based on observed data at monitoring sites in West Sussex. Cycling collisions in West Sussex have also increased in recent years[17], in line with national trends, which is partly explained by an overall increase in cycling (as evidenced by national travel surveys) over the same period[18]. However, the majority of all journeys are only a short distance, so there is also significant potential to increase levels of cycling in West Sussex.

4.28 The cycle network in West Sussex is short with only 75km (47miles) of dedicated cycleways and the quality of existing infrastructure is quite variable[19]. Some routes are designated by Sustrans as part of the NCN but there are large gaps in routes such as NCN2 and NCN20 where cyclists are required to use roads or follow other routes that do not form part of the NCN due to the low standard of provision. Major roads and railways can also create severance issues by requiring long detours to access crossing facilities. There is potential to substantially raise the standard of cycling infrastructure in almost all areas of the County, but in most areas this either requires reallocation of existing road space, or acquisition of third party land, which can be challenging and costly issues to overcome.

4.29 The West Sussex Walking Cycling Strategy (which is being reviewed in parallel with development of this Plan) includes a priority ambition to create a network of high-quality routes that are typically aimed at cycling. Stakeholders have identified over 300 future cycling and walking schemes within the strategy, many of which are also included in LCWIPs prepared by LPAs. To provide good quality cycle infrastructure that attracts higher levels of usage, it will be necessary to overcome the challenges of retrofitting facilities into urban areas where highway land is limited and demonstrate value for money. This can require road space reallocation and/or impacts on vegetation or trees in the highway verge. This can create conflict within communities or local environmental impacts, so needs to be developed and delivered carefully to ensure there is sufficient stakeholder support and that impacts are minimised. Furthermore, the costs and affordability of schemes far outweighs the available resources to fund and deliver schemes so an approach to prioritisation is required that takes these factors into account.

Equestrianism

4.30 As a largely rural county, West Sussex is home to numerous equestrian centres and stables and their supporting ancillary businesses.

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[17] DfT: Reported road casualties, Great Britain (https://roadtraffic.dft.gov.uk/custom-downloads/road-accidents accessed March 2021)

[18] Department for Transport, Walking and Cycling Statistics, CW0301

[19] The West Sussex Cycle Journey Planner contains details of cycle routes in West Sussex: https://cyclejourneyplanner.westsussex.gov.uk/

Equestrianism is understood to form an important part of the local rural economy, estimated to be worth £4.7bn nationally in 2019[20]. The extent of the network for riding in West Sussex is limited due to safety and severance issues caused by the road and rail network. Opportunities to improve the network include improved crossings to link up the bridleway network, potentially in combination with upgrading existing PRoW to facilitate horse-riding and the provision of parking opportunities for horse trailer boxes. The Coastal Plain in particular has very limited suitable access for equestrians, with public rights of way (PRoW) mainly footpaths.

Micro-mobility

4.31 There are other forms of new and existing micro-mobility which use highway infrastructure with specific needs for consideration as part of the design of new and improved highway infrastructure. This includes mobility scooters which are important in facilitating access for people with reduced mobility, where the provision of footway space, obstructions and dropped kerbs are important issues.

4.32 Other existing and new forms of micro-mobility such as e-scooters, e-bikes, adapted bikes, and bike trailer/e-cargo bikes have a potentially significant role to play in facilitating short distance mobility in the future. They can be an important part of the first-mile/last-mile component of journeys, for example between home, public transport and work, and reduce dependence on car travel and associated emissions. They can also form part of low weight freight distribution in urban centres in the case of cargo bikes. The Government is undertaking trials of rental e-scooters in pilot areas across the country and is expected to consider legalisation on the future use of e-scooters which are currently illegal to use on public highways. However, e-scooters also present challenges in terms of highway design requirements and the sharing of space between users, so infrastructure may need to be adapted to accommodate their use in future.

Shared Transport Services

4.33 West Sussex is well served by bus services in many places with buses carrying more passengers than any other mode of transport, other than the private car. Although passenger numbers have increased around the County, the increase has been strongest in the Crawley area where investment has been made by the County Council and bus operator, Metrobus, to improve journey times, frequency, reliability and quality of services as part of the Crawley Fastway network. The Government has recognised the potential opportunity and has sought to increase bus patronage through the introduction of new powers in the Bus Act 2017, incentivising the establishment of Enhanced Partnerships with operators and the production of Bus Service Improvement Plans to coordinate investment.

[20] British Equestrian Trade Association's National Equestrian Survey 2019 https://www.beta-uk.org/pages/industry-information/market-information.php

4.34 Buses play an important part in many lives across West Sussex, facilitating hundreds of thousands of annual residents and visitor trips across the County and to neighbouring areas. They have a vital role in reducing social isolation for people who, without local bus or community bus services, would not be able to access important services. If these services cannot be accessed, then this would have a large impact on the local economy. Some towns such as Chichester and Bognor Regis, and Crawley and East Grinstead are located close to each other and do not benefit from direct rail services which offers significant potential to increase bus patronage.

4.35 The bus connections provided across the County linking the towns in the north, along the West Sussex coast, across rural West Sussex and to neighbouring areas play a key role in economic development and promoting accessibility, although high fares can a barrier to some customers. The availability of public transport services depends on where you live with rural areas having fewer options. As there are typically fewer passengers in rural areas, bus services are often not commercially viable so require financial support and if this cannot be sustained, this can result in service reductions that reduce the attractiveness and convenience of using the bus.

4.36 Bus services in rural areas also do not typically benefit from the latest developments in technology. The emerging concepts of Dynamic Demand Responsive Transport (DDRT) services, digital platforms and mobility hubs (i.e. interchanges between transport services) have potential to improve the attractiveness and efficiency of the network of 'shared transport services'. Community transport services are not currently viewed as accessible to all users and there are opportunities to improve access to community transport services as part of a wider approach to shared transport. There may be opportunities to work on these emerging concepts with neighbouring authorities where services operate across boundaries or we have shared objectives.

4.37 Modal shift from private cars to buses has the potential to reduce traffic congestion and improve journey time reliability, thereby reducing carbon emissions linked to climate change. Access to the bus network could be improved through investment in bus stops and complimentary schemes, e.g. walking, cycling and rail infrastructure to promote door-to-door sustainable transport journeys. However, congestion negatively affects punctuality and the efficiency of the bus network by increasing journey times. This increases operating costs which operators may pass onto passengers through higher fares which can be a barrier to accessibility. Problems are common at junctions on routes into and within urban areas. Providing priority for buses such as bus lanes in areas where congestion occurs would improve the attractiveness of bus services compared to private cars. However, congestion often occurs in places where land is constrained so it is necessary to overcome this challenge. This can require road space reallocation which is only likely to be justified and supported where buses already operate frequently or are expected to do so in the future.

4.38 The COVID-19 pandemic has dramatically reduced bus patronage due to Government advice, changes to working patterns and requirements for

social distancing. Bus patronage has begun to recover but remains considerably lower than before the pandemic due to the increase in home-working and commensurate reduction in commuting, some of which may be sustained. As a result, the long-term impacts on demand for bus travel are unclear. The impact of emerging new mobility solutions on the bus network and bus patronage is also unclear.

4.39 Well planned strategic development can play a role in providing additional or enhanced connectivity on the bus network which can bring numerous benefits including mitigating transport impacts. However, there is scope to improve coordination between land use and bus service planning such as integrating plans for bus services within wider development plans.

Rail

4.40 In 2019/20, the annual average Public Performance Measure (PPM) indicated that for Govia Thameslink Railway Southern Mainline & Coast and Gatwick Express, 87% and 74% of services respectively were punctual (i.e. arrival within 5 minutes of scheduled arrival time) at their final destination[21]. Performance on Southern Mainline & Coast, which includes most services in West Sussex, had largely recovered following a period of disruption due to industrial relations disputes in 2016/17 but performance on Gatwick Express had not recovered as strongly[22]. These levels of performance reflect that the railway infrastructure and service pattern had poor resilience to disruption due to the number of services operating on congested and, in some places, ageing infrastructure. Following the COVID-19 pandemic performance has improved substantially with the moving annual average PPM increasing from 85.2% to 89.2% from 2019-20 Quarter 3 to 2020-21 Quarter 3, reflecting the lower number of services operating which poses questions for planning future service capacity, while ensuring services remain punctual and reliable post-COVID-19.

4.41 East-west rail connectivity and West Coastway journey times between West Sussex towns and key economic hubs such as the Solent cities and Brighton & Hove is poor compared to radial rail routes to London. West Coastway services are limited by the capacity and capability of the infrastructure which is comprised of two tracks with limited passing opportunities. The current service pattern provides a mix of stopping and semi-fast services with journey times for long distance journeys that can be poor compared to travelling by road. There is scope to improve the infrastructure to allow a different mix of services; i.e. faster long-distance services but options are limited due the constraints of the environment and urban areas. Improvements to the bus network and other shared transport services in this corridor could help to support the strategic role of the railway by providing an alternative for shorter distance trips.

4.42 Prior to the COVID-19 pandemic, passenger numbers on the rail network were forecast to grow faster than the provision of additional capacity in

[21] ORR: Punctuality data at sub-operator level (accessed August 2020)

[22] ORR: Disaggregated train punctuality and reliability performance on the rail network – periodic by sub-operator – table 3.9

some areas, potentially leading to overcrowding or the need for other demand management measures. The COVID-19 pandemic has dramatically reduced rail patronage which has begun to recover but remains considerably lower than before the pandemic due to the reduction in commuting, some of which may be sustained. As a result, the long-term impacts on demand for rail travel are unclear which may reduce the need for some previously identified projects to enhance capacity. This also potentially provides an opportunity to redesign the service pattern to improve performance, connectivity and journey times on east-west services to support the County Council's economic, social and environmental objectives.

4.43 The majority of rail services in West Sussex are operated using modern rolling stock. However, some West Coastway services are operated using 3-car Class 313 units which have been in service for over 40 years and have limited on-board facilities (i.e. no toilets or air conditioning). New rolling stock would significantly improve the customer experience of travelling by rail and would also be expected to improve reliability but this is not currently funded.

4.44 With the exception of Gatwick Airport Station, most railway stations in West Sussex have scope to facilitate greater use based on their current configuration. There are access issues at some stations such as East Grinstead that need to be addressed to enable access by persons with reduced mobility. Furthermore, improving bus and active travel access to railway stations would promote door-to-door sustainable transport journeys.

4.45 Strategic development that is well located and can provide good connectivity to the rail network has potential to support sustainable travel behaviour. There are stakeholder aspirations to build new stations, particularly on the Arun Valley Line to improve access to the railway. As most rail lines in West Sussex currently operate at or close to capacity, introducing new stations could adversely affect performance or reduce services at existing stations. Therefore, the benefits of introducing new stations would need to outweigh these adverse impacts in order to be supported by the rail industry. Furthermore, there is potential for new stations to abstract passengers from the bus network in areas where these services compete.

4.46 The interfaces between rail and highway networks, including road, footways and PRoW level crossings can present safety, traffic congestion and severance and connectivity issues that can be difficult to resolve. As strategic development takes place and other opportunities arise, these opportunities should be explored to improve facilities for crossing the railway that may facilitate level crossing closures.

4.47 The Williams Rail Review has made recommendations about the future organisation and operation of the rail network in light of the impacts of

the COVID-19 pandemic[23]. The Government has announced that a new system will replace the train operator franchise system. New partnerships will be established between Great British Railways and local and regional government to give local leaders a greater say in how the railways are run in their area. This presents a potential opportunity to influence the way the railway is operated to ensure it aligns with the County Council's objectives but as railways cross local authority boundaries, objectives and priorities will need to be agreed with strategic partners such as neighbouring local transport authorities. TfSE provides a mechanism to undertake this work by working across local authority boundaries with strong links to Government and the rail industry.

Gatwick Airport Surface Access

4.48 Gatwick Airport is a major international gateway that attracts passengers and employees from a wide area. There is generally good sustainable transport infrastructure in place to support journeys to and from the airport and Gatwick Airport Station is currently being upgraded to support its role as a major international gateway. An Airport Surface Access Strategy supported by a Sustainable Transport Fund is in place to progress initiatives that will increase sustainable transport mode share. Between 2010 and 2019, there was success in increasing sustainable transport mode share for passengers and reducing car mode share, but some initiatives aimed at changing employee travel behaviour to the Airport have been less successful. This is important to this Plan as these journeys are more likely to use the local transport network and impact communities that share routes to the Airport.

4.49 The medium and long-term impacts of the COVID-19 pandemic on air travel are uncertain which could affect willingness to invest in surface access infrastructure. However, the operator expects that passenger numbers will return to pre-pandemic levels in the short term and continue to grow, even on a current one runway, two terminal configuration. The impact of this growth on routes to the Airport will need to be managed.

4.50 The operator also has ambitions to expand the Airport as outlined in the Gatwick Masterplan by bringing the northern emergency runway into regular use. This may increase demand for access and impact routes to the Airport above levels expected on the current one runway, two terminal configuration. As use of sustainable modes of transport typically have less impact on communities and the environment, initiatives will be needed that will increase use of these modes by passengers and employees.

Road Network

Network Classification

4.51 The County Council is responsible for ensuring that all infrastructure on the PRN is appropriate for access to 40 tonne vehicles. There is currently

[23] DfT: Great British Railways, The Williams-Shapps Plan for Rail (2021) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/987752/gbr-williams-shapps-plan-for-rail.pdf

a section of the PRN (A272 between A24 and Hampshire boundary) which is not suitable for the largest heavy goods traffic and is largely within the South Downs National Park which is protected, so limits the scope for improving the route. As PRN routes are now determined locally in consultation with neighbouring authorities, this presents an opportunity to reclassify this section of the PRN on environmental grounds.

Network Performance

4.52 Road network performance issues can result in delays to road users, casualties, pollution and rat-running on less suitable routes and peak-spreading; i.e. peak periods starting earlier and/or ending later. Delays can cause productivity issues for businesses due to lost time and missed appointments and poor connectivity to customers and labour. These issues can also make conditions for public transport and active travel modes less attractive.

4.53 The CSRN generally provides the fastest and most direct routes between key destinations where priority is given to vehicles. Parts of the CSRN are already under pressure in a number of places such as parts of the A23 and A27 trunk roads which are the responsibility of National Highways, as well as parts of the A22, A24, A259, A264, A272, A284 and A2300 which are the responsibility of the County Council. The Government has recognised this and through designation of a Major Road Network shown on figure 4 in Appendix C has sought to direct funding towards the most strategically important local roads.

4.54 East-west routes can be particularly problematic as in places there is a lower standard of provision such as the A27 at Arundel, Chichester, Worthing and Lancing. Some routes also fulfil multiple roles due to the confluence of strategic and local trips that can conflict. When traffic flow exceeds capacity and results in congestion, this provides a reduced level of service which can lead to traffic rerouting via less suitable routes or peak-spreading.

4.55 Traffic rerouting can be particularly contentious as less suitable routes are often through rural and residential areas where the increasing volumes of traffic can lead to community concerns about rat-running and vehicle speeds. Traffic rerouting can also lead to environmental issues such as the declaration of Air Quality Management Areas and noise problems including Noise Important Areas. If traffic grows in future, these existing issues may worsen and new issues may emerge on the network that require intervention.

4.56 The challenge is to improve the road network and reduce use of less suitable routes while protecting the environment and increasing sustainable transport mode share. Some of these corridors are also used by buses and active travel modes so improvements will also create opportunities to enhance infrastructure for these modes. Where improvements are proposed to trunk roads that are managed by National Highways, this will be subject to their decision-making and processes where the County Council is typically only a consultee.

4.57 On other roads that do not form part of the CSRN, there are competing pressures on road space from traffic, shared transport and active travel

modes. These roads are often required to perform a role in place-making as well as movement. The approach to improvement on these roads needs to take these multiple roles into account alongside the needs of shared transport and active travel modes.

4.58 Route choice can be influenced by signing and in-vehicle systems such as satellite navigation systems which provide information to users. In order to use these systems effectively, there is a need for real-time information about network performance to be collected through intelligent transport systems. This information can also be used to help design network improvements.

Managing Improvements

4.59 Major schemes are under construction or planned for A27, A259 Littlehampton (between A284 and A280), A284, A2300 and A29 (between Fontwell and Lidsey) that will provide strategic benefits to the operation of the network and sustainable transport network enhancements in addition to mitigating the impacts of development. Major schemes will affect the distribution of traffic on the network increasing traffic flow in some areas and reducing it in others which can create issues that also need to be managed. Local plans also identify junction improvements and sustainable transport network enhancements at various locations to mitigate the cumulative impacts of development where they are severe. In most cases, these schemes are only expected to mitigate the impacts of development rather than address pre-existing issues. This presents potential opportunities to address pre-existing issues by supplementing developer contributions to deliver strategic improvements. This requires funding to be coordinated so depends on financial planning and management of the programme at least in the medium term (i.e. 5-year horizon).

Road Safety

4.60 In recent years the number of people killed or seriously injured on roads each year in West Sussex has remained fairly stable which is consistent with the national trend. However, this is not consistent with achieving 'vision zero' (i.e. the philosophy that no one will be killed or seriously injured on roads) and the County Council's current target for road safety which is to reduce the number of people killed or seriously injured (KSIs) by 25% by 2020 (this target will be reviewed in 2022) measured against the national baseline average between 2005-09. Actual or perceived road safety issues can be a deterrent to using active travel modes. Stakeholders also express concerns about vehicle speeds in rural and urban areas.

4.61 To address road safety and reduce casualties in line with our targets, there is a need for a step change in our approach. The Safe System philosophy brings a public health type focus on road safety where efforts should primarily be made to address the harm that is being done. At the centre of this is human fallibility and the fact that errors at present can lead to unintentional death and injury. Movement should not be at the expense of human wellbeing. The Road Safety Framework will undergo its mid-term review in 2022 and place greater emphasis on expanding and

embedding the Safe Systems approach to road safety and traffic management in all highway and transportation activities in West Sussex.

Future Mobility

4.62 At present vehicles in West Sussex largely rely on fossil fuel propulsion but the Government has confirmed that the sale of petrol and diesel cars will be banned from 2030. Electric vehicles are expected to have less environmental impact than those they will replace. Although the take up of electric vehicles and use of charging infrastructure is increasing, it is not currently doing so fast enough to achieve the Government's objectives. The County Council's Electric Vehicle Strategy is intended to address this issue by increasing the availability of charging infrastructure in places where on-street parking is prevalent and significant progress is being made to achieve this. However, there is uncertainty about the pace of change and future consumer behaviour. Therefore, this Plan will need to be flexible to adapt to changes in consumer behaviour (including other technologies, such as hydrogen, if they emerge) and travel choices over time.

4.63 The emergence of Connected and Autonomous Vehicles may start to influence transport network operations during the life of this Plan. At this point, it is very unclear what technological changes may be required to transport network infrastructure to facilitate their use and in what timescales. This could also potentially offer opportunities to generate income; therefore, the County Council will continue to monitor progress in this area to position itself to take advantage of opportunities if they arise.

Freight

4.64 Congestion causes delays for freight movements which negatively affects business productivity and can lead to rerouting on less suitable routes. The Lorry Route Network which includes the CSRN plus some other A class roads identifies the most suitable routes for goods vehicles. Infrastructure on some of these routes, particularly in rural areas, is not well suited for goods vehicle use due to size restrictions that can lead to concerns from local communities. Environmental constraints such as South Downs National Park and AONBs limit options for improvement.

4.65 Stakeholders have expressed concern about increasing goods vehicle use of roads such as rural lanes and those in residential areas that are not considered suitable for goods vehicles. The causes of this problem are difficult to isolate, as origins and destinations are not typically known and there are many different possible reasons for route choices. However, the move towards e-commerce has changed consumer habits resulting in more home deliveries and a need for some goods vehicles to use these roads to access their destination. It is also likely that some vehicles are seeking to avoid congestion on other routes, but it is difficult to identify these vehicles.

4.66 As road freight relies heavily on use of fossil fuels, the road freight sector is expected to take longer to decarbonise than the rest of the vehicle fleet. This may require investment in new technology such as hydrogen which has some potential to benefit shared transport.

5. Vision and Objectives

5.1 A vision and objectives have been developed to inform the development of the Plan. The vision and objectives will guide decisions that we make about how to maintain, manage and improve the transport network to deliver the Plan.

5.2 The vision sets out what we want the transport network to look like in 2036. It is intended to be ambitious but achievable if the Plan is implemented as intended.

5.3 The objectives are those matters that will need to be achieved over the Plan period if the vision is to be realised. The objectives have been used to develop the thematic and area transport strategies contained within the Plan.

5.4 Successful delivery of the vision and objectives will require a step change in the level of investment and the type of interventions that will be delivered. This will depend on having the funding and resources to deliver the Plan and support from local stakeholders for the interventions as they come forward. The thematic and area strategies and implementation mechanisms are intended to set out how this will be achieved to realise a range of environmental, societal and economic outcomes.

Vision

5.5 Our vision is:

"A West Sussex transport network in 2036 that works for communities in the Coastal West Sussex, Gatwick Diamond and Rural West Sussex economic areas by helping to address the spatial economic challenges of the County, level up the coastal economy and provide access to employment and services countywide.

The transport network will be on a pathway to achieve net zero carbon emissions by 2050 through more local living, increased use of electric vehicles and reduced use of fossil-fuels. It will also be safer, more efficient and resilient overall with more walking, cycling and use of public or shared transport and less congestion on major routes that connect West Sussex towns with Gatwick Airport, London and nearby cities.

The transport network will connect communities and allow residents to live healthy lifestyles with good access to the West Sussex coast and the protected South Downs, High Weald and Chichester Harbour.

Active travel modes, public or shared transport will be attractive options in built up areas and between towns, and rural communities will have access to the services they need.

Transport impacts such as air pollution, noise and rat-running on adjacent communities and the environment will be minimised to protect a quality of life that reflects the characteristics of the County."

5.6 In developing the Plan, three different potential strategic approaches were considered and appraised. They were called 'Local Living', 'Connecting Economic Centres' and 'Protecting Places and Communities'. Of the three overarching strategies, a version of the 'Local Living' strategy was

amended to improve its performance for the economy, and this was selected and has informed the development of the vision and objectives.

5.7 The original Local Living approach included a focus on reducing the need to travel by car and prioritising active travel and shared transport interventions in areas of short distance trips such as larger settlements. As a result, the expected outcomes are a significant decrease in fossil fuel car mode share (replaced to some extent with electric vehicles) as well as a decrease in trip length and frequency. As a result of interventions, the active travel and bus mode shares are expected to increase.

5.8 The modified Local Living approach additionally incorporated targeted measures to improve some strategic road and rail and urban bus infrastructure linked to planned strategic growth. This improved performance of the strategy against the economic objectives without substantially changing the impacts on the environmental and social objectives.

Objectives

5.9 The objectives relate to the economic, social, environmental and transport issues identified in our evidence base. The objectives are numbered for ease of reference, but the numbering does not imply an order of priority.

Prosperous West Sussex

5.10 The transport network in West Sussex is important to the economy because it enables businesses to access goods, labour and customers, and employees to access education, training and jobs. It also enables leisure and tourism visits and can also be an end itself by facilitating leisure activities such as walking, cycling and horse-riding.

5.11 The performance and connectivity of the transport network can impact business productivity, access to employment and services, inward investment and the visitor economy, as well as impact the health and wellbeing of society.

5.12 Economic performance can also be affected by conditions in town and village centres. Traffic conditions and the quality of public realm impact on the attractiveness of these places to work and visit. As most town and village centres are dependent on retail which is going through a transition, there is a need to reinvent town centres to be places fit for the future that support the achievement of our vision.

5.13 As outlined in section 4, the performance of the West Sussex economy is spatially variable. Planned development is expected to take place over the plan period in and adjacent to existing settlements and there are regeneration initiatives in some coastal towns which could increase commuting if suitable jobs are not created at a similar rate to housing delivery. The COVID-19 pandemic has had a significant adverse impact on the West Sussex economy, particularly on the leisure and tourism sectors and areas that are dependent on industries that have been particularly badly affected, for example Gatwick Airport.

5.14 Our objectives for a prosperous West Sussex are:

- Objective 1: Support sustainable economic prosperity across the County by enabling recovery from the COVID-19 pandemic and levelling-up underperforming areas.
- Objective 2: Support development and regeneration plans across the County by enabling local living and through strategic investments, particularly in sustainable modes of transport, at the right time and place to ensure the transport network is fit for the future.

Healthy West Sussex

5.15 The transport network in West Sussex is important to communities because it enables people to access employment, education and services. Travel choices can also affect public health through physical activity, mental wellbeing or exposure to transport-related pollution.

5.16 Over reliance on motorised vehicles can lead to a range of physical and mental health issues such as obesity because of less physical exercise, less time spent outdoors and less connection with the local community and nature.

5.17 As outlined in section 4, there is a growing and ageing population in West Sussex. In rural areas, there is a risk of isolation as traditional forms of passenger transport are not always commercially viable. Transport infrastructure can cause severance and accessibility issues that can be particularly acute for people with disabilities or those without access to private transport, which as well as being an issue itself, can also result in unhealthy lifestyles. Use of the transport network creates air quality, noise and light pollution that can have adverse public health and well-being impacts.

5.18 Our objectives for a healthy West Sussex are:

- Objective 3: Accommodate the needs of an ageing population that is expected to grow most in existing settlements in the Gatwick Diamond and Coastal West Sussex areas.
- Objective 4: Avoid where possible and minimise air, noise and light pollution from use of the transport network to minimise impacts on public health and well-being.
- Objective 5: Ensure the transport network allows residents and visitors (including people with disabilities) to live healthy lifestyles with good access to green and blue spaces, particularly the West Sussex coast and the protected South Downs, High Weald and Chichester Harbour.
- Objective 6: Ensure rural communities can live locally by accessing local services or nearby towns.

Protected West Sussex

5.19 Use of the transport network is currently heavily reliant on fossil fuelled vehicles which contribute to global environmental issues such as climate change. The transport network has important impacts on the environment because building new infrastructure requires use of materials that result in carbon emissions during production and construction.

5.20 New or improved infrastructure can have impacts on the soil, landscape, built and historic environment in which it is located, and a large area of West Sussex is protected due to the quality of the environment. Furthermore, use of the transport network can result in noise, air, light and water pollution.

5.21 Improvement of the transport network can also have impacts on ecology. In order to help in reversing species decline, habitat degradation and fragmentation, transport improvement needs to take opportunities to enhance biodiversity.

5.22 As outlined in section 4, travel patterns in West Sussex are dominated by use of vehicles that use fossil fuel propulsion which contribute to climate change. This Plan sets out strategies that will help to decarbonise travel behaviour. These will be supported by a carbon emission reduction target that will be set by the time of the first Action Plan review and used to guide decision-making.

5.23 Usage of the transport network has negative impacts (e.g. air, noise and light pollution) on the local natural environment, including protected areas. The available options for improving the transport network may be limited due to the quality of the environment as a large area of the County is protected for the landscape, ecological, or historic characteristics, some of which are of international importance. The transport network in West Sussex is vulnerable to the weather, particularly increased extreme events due to climate change.

5.24 Our objectives for a protected West Sussex are:

- Objective 7: Enable the transport network to achieve net zero carbon emissions by 2050.
- Objective 8: Avoid where possible and minimise the impacts of the transport network on natural resources and on the natural, built and historic environment.
- Objective 9: Improve the transport network whilst conserving and enhancing biodiversity.
- Objective 10: To monitor and adapt infrastructure to the effects of climate change.

Connected West Sussex

5.25 Travel behaviour in West Sussex is dominated by car travel and electric vehicles make up a very small proportion of the total number of vehicles. There are capacity pinchpoints on the road network where demand for travel exceeds capacity at certain times leading to congestion, pollution, rat-running and road safety issues. Road safety is not improving in line with the Council's vision and rerouting traffic is leading to various community concerns. Transport network improvements need to support our objectives for a prosperous, healthy and protected West Sussex, including decarbonisation of the transport network and travel behaviour.

5.26 Gatwick Airport is a major international gateway that attracts passengers and employees from a wide area which can have adverse impacts on communities that share routes to the Airport. The COVID-19 pandemic

has dramatically reduced use of Gatwick Airport, but it is anticipated that passengers will return to the Airport in the near future. There are potential opportunities and consequential impacts on nearby communities from planned or potential major projects such as Gatwick Airport Station and Gatwick Airport expansion.

5.27 Rail services on some West Coastway and Arun Valley Line routes are slow and rolling stock quality on the West Coastway can be poor. Planning for future capacity on services to London is an issue. Rail network, service and rolling stock enhancements are identified to address these issues, but in most cases these are not fully funded. COVID-19 has had a dramatic impact on travel behaviour. It is unclear what the long-term impacts will be on rail demand. There are potential opportunities and consequential impacts on nearby communities from planned or potential major projects such as the Brighton Main Line upgrades.

5.28 Bus network punctuality and efficiency is an issue due to congestion on routes into and within urban areas. The availability of local services and transport services depends on where you live with rural areas having fewer options and financial viability challenges. The cost of public transport can also be a barrier to accessibility, particularly for those who do not have access to, or choose not to use, a car.

5.29 In order to achieve our vision, it is vital that we accelerate the shift to active travel. The footway network is extensive but there are only 75km (47miles) of cycleway in West Sussex, the quality of routes is variable and severance can be particularly problematic for some users; e.g. equestrians. The cost of new infrastructure is likely to outweigh the available funding for the foreseeable future and reallocating road space can result in conflict between different road users.

5.30 The strategy set out in this Plan will be supported by short term targets to increase the length of cycleway in West Sussex and improve road safety.

5.31 Our objectives for a connected West Sussex are:

- Objective 11: Reduce the need to travel by car by enabling local living.
- Objective 12: Improve the efficiency of the County Strategic Road Network, particularly east-west routes including the A27, through targeted improvements to address congestion, pollution, rat-running and road safety issues on strategic or local routes.
- Objective 13: Minimise the impacts on the transport network of surface access to Gatwick Airport by passengers and employees and ensure transport network improvements take the needs of other users and communities that share these routes into account.
- Objective 14: Ensure the rail network is an attractive option for travel between West Sussex towns and to surrounding cities by improving the speed and quality of West Coastway and Arun Valley Line services, capacity on the Brighton Main Line and integration with other modes of transport.
- Objective 15: Improve bus network efficiency and integration by reducing the effects of congestion into and within West Sussex towns, particularly where there are gaps in the rail network.

- Objective 16: Ensure the bus network is customer focussed and integrated with other modes of transport to provide an attractive option for journeys to nearby towns.
- Objective 17: Extend and improve the network of active travel facilities so it is coherent and high quality enough to make active travel an attractive, safe option for short distance trips and to transport interchanges.

6. Thematic Transport Strategies & Priorities

6.1 The following sections set out our thematic transport strategies alongside our short, medium and long-term priorities for active travel, shared transport services, railways, roads and access to Gatwick Airport which require a consistent, strategic approach.

6.2 Our economic, social and environmental objectives are cross-cutting and have all been taken into account in the development of our thematic strategies. In combination the thematic strategies set out our approach to achieving our objectives for a prosperous, healthy, protected and connected West Sussex. A matrix showing the contribution of the thematic strategies to delivering the objectives is included as Appendix D.

6.3 In some cases, potential conflicts between thematic strategies have been identified (e.g. active travel and road network). The approach to dealing with potential conflicts is to clearly identify priorities and, where appropriate, criteria that will provide a consistent basis for decision-making taking account of all relevant considerations.

Active Travel Strategy

6.4 The relevant transport objectives are:

- Objective 11: Reduce the need to travel by car by enabling local living.
- Objective 17: Extend and improve the network of active travel facilities so it is coherent and high quality enough to make active travel an attractive, safe option for short distance trips and to transport interchanges.

6.5 Our active travel strategy is intended to address the needs of pedestrians, cyclists, equestrians, persons of reduced mobility and micro-mobility solutions which are emerging and may become more prominent during the life of the Plan. As most journeys in West Sussex are short distance, the strategy aims to increase use of active travel modes, particularly cycling and other emerging micro-mobility solutions by helping to overcome the infrastructure and skills barriers to using active travel modes.

6.6 In delivering the active travel strategy, there is a particular need to ensure that designs are inclusive of all users. This is because some interventions such as shared space can be problematic for some users and there is a need to cater for a range of abilities to overcome barriers to active travel. Where necessary, assessments of the impacts on potential users and safety will be used to inform the design of infrastructure improvements.

6.7 The strategy is to improve and develop a coherent network of active travel facilities that connects places of importance such as transport hubs, shops, schools and community facilities. LCWIPs that have been developed by partners provide a strong basis for the selection of priority routes. However, there is a need to work with partners to identify priority routes and scheme objectives before undertaking feasibility and design work prior to their implementation. In selecting priority routes, consideration must be given to the role of the route (i.e. strategic or local), the thematic and area transport strategies in this Plan and other factors that will affect the deliverability of schemes. Where necessary, this will involve working with strategic partners such as National Highways and neighbouring local transport authorities on schemes that cross boundaries.

6.8 In order to achieve our objectives, active travel infrastructure needs to be high quality and where appropriate, segregate cyclists from other users. In areas where there are constraints, compromises are likely to be required so, where necessary, these will be assessed against the scheme objectives and guided by technical assessments on safety and levels of service.

6.9 This strategy will be delivered alongside the Highway Infrastructure Asset Management Plan that sets out how the County Council will maintain highway assets including active travel infrastructure. As assets are renewed, opportunities to take advantage of technological advances; for example, in traffic signal technology, will be explored to ensure renewals programmes also help to deliver the vision and objectives of this Plan.

6.10 The strategy is also to work with partners as opportunities arise to deliver skills training and promotion initiatives, focusing on places where infrastructure improvements are planned or being implemented. These initiatives will draw on successful initiatives in areas with similar characteristics and aim to increase use of active travel modes by promoting active travel and its many benefits.

6.11 Our approach to active travel is to:

- Provide new and improved pedestrian infrastructure, including expanding the utility of existing PROW, where this helps to address barriers and connect routes for short distance trips, taking account of planned development;
- Work with LPAs and other partners to prioritise and implement new or improved cycle routes, taking account of the potential increase in demand (including due to micro-mobility solutions), network function, conditions for users and the impacts of planned development where these are feasible and deliverable, and there is support from local stakeholders;
- Work with LPAs and developers to identify active travel improvements that will ensure planned developments are well connected to the active travel network;
- Identify priority locations on major roads and railway lines to improve the provision of crossing facilities;

- Consult early on active infrastructure proposals in line with our active travel fund consultation plan to understand community support and incorporate views on the design of infrastructure;
- Provide good quality active travel infrastructure based on latest design guidance wherever possible and viable and ensure designs are guided by assessments against scheme objectives, safety and levels of service;
- Take account of impacts on public health, fear of crime and personal safety;
- Monitor long term usage trends at selected locations and assess scheme benefits for at least 5 years after opening;
- Consider traffic management measures (e.g. expanded pedestrianisation, school streets, filtered streets, low traffic neighbourhoods and quiet lanes) where these are feasible and deliverable, and there is support from local stakeholders;
- Deliver behaviour change or promotional initiatives targeted at places and communities where infrastructure improvements are planned or being implemented;
- Support the introduction of bike hire schemes where these are developed in partnership and either development or market-led;
- Ensure designs are inclusive of all users (including those with disabilities) and that the needs of active travel modes are considered within the design of all road network improvements;
- Ensure all interventions are designed to cater for climate change impacts, including an increase in extreme weather events by incorporating measures such as shading and take opportunities to reduce flood risk and improve network resilience, considering non-hard engineering measures where practicable;
- Minimise the carbon impacts of construction by using low carbon construction techniques and materials;
- Avoid where possible and mitigate the negative effects of major improvements on the environment (including green infrastructure and flood risk) and communities; and
- Ensure major improvements provide a net gain in biodiversity.

Short term (2022-27) active travel priorities

- West Sussex strategic cycle route schemes
- Major road enhancements with active travel infrastructure – including A27 Arundel Bypass, A27 Worthing & Lancing, A2300, A259 Littlehampton corridor, A259 Littlehampton-Bognor Regis, A259 Chichester-Bognor Regis corridor, A284 Lyminster Bypass and A29 realignment
- Strategic Transport Investment Programme active travel infrastructure including Adur cycling corridors, Haywards Heath – Burgess Hill cycle route, and Burgess Hill green circle network improvements

- Priority LCWIP/active travel network improvements in Adur and Worthing, Arun, Chichester, Crawley, Horsham and Mid Sussex, and for the South Downs National Park
- Identify priority locations for new and improved active travel crossings of main roads and railways, e.g. A27 Adur and Worthing

Medium term (2027-32) active travel priorities

- A259 Shoreham-Brighton cycle scheme (timing dependent on development)
- Major road enhancements with active travel infrastructure – including A24 corridor, A264 corridor and Crawley Western Link Road
- Strategic Transport Investment Programme active travel infrastructure including Worthing north – south cycling corridors
- Delivery of a rolling programme of active travel infrastructure schemes to be identified through the West Sussex Walking and Cycling Strategy and LCWIP priorities
- Implementation of new active travel crossings of major roads and railways

Longer term (2032-2036) active travel priorities

- Delivery of a rolling programme of active travel infrastructure schemes to be identified through the West Sussex Walking and Cycling Strategy and LCWIPs

Shared Transport Strategy

6.12 The relevant transport objectives are:

- Objective 11: Reduce the need to travel by car by enabling local living.
- Objective 15: Improve bus network efficiency and integration by reducing the effects of congestion into and within West Sussex towns, particularly where there are gaps in the rail network.
- Objective 16: Ensure the bus network is customer focussed and integrated with other modes of transport to provide an attractive option for journeys to nearby towns.

6.13 Our shared transport strategy is intended to set out our approach to buses, community transport and mobility solutions which are emerging and may become more prominent during the life of the Plan. As most journeys in West Sussex are short distance, the strategy aims to make shared transport services a more attractive choice by providing a high quality of service. Shared transport also plays an important role in meeting the needs of those who do not have access to, or do not wish to travel by, car.

6.14 As shared transport services develop, they need to be integrated and provide an attractive alternative to other modes of transport, taking the needs of all users into account. We will achieve this by working in partnership with operators to explore new models of service delivery and identify and deliver improvements to services, infrastructure and the customer interface that will improve network efficiency, integration and

customer experience. In selecting infrastructure improvements, consideration must be given to the role of the route (i.e. strategic or local), the thematic and area transport strategies in this Plan and other factors that will affect the deliverability of schemes.

6.15 This strategy will be supported by the other thematic strategies in this Plan, for example, through use of parking and traffic management measures as part our road network strategy to ensure shared transport is an attractive option. All major road network improvements will be multi-modal and provide facilities to address local challenges for shared transport services, taking account of likely future changes to usage and service provision. In areas where major road network improvements are being delivered, opportunities will be taken to ensure highway capacity gains provide benefits for shared transport services, for example by providing bus priority measures on nearby routes.

6.16 If opportunities arise, we will support partners to renew vehicle fleets, improve on-bus systems, deliver promotional initiatives and explore new fares and ticketing arrangements and concessionary fares schemes. These initiatives will draw on successful initiatives in areas with similar characteristics and aim to increase use of shared transport modes by promoting their many benefits.

6.17 Our approach to shared transport is to:

- Develop enhanced partnerships with operators focused around shared objectives in the short term and fundamentally review these arrangements to ensure they are working in the medium term;
- Deliver the Bus Service Improvements Plan in the short term and review this annually;
- Consider access to the bus network when prioritising walking and cycling investment options;
- Improve the coverage of shared transport services, including earlier morning/later evening services, later evening leisure services, and Sunday services where this will provide an attractive option for journeys to nearby towns;
- Consider the case for new or improved shared transport services and explore funding opportunities where these will support local connectivity, including access to service hubs and leisure access, as well as access between urban areas in West Sussex and other regional economic centres;
- Procure a digital platform to co-exist alongside traditional media that enables new mobility services such as Dynamic Demand Responsive Transport to be accessed alongside community transport services to improve access to shared transport;
- Consider opportunities for providing bus priority measures (e.g. bus lanes or bus vehicle detection at signal controlled junctions) on corridors into and within urban areas, employment sites and transport hubs or as part of major road improvements. Priority will be given to locations where congestion occurs and services operate frequently or

are expected to do so in the future, subject to considering impacts on all road users, funding, value for money and deliverability;

- Consider new or improved bus stop infrastructure such as real time passenger information screens where there is key stakeholder support and develop the concept of mobility hubs in locations where there is potential to provide interchange between different mobility services and modes of transport;
- Ensure designs are inclusive of all users, including those with disabilities;
- Take account of impacts on public health, fear of crime and personal safety;
- Consider service quality including ticketing arrangements and environmental impacts such as vehicle emissions, alongside cost and other considerations when procuring bus services;
- Ensure all interventions are designed to cater for climate change impacts, including and increase in extreme weather events by incorporating measures such as shading and take opportunities to reduce flood risk and improve network resilience, considering non-hard engineering measures where practicable;
- Work in partnership with local stakeholders to explore opportunities to upgrade bus stations and depots where these form part of area-wide regeneration or redevelopment plans;
- Work in partnership to support the development of zero and low emission technologies (e.g. clean hydrogen) where these are market-led;
- Work in partnership with bus operators to explore opportunities to simplify ticketing, for example through the introduction of tap-on tap-off payment and on-bus systems such as message screens and audible stop announcements;
- Explore new concessionary fares schemes for young people;
- Minimise the carbon impacts of construction by using low carbon construction techniques and materials;
- Avoid where possible or mitigate the negative effects of major improvements on the environment (including green infrastructure and flood risk) and communities; and
- Ensure major improvements provide a net gain in biodiversity.

Short term (2022-27) shared transport priorities

- Establish Enhanced Partnerships with bus operators
- Implement the Bus Service Improvement Plan (BSIP) and review annually
- Introduce bus priority measures as part of major road schemes for; A259 Bognor Regis to Littlehampton, A259 Chichester to Bognor Regis
- Develop an on-demand flexible shared transport services (DDRT) digital platform for rural and hard to reach areas

- Develop with partners the strategic case for improvements to the bus network
- Implement service coverage improvements - earlier morning/later evening services and weekend services
- Work with bus operators, TfSE and other partners to accelerate the transition to zero emission vehicles in West Sussex as part of the government's wider commitment to introduce 4,000 zero-emission buses
- Mobility hubs in eight locations
- Significantly increase the number of Real Time Passenger Information (RTPI) displays at bus stops across West Sussex and upgrade bus RTPI displays at rail stations Bus stop/access enhancements
- Concessionary fares scheme for young people
- Ticketing and on-bus systems

Medium term (2027-32) shared transport priorities

- Review enhanced partnership arrangements
- Review Bus Service Improvement Plans
- Develop the strategic case for improvements to the bus network
- Develop bus priority improvements required to accommodate strategic development plans in Crawley, Horsham, Worthing and Chichester
- Introduce bus priority measures as part of major schemes for; A264; A22 and A24 corridors
- Crawley bus station upgrade

Long term (2032-2036) shared transport priorities

- Crawley Fastway extension

Rail Strategy

6.18 The relevant transport objectives are:

- Objective 11: Reduce the need to travel by car by enabling local living.
- Objective 13: Minimise the impacts on the transport network of surface access to Gatwick Airport by passengers and employees and ensure transport network improvements take the needs of other users and communities that share these routes into account.
- Objective 14: Ensure the rail network is an attractive option for travel between West Sussex towns and to surrounding cities by improving the speed and quality of West Coastway and Arun Valley Line services, capacity on the Brighton Main Line and integration with other modes of transport.

6.19 Our rail strategy is intended to set out our approach to the railway but as the County Council does not operate railways and they also impact areas outside the County, delivery of the strategy will depend on partnership working. It is anticipated that some activities such as changes to ticketing arrangements will be addressed at a national level. The strategy sets out

an initial basis on which the County Council will engage in matters relating to railways, usually working jointly with other local transport authorities through TfSE to ensure there is a single voice on rail investment priorities in the region.

6.20 In order to support decarbonisation of the transport system, the rail network will need to be an attractive option for medium and long-distance journeys and integrated with other modes of transport. Therefore, our strategy is to identify priorities that will help the rail network to perform a strategic role in the transport network, providing connectivity between towns in West Sussex and other regional economic centres. The provision of off-peak services is vital to ensuring the rail network can be relied upon for leisure trips. The strategy is also to improve existing interchange facilities and access to stations to support access to the rail network, in particular ensuring that designs are inclusive.

6.21 Our approach to rail is to:

- Promote improvements to the speed and quality of rail services on the West Coastway, Arun Valley Line and North Downs Lines, and the capacity of services on the Brighton Main Line, in parallel with improvements to other modes of transport where necessary;
- Promote improved rolling stock quality, including the replacement of Sussex Coast class 313s with modern rolling stock;
- Prioritise good quality walking, cycling and shared transport connections from strategic development to existing rail stations, particularly where there is no clear strategic case to add new stations to the network;
- Promote improvements to the coverage of rail services, including earlier morning/later evening services to Gatwick Airport, later evening and Sunday leisure services;
- Consider with the rail industry and partners the case for potential re-orientation of rail services to better support local connectivity between towns in West Sussex and other regional economic centres if the reduction in demand for travel to London resulting from the COVID-19 pandemic is sustained over time;
- Prioritise improvements to existing lines and services unless there is a clear strategic case for new or reopened lines;
- Use funding opportunities to improve rail interchange facilities, including integration with other modes of transport (including taxis) and provide complimentary schemes to improve access to existing or new stations which would need to be development or industry-led;
- Ensure designs are inclusive of all users, including those with disabilities;
- Take account of impacts on public health, fear of crime and personal safety;
- Explore opportunities with Network Rail and strategic developments to resolve level crossing issues e.g. alternative road and PRoW bridge

crossings while maintaining local connectivity for all users, including active travel modes;

- Ensure all interventions are designed to cater for climate change, including and increase in extreme weather events by incorporating measures such as shading and take opportunities to reduce flood risk and improve network resilience, considering non-hard engineering measures where practicable;
- Avoid where possible and mitigate the negative effects of major improvements on the environment (including green infrastructure and flood risk) and communities; and
- Ensure major improvements provide a net gain in biodiversity.

Short term (2022-27) rail priorities

- Work with strategic partners to agree priorities for rail investment
- Gatwick Airport Station Upgrade (under construction)
- Develop the strategic case for improvements to the speed and quality of West Coastway and Arun Valley Line services
- Support strategic partners to make the case for improvements to services between Gatwick Airport and the Thames Valley and Kent
- Promote replacement of ageing rolling stock
- Promote earlier morning/later evening services
- Support station improvement schemes already identified for example, in Crawley and Burgess Hill, and identify new schemes.
- Identify priority locations for new and improved active travel crossings of railways, for example in Shoreham/Southwick, at Barnham and East Grinstead.

Medium term (2027-32) rail priorities

- Rolling stock replacement
- West Coastway infrastructure upgrades
- Implementation of new active travel crossings of railways

Long term (2032-2036) rail priorities

- West Coastway service pattern
- Brighton Main Line upgrade

Access to Gatwick Airport Strategy

6.22 The relevant transport objective is:

- Objective 13: Minimise the impacts on the transport network of surface access to Gatwick Airport by passengers and employees and ensure transport network improvements take the needs of other users and communities that share these routes into account.

6.23 Our access to Gatwick Airport Strategy is intended to set out our approach but as the Airport is privately operated, delivery of the strategy will

depend on working with the operator and other partners. This sets out an initial basis on which the County Council will engage in matters relating to access to Gatwick Airport. This includes supporting initiatives that will increase sustainable transport mode share for passengers and employees and ensure community needs are taken into account. This overall strategy will apply to growth in passengers and employees on the current airport configuration and any future plans for expansion should they come forward.

6.24 Our approach to access to Gatwick Airport is to:

- Support initiatives that will increase sustainable transport mode share for passengers and employees;
- Support initiatives that will reduce kiss and fly trips (i.e. being dropped off and picked up at the airport);
- Manage the local road network near the Airport in ways that prioritise shared transport and manage impacts on communities;
- Use on-street parking and other traffic management techniques to discourage unauthorised drop offs and pick-ups;
- Promote improvements to the coverage of rail services, including earlier morning/later evening services to Gatwick Airport;
- Promote improvements to the speed and quality of rail services on the West Coastway, Arun Valley Line and North Downs Lines, and the capacity of services on the Brighton Main Line, to access Gatwick Airport;
- Consider with the rail industry and partners the case for potential re-orientation of rail services to better support local connectivity between towns in West Sussex and other regional economic centres and Gatwick Airport if the reduction in demand for travel to London due to the COVID-19 pandemic is sustained over time;
- Ensure the impacts of future growth on other users and communities are taken into account;
- Support connectivity improvements particularly on east-west sustainable transport routes between Gatwick, Kent and the Thames Valley;
- Subject to future planning decisions about the scale and location of development, explore the role of a multi-modal Crawley Western Link Road to support economic and housing growth;
- Ensure all interventions are designed to cater for climate change, including an increase in extreme weather events by incorporating measures such as shading and take opportunities to reduce flood risk and improve network resilience, considering non-hard engineering measures where practicable;
- Avoid where possible or mitigate the negative effects of major improvements on the environment (including green infrastructure and flood risk) and communities; and
- Ensure major improvements provide a net gain in biodiversity.

Road Network Strategy

6.25 The relevant transport objectives are:

- Objective 11: Reduce the need to travel by car by enabling local living.
- Objective 12: Improve the efficiency of the CSRN, particularly east-west routes including the A27, through targeted improvements to address congestion, pollution, rat-running and road safety issues on strategic or local routes.
- Objective 15: Improve bus network efficiency and integration by reducing the effects of congestion into and within West Sussex towns, particularly where there are gaps in the rail network.
- Objective 17: Extend and improve the network of active travel facilities so it is coherent and high quality enough to make active travel an attractive, safe option for short distance trips and to transport interchanges.

6.26 Travel behaviour in West Sussex is currently dominated by fossil fuel propelled car travel and in recent years, car ownership has been increasing. In the absence of viable and attractive alternatives, which are not currently available everywhere, this is expected to be the case over the Plan period, so we must plan for this. However, this does not mean planning for unmanaged traffic growth as this could exacerbate other challenges. It means planning positively to minimise traffic growth through a 'vision-led' approach to design rather than designing to cater for forecast traffic growth or overproviding capacity which would have negative impacts on carbon emissions. It also means planning positively to reduce the impacts of vehicle use and using demand management measures; e.g. parking controls, in constrained areas.

6.27 Our strategy is to plan for increased use of electric vehicles(or through use of other zero emission technologies, such as hydrogen, if they emerge) and for use of sustainable transport modes to grow at a faster rate than traffic growth. This will be achieved by delivering multi-modal schemes that ensure sustainable modes of transport are an attractive and safe option. As use of sustainable modes of transport increases, this will reduce the need for further road improvements as they generally require less space.

6.28 Our strategy is to improve the efficiency and safety of the most strategically important local roads and provide facilities for active travel and shared transport services. On local roads that do not form part of the CSRN we will give priority to active travel and shared transport modes and using demand management measures in towns to encourage their use. The aim is to reduce vehicular use of less suitable urban and rural routes to reduce impacts on the environment and communities. If major road network improvements are being made, our approach is to ensure they enhance the environment, including Biodiversity Net Gain.

6.29 Management of the road network will follow the principles of the safer systems approach which apply the vulnerable user hierarchy and be supported by behavioural initiatives to encourage safer and more sustainable travel behaviour.

6.30 Delivery of the strategy will depend on funding opportunities and where development takes place. In some cases, priorities will be delivered by third parties such as National Highways or developers. This can present challenges for delivery as there is a need align objectives, so this Plan is intended to set out a strategic approach on which to base the County Council's involvement in developing third party schemes.

6.31 This strategy will be delivered alongside the Highway Infrastructure Asset Management Plan that sets out how the County Council will maintain the road network. Maintaining existing assets is important for all road users as described in Appendix B. As assets are renewed, opportunities to take advantage of technological advances; for example, in traffic signal technology, will be explored to ensure renewals programmes also help to deliver the vision and objectives of this Plan. Our approach for the road network is to:

- Improve our understanding of network performance, resilience and safety issues through monitoring and analysis;
- Avoid new road building where possible and only build new roads where they are development-led or necessary to achieve our wider objectives;
- Improve existing roads as a first preference and prioritise the CSRN for major improvements, working with National Highways on trunk roads;
- Avoid using undeveloped land where possible and make best use of land, resources and energy through choice of materials and by minimising waste and reusing materials wherever possible;
- Use lane rental (i.e. charging promoters for undertaking works on busy highways), on-street parking controls and other network management techniques to prioritise and encourage use of shared transport and active travel modes and discourage rat-running via less suitable routes away from the CSRN and manage speed;
- Manage parking through use of controlled parking zones to keep traffic moving and deliver the thematic and area transport strategies in this Plan;
- Ensure designs are inclusive of all users, including those with disabilities, taking account of the hierarchy of users which places the most vulnerable at the top;
- Ensure infrastructure follows design guidance or standards wherever possible and viable and ensure designs are guided by assessments against scheme objectives, safety and levels of service;
- Take account of impacts on public health, fear of crime and personal safety;
- Support the introduction of car clubs in controlled parking zones and where development takes place;
- Enhance the public realm where this will support local living on the proviso that the impacts on alternative routes and all road users are acceptable and there is support from local stakeholders;

- Take a safer systems approach to managing risk and design for all users (including motorcyclists), ensuring that street design contributes to reducing the fear or crime;
- Deliver improvements at capacity pinchpoints and road safety hotspots on the CSRN and elsewhere to mitigate development impacts;
- Avoid where possible and mitigate the negative effects of major improvements on the air, water, landscape, built and historic environment (including designated sites and green infrastructure) and communities;
- Design major improvements to provide a net gain in biodiversity;
- Deliver actions identified in Air Quality and Noise Action Plans where these exist;
- Through a third-party provider, facilitate the introduction of a network of electric vehicle charging infrastructure rolled out using a data-led approach, initially prioritising areas with greatest reliance on on-street parking followed by other areas as outlined in the Electric Vehicle Strategy;
- Work in partnership to support the development of zero and low emission technologies (e.g. clean hydrogen) where these are market-led;
- Increase the use of Highways Technology (intelligent transport systems tools) and explore the potential of new, emerging, smart technology;
- Support other strategies by using latest technology in traffic data collection to monitor before and after changes in modal shift and travel patterns;
- Use behavioural initiatives to manage road safety issues;
- Ensure major improvements and technology upgrades also provide facilities for public transport and active travel modes wherever possible and viable and take opportunities for renewable energy capture where practicable;
- Ensure all road improvements that will have significant drainage impacts incorporate Sustainable Urban Drainage Systems (SuDS) and are designed to cater for future climate change (including extreme weather and temperatures) by considering this in choosing materials and take opportunities to reduce flood risk and improve network resilience, considering non-hard engineering measures where practicable;
- Minimise the carbon impacts of construction by using low carbon construction techniques and materials where these are available and viable;
- Deliver major infrastructure improvements in the short and medium term and reduce investment in the long term in line with the planned shift to sustainable modes of transport; and

- Work in partnership to support the introduction of freight consolidation centres where these are market-led.

Short term (2022-27) road priorities

- A27 Arundel bypass (in the Government's Roads Investment Strategy 2020-25)
- A27 Chichester improvements (development-led)
- A27 Worthing & Lancing improvements (in the Government's Roads Investment Strategy 2020-25)
- A29 Realignment (development-led) (phase 1 construction due to commence in 2022)
- A259 Littlehampton corridor enhancement (under construction)
- A259 Bognor Regis to Littlehampton corridor enhancement package
- A259 Chichester to Bognor Regis corridor enhancement package
- A284 Lyminster bypass (development-led) (construction due to commence in 2022)
- A2011 Crawley junction improvements
- A2300 corridor enhancement (under construction)
- Air Quality and Noise Action Plan measures
- Electric vehicle charging infrastructure in areas reliant on on-street parking

Medium term (2027-2032) road priorities

- A27 Chichester major scheme (not currently programmed)
- A22 East Grinstead junction improvements
- A23 Crawley to Burgess Hill junction improvements
- A24 corridor enhancement package
- A264 corridor enhancement package
- Crawley Western Link Road (development-led)

Long term (2032-36) road priorities

- Potential local highway capacity improvements (subject to need)

7. Area Transport Strategies

7.1 The following section includes the area transport strategies for each of the eight local planning areas in West Sussex. The South Downs National Park includes sections of Adur, Arun, Chichester, Horsham, Mid Sussex districts and Worthing Borough. The spatial and transport context for each District and Borough relates to the area within the administrative boundary but the area transport strategies and priorities in these areas exclude those in the South Downs National Park (SDNP) which has its own key issues, area transport strategy and priorities.

Area Transport Strategy for Adur

Spatial Context

7.2 Adur is the smallest district in West Sussex; it covers an area of only sixteen square miles, 66% of which is countryside including an area of the SDNP. It is home to the communities of Sompting, Lancing, Shoreham-by-Sea, Southwick and Fishersgate. The River Adur bisects the District and acts a natural barrier to east-west movement.

7.3 The total population of Adur District in 2018 was estimated at 63,900. This accounted for 7.4% of the West Sussex population, the least populated district of the County. The population is forecast to increase by 7.9% to 68,900 by 2043. For the 65+ age group the forecast population is expected to increase from 15,000 to 20,300 (35.7%) over this period[24] as the overall trend is towards an ageing population in the District.

7.4 There are some significantly deprived areas with five of the wards within Adur being ranked within the top twenty 'most deprived' wards in the County. Unemployment in the District is also higher than the West Sussex average[25].

7.5 The economy in Adur District is characterised by public sector jobs, which makes up 24% of all jobs in the area, followed by retail (22%), financial services (17%) and manufacturing (13%).

7.6 The Adur Local Plan 2017 sets the strategic development and land-use priorities for Adur (outside of the South Downs National Park) up to 2032 and contains the policies against which development management decisions within that area will be made. The Local Plan seeks to deliver a minimum of 3,718 dwellings between 2011 and 2032 which includes strategic developments at New Monks Farm and the section of Shoreham Harbour within Adur District.

7.7 Shoreham-by-Sea is the largest town within the District. Part of Shoreham Harbour has been designated a growth area and eco-quarter which includes parts of Southwick, Fishersgate and Portslade. Alongside Shoreham Airport, the Harbour is expected to benefit from substantial development and regeneration during the lifetime of the Plan as outlined in the Shoreham Harbour Joint Area Action Plan which covers part of Adur and Brighton & Hove.

Transport Context

7.8 Transport is a major feature within the District. Two of the County's strategic roads pass through the District; the A27 and A283 (north of A27). The A27 trunk road passes through Sompting and Lancing in the north of the District as a dual carriageway with lowered speed limits. There is a mix of roundabout and signal-controlled junctions, serving the

[24] WSCC: West Sussex Life (http://www.westsussex.gov.uk/westsussexlife accessed May 2021)

[25] AWC: Population Statistics (accessed June 2021)

area. The A259 runs as the High Street directly through Shoreham Town Centre.

7.9 There are also four railway stations on the West Coastway route (two of which offer direct links to London and Gatwick Airport) and several level crossings in Adur.

7.10 There is one airport (Brighton City Airport) and one international harbour (Shoreham Port). These provide key economic and commercial opportunities to the wider area and allow further transportation links for business and services.

7.11 E-bikes are expected to operate an on-street bike hire scheme in the town, which is being extended from Brighton into Adur by 2023.

7.12 National Cycle Network routes 2 and 223 (Downs Link) provide long distance active travel connections between the District and neighbouring areas. There are two crossings of the River Adur that both provide traffic-free facilities for pedestrians and cyclists to cross the river.

Key Issues

7.13 Travel behaviour in Adur is dominated by car travel and public transport. Active travel use is limited, reflecting the limited and disjointed infrastructure. The current key transport issues for Adur are:

- Congestion at peak times on the A27, A259 and A270 which leads to rat-running on less suitable routes;
- Level crossings in Shoreham, Southwick and Lancing cause congestion and poor local air quality;
- Traffic-related air quality management areas on Shoreham High Street and in Southwick;
- HGV access to Worthing and Shoreham Port is via roads that are also residential;
- The current cycle network does not meet user needs as it is disjointed and there is limited space and segregation including NCN2 which is largely on-road and follows an indirect route through the District;
- Bus journey times are slow at peak times due to congestion on routes such as the A259;
- Rail services to Brighton and the Solent cities can be slow and some trains lack modern facilities; and
- Severance caused by the A27 and West Coastway Line.

7.14 DfT undertook a feasibility study in 2013 which identified a need for improvements to the A27 at Worthing and Lancing. In 2017, National Highways consulted on a package of improvements to increase the capacity of several key junctions along the route, but these were not supported by the majority of consultees. The A27 Worthing and Lancing scheme is part of the Government's Roads Investment Strategy (2020-2025) and options are expected to be developed before consultation with stakeholders in the short term.

7.15 In the future, once development identified in the Adur Local Plan 2017 is complete, it is anticipated that some of the current transport issues will worsen if background traffic also grows as forecast. A new Local Plan is also being prepared that is likely to alter demands on the transport network. In line with the Adur Local Plan 2017 and Shoreham Harbour JAAP, interventions are needed in Adur that will reduce car travel at peak times. If such interventions are not delivered or are not successful, then congestion at the following locations on the highway network is likely to worsen and measures may be required to protect vulnerable users and keep traffic moving:

- A259/A283 Norfolk Bridge junction
- A259/A2025 Lancing Beach Green junction
- A27/A283 Shoreham flyover junction
- A27/A293 Hangleton junction (in Brighton & Hove)
- A27/A2025 Grinstead Lane junction

Transport Strategy for Adur (excluding area in SDNP)

7.16 A key element of our transport strategy for the Adur area is to improve the performance of the A27 in Lancing so it can perform its function as a strategic route. This means improvements that help to keep traffic moving in the short term, while plans are developed for more substantive improvements to come forward in the medium term that will reduce community severance and collisions, and ensure capacity is more closely matched to demand. Major A27 improvements will need to be designed to ensure that road capacity is not overprovided to avoid inducing traffic growth and take opportunities to enhance active travel and shared transport facilities. Alongside these improvements, our strategy will be to introduce interventions in Adur, particularly on local roads, to lock in the benefits of capacity gains on the strategic road network; for example, by allocating local road space to shared transport and/or active travel.

7.17 In order to facilitate the shift to electric vehicles and improve air quality, we will initially facilitate the introduction of on-street EV charging infrastructure in Shoreham where our analysis indicates that communities are most reliant on on-street parking, followed by other areas. In areas where there are AQMA's such as Shoreham and Southwick, we will work with partners to explore potential solutions (i.e. engineering or behavioural initiatives) and deliver Air Quality Action Plans.

7.18 Our strategy is to enable local living by making active travel increasingly realistic and attractive for short distance east-west journeys by increasing space for active travel on the important A259 corridor as development comes forward. In the medium and long term, we will work in partnership to identify and develop additional priorities in the LCWIP . We will also explore the potential for improved crossings of the A27 and West Coastway to address community severance and improve access to the South Downs and coast.

7.19 As opportunities to provide dedicated space for shared transport are limited by land availability, our strategy is to use traffic signal technology

to give priority to shared transport where services operate frequently such as the A259 corridor.

7.20 Our strategy for improving transport network infrastructure will be supported by our approach to managing the road network through use of on-street parking and traffic management techniques to manage demand and improve air quality in Shoreham. This will be supported by the use of behavioural initiatives to tackle inappropriate use of unsuitable routes.

7.21 In the long term once infrastructure for active travel and shared transport has been improved to cater for short distance trips, we will work with strategic partners to reconfigure West Coastway services to deliver faster rail services to Brighton and the Solent cities.

Short term (2022-27) priorities for the Adur area (excluding SDNP)

- On-street electric vehicle charging infrastructure in Shoreham
- A27 Worthing and Lancing improvements (including active travel facilities)
- Air Quality Action Plan measures in Shoreham and Southwick

Medium term (2027-32) priorities for the Adur area (excluding SDNP)

- A259 Shoreham to Brighton cycle route (timing dependent on development)
- A27 Worthing and Lancing major scheme
- Active travel crossings of A27 and West Coastway
- Lancing and Sompting cycle routes
- Active travel route priorities
- On-street electric vehicle charging infrastructure in remaining areas

Long term (2032-36) priorities for the Adur area (excluding SDNP)

- Active travel route priorities
- Reconfigured West Coastway service
- Potential local highway improvements (subject to need)

Area Transport Strategy for Arun

Spatial Context

7.22 Arun covers an area of approximately 85 square miles along the south coast stretching from Pagham Harbour in the west to Ferring and Angmering in the east. In the south lie the communities of Bognor Regis and Littlehampton, and in the north of the District lies the historic settlement of Arundel and a range of villages and hamlets across a large rural area. Part of the District is also part of the SDNP. The River Arun passes to the West of Littlehampton, through Arundel and up towards Pulborough, this acts as a natural barrier to east-west movement.

7.23 Arun is the most populated district in the County, with a population estimated to be 159,800 in 2018 (18.6% of the county population). This is forecast to increase by 17.8% to 188,300 by 2043. For the 65+ age

group the forecast population is expected to increase from 45,900 to 68,700 (49.7%) over this period as the overall trend is towards an ageing population in the District. Arun has the highest proportion of people 65+ in West Sussex at 28.7% of the district population[26]. At the same time the proportion of people aged under 65 is declining which may present challenges to sustain a transport network that also meets the needs of these users.

7.24 The Arun Local Plan was adopted in 2018 and allocates sites for housing and commercial developments across the District with a minimum of 20,000 dwellings expected to be provided over the plan period from 2011 to 2031 alongside new infrastructure. The strategic developments are located at Pagham, West Bersted, North Littlehampton, Barnham, Eastergate and Westergate (BEW), Fontwell, Clymping, Ford, Littlehampton West Bank, Angmering and Enterprise Bognor Regis economic development site. This is a step change in the level of development in the District which presents a range of challenges and potential opportunities.

7.25 The economy of the area is characterised by poor economic performance compared with the county as a whole, which is seen through lower economic activity and employment rates, lower levels of earnings of residents and of those working in the area, and a higher claimant count. Nevertheless, there are ambitious and developing plans for town centre regeneration in Bognor Regis and Littlehampton. Bognor Regis is home to Butlins and a recently expanded campus which forms part of the University of Chichester.

7.26 Arun District has diverse socio-economic characteristics, with some very deprived wards contrasting with some that are very affluent.

Transport Context

7.27 Travel behaviour in Arun District is dominated by private car trips. Lower levels of car use are observed in communities near the town centres, whilst those in the rural wards look to the car as the only realistic means of getting around due to the lack of realistic and high quality alternatives, particularly in the north of the District.

7.28 There is a strong travel to work relationship between Bognor Regis and Chichester, and there are also significant daily flows between these places for other purposes such as education and healthcare.

7.29 The A27 and A259 provide the main east-west road routes. The A29, A280 and A284 provide north-south connections between the A27 and A259 that provide options for rerouting some journeys.

7.30 There are six railways stations: Bognor Regis, Barnham, Ford, Littlehampton, Arundel and Angmering. Journey times to London have improved over recent years, with introduction of Thameslink services from Littlehampton. There is no direct rail link between Bognor Regis and Chichester or between Arundel and West Coastway stations towards

[26] WSCC: West Sussex Life (http://www.westsussex.gov.uk/westsussexlife accessed May 2021)

Brighton which presents opportunities for shared transport and active travel modes to cater for journeys between some of these towns.

7.31 The local bus network is extensive and largely operated on a commercial basis by Stagecoach. Some services, particularly those that connect the surrounding rural areas are financially supported by the County Council. Buses have some priority in Bognor Regis town centre.

7.32 The cycle network in Arun is limited, with most routes being available in the urban coastal areas. There are very few cycle routes in the northern parts of the district due to narrow rural roads and varying terrain. The National Cycle Network route 2 provides connections along the A259 and coastal towns but there are gaps between Bognor Regis and Chichester, and Littlehampton and Worthing.

Key Issues

7.33 Travel behaviour in Arun is mostly dominated by private car and public transport use with limited use of active travel away from the urban areas of Littlehampton and Bognor Regis. The current key transport issues in the Arun area are:

- Congestion on the A27 at Arundel and Fontwell during peak periods;
- Congestion on the A29 and A259;
- Poor connectivity between Littlehampton and Bognor Regis and the A27;
- Level crossings at Wick, Woodgate and Ford which create congestion and poor air quality;
- Rat running on less suitable routes causing concerns over safety;
- Bus journey times are slow at peak times due to congestion on routes such as the A259;
- Rail services to London, Brighton and the Solent cities can be slow, and some trains lack modern facilities;
- No direct rail services between Bognor Regis and Chichester, or the Arun Valley and parts of the West Coastway route;
- The current cycle network does not meet user needs and it is limited in extent and disjointed between Bognor Regis, Littlehampton, Arundel and adjoining areas such as Chichester and Worthing where there are gaps in NCN2; and
- The A27 and railway lines cause community severance, particularly for active travel modes.

7.34 National Highways are currently developing the A27 Arundel Bypass major project. In October 2020, National Highways announced their preferred route for the scheme which will now be developed and subject to formal consultation in 2022. As a Nationally Significant Infrastructure Project, the scheme requires a Development Consent Order from the Secretary of State. The County Council will engage in the DCO process to ensure that concerns about impacts of the scheme on communities and the environment influence the design of the scheme, including a high-quality package of mitigation measures.

7.35 The Arun Local Plan includes a requirement for major highway improvements to mitigate planned development and a series of junction improvements. Some of these improvements are also needed to mitigate the impacts of development in Chichester District. The timing of these improvements will depend on the timing of development so are subject to commercial decisions by developers. The schemes identified are:

- A27 Fontwell (east and west) junction improvements
- A27 Whyke Road junction improvements
- A27 Bognor Road junction improvements
- A29 Realignment (phases 1 and 2)
- A284 Lyminster Bypass (southern section under construction, northern section due to commence construction in 2022)
- A259 Littlehampton improvements (under construction)
- A259 junction improvements between Bognor Regis and Littlehampton
- A259 improvements between Chichester and Bognor Regis
- Fitzalan Link Road (under construction)

7.36 In the future, it is anticipated that some of the current transport issues will worsen if background traffic also grows as forecast. Therefore, interventions are needed in Arun that will reduce car travel at peak times. If such interventions are not delivered or are not successful, then congestion at the following locations on the highway network is likely to worsen and measures may be required to protect vulnerable users and keep traffic moving:

- A259/A29 junction improvements
- A27/A280 Clapham junction improvements

Transport Strategy for Arun (excluding area in SDNP)

7.37 Our transport strategy for the Arun area is to improve the performance of the A27 at Arundel and Chichester so it can perform its function as a strategic route by ensuring capacity is more closely matched to demand and poor road safety and community severance issues are addressed. At Arundel, this includes the A27 Arundel Bypass. Elsewhere on the A27, including at Chichester which is important for access to/from Bognor Regis, in the absence of central Government funded major schemes, the strategy is to bring forward junction improvements that help to keep traffic moving in the short term as planned development takes place. In parallel we will work with partners to develop plans and build consensus for a major A27 improvement to come forward through the Government's Roads Investment Strategy in the medium term.

7.38 The A29, A259 and A284 will be upgraded including infrastructure for active travel and shared transport modes as planned strategic developments takes place. These will improve network efficiency and address road safety issues on the A259 and provide alternative routes for the A29 and A284 that avoid level crossings to transform connectivity to Bognor Regis and Littlehampton. All major road improvements in Arun will need to be designed to ensure that road capacity is not overprovided

to avoid inducing traffic growth and take opportunities to enhance active travel and shared transport facilities. Alongside these improvements, our strategy will be to introduce interventions, particularly on the local road network in Arun to lock in the benefits of capacity gains on the strategic road network; for example, by allocating local road space to shared transport and/or active travel.

7.39 In order to facilitate the shift to electric vehicles, we will initially facilitate the introduction of on-street charging infrastructure in Littlehampton where communities rely on on-street parking, followed by other areas.

7.40 Our strategy is to enable local living by making active travel increasingly realistic and attractive for short distance journeys within existing communities and between towns such as Chichester and Bognor Regis and the six villages area, particularly on corridors where strategic development is planned. In the medium and long term we will work in partnership to identify and develop additional priorities identified in Arun District Council's Active Travel Study.

7.41 Where land is available or can be acquired and shared transport services operate frequently such as on parts of the A259, our strategy will be to dedicate space for shared transport priority, particularly between Bognor Regis and Chichester. This infrastructure will support new frequent shared transport services which could include fixed bus routes or potentially a DDRT service connecting Littlehampton and Bognor Regis with Chichester. This will link various planned strategic developments as they come forward, subject to commercial considerations by the operators.

7.42 Our strategy for improving the transport network infrastructure will be supported by our approach to managing the road network through use of on-street parking and traffic management techniques in Bognor Regis, Littlehampton, Arundel and Barnham to manage demand. This will also be supported by the use of behavioural initiatives to tackle inappropriate traffic speeds and use of unsuitable rural routes.

7.43 In the long term once infrastructure for active travel and shared transport has been improved to cater for short distance trips, we will work with strategic partners to reconfigure West Coastway services to deliver faster rail services from Barnham to Brighton and the Solent cities. This will be supported by interchange improvements at Ford and Barnham linked to strategic development and we will also explore the potential for further rail crossings in the District.

Short term (2022-27) priorities for the Arun area (excluding SDNP)

- A27 Arundel Bypass (including active travel facilities)
- A29 Realignment phase 1 (including active travel facilities)
- A284 Lyminster Bypass (including active travel facilities)
- A259 Littlehampton corridor enhancement (including active travel facilities)
- A259 Bognor Regis to Littlehampton corridor enhancement (including shared transport facilities)

- DDRT and other shared transport services between Chichester, Havant, Bognor Regis and Littlehampton (connecting strategic developments in Chichester and Arun Districts)
- On-street electric vehicle charging infrastructure in Littlehampton

Medium term (2027-32) priorities for the Arun area (excluding SDNP)

- A259 Chichester to Bognor Regis corridor enhancement (including shared transport and active travel facilities)
- A29 Realignment phase 2 (including active travel facilities) (development led)
- Priorities identified in the Arun Active Travel Study
- On-street electric vehicle charging infrastructure in remaining areas

Long term (2032-36) priorities for the Arun area (excluding SDNP)

- Priorities identified in the Arun Active Travel Study
- Reconfigured West Coastway service
- Potential local highway improvements (subject to need)

Area Transport Strategy for Chichester

Spatial Context

7.44 Chichester District is the largest in the County, with coastal areas including Chichester Harbour AONB and the Manhood Peninsula to the south as well as a large rural area of the district, most of which is within the South Downs National Park. The District has borders with Hampshire and Surrey.

7.45 The City of Chichester is the County town of West Sussex. The City attracts large numbers of visitors each year, due to its historical and national importance. The centre has long been an established area for shopping and a centre for business. The City is also becoming a thriving place for students with a popular University and College, attracting students from across the country.

7.46 Chichester District has a mixed economy, with Chichester City having strengths in the tourism, business, educational and public sectors, while northern parts of the District have strengths in self-employed professionals and small businesses. On the Manhood Peninsula, there are strengths in the tourism, agriculture and horticulture sectors.

7.47 The population of the District in 2018 was estimated to be 120,800 which is forecast to increase by 13.5% to 137,100 by 2043. Some areas within the District, such as Tangmere have a high proportion of young families, however most of the area has a higher proportion of older residents. For the 65+ age group the forecast population is expected to increase from

32,500 to 49,700 (52.6%) over the period 2018-2043[27] as the overall trend is towards an ageing population in the District.

7.48 The Chichester Local Plan seeks to balance the economic, social and environmental dimensions of sustainable development of the District. The Local Plan allocates land for housing and commercial development up to 2029 and identifies infrastructure improvements that are needed to support sustainable development of the area. Sites are allocated to accommodate 7,388 dwellings between 2012 and 2029. The Chichester Local Plan is being reviewed in parallel with the development of this Plan and will be taken into account as appropriate.

Transport Context

7.49 The A27 is the only major route for traffic going east-west. The A27 severs the City from the surrounding hinterland including the Manhood Peninsula and Chichester Harbour to the south.

7.50 The West Coastway provides rail connections to Portsmouth/Southampton and Brighton via Worthing and London via the Arun Valley Line. Rail services on the West Coastway are typically slow and uncompetitive with travelling by private car.

7.51 The local bus network is fairly extensive around the District, with Chichester bus station provides services to neighbouring areas and districts, including the Manhood Peninsula. However, bus services in some rural areas are not frequent and do not provide an attractive alternative to travelling by private car. Also, where congestion occurs on bus routes such as at the A27 junctions, buses currently have very little or no priority over general traffic.

7.52 There are a number of cycle facilities within the City, with National Cycle Network Route 2 providing a connection to the west. Routes such as Salterns Way and Centurion Way provide access to areas to the south and north of the City. However, there are gaps in the cycle network and users tell us that the infrastructure does not always meet user needs.

7.53 Chichester City centre has a large pedestrianised area within the historic walls of the City. There are aspirations for further pedestrianisation but potential for conflict with other modes of transport, particularly buses.

Key Issues

7.54 Travel behaviour in Chichester is a mix of private car, public transport and some active travel use but private car usage is dominant. Public transport and active travel modes are not seen as viable options for many journeys due to the relatively low cost of city centre parking, compared to public transport fares. The current key transport issues in Chichester are:

- Congestion on the A27 and A259 during peak periods (not limited to AM and PM peak hours);

[27] WSCC: West Sussex Life (http://www.westsussex.gov.uk/westsussexlife accessed May 2021)

- Congestion on A285 Westhampnett Road and A286 Chichester Ring Road which can interact with the operation of the A27;
- Limited routes to the Manhood Peninsula;
- Further tourist congestion during peak summer periods;
- Rat-running on residential and rural routes to avoid congestion on the A27;
- Level crossing delays at Southgate, Basin Road & Whyke Road;
- Traffic related air quality management areas within the District in Chichester and Midhurst;
- Bus journeys times are slow at peak times due to congestion;
- Rail services to Brighton and the Solent cities can be slow and some trains lack modern facilities;
- Limited opportunities to use active travel modes from Manhood Peninsula and Midhurst;
- Community severance caused by A27 and the West Coastway; and
- Gaps in the cycle network.

7.55 In 2016, National Highways consulted on five options for improving the A27 at Chichester. However, none of the options were well supported and the scheme was cancelled. In 2020, the Government included the A27 Chichester scheme in its Roads Investment Strategy 2020-25 (RIS2) as a scheme to be developed for delivery in a future RIS, subject to affordability, value for money and deliverability.

7.56 The Chichester Local Plan includes a requirement to improve six junctions on the A27 Chichester Bypass to mitigate the impacts of development. Some of these improvements are also needed to mitigate the impacts of development in Arun District. The timing of these improvements will depend on the timing of development so is subject to commercial decisions by developers. The junctions to be improved are:

- A27/A286 Portfield junction (recently completed)
- A27/Oving Road junction (planned for construction early 2022)
- A27/A259 Fishbourne Road junction
- A27/A286 Stockbridge Road junction
- A27/B2145 Whyke Road junction
- A27/A259 Bognor Road junction

7.57 In the future, it is anticipated that some of the current transport issues will worsen if background traffic also grows as forecast. Therefore, interventions are needed in Chichester that will reduce car travel at peak times. If such interventions are not delivered or are not successful, then congestion at the following locations on the highway network is likely to worsen and measures may be required to protect vulnerable users and keep traffic moving:

- A285 Westhampnett Road

- A286 Chichester City ring road
- A286 Birdham Road
- A259 Bognor Road

Transport Strategy for Chichester (excluding area in SDNP)

7.58 Our transport strategy for the Chichester area in the absence of a central Government funded major scheme for A27 Chichester is to improve the performance of the A27 through junction improvements at Chichester that help to keep traffic moving in the short term as planned development takes place. We will revisit this strategy in light of the Chichester Local Plan review and make changes, if necessary, in response to planning decisions. In parallel we will work with partners to develop plans and build consensus for a major A27 improvement to come forward through the Government's Roads Investment Strategy in the medium term that will separate conflicting strategic and local trips, reduce collisions and ensure capacity is more closely matched to demand. Major A27 improvements will need to be designed to ensure that road capacity is not overprovided to avoid inducing traffic growth and take opportunities to enhance active travel and shared transport facilities. Alongside these improvements, our strategy will be to introduce interventions, particularly on the local road network in Chichester to lock in the benefits of capacity gains on the strategic road network; for example, by allocating local road space to shared transport and/or active travel.

7.59 The A259 between Chichester and Bognor Regis will be improved including infrastructure for active travel and shared transport modes as planned strategic developments take place to improve network efficiency. Where opportunities to provide dedicated space for shared transport are limited such as routes to the Manhood Peninsula and Bourne area, our strategy is to use traffic signal technology to give priority to shared transport where services operate frequently. This infrastructure could support the introduction of a DDRT service connecting rural communities with the City, linking various planned strategic developments as they come forward, subject to commercial considerations by the operators.

7.60 In order to facilitate the shift to electric vehicles and address the current air quality issues in Chichester, we will initially facilitate the introduction of on-street charging infrastructure in the City where communities rely on on-street parking followed by other areas. In areas where there are AQMA's such as Chichester City, we will work with partners to explore potential solutions (i.e. engineering or behavioural initiatives) and deliver Air Quality Action Plans.

7.61 Our strategy is to enable local living by making active travel increasingly realistic and attractive for short distance journeys within existing communities and between towns such as Chichester, Selsey, Bognor Regis, and the Bourne and six villages areas, particularly on corridors where strategic development is planned, including in neighbouring districts. On routes within existing urban areas we will increase space for active travel in the A286 Chichester ring road and A285 Westhampnett Road corridors. In the medium and long term we will work in partnership to develop additional priorities identified in Chichester LCWIP and explore

the potential for improved crossings of the A27 and the West Coastway Line to address community severance and improve access to the South Downs and coast.

7.62 Our strategy for improving the transport network infrastructure will be supported by our approach to managing the road network through use of on-street parking and traffic management techniques to manage demand in Chichester City. This will also be supported by behavioural initiatives to tackle inappropriate traffic speeds and use of unsuitable rural routes.

7.63 In the long term once infrastructure for active travel and shared transport has been improved to cater for short distance trips we will work with strategic partners to reconfigure West Coastway services to deliver faster rail services between Chichester, Worthing, Brighton and the Solent cities.

Short term (2022-27) priorities for the Chichester area (excluding SDNP)

- On-street electric vehicle charging infrastructure in Chichester
- A27 junction mitigation measures
- A259 National Cycle Network Route 2/'Chemroute' improvements
- A259 Chichester to Bognor Regis corridor enhancement (including shared transport and active travel facilities)
- A286 Chichester City ring road improvements (including active travel facilities)
- Strategic Transport Investment Programme Oving Road cycle route
- A285 Westhampnett Road improvements (including shared transport and active travel facilities)
- DDRT and other shared transport services between Chichester, Havant, Bognor Regis and Littlehampton (connecting strategic developments in Chichester and Arun Districts, and Havant Borough)
- Air Quality Action Plan measures in Chichester

Medium term (2027-32) priorities for the Chichester area (excluding SDNP)

- A27 Chichester major scheme
- Active travel route priorities
- On-street electric vehicle charging infrastructure in remaining areas

Long term (2032-36) priorities for the Chichester area (excluding SDNP)

- Active travel route priorities
- Reconfigured West Coastway services
- Potential local highway improvements (subject to need)

Area Transport Strategy for Crawley

Spatial Context

7.64 Crawley town sits to the south of Gatwick Airport which is wholly included within the Borough boundary. Crawley developed slowly as a market town, serving the surrounding villages in the Weald. Crawley was designated as a new town in 1947. The town now contains 14 residential neighbourhoods radiating out from the core of the old market town and separated by main roads and railway lines.

7.65 Crawley Borough's population is estimated to grow by 6.4% to 119,600 by 2043 from 112,400 in 2018, when it accounted for 13.1% of the West Sussex population. Crawley Borough has a higher proportion of younger people compared to other West Sussex districts, with 21.9% of people aged up to 15, while 13.4% of the population are aged 65 or above. For the 65+ age group the forecast population is expected to increase from 15,000 in 2018 to 23,600 (57.0%) over the period 2018-2043[28] as the overall trend is towards an ageing population in the District. Whilst there are some affluent areas there are also areas which are among the most deprived in the County.

7.66 Economically, the town has developed into the main centre of industry and employment between London and the south coast and is at the centre of the 'Gatwick Diamond'. The Manor Royal Business District is the biggest business park in the region and one of the south east's premier mixed activity employment hubs. Covering an area of 240 hectares and home to over 600 businesses and 30,000 jobs, its proximity to Gatwick Airport and good transport links means it has a range of airport-related services such as logistics, catering, distribution and warehousing. Crawley is also a major retail centre for the surrounding area with over 300 shops in the town centre on the high street focused in and around Queens Square and over 75 shops in the County Mall shopping centre.

7.67 Crawley has been severely impacted by the COVID-19 pandemic as the town relies on Gatwick Airport. The major collapse in Gatwick Airport passenger numbers – nearly four million per month (2019) to 850,000 per month (2020) has resulted in more than 16,000 fewer jobs at the airport (nearly 33 per cent of the workforce). As many as 25,800 Crawley residents were furloughed during the pandemic (41% of the eligible local workforce). Unemployment in Crawley has more than trebled from 2.4 per cent to more than eight per cent during the pandemic.

7.68 The emerging Crawley Local Plan is proposing to allocate sites for 4,100 new homes in the adopted Local Plan with an additional 2,180 and commercial development identified in the 2020 Local Plan Review that is expected to come forward in the period up to 2037 alongside infrastructure improvements. The emerging Local Plan proposes to allocate sites in the town centre and Three Bridges to increase housing allocations at existing developments which are expected to be delivered through densification. By 2037 around 5,320 new homes are expected to

[28] WSCC: West Sussex Life (http://www.westsussex.gov.uk/westsussexlife accessed May 2021)

have been built with around 20 per cent of this provision in the form of the new neighbourhood known as Forge Wood.

7.69 Commercial development is proposed to be provided in the main through a strategic employment allocation known as Gatwick Green. The emerging Local Plan aims to make Crawley the place to do business in the South East by redeveloping and revitalising the Town Centre and further regeneration of the Manor Royal Business District.

Transport Context

7.70 The M23 motorway is the main north-south route that passes through the very east of the borough connecting the A23 in the south to the A27 and Brighton and the M25 and London to the north. The A23 / A2011 provides a key relief route to traffic in the town centre and provides a connection from the M23 / A264 / A23, Pease Pottage Interchange, junction 11 in the south to the M23 / A264 / A2011, Crawley Interchange, junction 10 in the north at Forge Wood.

7.71 The A23 / A2011 is dual carriageway over its entire length between the two motorway junctions with a mix of junction types, some of which are signal controlled. Crossing facilities for pedestrians and cyclists on this section of A23 / A2011 are mainly provided at grade.

7.72 The town has excellent rail links to Gatwick Airport and the capital and beyond to the north and south to destinations such as Brighton and Chichester. The Brighton Main Line (which is accessed via Three Bridge station, over 1 mile from the town centre) provides rail connections to the north (destinations such as London and Thameslink services such as Bedford and Peterborough) and the south (destinations such as Haywards Heath and Brighton). The Arun Valley line provides rail connections to the south (destinations such as Horsham, Chichester, Bognor Regis, Portsmouth and Southampton).

7.73 There are four railway stations in Crawley Borough, including Gatwick Airport, split evenly between the Arun Valley line and the Brighton Main Line. The stations have very good levels of service with Gatwick Airport having the best level of service in the south east outside of London. It has express services which connect the Airport with central London in just over half an hour and to Brighton in 25 minutes.

7.74 The local bus network is very comprehensive in Crawley with services being operated on a largely commercial basis by Metrobus. Metrobus operates three (10, 20 & 100) bus rapid transit standard services branded 'Fastway' which operate 24 hours a day. The 10 service is very successful, carrying 3.8m passengers per annum and operates at 6 to 7-minute frequency at peak times.

7.75 There is extensive bus priority in Crawley including segregated busways that require specially adapted 'guided' buses to run on them. There are 1.5 km guided and 5.8 km unguided bus lanes, 40 traffic lights and 2 roundabouts including Tushmore roundabout which has a segregated bus lane through the centre of the roundabout.

7.76 The cycle network in Crawley is comprised of a mix of off-carriageway, typically shared use routes and signed routes on quieter roads. The

network is of variable quality and many routes are severed by roads. National Cycle Network route 21, which is part of the Avenue Verte London to Paris route provides a connection north to Horley and on to Redhill and east to East Grinstead and onwards towards Royal Tunbridge Wells. The route is primarily used for leisure purposes as part of their wider regional use but also provide some good local cycling provision in the east of Crawley connecting Three Bridges with Manor Royal and Gatwick Airport.

Key Issues

7.77 Travel behaviour in the borough is currently dominated by car travel but there is significant bus and rail use. Some areas in the south of Bewbush have over 20% bus mode share for travel to work (census 2011), the highest bus mode share in the south east outside of London. Rail mode share for travel to work (census 2011) tops 25% at Three Bridges, again one of the highest rail mode shares in the south east outside of London. Access improvements are required and due to be implemented at this station.

7.78 Active travel modes are not usually seen as viable options for many journeys but have significant potential to be increased.

7.79 The current key transport issues in Crawley are:

- Congestion on the A23 / A2011 Crawley Avenue during peak periods;
- Congestion on the A264 during peak periods;
- Congestion on the M23 during peak periods;
- Congestion at M23 junctions during peak periods;
- Rat-running on less suitable routes to avoid congestion;
- Cycle network is primarily on highway and discontinuous and does not meet user needs;
- Community severance due to busy roads and rail lines;
- On-street parking in Manor Royal Business District;
- Traffic-related air quality management area at Hazelwick and Three Bridges area; and
- Congestion for buses using and exiting the bus station, which is at capacity.

7.80 In the future, once the Crawley Local Plan development takes place, it is anticipated that some of the current transport issues will worsen if background traffic also grows as forecast. Therefore, ambitious sustainable transport and demand management interventions are needed in Crawley and the surrounding area that will reduce car travel, particularly at peak times. The Local Plan transport study includes 27 suggestions for bus lanes or other bus priority features. These will require further study and prioritisation to take forward. If such interventions are not delivered or are not successful, then congestion at the following locations on the highway network is likely to worsen and measures may be required to protect vulnerable users and keep traffic moving:

- A23 / Ifield Avenue – Ifield Roundabout
- Mitigation needs at M23 junctions and merges are under discussion with National Highways

Transport Strategy for Crawley

7.81 Our transport strategy for the Crawley area is intended to support the delivery of Crawley Borough Council's New Directions for Crawley Strategy by ensuring active travel modes and shared transport services are attractive options in all areas of the town. Our strategy to achieve this is by: improving the efficiency of the network of shared transport services, building on the existing Fastway network by providing bus priority at signal controlled junctions; working with partners to upgrade Crawley bus station; improving efficiency and giving greater priority to active travel and shared transport at three A2011 junctions; improving access to the railway through improved public transport interchange facilities at Crawley, Three Bridges and Gatwick Airport; prioritising active travel modes as development takes place; and working in partnership to deliver priority cycle routes such as the Horsham to Crawley cycle route.

7.82 A Crawley Western Link Road (CWLR) has potential to support strategic economic and housing growth in Crawley and Horsham subject to future planning decisions. The vision for CWLR is for a multi-modal link road between the A264 and A23 that supports additional Fastway style bus services through extensive bus priority measures alongside active travel facilities. This vision will continue to be developed with local stakeholders to ensure that the scheme is deliverable and performs both transport and place-making roles.

7.83 We will work with partners to bring forward improvements that ensure active travel and shared transport modes are an attractive option for travel to Gatwick Airport. These improvements will need to take account of the needs of the existing community in Horley and planned strategic employment development in Surrey. Our strategy for improving the transport network will be supported by the use of on-street parking and traffic management techniques to discourage pick-ups and drop-offs at Gatwick Airport.

7.84 In order to facilitate the shift to electric vehicles and address the current air quality issues, we will initially facilitate the introduction of on-street charging infrastructure in areas of Crawley where communities rely on on-street parking followed by other areas. In areas where there are AQMA's such as Hazelwick and Three Bridges, we will work with partners to explore potential solutions (i.e. engineering or behavioural initiatives) and deliver Air Quality Action Plans.

7.85 Our approach to managing the network will use on-street parking and traffic management techniques to manage demand in Crawley.

7.86 We will revisit this strategy in light of the Crawley Local Plan review and make changes, if necessary, in response to planning decisions.

7.87 In the long term we will work with strategic partners to provide an improved service on the Brighton Main Line to improve connections to Brighton and London and the Arun Valley Line.

Short term (2022-27) priorities for the Crawley area

- Bus Priority at various signal-controlled junctions
- Crawley Rail Station upgrade
- Three Bridges Station Interchange improvements
- Gatwick Airport Station upgrade
- Horsham to Crawley cycle route
- On-street electric vehicle charging infrastructure
- A2011 Crawley Ave/Balcombe Rd Link
- A2011 Hazelwick Junction (including shared transport and active travel facilities)
- A2011 Tushmore Junction (improved shared transport and active travel facilities)
- Air Quality Action Plan measures in Crawley

Medium term (2027-32) priorities for the Crawley area

- Crawley Western Link Road (including shared transport and active travel facilities)
- Active travel priority routes
- On-street electric vehicle charging infrastructure in remaining areas
- Crawley bus station upgrade

Long term (2032-36) priorities for the Crawley area

- Active travel priority routes
- Potential local highway enhancements (subject to need)

Area Transport Strategy for Horsham

Spatial Context

7.88 Horsham District sits between Gatwick Airport and Crawley to the north and Brighton and Worthing to the south. The District is largely rural in nature and has a range of market towns and villages, and good rail links to the coast and the capital.

7.89 Horsham town is the largest settlement in the District by some margin, with a population of over 50,000, which is more than the population of the next 6 largest settlements of Southwater, Billingshurst, Storrington, Steyning, Henfield and Pulborough which have a combined population of over 40,000. Horsham is a market town on the upper reaches of the River Arun on the fringe of the Weald. It is the administrative centre of the Horsham district. It is in the centre of the Weald in the Low Weald, at the western edge of the High Weald, with the Surrey Hills of the North Downs to the north and the Sussex Downs of the South Downs to the south.

7.90 Horsham has developed beyond its original boundaries to incorporate some of the smaller hamlets which now form part of its outer area.

7.91 Significant industries now are financial services, electronics, and technology. Horsham is also a commuter town serving London, Gatwick Airport, Crawley and the South Coast.

7.92 Horsham District's population is estimated to grow by 19.2% to 169,500 by 2043 from 142,200 in 2018. For the 65+ age group the forecast population is expected to increase from 32,000 in 2018 to 51,400 (60.6%) over the period 2018-2043[29] as the overall trend is towards an ageing population in the District. There are a large number of affluent areas in the district with very limited areas of deprivation.

7.93 The Horsham District Planning Framework allocates sites for at least 16,000 dwellings to come forward between 2011 and 2031. The emerging Horsham Local Plan is proposing to allocate additional sites for new homes and commercial development that are expected to come forward in the period up to 2038 alongside infrastructure improvements. This is likely to be a step change in the level of development in the District.

Transport Context

7.94 The A24 is the main north-south route that passes through the district. It is largely dual carriageway with a mix of junction types, some of which are grade separated and some of which are signal controlled. Crossing facilities for pedestrians and cyclists on the A24 in the District are mainly provided at grade and are very limited due to the low level of demand to cross the A24 by those modes. The A272 cuts through the centre of the district east to west providing connections to the A3 at Petersfield in the west and Haywards Heath and beyond to Uckfield in the east. The A264 connects the A29 and A24 south of Horsham to the M23/A23 south of Crawley. The A283 connects the A24 at Washington to the A27 at Shoreham. In addition, the A29 connects the smaller settlements in the west of the District including Pulborough and Billingshurst. The A281 runs from northwest to southeast, connecting Horsham to Guildford and towards Brighton.

7.95 The Arun Valley Line provides rail connections to the north (destinations such as Crawley, Gatwick, London and Peterborough), and the south (destinations such as Chichester, Bognor Regis, Portsmouth and Southampton). The Sutton & Mole Valley Line provides an alternative route to London via Dorking and Sutton.

7.96 There are eight railway stations in Horsham District, 7 of which are on the Arun Valley Line. The stations have varying levels of service and usage with Horsham station being the most well served and used with over 2.5 million passengers per annum, which is around the total passenger numbers for the other 7 stations in the district combined. On the opposite end of the scale is Faygate station with very limited services and under 10,000 passengers per year. Horsham Railway Station is well served by buses both locally and onto destinations such as Haywards Heath, Southwater and Worthing.

[29] WSCC: West Sussex Life (http://www.westsussex.gov.uk/westsussexlife accessed May 2021)

7.97 The local bus network is fairly comprehensive in Horsham town but lacks higher frequency services that could be considered as 'turn up and go'. The current bus usage would not support additional investment in services by the commercial operator. The bus network is largely operated on a commercial basis by Metrobus with a smaller number of Stagecoach services in the District. Some services, particularly those that connect the surrounding rural areas are operated under tender by the County Council. The 100 service is the most notable which provides services between Horsham and Burgess Hill via Henfield, Pulborough and Billingshurst and many villages in between. Buses have limited bus priority in Horsham town centre. Buses have in the main little to no priority over other traffic in other towns. Smaller settlements in the District have limited bus services with rural areas having in the main no bus service or a very limited service.

7.98 The cycle network in Horsham is comprised of a mix of off-carriageway, typically shared use routes and signed routes on quieter roads. National Cycle Network route 223, the Downs Link provides a connection from the North Downs and Guildford to the South Downs and Shoreham and is primarily a leisure route.

Key Issues

7.99 Travel behaviour in the District is currently dominated by car travel and public transport while active travel modes are not seen as viable options for many journeys which leads to a number of issues. The current key transport issues in Horsham district are:

- Congestion on the A24 during peak periods;
- Congestion on the A264 during peak periods;
- Congestion on the A272 during peak periods;
- Rat-running on less suitable routes to avoid congestion;
- Traffic-related air quality management areas in Storrington and Cowfold;
- Unreliable rail service to London;
- Poor access to the railway from settlements away from rail lines;
- Bus journey times are slow, and punctuality is affected at peak times due to congestion;
- Cycle network is primarily on highway, is discontinuous and indirect and does not meet user needs; and
- Severance caused by the A24, A264 and the Arun Valley and Mole Valley lines.

7.100 In the future, once Horsham Local Plan development takes place, it is anticipated that some of the current transport issues will worsen if background traffic also grows as forecast. Therefore, ambitious sustainable transport and demand management interventions are needed in Horsham and the surrounding area that will reduce car travel, particularly at peak times. If such interventions are not delivered or are not successful, then congestion at the following locations on the highway

network is likely to worsen and measures may be required to protect vulnerable users and keep traffic moving:

- A24 / A272 Buckbarn junction
- Hop Oast Roundabout – A24 / B2237
- Washington Roundabout – A24 / A283
- Robin Hood Roundabout – A24 / B2237
- Great Daux Roundabout – A24 / A264
- Moorhead roundabout – A264/B2195

Transport Strategy for Horsham (excluding area in SDNP)

7.101 Our transport strategy for Horsham in the short term is to deliver improvements largely within existing highway land to provide bus priority at signal-controlled junctions and deliver small scale 'tactical' highway improvements on A24 and A264 as development comes forward. The aim of these improvements will be to keep traffic moving to minimise rat-running on less suitable routes and the nature of these schemes will depend on the impacts of development. The location, scale and timing of strategic improvements to the road network will depend, at least to some extent, on the emerging development strategy.

7.102 We will facilitate the shift to electric vehicles, initially by facilitating the introduction of on-street electric vehicle charging infrastructure in Horsham, Billingshurst, Pulborough, Storrington Southwater, Colgate and Rusper where communities rely on on-street parking followed by other areas. In areas where there are AQMA's such as Storrington and Cowfold, we will work with partners to explore potential solutions (i.e. engineering or behavioural initiatives) and deliver Air Quality Action Plans.

7.103 We will also prioritise active travel modes where development takes place and deliver priority cycle routes such as the Horsham to Crawley cycle route. In the medium and long-term we will work in partnership to deliver priorities identified in the LCWIP.

7.104 In the medium term we will improve public transport services by giving them greater priority (i.e. roadspace) where possible and viable on the strategically important A24 corridor through an A24 junction improvements major scheme. This scheme will provide new active travel facilities as well as bus stop infrastructure improvements. The priority junctions will be connections between routes that form part of the CSRN with improvements at other junctions, if necessary, to mitigate development impacts.

7.105 We will investigate an integrated approach to resolving capacity issues on the A264 and the inappropriate use of parallel rural routes which result from this, seeking an appropriate balance between improved public transport and use of private transport. This is likely to become a major scheme that will come forward in the long term.

7.106 In the medium term and subject to local planning decisions, it is anticipated that a Crawley Western Link Road (CWLR) will come forward as a development-led scheme to unlock potential strategic employment and housing development in Horsham and Crawley. The vision for CWLR

is for a multi-modal link road between the A264 and A23 that supports additional Fastway style bus services through extensive bus priority measures alongside active travel facilities. This vision will continue to be developed with local stakeholders to ensure that the scheme is deliverable and performs both transport and place-making roles.

7.107 In the long term we will support the rail industry to provide an improved service on the Arun Valley Line. We will also work with Surrey County Council to identify potential improvements for the Horsham to Dorking corridor on the sustainable travel and road network to come forward in the long term.

Short term (2022-27) priorities for the Horsham area (excluding SDNP)

- Bus Priority at signal-controlled junctions
- Bus and rail interchange improvements
- Flexible shared transport services
- Mobility Hubs
- Active travel infrastructure 'quick wins'
- On-street electric vehicle charging infrastructure in Horsham, Billingshurst, Colgate, Pulborough, Rusper, Storrington and Southwater
- Small scale 'tactical' highway improvements
- Horsham to Crawley cycle route
- Air Quality Action Plan measures in Storrington and Cowfold

Medium term (2027-32) priorities for the Horsham area (excluding SDNP)

- Crawley Western Link Road (including shared transport and active travel facilities)
- Enhanced bus priority in Horsham
- A24 junction improvements (including shared transport and active travel facilities)
- A264 study to develop integrated transport scheme
- North – south sustainable transport corridor connecting key settlements such as Worthing, Horsham and Crawley
- Active travel priority routes
- Active travel crossing infrastructure on the A24
- On-street electric vehicle charging infrastructure in remaining areas

Long term (2032-36) priorities for the Horsham area (excluding SDNP)

- Potential local highway enhancements (subject to need)
- Active travel priority routes
- Implement scheme for A264 from study recommendations

Area Transport Strategy for Mid Sussex

Spatial Context

7.108 Mid Sussex is on the eastern boundary of West Sussex containing the towns of East Grinstead, Haywards Heath and Burgess Hill with rural areas in between them. It stretches from Copthorne in the north, through the High Weald to Fulking in the south. The District borders the Tandridge District of Surrey to the north, Wealden and Lewes districts in East Sussex to the east, Brighton and Hove to the south, Horsham District to the west and Crawley Borough to the northwest.

7.109 A large part of Mid Sussex District is also part of the High Weald AONB and to a lesser extent the SDNP. Ashdown Forest Special Protection Area is in the adjacent Wealden District in East Sussex. The District is made up of the three larger towns and numerous smaller villages across the largely rural area.

7.110 Mid Sussex's population is estimated to grow by 11.7% from 149,700 in 2018 to 167,200 by 2043. In 2018 Mid Sussex had the second highest population of districts in West Sussex at 17.4% of the county population. For the 65+ age group the forecast population is expected to increase from 30,500 in 2018 to 45,000 (47.6%) over the period 2018-2043[30] as the overall trend is towards an ageing population in the District. The District is fairly affluent with few areas of deprivation.

7.111 The Mid Sussex Local Plan allocates sites for 16,390 new homes and commercial development that is expected to come forward in the period up to 2031 alongside infrastructure improvements. The Local Plan has a number of strategic site allocations in Burgess Hill (north and north west), East Grinstead, Pease Pottage and Hassocks. This is a step change in the level of development in the District.

7.112 The emerging Site Allocations Development Plan Document (DPD) proposes to allocate a number of sites for small to medium sized developments across the District and a Science and Technology Park, located to the west of Burgess Hill and the north of the A2300.

Transport Context

7.113 The A23 trunk road is the main north-south route that passes through the western edge of the District. The A23 is dual carriageway with a mix of 2 lane and 3 lane provision in each direction. There are a mix of junction types, but all are grade separated. Crossing facilities for pedestrians and cyclists on the A23 are grade separated. There are limited crossing facilities provided at the main junctions.

7.114 The A272 cuts through the centre of the District east to west. The A264 and the A22 are to the north of the District and link Crawley to East Grinstead.

7.115 The Brighton Main Line provides direct rail connections to the north (destinations such as London and Thameslink services to the north such

[30] WSCC: West Sussex Life (http://www.westsussex.gov.uk/westsussexlife accessed May 2021)

as Bedford and Cambridge), and the south (destinations such as Brighton and Littlehampton via Hove). The connection to the East Coastway line just to the south of Wivelsfield station provides a connection via Lewes onto Eastbourne and Hastings. The Oxted line provides rail connections to the north to London from East Grinstead.

7.116 There are six national rail network stations in Mid Sussex District which have varying levels of service and usage. Stations like Hassocks, though small, provide a frequent level of service to London and Brighton and are well used by commuters with over a million passengers per annum. The three larger towns are all reasonably well served by local buses and Haywards Heath has a Cycle Hub.

7.117 The local bus network in the three main towns is fairly comprehensive but lacks higher frequency services or priority over general traffic and bus usage is currently low. The smaller settlements in the District have limited bus services and some rural areas have no or a very limited bus service.

7.118 Longer bus routes are in the main north to south with fewer services running east to west. The main north to south routes connect Burgess Hill and Haywards Heath and onward to Brighton in the south (270, 271, 272) and Crawley (271, 272) and East Grinstead (270) to the north. The 273 provides an express service between Brighton and Crawley using the A23 and provides an alternative to rail.

7.119 The bus network is largely operated on a commercial basis by Metrobus. Some services, particularly those that connect the surrounding rural areas are operated under tender by the County Council. The 100 service is the most notable which provides services between Burgess Hill and Horsham via Henfield, Pulborough and Billingshurst and many villages in between.

7.120 The cycle network in Mid Sussex is comprised of a mix of off-carriageway, typically shared use routes and signed routes on quieter roads. National Cycle Network route 20 provides a connection between Pyecombe and Brighton. The section between Pyecombe and Crawley which mostly follows the route of A23 has recently been removed from the National Cycle Network as in places the infrastructure does not meet the required standards. Route 21 in the north along the Worth Way provides connections between Crawley, East Grinstead and East Sussex.

Key Issues

7.121 Travel behaviour in Mid Sussex is currently dominated by car travel. Public transport and active travel modes are not seen as viable options for many journeys although commuting by rail is relatively high in the towns. The current key transport issues in Mid Sussex are:

- Congestion on the A23 during peak periods;
- Congestion on the A264 and the A22 during peak periods;
- Congestion on the A272 during peak periods;
- Rat-running on less suitable routes to avoid congestion;
- Bus services in the towns are not frequent enough;
- No bus services over large parts of the rural areas of the district

- Bus journey times are slow at peak times due to congestion;
- Cycle network is primarily on highway and discontinuous and does not meet user needs;
- Traffic related air quality management area in Hassocks; and
- Congestion within Burgess Hill concentrated on the two bridges over the Brighton Main Line.

7.122 In the future, once the Mid Sussex Local Plan and the Site Allocations DPD development takes place, it is anticipated that some of the current transport issues will worsen if background traffic also grows as forecast. Therefore, interventions are needed in the District that will reduce car travel at peak times. If such interventions are not delivered or are not successful, then congestion at the following locations on the highway network is likely to worsen and measures may be required to protect vulnerable users and keep traffic moving:

- A23 / A2300 Hickstead junction
- A2300 / Cuckfield Road junction – the Science & Technology Park traffic accesses via this junction
- A272 / B2036 at Ansty
- A2300 / Northern Arc Link Road junction
- A22 / A264

7.123 A safety study that was carried out has also recommended interventions at:

- Burgess Hill: London Road / Victoria Way
- East Grinstead: B2110 Brooklands Way / Railway Approach
- Crawley Down: B2028 Turners Hill Road / Wallage Lane

7.124 At East Grinstead/Felbridge the A22/A264 Felbridge junction (on boundary, but mainly within Surrey), the A22/Imberhorne Lane junction and the A22 Lingfield Road junction are severely congested. As development comes forward in the area, this is likely to exacerbate rat running on rural routes as traffic seeks to avoid congestion.

Transport Strategy for Mid Sussex (excluding area in SDNP)

7.125 Our transport strategy for Mid Sussex area is to improve the performance of the A22, A23, A264 and A2300. We will do this by delivering major improvements to the A22 and A264 to improve efficiency, give greater priority where possible and viable to shared transport services in addition to the A2300 corridor enhancement that is already under construction. The location, scale and timing of strategic improvements to the road network will depend, at least to some extent, on the emerging development strategy. In the medium term we will work with National Highways to deliver improvements to the A23 to ensure junction capacity is more closely matched to demand once development takes place.

7.126 We will facilitate the shift to electric vehicles initially by facilitating provision of on-street charging infrastructure in the East Grinstead, Lindfield, Cuckfield Ardingly and Balcombe areas where communities rely

on on-street parking followed by other areas. In areas where there are air quality problems such as the AQMA in Hassocks, we will work with partners to explore potential solutions (i.e. engineering or behavioural initiatives) and deliver Air Quality Action Plans.

7.127 We want to make active travel modes and shared transport services more attractive options, particularly in Burgess Hill, East Grinstead and Haywards Heath. We will achieve this by prioritising active travel modes in the towns as development takes place and deliver priority cycle routes such as the Haywards Heath to Burgess Hill route (subject to identification of a deliverable route). In the medium and long-term we will work in partnership to identify and deliver priorities identified in the LCWIP.

7.128 Due to constraints on available land, we will deliver improvements largely within existing highway land to provide bus priority where possible and viable including priority at signal-controlled junctions. In the medium term we will bring forward improvements to the A22 and A264 which form part of a coordinated strategy to enhance shared transport connections to neighbouring Crawley and Tandridge.

7.129 We will also improve access to the railway through planned improvements to interchange facilities at Burgess Hill and Wivelsfield stations and improve public realm in Haywards Heath and Burgess Hill town centres to improve their vitality.

7.130 Our approach to managing the network will use on-street parking and traffic management techniques to manage demand, particularly in Burgess Hill, East Grinstead and Haywards Heath. We will also use behavioural initiatives to tackle inappropriate traffic speeds and use of unsuitable rural routes.

7.131 In the long term, we will work with strategic partners to provide an improved service on the Brighton Main Line to improve connections to Brighton and London.

Short term (2022-27) priorities for the Mid Sussex area (excluding SDNP)

- Bus Priority at signal-controlled junctions
- Bus and rail interchange improvements at Burgess Hill and Wivelsfield stations
- Flexible shared transport services
- On-street electric vehicle charging infrastructure in Lindfield, Ardingly, Cuckfield and Balcombe
- Active travel infrastructure 'quick wins'
- Small scale 'tactical' highway improvements
- Air Quality Action Plan measures in Hassocks

Medium term (2027-27) priorities for the Mid Sussex area (excluding SDNP)

- Enhanced bus priority in towns
- A23 improvements

- A22 improvements, working with Surrey County Council – including sustainable transport provision between Felbridge junction and Lingfield Road
- North – south bus priority between towns
- A264 corridor enhancement (including shared transport and active travel infrastructure)
- Active travel priority routes
- On-street electric vehicle charging infrastructure in remaining areas

Long term (2032-36) priorities for the Mid Sussex area (excluding SDNP)

- Brighton Main Line improvements
- Potential local highway enhancements (subject to need)
- Active travel priority routes

Area Transport Strategy for South Downs National Park

Spatial Context

7.132 The South Downs National Park was designated in 2010 and includes parts of Adur, Arun, Chichester, Horsham, Mid Sussex Districts and Worthing Borough. The National Park extends beyond West Sussex to Winchester, Hampshire in the west and Eastbourne, East Sussex in the east.

7.133 The SDNP is a largely rural area. The settlement pattern in the West Sussex section of the National Park is comprised of two small towns; Midhurst and Petworth and many villages and hamlets. The population and economic statistics for the Districts and Boroughs that comprise the West Sussex section of the SDNP are shown within each of the respective area transport strategies.

7.134 The SDNP is designated to protect the landscape but the area also includes a range of sites that are designated for their environmental qualities. The SDNP is also a designated International Dark Sky Reserve which aims to limit the effects of artificial light pollution.

7.135 The South Downs National Park Local Plan (SDNPLP) assessed development sites in Fernhurst, Midhurst and Petworth. Midhurst and Petworth total only a few hundred newly planned dwellings. The amount of housing planned is relatively small and plans for transport infrastructure improvements to mitigate development are limited due to the environmental constraints in the area which protect the area from major development.

7.136 The only strategic site in West Sussex identified in the SDNPLP is Shoreham Cement Works which is identified as an opportunity area with potential for mixed use development. Due to the challenges of developing this site, the National Park Authority intends to develop an Area Action Plan for the site that will set out how the site could be developed.

Transport Context

7.137 The A27 trunk road is the main east-west route that in places forms the southern boundary of the National Park. In some places, the A27 is also inside the National Park which will influence the approach to future improvements.

7.138 The A272 crosses the National Park and provides a link between Petworth and Midhurst and destinations that are outside the National Park boundary. However, the infrastructure on the section of A272 west of A24 is, in places, unsuitable for the largest heavy goods traffic.

7.139 The A24, A29, A280 and A283 also provide key routes through the National Park which form part of the Primary Route Network, linking coastal communities with those further north in the County and beyond.

7.140 In Midhurst and Petworth the historic built up areas act as capacity pinch points on the highway network. The options for major highway improvements to address this issue are limited due to the environmental constraints of the area.

7.141 The Arun Valley Line provides rail connections between the National Park in West Sussex and the south (destinations such as Barnham, Chichester, Worthing, Portsmouth and Southampton), and the north/east (destinations such as Horsham, Crawley and London). The Brighton Main Line also provides a rail connection to the National Park via Hassocks station which is close to the SDNP.

7.142 The bus network in the SDNP is largely financially supported by the Local Authorities. Services can be infrequent, and some areas have no bus service at all.

7.143 The cycle network in the West Sussex section of the SDNP includes the Centurion Way, the Downs Link and the Barnham to Bignor route as well as the South Downs Way National Trail. These routes are mainly off-carriageway and shared use. They are more leisure routes rather than utilitarian, even though a few commuters may choose to use them to travel to employment or connect with train services to go further.

7.144 Equestrianism is important to the economy of the South Downs National Park as it provides jobs and attracts business. Not only are there numerous private and commercial riding schools, livery yards, studs and their supporting ancillary businesses, but there are also major tourist attractions such as the Goodwood and Fontwell racecourses and Hickstead All England Jumping Course.

Key Issues

7.145 Travel behaviour in the South Downs National Park is currently dominated by car travel while public transport and active travel modes are not seen as viable options for many journeys which leads to a number of issues. The current key transport issues in the South Downs National Park are:

- Congestion on the A27 during peak periods causes re-routing onto less suitable routes, through rural areas, to avoid congestion;
- Overflow commuter parking within surrounding areas of rural train stations;

- Traffic-related air quality management area at Midhurst;
- Limited or no access to public transport;
- There is a dominance of north to south bus routes that run through the National Park but very few east to west routes;
- The cycle network is discontinuous and does not meet user needs;
- Severance caused by the A27, the A24 and other main roads as well as the Arun Valley Line;
- Limited access to services and service centres including market towns;
- Limited access to the rural area for leisure and recreation by all modes of transport; and
- Inappropriate speeds on rural lanes.

Transport Strategy for the South Downs National Park

7.146 Our transport strategy for the South Downs National Park is to ensure that any improvements are designed sensitively to fit in with the character of the National Park and encourage use of active travel modes by improving active travel infrastructure within and to larger settlements such as Midhurst, Petersfield Chichester and Worthing. We want to explore the potential for new active travel crossing facilities of roads on the CSRN such as A24 and A283 to improve access to the South Downs.

7.147 To improve shared transport services, we will explore new service delivery models that may help to improve connections to nearby towns such as Dynamic Demand Responsive Transport services and undertake pilot projects to test the concept in areas such as the north west of Chichester. We will also give greater priority to shared transport services at junctions on the A24 in the medium term.

7.148 Where it is necessary to deliver highway improvements to keep traffic moving, we will deliver small scale 'tactical' highway improvements and use traffic management techniques largely within existing highway land that will encourage traffic to use the CSRN. We will also consult stakeholders on the principle of removing part of the A272 from the PRN to discourage use of this route. Improvements will also be designed sensitively to respect the qualities of the National Park designation.

7.149 Our approach to managing the network will also use behavioural initiatives to improve air quality in Midhurst and tackle inappropriate traffic speeds and use of unsuitable rural routes.

7.150 To encourage the shift to electric vehicles, we will initially facilitate the provision of on-street electric vehicle charging infrastructure in areas where communities rely on on-street parking followed by other areas.

Short term (2022-27) priorities for the South Downs National Park

- Facilitate the provision of on-street electric vehicle charging infrastructure once initial priority areas are complete
- Active travel infrastructure 'quick wins'
- Small scale 'tactical' highway improvements

- Air Quality Action Plan measures in Midhurst
- Supporting local services and access to services through innovation
- Working closely with the SDNPA to identify transport improvements which improve access to services and benefit visitors to the SDNP
- Remove part of the A272 from Primary Route Network and associated signing
- A number of piloting options are being looked at for DDRT services that are likely to include areas of the national park (north west Chichester for example) with a view to rolling this out to other rural areas if these pilot schemes are successful

Medium term (2027-32) priorities for the South Downs National Park

- North – south sustainable transport corridor along the route of the A24 (including active travel facilities)
- Pedestrian and cycle crossings of the A24 and A283
- Supporting a bus network that is affordable and takes account of accessibility issues and the need to provide social inclusion and travel choices
- Centurion Way extension north cycle route, project led by SDNPA

Long term (2032-36) priorities for the South Downs National Park

- Potentially local highway capacity enhancements (subject to need)
- Creating a transport network and transport improvements that respect rural needs, the rural landscape and rural character
- Developing opportunities to improve access to, and within the National Park particularly for walking, cycling and equestrianism
- Developing opportunities to improve and protect public rights of way through the RoWIP
- Seek to close footpath level crossings where alternatives can be used or provided
- Midhurst to Petersfield cycle route

Area Transport Strategy for Worthing

Spatial Context

7.151 Worthing is a large urban area on the south coast with one clearly defined Town Centre and six neighbourhood centres. Part of Worthing Borough also falls within the SDNP.

7.152 Like neighbouring seaside resorts, Worthing grew historically as a result of the tourist industry. However, with the advent of cheap holidays abroad, Worthing has promoted itself to new markets. To aid this, and in addition to recovering from the COVID-19 pandemic, work has already begun to improve the Town Centre public realm to enhance public spaces together with leisure and retail opportunities, in order to attract visitors so that the town can successfully compete with other centres.

7.153 Worthing's community is diverse, and the population is estimated to grow by 12.1% from 110,000 to nearly 123,300 by 2043. For the 65+ age group the forecast population is expected to increase from 24,600 in 2018 to 36,200 (47.2%) over the period 2018-2043[31] as the overall trend is towards an ageing population in the District. Whilst there are some affluent areas there are also areas which are among the most deprived in the County.

7.154 The emerging Worthing Local Plan proposes to allocate sites for new homes and commercial development that are expected to come forward in the period up to 2036 alongside infrastructure improvements. The emerging Local Plan includes 780 homes in the Durrington vicinity, 760 in the town centre and 213 in the north-eastern part of Worthing.

7.155 A minimum of 34,000 sqm of commercial floor space has been proposed within the emerging Local Plan (to include 24,000 sqm of industrial and warehousing and 10,000 sqm of commercial (retail and leisure) floorspace will be provided.

Transport Context

7.156 The A27 trunk road is the main east-west route that passes through the northern part of the town and is largely single carriageway with a mix of junction types, some of which are signal controlled. Crossing facilities for pedestrians and cyclists on this section of the A27 are provided at grade.

7.157 The A259 routes through the town centre and provides as an alternative east-west route to the A27 for some journeys.

7.158 The West Coastway Line provides rail connections to the east (destinations such as Brighton and London via Hove), and the west (destinations such as Chichester, Portsmouth and Southampton).

7.159 There are five railway stations in Worthing Borough which have varying levels of service. Worthing Railway Station is well served by local buses and has a Cycle Hub.

7.160 The local bus network is extensive and largely operated on a commercial basis by Stagecoach. Some services, particularly those that connect the surrounding rural areas are financially supported by the County Council. Buses have some priority in the town centre.

7.161 The cycle network in Worthing is comprised of a mix of off-carriageway, typically shared use routes, and signed routes on quieter roads. National Cycle Network route 2 provides a connection towards Shoreham in the east. The overall geography of Worthing is flat, making the town attractive for cycling networks in the future.

7.162 E-bikes are due to operate an on-street bike hire scheme in the town, which is being extended from Brighton into Worthing by 2023. Alongside this, car sharing clubs are currently being introduced, with several development schemes committing to support this.

[31] WSCC: West Sussex Life (http://www.westsussex.gov.uk/westsussexlife accessed May 2021)

Key Issues

7.163 Travel behaviour in Worthing is currently dominated by car travel while public transport and active travel modes are not seen as viable options for many journeys which leads to a number of issues. The geography of Worthing is relatively flat compared to other coastal towns, promoting a key opportunity to deliver and encourage modal shift from car to active modes in the future. The current key transport issues in Worthing are:

- Congestion on the A27 during peak periods;
- Congestion on the A259 during peak periods;
- Rat-running on less suitable routes to avoid congestion;
- Level crossing delays at South Farm Road and South Street, Tarring;
- Rail services to London, Brighton and the Solent cities can be slow, and some trains lack modern facilities;
- No direct rail service to Horsham;
- Traffic-related air quality management area on the A27 between Grove Lodge and Lyons Farm;
- Bus journey times are slow at peak times due to congestion;
- Cycle network is discontinuous and does not meet user needs; and
- Severance caused by the A27 and West Coastway.

7.164 DfT undertook a feasibility study in 2013 which identified a need for improvements to the A27 at Worthing and Lancing (in Adur District). In 2017, National Highways consulted on a package of improvements to increase the capacity of several key junctions along the route, but these were not supported by the majority of consultees. The A27 Worthing and Lancing scheme is part of the Government's Roads Investment Strategy (2020-2025) and options are expected to be developed before consultation with stakeholders in the short term.

7.165 In the future, once Worthing Local Plan development takes place, it is anticipated that some of the current transport issues will worsen if background traffic also grows as forecast. Therefore, interventions are needed in the Borough that will reduce car travel at peak times. If such interventions are not delivered or are not successful, then congestion at the following locations on the highway network is likely to worsen and measures may be required to protect vulnerable users and keep traffic moving:

- Poulters Lane / Offington Lane junction
- A259 / A2032 / Goring Street Roundabout
- Durrington Lane / A2032 / The Boulevard Roundabout
- Poulters Lane / A2032 Roundabout

Transport Strategy for Worthing

7.166 Our transport strategy for the Worthing area is to improve the performance of the A27 in Worthing. This means improvements that help to keep traffic moving in the short term and using small scale tactical

highway improvements to mitigate development impacts. This is while plans are developed for more substantive improvements to come forward in the medium term that will reduce community severance and collisions, separate strategic and local movements and ensure capacity is more closely matched to demand. Major A27 improvements will need to be designed to ensure that road capacity is not overprovided to avoid inducing traffic growth and take opportunities to enhance active travel and shared transport facilities. Alongside these improvements, our strategy will be to introduce interventions in Worthing, particularly on local roads, to lock in the benefits of capacity gains on the strategic road network; for example, by allocating local road space to shared transport and/or active travel.

7.167 In order to facilitate the shift to electric vehicles, we will initially facilitate the introduction of on-street electric vehicle charging infrastructure in central Worthing where communities place greatest reliance on on-street parking. This will be followed by other areas in the medium and long term.

7.168 Our strategy is to enable local living by making active travel increasingly realistic and attractive for short distance journeys by increasing space for active travel on strategically important east-west and north-south corridors. In the medium and long term we will develop additional priorities identified in the LCWIP and explore the potential for improved crossings of the A27 to address community severance and improve access to the South Downs.

7.169 As opportunities to provide dedicated space for shared transport are limited by land availability, our strategy is to use traffic signal technology to give priority to shared transport where services operate frequently such as the A259 corridor. This will be supported by improvements to interchange facilities.

7.170 Our strategy for improving transport network infrastructure will be supported by our approach to managing the road network through use of on-street parking and traffic management techniques to manage demand and improve air quality in Worthing.

7.171 In the long term once infrastructure for active travel and shared transport has been improved to cater for short distance trips, we will work with strategic partners to reconfigure West Coastway services to deliver faster rail services between Worthing, Chichester, Brighton and the Solent cities.

Short term (2022-27) priorities for the Worthing area

- On-street electric vehicle charging infrastructure in Worthing Town Centre
- Small scale 'tactical' highway improvements
- Bus and rail interchange facilities
- Air Quality Action Plan measures in Worthing

Medium term (2027-32) priorities for the Worthing area

- A27 major scheme

- East – west sustainable transport corridor
- North – south sustainable transport corridor
- Active travel crossings over A27
- On-street electric vehicle charging infrastructure in remaining areas

Long term (2032-36) priorities for the Worthing area

- Active travel priority routes
- Reconfigured West Coastway service
- Potentially local highway enhancements (subject to need)

8. Implementation

8.1 This chapter explains the key mechanisms that we will use to implement the Plan including the priorities identified in sections 6 and 7.

Action Plan and Plan Reviews

8.2 To deliver the Plan, Appendix A includes an initial five-year action plan that identifies the lead organisation, partners and key dependencies for each action. This will be reviewed annually in line with the Capital Programme to provide a rolling five-year action plan that enables medium term resource and financial planning and effective management of the project pipeline. The annual review will consider whether any changes in priorities are required due to changes in circumstances.

8.3 The Plan will also be fundamentally reviewed every five years. Plan reviews will consider whether or not any changes are required to our strategies or priorities.

Consultation and Stakeholder Engagement

8.4 The actions identified in this Plan will have positive and negative effects on the businesses, communities and the environment. The County Council is committed to consulting with affected communities and relevant stakeholders in an open, timely and consistent manner following the 'Gunning principles' for consultation:

- Initial consultation will be at a time when proposals are still at a formative stage;
- The council will give sufficient information on each scheme proposal to permit intelligent consideration and response;
- Adequate time will be given for consideration and response by stakeholders; and
- Consultation responses will be conscientiously taken into account during scheme development.

8.5 In delivering our Plan, we will take account of the impacts on communities and the needs of all users of the transport system, taking particular care to engage with and listen to young people and those with protected characteristics. These needs may vary in different areas of the County which will need to be taken into account. Where appropriate, equalities impact (or similar) reports will be prepared to inform decisions as

interventions are developed. Feedback received through consultation will inform decisions but will not be considered the only, or primary, determinant of decision-making as it is necessary to take other factors into account, notably including the vision and objectives of this Plan and impact assessments.

8.6 The County Council will draw on best practise and use innovative approaches such use of stakeholder mapping, stakeholder forums and focus groups, particularly on larger projects, to support the design process and where possible, build consensus between local stakeholders. This is particularly important where there are polarised views about how to improve the transport network and should aim to facilitate compromise between stakeholders, where this is needed.

Partnership Working

8.7 The County Council is unlikely to be able to deliver the Plan alone as it has neither the resources, statutory powers nor funding to do so. Therefore, we will work in partnership with other organisations in the public, private and third sector to help deliver the Plan. Some of the formal partnerships that we will use include:

- Transport for the South East;
- Coast to Capital Local Economic Partnership;
- Partnerships covering spatial economic areas;
- Enhanced Partnerships (with bus operators); and
- Community Rail Partnerships.

8.8 In addition to formal partnerships, the County Council also works closely with LPAs to deliver planned development and associated infrastructure and services through the statutory planning system.

8.9 Where there is a need to work together with neighbouring Local Transport Authorities, for example on schemes that cross the County boundary, we will consider options and the need for joint governance arrangements. The aim of such arrangements, which could be formal or informal, will be to support the development of shared objectives and delivery of these projects.

Spatial Planning and Development Management

8.10 As a local transport authority, the County Council is a consultee in the land use planning process. The County Council works with LPAs to develop plans for development by providing technical advice to inform planning decisions and where necessary to submit formal representations to be considered as part of local or neighbourhood plan examinations. In doing so, the County Council will have regard to this Plan to ensure that transport and land use planning is closely aligned. Spatial strategies such as focusing development around transport hubs, have the potential to support delivery of this Plan. Therefore, early involvement of the County Council in the preparation of local plans, including development of spatial strategy options, is both necessary and desirable. However, it is up to the LPAs to decide how and when the County Council should be involved in plan-making and the weight to be given to its views.

8.11 In line with Government guidance, the County Council encourages developers to front load the planning process to avoid potentially costly or unexpected issues at the planning application stage by requesting pre-application advice. In providing advice on planning applications, the County Council will have regard to all aspects of this Plan, including those which are not the direct responsibility of the County Council such as shared transport services. The County Council also maintains guidance for developers on matters such as preparation of transport assessments and parking at new developments that will also be taken into account. The County Council intends to develop a Design Guide for developers setting out its expectations for highway design and standards for highway adoption.

8.12 The County Council would like to see LPAs and developers taking a 'vision-led' approach to development and improvement of the transport network. This approach should place emphasis on place-shaping and creating liveable neighbourhoods with infrastructure to support travel by a range of modes of transport rather than designing to cater for forecast traffic demand. Reference should also be made to the Creating Healthy and Sustainable Places Framework for West Sussex 2021.

8.13 On occasions, it may be necessary to comment on matters through the land use planning process that are not specifically addressed by this Plan. In these cases, the County Council will provide advice by having particular regard to the vision and objectives of this Plan.

8.14 In order to ensure timely delivery of infrastructure, the County Council need to work in partnership, particularly with Local Planning Authorities and developers, to ensure the pipeline of developer contributions towards infrastructure improvements is understood. This will need to be supported by the approach to funding and prioritisation, particularly to address funding gaps where they arise.

8.15 When using developer contributions the approach is to achieve best value for money by commencing development funded services (or enhancements) when there is forecast to be sufficient additional demand and phase any improvements in line with the expected build out of development.

8.16 Where necessary to deliver the vision and objectives of this Plan, the County Council may request that land is safeguarded for future transport improvements in Local Plans.

8.17 As new or updated Local Plans are prepared, these will be taken into account through either the annual review of our Action Plan or a five-year Plan review.

Sustainability Appraisal and Habitats Regulations Assessment

8.18 A Sustainability Appraisal (SA) incorporating the requirements of a Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA) has been conducted as part of the process of developing this Plan. The recommendations have been incorporated into the Plan to ensure the Plan meets the identified sustainability objectives.

8.19 Any transport interventions that would be likely to have a significant effect on a Habitats Site (listed in the HRA), either alone or in combination with other plans or projects, would not have the benefit of the presumption in favour accorded via s.38 of the Planning and Compulsory Purchase 2004 Act at application stage.

8.20 Any transport interventions that would be likely to have a significant effect on a Habitats Site (listed in the HRA), either alone or in combination with other plans or projects, will be subject to assessment under part 6 of the Habitats Regulations at the additional plan or project application stage.

Funding and Prioritisation

8.21 Given the constraints on the County Council's resources, it may be that some actions cannot be progressed or that they need to be delivered in a different way. However, the Plan is intended to demonstrate the County Council's ambition to effect positive change on the transport network within the County. To deliver the Plan we will seek out funding opportunities and work with strategic partners such as central Government and TfSE to deliver our priorities. The distribution of investment spatially and by mode of transport will be dependent on decisions by third parties about which schemes to invest in.

8.22 The capital (i.e. investment) and revenue (i.e. on-going maintenance) financial implications of taking forward the actions in this Plan must be considered in the light of the ongoing difficult financial circumstances facing this and all councils, exacerbated by the impact of COVID-19 on the Council's budget and the wider economy. Where possible, the opportunity will be taken to secure external sources of funding and to generate additional income to deliver this Plan.

8.23 Third party funding (i.e. funding controlled by others) such as developer contributions can reduce the need for County Council investment and will be prioritised. Therefore, levels of third party funding will be taken into consideration when prioritising and considering options for external funding applications, alongside other considerations such as levels of stakeholder support and deliverability.

8.24 In the event that there is insufficient funding or other resources during the life of the Plan to deliver every ambition, then we will need to prioritise. It is important that investment decisions maximise value for public investment over the long term. The views of local stakeholders and statutory processes such as planning can have a significant impact on lead-in times, cost and resource requirements. Therefore, we will prioritise by considering the following:

- Statutory duties;
- Alignment with all relevant corporate policies including this Plan;
- Alignment with partners' corporate policies (e.g. local plans)
- Affordability (i.e. capital and revenue) and levels of third party funding (e.g. developer contributions);
- Value for money (i.e. cost benefit analysis); and

- Deliverability including stakeholder views and the need for statutory processes.

Gateway Process

8.25 The County Council uses a gateway process to manage project delivery and ensure a consistent and proportionate approach is taken to managing project scope, cost and risks. The gateway process is a key component of our approach to programme management.

Capital Programme

8.26 The County Council will deliver transport improvements (i.e. capital projects) through its Capital Programme that includes a Highways and Transport Annual Delivery Programme (ADP) which is reviewed annually. The ADP includes all schemes identified in the County Council's transport investment programmes (e.g. Strategic Transport Investment Programme, Local Transport Investment Programme, Growth Programme).

8.27 Governance arrangements for the Capital Programme are well established and bring relevant stakeholders together to manage the programme and associated risks, and where appropriate are supported by project boards.

8.28 Delivery of capital projects is dependent on the availability of funding and resources to deliver them. Where appropriate, delivery of capital projects will also be subject to all relevant statutory processes; e.g. planning.

Benefit Realisation

8.29 In order to ensure our projects and initiatives deliver their intended outcomes, the County Council uses benefit realisation plans for all major projects. These are intended to monitor the outcomes that form the basis of the strategic case for investment over the long term. Benefit realisation plans also help to facilitate continuous improvement in the development of future improvements and initiatives. Due to the disproportionate cost and in some cases, difficulties in monitoring the outcome of smaller projects, a proportionate approach is applied to monitoring the benefits of these projects.

8.30 To ensure that the carbon impacts of major highway interventions are taken into account and monitored, a carbon impact appraisal system will be established. Carbon impacts will be reported as part of Benefits Realisation Plans.

Contracts

8.31 As well as using its own resources, the County Council will use contracts with third parties who provide specialist services to help deliver the Plan. When existing contracts end, any new contracts will be expected to take this Plan into account. In the first five years of this Plan, new contracts will be required to replace the Professional Services Framework which ends in 2022 and highway works contracts which will need to be renewed or extended in 2025.

9. Monitoring

9.1 This section explains the approach to monitoring the Plan.

9.2 The monitoring indicators and measures detailed below have been listed under the categories of: 'output' (what is being produced), 'outcome' (short and medium term results) and 'impact' (long-term results) measures based on logic mapping principles[32].

Annual Monitoring

9.3 The measures we intend to use to monitor the Plan are listed below. An annual monitoring report will be prepared alongside the annual review of the Action Plan. This will inform the rolling five-year action plan that will respond to changing circumstances as they occur.

Targets, Measures & Indicators

9.4 The County Council is committed to setting a carbon emission reduction target by the end of 2022 following the publication of new Government guidance on how local authorities should undertake this task. The target will continue to be monitored during the life of the Plan and will inform future decision-making.

9.5 The following output measures and outcome indicators will be reported annually. For the quantitative measures and indicators we intend to use direction of travel pointers to show the direction which we expect the measures to take as a result of the Plan. In many cases, it will not be possible to isolate the impacts of the Plan on the outcome indicators but the Plan is still believed to have an important influence. Achieving our Plan will depend on the availability of funding and decisions that are, at least to some extent, outside our control so in most cases the Plan does not include specific targets. However, if there is greater certainty over future funding, then we will reconsider this approach.

Table 1: Output measures

Output measure	Description	Future direction of travel	Objectives
Infrastructure schemes implemented	Description of progress	N/A	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 17
Length of new cycleway provided	Length of new cycleway and description of key schemes	Additional 7.5km per year	1, 2, 3, 4, 5, 6, 7, 8, 9, 17

[32] The Tavistock Institute: Logic mapping: hints and tips for better transport evaluations, (2010) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/3817/logicmapping.pdf

Output measure	Description	Future direction of travel	Objectives
Funding grants received	Description of external funding grants received	N/A	1, 2, 3, 4, 5, 6, 7, 8, 9, 12
New or improved public transport services provided	Description of key interventions	N/A	1, 2, 3, 4, 5, 6, 7, 8, 9, 14, 15, 16
Electric vehicle charging points in West Sussex	Number of charging points across West Sussex	Increase	1, 4, 7, 8, 9
Maintenance condition of the highway network	Measure of principal, non-principal and unclassified road and footway condition based on surveys	Decrease % of network where maintenance should be considered	3, 5, 6, 7, 8, 9, 10, 17
Maintenance condition of other aspects, including structures, street lighting	Bridge Condition Indicators, streetlights maintained	Increase	3, 5, 6, 7, 8, 9, 10
Consultations that involve hard to reach groups	Percentage of consultations supported by stakeholder mapping	Increase	3, 5, 6

Table 2: Outcome indicators

Outcome indicator	Description	Future direction of travel	Objectives
Traffic volumes	Number of vehicles entering selected urban areas[33] and countywide traffic volume statistics based on automatic traffic counters.	Static (taking into account development and population growth)	4, 8, 9

[33] Bognor Regis, Chichester, Crawley, Horsham and Worthing where there is an established network of counters monitoring in-bound traffic flows

Outcome indicator	Description	Future direction of travel	Objectives
Traffic congestion	Average delay on local 'A' roads in West Sussex taken from Department for Transport Statistics[34]	Improve	1, 2, 3, 5, 6, 12, 15
Public transport trips[35]	Number of bus and rail journeys based on Department for Transport returns and Office of Road and Rail Data.	Continual increases following COVID-19 restrictions easing	2, 3, 4, 5, 6, 13, 14, 15, 16
Cycle trips	Number of cycle trips based on permanent cycle counters.	Increase	2, 3, 4, 5, 6, 11
Sustainable transport mode share for passengers and employees to Gatwick Airport	As measured by Civil Aviation Authority and staff surveys	Increase	1, 2, 4, 13, 15, 16
Collision statistics	Killed and seriously injured (KSI) casualties per billion vehicle miles reported by Sussex Police	Baseline (112) 2021/22 (107) 2022/23 (103) 2023/24 (99) 2024/25 (95)	11, 12, 17
Bus punctuality	Percentage of services with real-time systems on-time at timing points.	Increase	1, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 16

[34] DfT: Travel Time Measures January to December 2020 (cgn0502b) https://www.gov.uk/government/statistics/travel-time-measures-for-the-strategic-road-network-and-local-a-roads-january-to-december-2020

[35] We also plan to review Community Transport patronage information available from operators to see whether this can be reported as a countywide indicator to monitor year on year changes. We also plan to review if there are any other suitable rural accessibility indicators reflecting bus and community transport access

Outcome indicator	Description	Future direction of travel	Objectives
Air quality levels in Air Quality Management Areas (AQMAs)	Pollutants within AQMAs monitored by District and Borough Councils environmental health teams.	Decrease	4, 8, 9, 11
Highways and Transport public satisfaction levels	Public satisfaction with overall highways and transport condition, local bus services, pavements and footpaths, cycle routes and facilities, and PRoW, as measured through the National Highways and Transport Network Public Satisfaction Survey.	Improved satisfaction levels	3, 5, 6, 13, 15, 16, 17
Total electric vehicle/ultra-low emission vehicles licensed in West Sussex	Department for Transport statistics[36]	Increase	1, 7, 8, 10
Carbon emissions from major transport schemes	Carbon emissions measured using a carbon impact appraisal system	Decrease	7, 8, 10
Transport contributions to carbon emissions in West Sussex	Data from UK's Greenhouse Gas Inventory[37]	Decrease	7, 8, 10
Public health	NHS obesity data from National Child Measurement Programme	Decrease	3, 5, 6, 11, 17
Physical activity	Sport England Active Lives Adult Survey	Increase	3, 5, 6, 11, 17

[36] DfT: All Vehicles Statistics (VEH0131) https://www.gov.uk/government/statistical-data-sets/all-vehicles-veh01#ultra-low-emissions-vehicles

[37] BEIS: UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2018

Outcome indicator	Description	Future direction of travel	Objectives
Economic performance	Gross Value Added (GVA), employment and unemployment rates from Office for National Statistics	Mix	1, 2
	Annual commercial floorspace as a measure of new employment floorspace	Countywide net increase	1, 2
Local environment	Number of Noise Important Areas in West Sussex	Decrease	4, 8
	Number of incidences of road flooding	Decrease	10
	Biodiversity on major schemes	At least 10% increase	8, 9

Glossary

Abbreviation / term	Description
Active travel	Active travel is the transport of people or goods, through non-motorised means, based around human physical activity.
ADP	Annual Delivery Programme
Adur DC	Adur District Council
AQMA	Air Quality Management Area
Arun DC	Arun District Council
ATE	Active Travel England
BOATs	Byways Open to All Traffic
BSIPs	Bus Service Improvement Plans
CBC	Crawley Borough Council
CDC	Chichester District Council
Climate Change	Climate change is a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates.
CSRN	County Strategic Road Network
CT	Community Transport
CWLR	Crawley Western Link Road
C2C LEP	Coast to Capital Local Enterprise Partnership
DDRT	Dynamic Demand Responsive Transport
DEFRA	Department for the Environment, Food and Rural Affairs
DfT	Department for Transport
DPD	Development Plan Document
EV	Electric Vehicles
GAL	Gatwick Airport Limited
GVA	Gross Value Added

Abbreviation / term	Description
HDC	Horsham District Council
HIAMP	Highway Infrastructure Asset Management Plan
HRA	Habitat Regulations Assessment
JAAP	Joint Area Action Plan
KSI	Killed or Seriously Injured
LCWIP	Local Cycling and Walking Infrastructure Plan
LPA	Local Planning Authority
LRN	Lorry Route Network
Micro Mobility	Transportation using lightweight vehicles such as bicycles or scooters, especially electric ones that may be borrowed as part of a self-service scheme in which people hire vehicles for short-term use within a town or city.
MSDC	Mid Sussex District Council
NCN	National Cycle Network
Net Carbon Zero	Net carbon zero refers to the balance between the amount of greenhouse gas produced and the amount removed from the atmosphere.
NIAs	Noise Important Areas
NOx	Nitrogen Oxides
NH	National Highways
NR	Network Rail
PM	Particulate Matter
PPM	Public Performance Measure
PRN	Primary Route Network
PRoW	Public Rights of Way
RoWMP	Rights of Way Management Plan

Abbreviation / term	Description
SA	Sustainability Appraisal
SAQP	Sussex Air Quality Partnership
SDNP	South Downs National Park
SDNPA	South Downs National Park Authority
SDNPLP	South Downs National Park Local Plan
SEA	Strategic Environmental Assessment
Shared transport services	Refers to the shared use of a vehicle; for example, buses on fixed routes or on-demand flexible routes and shared taxis and cars.
SRN	Strategic Road Network
SSRP	Sussex Safer Roads Partnership
TfSE	Transport for the South East
TOC	Train Operating Company
WBC	Worthing Borough Council
WSCC	West Sussex County Council
WSTP	West Sussex Transport Plan (the Local Transport Plan for West Sussex)

Appendix A: Action Plan – Short term (2022-27)

Active Travel Schemes

Action	Lead Organisation	Partners	Dependencies
LCWIP priority - Adur	WSCC	Adur DC	Funding, land
LCWIP priority - Arun	WSCC	Arun DC	Funding, land
LCWIP priority - Chichester	WSCC	CDC	Funding, land
LCWIP priority - Crawley	WSCC	CBC	Funding, land
LCWIP priority - Horsham	WSCC	HDC	Funding, land
LCWIP priority – Mid Sussex	WSCC	MSDC	Funding, land
LCWIP priority – South Downs	WSCC	SDNPA	Funding, land
LCWIP priority - Worthing	WSCC	WBC	Funding, land
Identify priority locations for new active travel crossings	WSCC	NR, LPAs	Funding, land, track possession

Multi-modal Schemes

Action	Lead Organisation	Partners	Dependencies
Multi-modal A2300 corridor enhancement	WSCC	DfT, C2C LEP, MSDC, Homes England	Funding, land
Multi-modal A259 Littlehampton corridor enhancement	WSCC	C2C LEP, Arun DC	Funding, land

Action	Lead Organisation	Partners	Dependencies
Multi-modal A284 Lyminster Bypass	WSCC	DfT, C2C LEP, TfSE, Arun DC	Funding, land
Multi-modal A29 Realignment phase 1	WSCC	C2C LEP, Arun DC	Funding, land
Multi-modal A29 Realignment phase 2	Developer	C2C LEP, Arun DC	Funding, land
Multi-modal A259 Bognor Regis to Littlehampton corridor enhancement	WSCC	DfT, TfSE, Arun DC	Funding, land
Multi-modal A259 Chichester to Bognor Regis corridor enhancement	WSCC	DfT, TfSE, CDC, Arun DC	Funding, land

Rail Schemes

Action	Lead Organisation	Partners	Dependencies
Agree priorities for rail investment	WSCC	TfSE	
Gatwick Airport Station upgrade	NR	DfT, NR, GAL	Funding
Lobby for replacement rolling stock, earlier morning and later services	WSCC	DfT, TOC, NR	
Crawley Station upgrade	NR	NR, CBC	Funding
Burgess Hill Station improvements	NR	NR, MSDC	Funding
Wivelsfield Station improvements	NR	NR, MSDC	Funding

Shared Transport Schemes

Action	Lead Organisation	Partners	Dependencies
Establish enhanced partnerships	WSCC	Bus operators	
Develop Bus Service Improvement Plans	WSCC	LPAs, Bus operators	
Pilot dynamic demand transport services (inc. digital platform) in Chichester, Arun and South Downs	WSCC	Bus operators, CT operators	Funding
Develop business case for service improvements	WSCC	Bus operators	
Partnership working to introduce zero emission vehicles	Bus operators	Bus operators	Funding

Action	Lead Organisation	Partners	Dependencies
Traffic signal upgrades (inc. bus priority)	WSCC	Bus operators	Funding
Mobility hubs	WSCC	Bus operators, LPAs	Funding, planning
Interchange improvements	WSCC	Bus operators, LPAs	Funding
Ticketing and on-bus systems	Bus operators	WSCC	Funding

Highway Schemes

Action	Lead Organisation	Partners	Dependencies
A27 Arundel Bypass	NH	DfT, NH, Arun DC, SDNPA	
A27 Chichester improvement	NH	DfT, NH, CDC, SDNPA, Chichester Harbour Conservancy	
A27 Worthing & Lancing improvement	NH	DfT, NH, WBC, ADC, SDNPA	
Procure electric vehicle charge point network	WSCC	LPAs, Network Provider	
Air quality action plan measures – Shoreham	WSCC	Adur DC	Funding
Air quality action plan measures – Chichester	WSCC	CDC, NH	Funding

Action	Lead Organisation	Partners	Dependencies
Air quality action plan measures – Midhurst	WSCC	CDC, SDNPA	Funding
Air quality action plan measures – Crawley	WSCC	CBC	Funding
Air quality action plan measures – Cowfold	WSCC	HDC	Funding
Air quality action plan measures – Storrington	WSCC	HDC	Funding
Air quality action plan measures – Hassocks	WSCC	MSDC	Funding
Air quality action plan measures – Worthing	NH	WBC, WSCC	Funding
Noise Action Plans	WSCC	District & Borough Councils	Funding

Behavioural Initiatives

Action	Lead Organisation	Partners	Dependencies
Rural speeding campaign	SSRP		Funding, resource
Goods vehicle pilot	WSCC		Funding, resource

Network Management Initiatives

Action	Lead Organisation	Partners	Dependencies
Establish lane rental scheme	WSCC	DfT	DfT approval
Amend Primary Route Network	WSCC	HCC	Consultation
Establish Controlled Parking Zone programme	WSCC	LPAs	
Prepare Speed Management Plan and review Speed Limit Policy	WSCC	SSRP	

Policy / Strategy Initiatives

Action	Lead Organisation	Partners	Dependencies
Review Walking & Cycling Strategy	WSCC	LPAs	
Review Bus Strategy	WSCC	Bus operators	
Prepare Highway Technology Strategy	WSCC	NH, bus operators	
Review Road Safety Framework	WSCC	SSRP	
Review Transport Assessment guidance to developers	WSCC	LPAs	
Develop Design Guide for developers	WSCC	LPAs	

Appendix B: Approach to Highway Infrastructure Asset Management

The County Council has adopted a Highway Infrastructure Asset Management Policy (HIAMP) which sets out how we will apply asset management principles to the maintenance of highway infrastructure, including drainage assets. This long-term approach to asset management is expected to provide efficiencies, greater understanding of the asset base and opportunities to align maintenance activities with the corporate objectives. The Highway Infrastructure Asset Management Strategy sets out the service levels that are expected to be achieved and will be updated periodically through the life of this Plan.

The way highway infrastructure is maintained has the potential to impact (positively or negatively) on the achievement of corporate objectives, including the vision and objectives of this Plan. Therefore, in order to ensure the HIAMP also facilitates the delivery of this Plan, the HIAMP will have regard to the vision and objectives of the Plan alongside other corporate objectives. It will do this by giving appropriate weight to these factors and taking these into account, alongside other factors such as whole life costs when determining the approach to maintenance. To facilitate this, all relevant monitoring measures outlined in this Plan will be used to inform the Highways Annual Delivery Plan and future updates to the Highway Infrastructure Asset Management Strategy.

Implementation of this Plan is likely to increase maintenance liabilities through the creation of new or improved highway infrastructure assets. Although efforts will be made to fund additional maintenance costs through efficiency savings, this may not be possible in every case. The County Council will prioritise and explore funding opportunities to increase maintenance budgets when they arise. New development will be expected to contribute towards the whole life costs of infrastructure delivered to mitigate its impacts through commuted sums or a similar mechanism.

Appendix C: Maps and Figures

This appendix contains the following maps:

- Figure 1: Spatial Context
- Figure 2: Primary Route Network
- Figure 3: County Strategic Road Network
- Figure 4: Major Road Network
- Figure 5: Lorry Route Network

Figure 1: Spatial Context

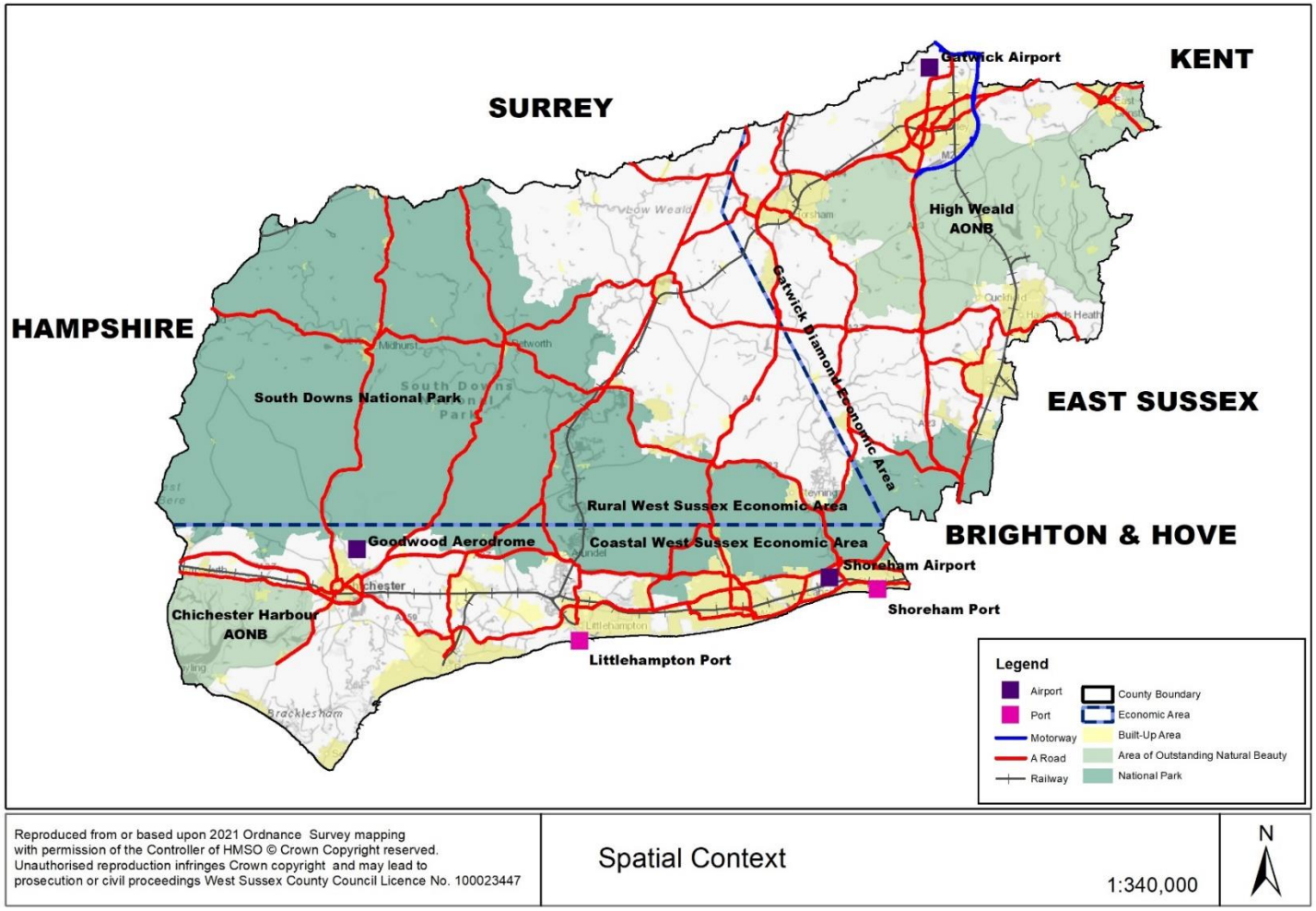


Figure 2: Primary Route Network

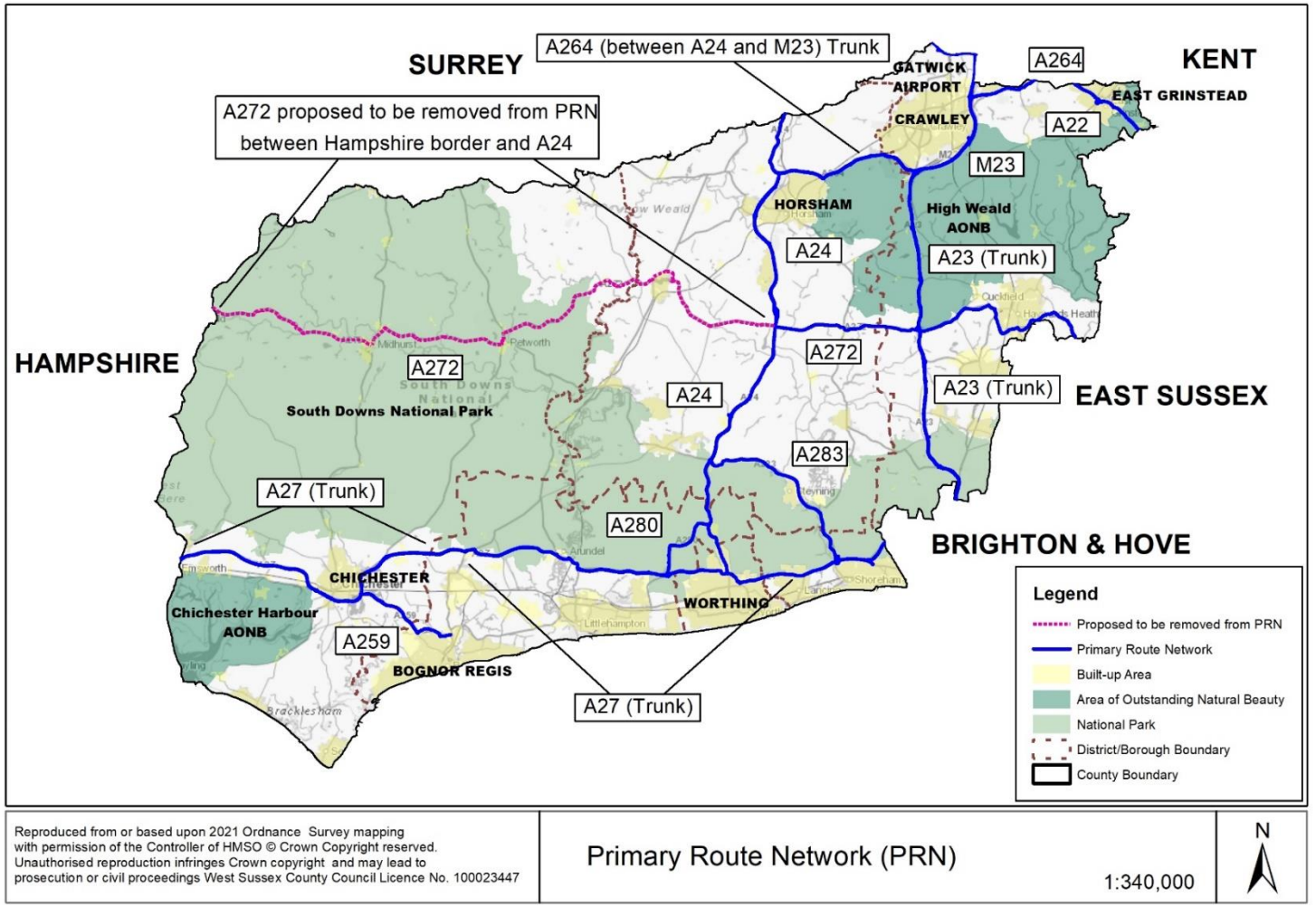


Figure 3: County Strategic Road Network

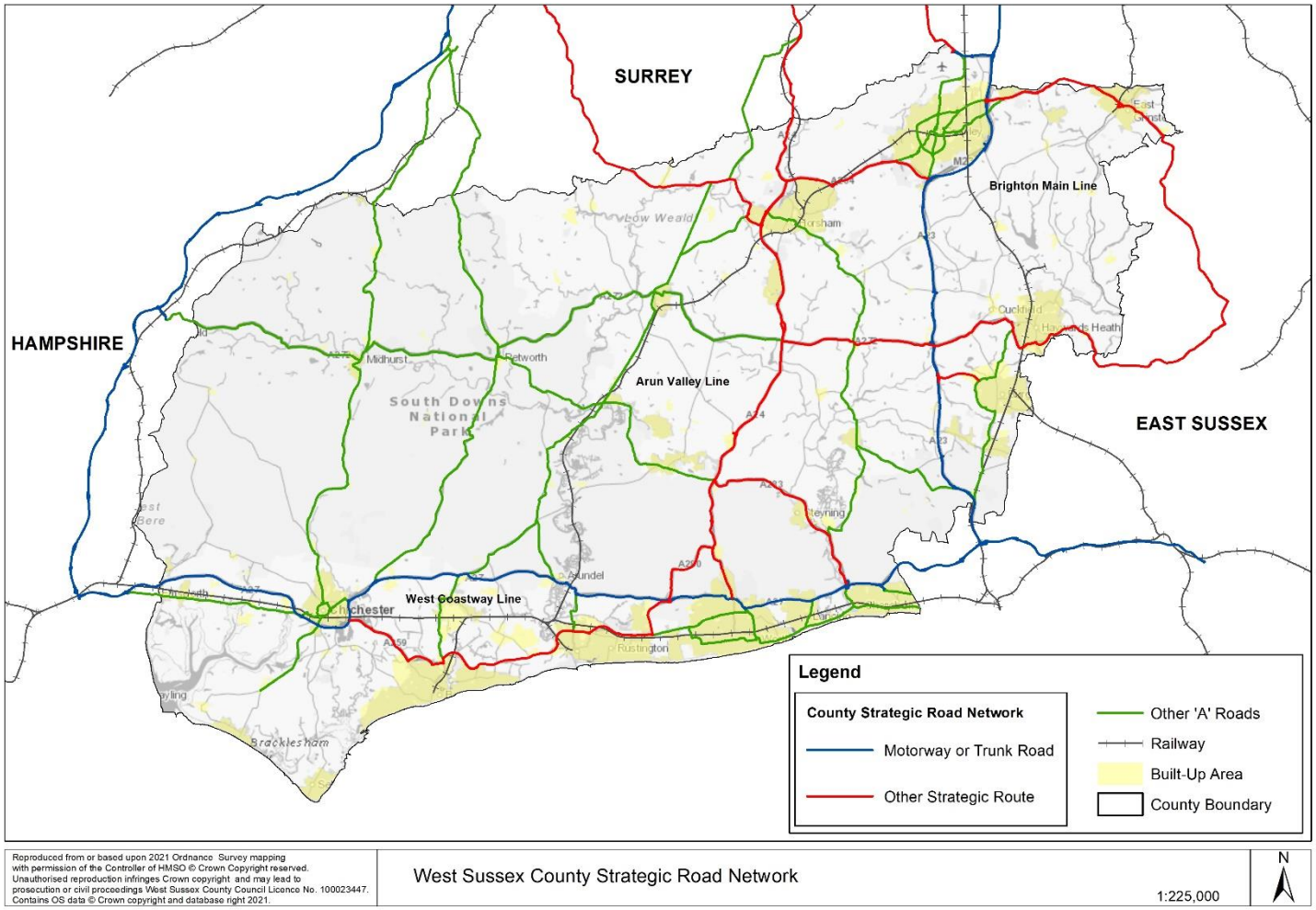


Figure 4: Major Road Network

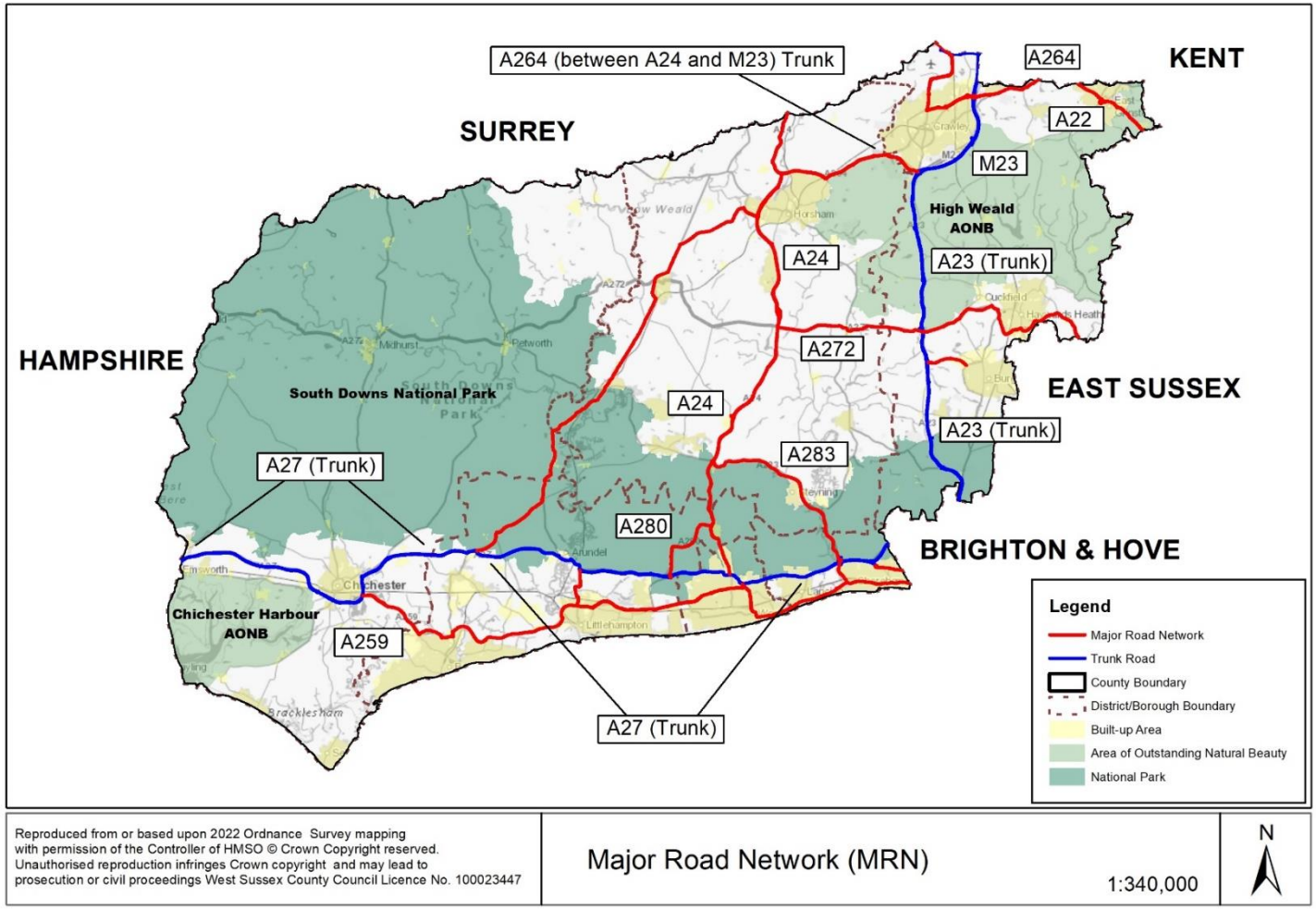
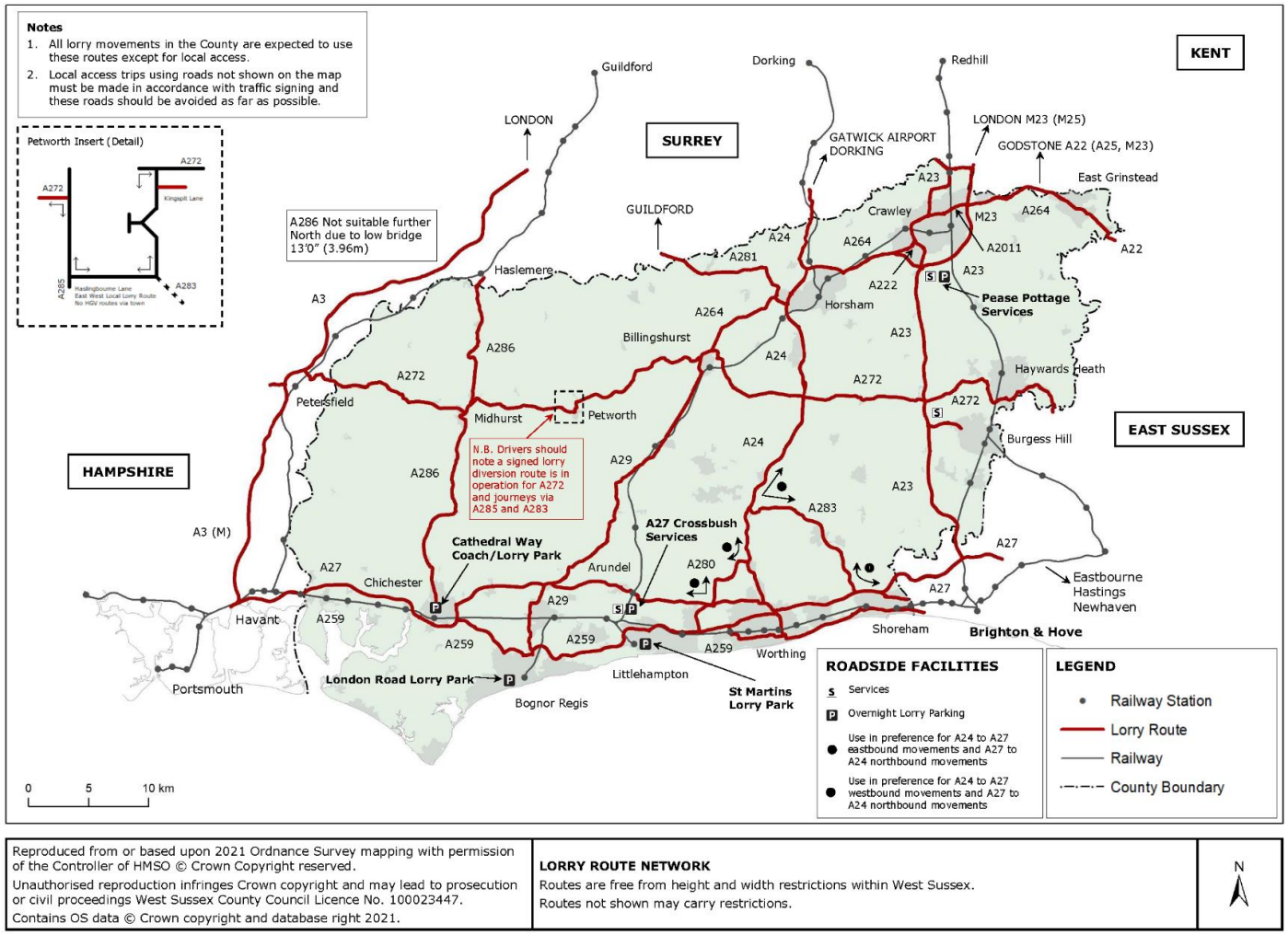


Figure 5: Lorry Route Network



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LORRY ROUTE NETWORK

Routes are free from height and width restrictions within West Sussex.
Routes not shown may carry restrictions.

Appendix D: Performance Assessments

The following tables set out an assessment of the performance of the Thematic Strategies in achieving the WSTP Objectives. In each case, interventions are scored 1 to 5 (1 is strongly negative, 2 is negative, 3 is neutral, 4 is positive, 5 is strongly positive). Scores are largely based on professional judgement and understanding drawn from transport scheme appraisal and monitoring.

Active Travel Strategy Assessment

Interventions	1. Sustainable economic prosperity	2. Accommodate planned development	3. Accommodate demographic change	4. Avoid and minimise impacts on public health	5. Enable healthy lifestyles	6. Ensure access to services	7. Achieve net zero carbon emissions by 2050	8. Avoid and minimise impacts on the environment	9. Enhance biodiversity	10. Adapt to climate change	11. Reduce the need to travel by car	12. Improve road network efficiency	13. Minimise impacts of access to Gatwick Airport	14. Improve rail services	15. Improve bus network efficiency	16. Improve bus network coverage	17. Extend and improve active travel facilities
Active travel priority routes	3	4	4	4	4	4	4	2	4	4	4	3	4	3	2	3	5
Active travel crossings	3	4	4	4	4	4	4	2	4	4	4	3	4	3	2	3	5
Promotional initiatives	3	4	4	4	4	4	4	3	3	3	4	3	4	4	3	4	4
Skills training	3	4	4	4	4	4	4	3	3	3	4	3	4	4	3	3	4

Shared Transport Strategy Assessment

Interventions	**Sustainable economic prosperity**	**Accommodate planned development**	**Accommodate demographic change**	**Avoid and minimise impacts on public health**	**Enable healthy lifestyles**	**Ensure access to services**	**Achieve net zero carbon emissions by 2050**	**Avoid and minimise impacts on the environment**	**Enhance biodiversity**	**Adapt to climate change**	**Reduce the need to travel by car**	**Improve road network efficiency**	**Minimise impacts of access to Gatwick Airport**	**Improve rail services**	**Improve bus network efficiency**	**Improve bus network coverage**	**Extend and improve active travel facilities**
Bus priority measures	4	5	5	4	4	5	5	2	4	4	5	2	5	4	5	5	2
Demand responsive services	4	5	5	4	4	5	5	3	3	3	5	3	3	4	4	5	3
Promotional initiatives	3	4	4	4	4	4	4	4	3	3	4	3	4	4	4	4	4
Service enhancements	4	4	5	4	4	5	5	3	3	3	5	4	3	4	4	5	3
Bus fleet renewal	4	4	5	5	4	5	5	3	3	4	5	4	4	4	5	5	3
Interchange improvements	4	5	5	4	4	5	5	3	3	4	5	3	4	4	4	4	4

Interventions	**Sustainable economic prosperity**	**Accommodate planned development**	**Accommodate demographic change**	**Avoid and minimise impacts on public health**	**Enable healthy lifestyles**	**Ensure access to services**	**Achieve net zero carbon emissions by 2050**	**Avoid and minimise impacts on the environment**	**Enhance biodiversity**	**Adapt to climate change**	**Reduce the need to travel by car**	**Improve road network efficiency**	**Minimise impacts of access to Gatwick Airport**	**Improve rail services**	**Improve bus network efficiency**	**Improve bus network coverage**	**Extend and improve active travel facilities**
Concessionary fares	4	4	4	4	4	5	5	4	3	3	5	4	4	4	4	4	3
Ticketing	4	4	4	4	4	5	5	4	3	3	5	4	4	4	4	4	3
On bus systems	4	4	4	4	4	5	5	4	3	3	5	4	4	4	4	4	3

Rail Strategy Assessment

Interventions	Sustainable economic prosperity	Accommodate planned development	Accommodate demographic change	Avoid and minimise impacts on public health	Enable healthy lifestyles	Ensure access to services	Achieve net zero carbon emissions by 2050	Avoid and minimise impacts on the environment	Enhance biodiversity	Adapt to climate change	Reduce the need to travel by car	Improve road network efficiency	Minimise impacts of access to Gatwick Airport	Improve rail services	Improve bus network efficiency	Improve bus network coverage	Extend and improve active travel facilities
Rail service enhancements	5	5	5	4	4	5	5	2	4	4	5	2	5	5	4	4	2
Interchange improvements	5	5	5	4	4	4	5	3	3	4	5	3	5	5	4	4	4
Rolling stock upgrades	5	5	5	4	4	4	5	3	3	4	5	3	5	5	3	3	3
Level crossing improvements	4	4	4	4	4	4	3	3	4	2	4	4	4	4	4	4	4

Access to Gatwick Strategy Assessment

Interventions	Sustainable economic prosperity	Accommodate planned development	Accommodate demographic change	Avoid and minimise impacts on public health	Enable healthy lifestyles	Ensure access to services	Achieve net zero carbon emissions by 2050	Avoid and minimise impacts on the environment	Enhance biodiversity	Adapt to climate change	Reduce the need to travel by car	Improve road network efficiency	Minimise impacts of access to Gatwick Airport	Improve rail services	Improve bus network efficiency	Improve bus network coverage	Extend and improve active travel facilities
Rail service enhancements	5	5	5	4	4	5	5	2	4	4	5	2	5	5	4	4	2
Road network improvements	5	5	4	2	2	4	1	2	4	4	2	5	5	3	4	3	2
Active travel infrastructure	3	4	4	4	4	4	4	2	4	4	4	3	4	3	2	3	5
Interchange improvements	5	5	5	4	4	4	5	3	3	4	5	3	5	5	4	4	4

Road Network Strategy Assessment

Interventions	Sustainable economic prosperity	Accommodate planned development	Accommodate demographic change	Avoid and minimise impacts on public health	Enable healthy lifestyles	Ensure access to services	Achieve net zero carbon emissions by 2050	Avoid and minimise impacts on the environment	Enhance biodiversity	Adapt to climate change	Reduce the need to travel by car	Improve road network efficiency	Minimise impacts of access to Gatwick Airport	Improve rail services	Improve bus network efficiency	Improve bus network coverage	Extend and improve active travel facilities
Highway capacity enhancement	5	4	4	2	2	4	1	2	4	4	2	5	5	3	4	3	2
Development-led highway schemes	5	5	4	2	2	4	1	2	4	4	2	5	5	3	4	3	2
Environmental mitigation (air, noise, light)	2	2	3	5	4	3	5	5	5	4	4	2	2	2	2	3	4
Intelligent Transport Systems	4	4	4	4	4	4	4	4	3	3	2	4	4	3	4	4	4
Electric vehicle charging infrastructure	5	5	4	4	4	4	5	4	3	3	1	1	1	3	1	1	2