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The routes

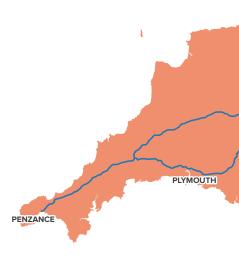
Routes

- London to Scotland West (North)
- London to Scotland East (North)
- South Pennines (East)
- South Pennines (West)
- North Pennines
- London to Leeds
- Midlands and Gloucestershire to Wales
- North and East Midlands
- South Midlands
- London to Scotland West (South)
- London to Scotland East (South)
- East of England
- Felixstowe to Midlands
- Kent Corridors to M25
- Solent to Midlands
- London Orbital and M23
- South Coast Central
- South West Peninsula
- Birmingham to Exeter
- London to Wales

Sub-national Transport Bodies

- England's Economic Heartland
- Midlands Connect
- South West Peninsula
- Transport East
- Transport for the North
- Transport for the South East
- Western Gateway

There are 17 routes relating to route strategies across our strategic road network (SRN). To take better account of our customers' end-to-end journeys, we have split some of the longer routes into sub-strategies across 20 reports.





Executive summary

Introduction

Our strategic road network (SRN) is the backbone of the country. Over 4,500 miles of motorways and major A-roads connect people, build communities, create opportunities and help the nation thrive. To plan for the future, we take a long-term view of our network and the trends that could impact transport, road travel, and personal and commercial mobility. Route strategies are at the centre of this dynamic future planning of our network, informing how we operate, maintain and renew our network. This report is the Initial overview report for the Solent to Midlands route and summarises the outcomes of the route strategy. The report builds on the first two rounds of route strategies in 2015 and 2017. It aims to be more forward looking, integrated and collaborative, while being dynamic enough to respond to the future needs of our customers and neighbours.

In this report, we detail the route context, current constraints on the route, and opportunities for improved connections with local roads and rail links. We set out intelligence-led route objectives aligned with the Department for Transport's (DfT's) six strategic objectives. These objectives aim to ensure the route can serve its function, while mitigating the identified constraints and challenges. They conclude with locations for further consideration to achieve the route objectives. The route objectives and locations for further consideration will be presented to the Department for Transport to inform future decision-making about investment planning through the Road Investment Strategy (RIS). It should be recognised that not all aspirations outlined in this report can be funded or delivered.

DFT'S SIX STRATEGIC OBJECTIVES FOR THE STRATEGIC ROAD NETWORK A Improving safety for all Network performance Improved environmental outcomes Growing the economy Managing and planning the SRN for the future A technology-enabled network

For clarity, this document does not:

- Identify committed schemes for delivery as part of future RIS periods. This will be part of the wider RIS setting process
- Commit to the delivery of local plans or economic growth developments mentioned
- Guarantee funding for any locations identified for further studying to understand the challenges and issues in more detail
- Preclude the inclusion of other locations for consideration in the light of other evidence or imperatives

Customers and neighbours

Engagement with our customers and neighbours has been central to developing our route strategies. We have already gathered a wealth of evidence from the previous rounds of route strategies and through our ongoing monitoring of road condition and performance.

Our performance is monitored through the National Highways' Performance Framework. This Performance Framework was established at the start of the second road period (2020 – 2025) and sets out National Highways' commitments to 2025. It is outlined in the RIS2 *Delivery plan* (2020 - 2025)¹. We will continue this monitoring approach into the third road period (2025 – 2030).

To add to this existing evidence, we carried out a detailed engagement programme for this round of route strategies to understand the current and future needs of those using and living alongside the SRN.

The route

The South Coast Central route which is 206 miles in length and comprises the A3 corridor linking Portsmouth to the M25, the A27 running along the length of the south coast, the A23 running north-south as far as Crawley, and the A21 linking the M25 with towns on the south coast. It also includes the A259 and A2070, which connect the route to Ashford in Kent, and the A26 between Newhaven and the A27at Beddingham.

This route strategy report can be read alongside other interacting route strategy reports, including:

- London Orbital and M23
- SW Peninsula
- Kent Corridors to M2

Challenges and issues

We have identified challenges and issues of those using the route and living alongside it. These correspond to the DfT's six strategic objectives, which are the strategic objectives for RIS3. They were agreed by National Highways and the DfT, and are set out in the *RIS3 Planning ahead*² document in December 2021.

Challenges and issues on the route have been identified which correspond to the the DfT's six strategic objectives:

Improving safety for all:

- Much of the A26, several sections of the A27, the A21 corridor south of Tunbridge Wells, plus large sections of the A259 and the A2070 have the lowest International Road Assessment Programme (iRAP) star ratings of 1 or 2
- Higher collision rates and proportions of people being killed or seriously injured in collisions at key locations on the A259, A21 and A27
- A higher percentage of collisions resulting in someone being killed or seriously injured involving walkers, cyclers or horse riders on the A3 south of Hindhead, A27 east of Portsmouth to Worthing, and A259 between Pevensey and Bexhill on Sea
- A high proportion of collisions resulting in death or serious injury involve motorcyclists on much of the network

¹ Highways England, Delivery Plan 2020 – 2025, https://nationalhighways.co.uk/media/vh0byhfl/5-year-delivery-plan-2020-2025-final.pdf

² Department for Transport, December 2021, Planning ahead for the Strategic Road Network: Developing the third Road Investment Strategy, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1045938/planning-ahead-for-the-strategic-road-network-developing-the-third-road-investment-strategy.pdf

Network performance

- Congestion-related delay occurs on sections of the A27 at Chichester, Worthing, Polegate, Arundel, the A2070 and A3 Guildford
- Inconsistency of network layout, sections of single carriageway and provision of at-grade junctions (for example on the A21 and A259) can impact on journey time reliability and worsen peak congestion
- Access to coastal towns and event days at local attractions also results in higher traffic in the summer months, often worsening congestion issues
- Delays are expected to worsen by 2031 at several locations, particularly along sections of the A27, the A2070 and the A3

Improved environmental outcomes

- Impacts of traffic on iconic environmentally designated assets, such as the South Downs National Park adjacent to the A27, and AONBs such as the High Weald and Surrey Hills corridor
- Traffic-related severance, and noise and air quality impacts on local communities with existing Air Quality Management Areas and Noise Important Areas in place
- Receptor locations within 100m may be more likely affected by air quality include sections of the A3, the A27 and the A259
- Receptor locations within 300m may be more likely affected by higher noise include sections of the A23, A27, A3 and the A21.

Growing the economy

- The route supports regional economic growth by enabling connectivity and linking communities. There is substantial housing growth in the area, including in the 'Gatwick Diamond' and Sussex coastal communities
- Providing access to international gateways such as Gatwick Airport via the A23 corridor, and connectivity between Newhaven Port and the wider network via the A26
- Highway and sustainable travel network constraints risk inhibiting growth, with several areas located along the corridor identified as priorities for the Levelling Up Fund.

Managing and planning the SRN for the future

- Contributing toward the national target of 96.2% or more of carriageway being in good condition
- Maintaining the good condition of the SRN's geotechnical assets
- Ensuring that drainage assets are maintained so that their good structural and service conditions can be upheld

A technology-enabled network

- Electric vehicle charging points are largely clustered in urban areas
- Limited provision of technology providing up to date information to improve road user experience
- Limited opportunity for active traffic management with goods vehicle journeys particularly affected during diversions







Initial route objectives

We want to provide safer and more reliable journeys for all those who use or live alongside our network, and support the route in achieving the economic and housing growth ambitions of surrounding areas. Based on our engagement and data analysis, we have defined a set of objectives for the route. The table below shows the route objectives and how they contribute to the DfT's six strategic objectives for the SRN as a whole.

		DfT's strategic objectives for our network					
Ref.	Route objective	Improving safety for all	Network performance	Improved environmental outcomes	Growing the economy	Managing and planning the SRN for the future	A technology- enabled network
Α	Provide a safe and serviceable network to improve journey quality, user experience and safety for customers, particularly on the A21 and A27 corridors	√	√				
В	Support strategic functions of the corridors by enhancing strategic travel and improving integration of local and strategic trips, particularly for road users and communities on the A27, A21 and A3 corridors		✓	✓	✓		
С	Protect communities and environmentally sensitive assets acting as a better neighbour to enable appropriate & effective local access to visitor destinations, including Areas of Outstanding Natural Beauty and South Downs National Park			√			
D	Support sustainable regional and local growth aspirations adjacent to corridors to enhance opportunities for improved freight movement and business and community interaction on the A27, A3 and for the Gatwick Diamond		✓		V		
E	Support sustainable travel and integrated transport improving local community accessibility, enhancing connectivity and east – west movement in the region		✓	√	~		
F	Maximise the opportunities offered by new technologies to better inform road users and improve reliability and access to innovations and information systems					V	√

Next steps

The 20 route strategy Initial overview reports will combine with other related evidence to inform the broader *SRN initial report*³ as part of the RIS process for the third road period (2025-2030). The *SRN initial report* includes an assessment of the current state of the network and user needs from it, potential maintenance and enhancement priorities, and future developmental needs and prospects. DfT will consult on this *SRN Initial report*, which will serve to inform the RIS and *Strategic business plan*⁴.

We will finalise the Route strategy overview reports following feedback on the publication of these Initial overview reports. They will be used as a forward planning tool by National Highways to help identify investment opportunities for enhancements, as well as to support decisions around operating and maintaining our network. Providing an understanding of the strategies for each route will also help inform the decisions taken by our interested parties. These finalised Route strategy reports will also serve to inform the RIS and *Strategic business plan*.

 $^{3 \}quad \text{National Highways, 2023, } \textit{Strategic Road Network Initial Report, } \underline{\text{https://nationalhighways.co.uk/futureroads}}$

⁴ National Highways, 2023, Connecting the country; Our long-term strategic plan, https://nationalhighways.co.uk/futureroads





01 Introduction

Our strategic road network (SRN) is the backbone of the country. Over 4,500 miles of motorways and major A-roads connect people, build communities, create opportunities and help the nation thrive.

Our network provides safe, high-speed connections that:

- enable businesses to transport products and services
- · provide access to jobs and suppliers
- · facilitate trade and investment
- support commercial and housing development that is integrated with local roads and other modes of transport.

The SRN also supports leisure journeys, connecting people and places, and will play a central role in delivering the social, economic and environmental needs of the nation, especially as we seek to reduce the carbon footprint of our network.

To plan for the future, we are taking a long-term view of our network and the trends that could impact transport, road travel and personal and commercial mobility. We consider factors ranging from climate change and low-carbon transport to increasing automation, digital technologies and changing travel preferences. Route strategies are at the centre of this dynamic future planning of our network. They build on our *Connecting the country: Our long-term strategic plan to 2050*⁵ that sets out our vision and plan for the SRN until 2050, aligning with the government's *Ten point plan for a green industrial revolution*⁶.

Purpose of route strategies

Our route strategies are based on 17 routes across England, with some split into two sub-strategies where this better reflects our customers' end-to-end journeys. There are 20 reports in total. We outline the objectives of each route along with the constraints faced and the current and predicted future performance based on analysis and widespread engagement with our customers and neighbours. Our customers and neighbours include:

- Local authorities, devolved administrations, and Sub-national Transport Bodies
- Other transport network operators (including local highway authorities, Network Rail, port and airport operators)
- Operational partners (including, but not limited to, the emergency services)
- Road users
- · Local communities
- Other relevant interested parties with a significant stake in the longterm development of the network
- Members of Parliament

We also provide a list of locations for further consideration to inform investment planning across National Highways and for the Road investment strategy (RIS). We develop and publish these route strategies to:

- help us develop an understanding of the future state of the routes
- identify the locations for further consideration to inform our investment programmes and guide our vision

⁵ National Highways (2023) Connecting the country: Our long-term strategic plan to 2050 https://nationalhighways.co.uk/connectingthecountry

⁶ HM Government (November 2020) The Ten Point Plan for a Green Industrial Revolution: Building back better, supporting green jobs, and accelerating our path to net zero. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936567/10_POINT_PLAN_BOOKLET.pdf

- give a practical tool to National Highways as a whole, while supporting external interested parties who anchor their infrastructure planning and investment around our network
- help ensure that all investment delivers safer and more reliable journeys for our customers and neighbours

For clarity, this document does not:

- identify committed schemes for delivery as part of future RIS periods. This will be part of the wider RIS setting process
- commit to the delivery of local plans or economic growth developments mentioned
- guarantee funding for any locations identified for further studying to understand the challenges and issues in more detail
- preclude the inclusion of other locations for consideration in the light of other evidence or imperatives

Route strategy reports

These Route strategy initial overview reports have informed the *SRN initial report*⁷ that sets out our vision and proposed priorities for the third road period (2025-2030) and beyond.

The final Route strategy reports will be published by the end of the RIS period, which covers 2020-2025. The three delivery phases of route strategies are shown in Figure 1.

Purpose of the report

This report is for the South Coast Corridor Route. In this report, we detail the route context, current constraints on the route, and opportunities for improved connections with local roads and rail links. We set out intelligence-led route objectives aligned with the DfT's six strategic objectives. These objectives aim to ensure the route can serve its function, while mitigating the identified constraints and challenges. They conclude with locations for further consideration to achieve the route objectives.

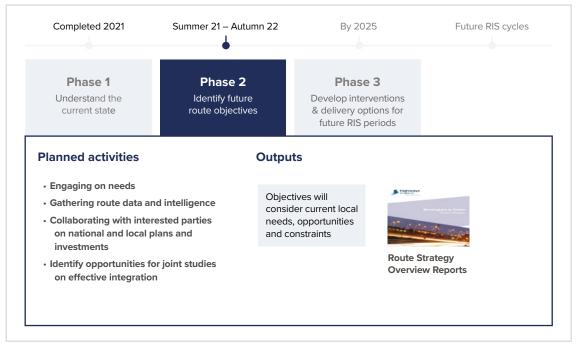


Figure 1: The route strategies delivery phases

⁷ National Highways, 2023, Strategic Road Network Initial Report, https://nationalhighways.co.uk/futureroads

The route objectives and locations for further consideration will be presented to DfT to inform future decision-making about investment planning through the RIS. It should be recognised that not all aspirations outlined in this report can be funded or delivered.

The development cycle for the third Road Investment Strategy (RIS3)

Preparing route strategies is a requirement under the Infrastructure Act as well as a National Highways Licence requirement. The Licence sets out the Secretary of State for Transport's statutory directions and guidance to National Highways. It states that we must periodically prepare and publish route strategies covering the whole of the network to maintain an understanding of how the network is performing, while identifying any potential challenges. Each set of route strategies informs each RIS outlined by government, as well as supporting decision-making for the ongoing management and development of the network.

Route strategies are one of the key steps of research required by DfT to inform the setting of a RIS. Following the setting of RIS1 and RIS2, which covered the first road period (2015-2020) and second road period (2020-2025), we are now in our third round of route strategy planning informing RIS3 for the third road period (2025-2030) and beyond.

Looking across the whole of the SRN, our route strategies form one of the most important parts of the 'research' phase of the RIS3 development cycle. These strategies explore the current performance and future pressures on every stretch of the SRN, covering matters such as safety, reliability, congestion, environmental impacts, and local ambitions for economic and housing growth. Through the extensive engagement we have undertaken to inform the strategies, we provide insight to DfT and government into local, regional and national priorities for the SRN to support investment decisions for RIS3 and beyond. Grounded in evidence, the strategies identify the immediate needs of the network as well as highlighting longer-term issues or potential opportunities as shown in Figure 2.



- Strategic Studies
- Route strategies
- National Highways Strategic Road Network (SRN) initial report
- Public consultation on SRN initial report
- Department for Transport produces Road investment strategy
- National Highways produces Strategic business plan
- Office of Rail and Road advises government on efficiency and deliverability of both
- · Scheme development
- National Highways publishes Delivery plan
- Maintenance and renewals plans

We have developed a revised approach to route strategies, building on past versions, to ensure they respond to the current and future needs of our customers and neighbours. The approach for route strategies is outlined in our approach document *Vision for route strategies: Planning for the future of our roads*⁸.

Our ambitions for route strategies, summarised in Figure 3, are to be forward-looking, widely supported, and integrated with other networks and modes of travel. They will consider the implications of local development plans and government ambitions and be dynamic to respond to the changing needs of ou customers and neighbours in how they use and interact with our network. Such needs may evolve as a result of how people use our network due to COVID-19, environment considerations, or the need to support strategic connections and integrated solutions that connect locations, all of which will have an influence on the scale and type of future investments. We will work with interested parties to ensure that the route strategies are widely supported and integrated into regional and local strategies.

Engagement with customers and neighbours

Engagement with customers and neighbours has been central to developing our route strategies. We have already gathered a wealth of evidence from the previous rounds of route strategies and through our ongoing monitoring of road condition and performance.

Building on engagement to date, we have worked with Sub-national Transport Bodies, Office of Rail and Road, Department for Transport, and Transport Focus to ensure a diverse range of people and their views are represented. This has allowed us to further improve our understanding of our customers and neighbours' requirements, helping us identify locations for further consideration to improve the SRN.

We will continue to evolve this engagement process for future cycles of route strategies. We used a range of methods to gather information from customers and neighbours throughout the route strategies' evidence collection period, which ran from August to December 2021 (Figure 7). These included round tables, workshops, and an online feedback form and we designed the approach to be more inclusive by engaging with, and learning from, a wide range of interested parties.

Thinking about how the SRN integrates with the surrounding rail and road network, including parts of the Major Road Network (MRN) and local roads, we designed our engagement around the following objectives:

- to understand the current role of the SRN and how it could better support the aspirations of customers and neighbours of the future
- to gather views and seek evidence on current and future issues, challenges and opportunities – both local and strategic

We have also gained an in-depth understanding of what our road users want nationally from Transport Focus' *Strategic roads user survey 2021/22*9 into road users' priorities for improvements to journeys on the SRN. This research was based on focus groups and interviews with all types of road users across the country, alongside a survey of more than 5,000 drivers. It asked for users' views on key issues, such as sustainability and electric vehicles, and the stress of driving on the SRN.

From this research, Transport Focus identified that the majority of road users want the focus of investment to be on keeping National Highways' existing roads in good order before building new ones. Their top priority for improvement to journeys on the SRN is road surface quality, followed by the safer design and upkeep of roads.

⁸ Highways England, 2021, Vision for route strategies Planning for the future of our roads, https://nationalhighways.co.uk/media/w0vhd3un/vision-for-route-strategies.pdf

⁹ Transport Focus, 2022, Strategic Roads User Survey - 2021/22 Summary Report, https://www.transportfocus.org.uk/publication/strategic-roads-user-survey-2021-22-summary-report/



operational and investment priorities.

Figure 3: Our ambition for route strategies

Users also want to see better management of roadworks and of unplanned delays, such as incidents or breakdowns, and better information about unplanned disruptions to journeys. Walkers, cyclists and horse riders using the SRN highlighted concerns about the speed of traffic and want action on lighting and litter. This research will be used by Transport Focus to make recommendations about what National Highways should be required to deliver during the third road period (2025-2030).

The findings from the Transport Focus survey align with findings from our route strategies engagement with customers and neighbours across the SRN.

Engagement during workshops with interested parties (shown in Figure 6) identified the following national priorities:

- Better driver education aimed at teaching road users about new technology
- Deeper consideration of environmental constraints at the earliest stage of planning, and consideration for key environmental issues such as biodiversity, air quality and sustainable transport
- A resilient and reliable SRN to support economic growth
- Better integration between the SRN and local road network to improve journey times
- Greater support for the freight industry in terms of:
 - The future of low emission vehicles and commercial fleet
 - The impact of congestion on productivity, fuel cost, driver breaks, lorry park locations and delivery times
- Greater collaboration and early engagement with interested parties, and greater alignment between network operators, including consideration for joint funding opportunities
- In addition, feedback on the SRN provided by communities and neighbours via the online tool, showed similar national priorities. The breakdown of the 1,700 responses we received via the online feedback tool are shown in Figure 4 and Figure 5.

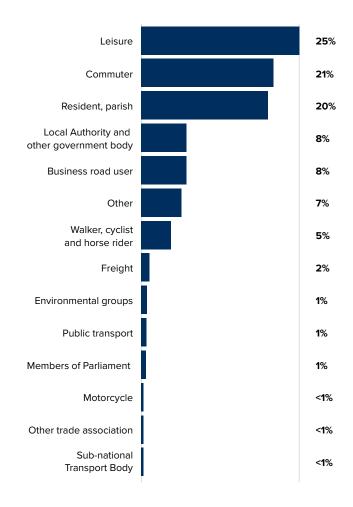


Figure 4: All responses to online tool by participant type

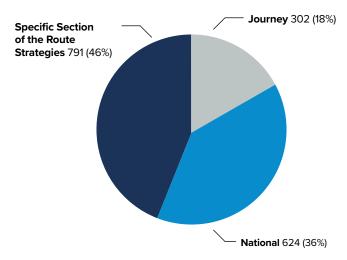


Figure 5: All response to online tool by type

A breakdown of the national issues and general feedback raised is shown in Figure 8, which highlights that, in terms of the issues identified:

- 26% were related to safety
- · 23% were related to congestion
- 28% were related to the environment or carbon

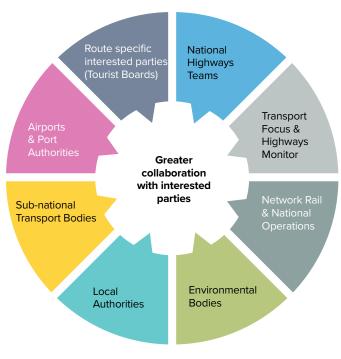


Figure 6: Interested parties involved in the route strategy engagement



Figure 7: Timeline of engagement with interested parties

DfT's strategic objectives for the strategic road network

DfT have published six objectives for the SRN. These are the strategic objectives for RIS3 (2025-2030) that have been agreed between National Highways and DfT and were set out in the *RIS3 Planning ahead*¹⁰ document in December 2021. They cover safety, network performance, environment, economy, management and planning for the future and technology.

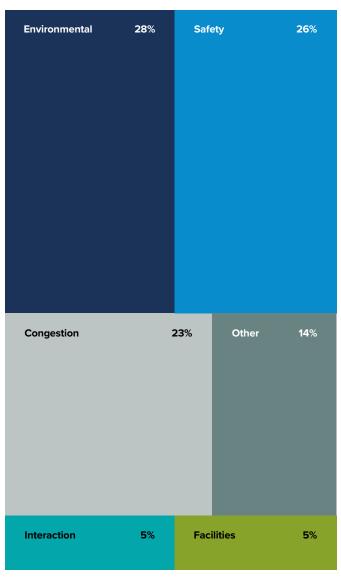


Figure 8: National themes from feedback through the online tool

¹⁰ Department for Transport, December 2021, Planning ahead for the Strategic Road Network: Developing the third Road Investment Strategy, https://assets.publishing.service.gov.uk/Government/uploads/system/uploads/attachment_data/file/1045938/planning-ahead-for-the-strategic-road-network-developing-the-third-road-investment-strategy.pdf

All our route strategies need to show how they contribute to the delivery of the DfT's six strategic objectives for our network, to ensure we meet future challenges. These help us create relevant, meaningful and effective strategies that address evolving concerns. Such concerns include decarbonisation, ecology, the need for new homes and the desire for a better-connected country.

This aligns with the Infrastructure Act 2015, where National Highways has a statutory obligation to have regard to the effect of its functions on the environment, and the safety of users of highways.

At a national level, National Highways has existing commitments and ambitions to contribute to the DfT strategic objectives, as outlined below. The strategies for each route are aligned with these. They include:

i) Improving safety for all

· Our safety approach

ii) Network performance

- Expectations over COVID-19 and travel demand
- · Our ambition for supporting freight, logistics and the coach industry
- Our ambition for supporting end-to-end journeys for a variety of modes
- · Our approach to trunking and de-trunking for SRN

iii) Improved environmental outcomes

- · Net zero highways: Our 2030/2040/2050 plan¹¹
- Our plan for net zero carbon travel on our roads covering emissions from the vehicles using the SRN
- Our approach to improved environmental outcomes

DFT'S SIX STRATEGIC OBJECTIVES FOR THE STRATEGIC ROAD NETWORK

A Improving safety for all



Network performance



Improved environmental outcomes



Growing the economy



Managing and planning the SRN for the future



A technology-enabled network

iv) Growing the economy

- · Our contribution to growing the economy and levelling up
- · Our approach to spatial planning

v) Managing and planning the SRN of the future

· Our approach to asset management

vi) A technology-enabled network

· Our ambition for digital roads

¹¹ National Highways (2021) Net zero highways: our 2030 / 2040 / 2050 plan. https://nationalhighways.co.uk/media/eispcjem/net-zero-highways-our-2030-2040-2050-plan.pdf

IMPROVING SAFETY FOR ALL

OUR SAFETY APPROACH: We are committed to reducing the number of road users killed or seriously injured on the strategic road network, by 50% (from the 2005-2009 baseline) by the end of 2025, with a long-term vision to eliminate harm arising from use of the SRN. We recognise:

- safety is National Highways' top priority. We believe that everyone who travels or works on our roads should get home safe and well
- billions of miles are travelled on the SRN each year, with the vast majority of these safe and reliable journeys
- our roads are some of the safest in the world, but we know there is more we can do. Every death or serious injury on our roads is a tragedy and we are committed to creating the safest roads in the world

NETWORK PERFORMANCE

EXPECTATIONS OVER COVID-19
AND TRAVEL DEMAND: COVID-19
has had the biggest single-year impact on road traffic since records began in 1949.
But car traffic on the SRN is now back to approximately 95% of pre-pandemic levels.

At the time of writing, while the onset of COVID-19 and the rapid rise in homeworking initially decreased demand for both public and private transport, the greatest impact has been on public transport, with private vehicle travel the first mode to rebound. Homeworking has not noticeably reduced demand for the SRN. An estimated 43% of UK jobs can be done entirely from home, but nearly two-fifths of businesses expect 75% of their workforce to eventually return to their normal place of work.

It is unclear if the scale of homeworking will continue or how it will affect long-term travel demand. For the short-term, transport flow data has generally shown that traffic peaks have become flatter but broader, with traffic more evenly spread across the day, suggesting some behaviour change.

Continued hybrid working could see a redistribution of demand, flattening the daily morning and afternoon peaks, and instead creating a mid-week peak.

The pandemic has also brought wider uncertainties, such as whether these loosened physical ties to employment locations could see increases in suburban living, as workers that are more 'knowledge-based' than 'location based' take advantage of greater geographic mobility across the country.

Changes in leisure trends caused by the pandemic could also have implications for the SRN, such as the changing demand for high street retail or choices around domestic versus overseas holiday-making. Such needs may evolve, all of which will have an influence on the scale and type of future investments.

SUPPORTING FREIGHT, LOGISTICS AND THE COACH INDUSTRY: We continue to collaborate with our freight and logistics customers to better understand how the SRN can support their operations, and work with wider government in the delivery of their Future of freight plan¹². We recognise that lorry parking and facilities are key to enabling freight and logistics businesses to operate safely and efficiently. A lack of parking and good quality facilities impacts the recruitment and retention of drivers into a sector that is crucial to the country's economy. We are keen to play our part in ensuring good quality facilities are in the right places and that we support the sector in recruiting and retaining a diverse pool of drivers.

Our ambition is to improve lorry parking by:

- intervening where the market is not meeting the demand for lorry parking (areas of high demand with insufficient facilities)
- working with operators to improve the quality of existing facilities
- ensuring our major projects consider the needs of lorry drivers

¹² Department for Transport (June 2022) Future of Freight: a long-term plan. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1085917/future-of-freight-plan.pdf

In addition to supporting lorry parking, we remain focused on:

- reducing congestion on the SRN, which affects the speed, reliability and cost of logistics, as well as driver safety when journeys exceed regulated driving time
- improving the suitability of alternative routes and diversions off the SRN
- supporting the industry in achieving net zero carbon emissions by facilitating the adoption of alternative fuels linked to parking facilities
- ensuring resilience on key freight routes, such as between ports, airports, wharves and rail freight interchanges
- increased data sharing on incidents, roadworks and diversions
- understanding changes in how our freight and logistics customers use the SRN so we can continue to provide the best possible service

IMPROVING END-TO-END JOURNEYS FOR A VARIETY OF MODES: The SRN plays an important role in supporting a wide range of customer journeys by different modes of transport. We are exploring how to support customers' end-to-end journeys by creating travel choices that deliver our target of net zero carbon customer journeys by 2050. We recognise our role in supporting an integrated transport network that allows our current and future customers to re-route, re-time, re-mode and reduce their journeys, especially at peak times and during major disruption.

Through understanding National Highways' role in influencing and improving travel, we will identify how to support customers utilise the right mode for the right journey. By working closely with operators, we will ensure our network supports bus and coach services.

And through the development of active travel networks we can help deliver health and wider social benefits.

Our focus is on delivering net-zero customer journeys by 2050 through behaviour change towards sustainable travel by:

- understanding travel behaviours to identify customer needs for end-to-end journeys, supporting the development of a travel demand management strategy
- ensuring our customers have the information they need to make the travel choices that are right for them
- improving integration of different modes of travel by working with key interested parties to deliver a range of active travel and public transport interventions
- using behaviour change and techniques to manage future travel demand and minimise disruption from major works
- continuously improving our offer for walkers, cyclists and horse riders

SRN TRUNKING/DETRUNKING: For RIS2 (2020-2025), we were asked to explore changes to the SRN to ensure the network aligns with RIS2 strategic priorities, reflected in the Strategic business plan. This plan relates to improving connections between main urban centres, to international gateways, to peripheral regions (for levelling up) and strategic cross-border routes (to strengthen union connectivity). It included a commitment to explore potential asset ownership changes between ourselves and local highway authorities that could be implemented no earlier than the start of RIS3 (2025-2030). DfT have produced a shortlist of 18 trunking and two de-trunking candidates, identified following the draft RIS2 public consultation in 2018, for us to assess desirability and viability of asset transfer.

De-trunking is the process of returning a
National Highways road to the local highway
authority control and visa versa for trunking.
These candidates were put forward by a range
of external interested parties, including local
authorities, Local Enterprise Partnerships and
Chambers of Commerce, then shortlisted by DfT.

These candidates were put forward by a range of external interested parties, including local authorities, Local Enterprise Partnerships and Chambers of Commerce, then shortlisted by DfT. There is ongoing work to review the assessment evidence and recommendations, after which government ministers are expected to announce the candidates that will progress to the detailed development stage, which will be led by National Highways and incorporated in the forward study programme and wider RIS3 process.

IMPROVED ENVIRONMENTAL OUTCOMES



NET ZERO HIGHWAYS:

NATIONAL HIGHWAYS' 2030/2040/2050 PLAN¹³. We are committed to being a Net Zero Carbon Company by 2050 (2040 for Maintenance and Construction emissions).

We published our ambitious net zero carbon plan in July 2021. It details how we will achieve net zero emissions for: our corporate space by 2030, our maintenance and construction emissions by 2040, and road user emissions by 2050. We're keen to support a sustainable future and know that road travel is vital to enabling a thriving net zero economy. Our plan strengthens the decarbonisation of the transport sector, which remains the biggest emitting sector of greenhouse gases in the country.

We also need to consider how the SRN will be resilient to climate change. Our route strategies will need to recognise that the schemes we construct are likely to be subjected to changes to the climate, such as flooding.

Our route strategies demonstrate how we will continue to connect the country and ensure that the SRN is environmentally sustainable and resilient to climate change. This includes understanding the right schemes and options that support integration across different modes of travel, improve the SRN's capacity through digital roads, and deliver broader environmental enhancements.

This will change the way we work both internally and with our supply chain and wider interested parties.

As part of our net zero commitment, we need to consider the contribution our schemes make to sustainable development. We are adopting the PAS2080 Carbon Management in Infrastructure Standard that will help us invest only where we can achieve our zero carbon goals. Guided by the PAS2080 Standard, we will use an investment hierarchy where we favour opportunities to deliver whole life value without undertaking construction. We will demonstrate that we have considered all interventions during our planning stages and that every effort is made to avoid negative impacts and maximise environmental benefits throughout the lifecycles of schemes. We will also work with government and the private sector to set out a clear proposition by 2023 for electric vehicle charging on our network. This will cover both customer need and the infrastructure required to deliver this.

More than ever we need to support the Government's wider plans for decarbonising transport. The SRN plays a pivotal role in supporting the transition to zero carbon cars, vans and heavy goods vehicles (HGVs), but we also recognise that we need to better integrate with other modes of transport too, including public transport and active travel.

NET ZERO CARBON TRAVEL ON OUR ROADS COVERING EMISSIONS FROM THE VEHICLES USING THE STRATEGIC ROAD NETWORK: We have set an ambition for all of our customers to be travelling using net zero transport by 2050, in line with the UK Climate Change Act. Many of the actions that will deliver this ambition are out of our direct control, but that does not mean we cannot play our part. Our priorities are to help roll-out solutions to decarbonise HGVs and support the uptake of electric cars and vans. We will also continue our work on integrating the SRN with other transport modes, while working to improve the efficiency of the network.

Our actions relating to reducing emissions from road users of our network include:

- publishing our proposed approach to zero carbon HGV trials by the end of 2022
- publishing a blueprint for electric vehicle charging services on our roads by 2023
- integrating a strong modal shift programme in the third road period (2025-2030), building on our work to date

IMPROVED ENVIRONMENTAL OUTCOMES: We know there's a requirement to balance people's need to travel on our roads with doing all we can to protect and improve the environment. That means we will continue to consider a wider range of environmental factors in our future planning, such as improving biodiversity, protecting ancient woodlands, reducing pollution in Air Quality Management Areas, and protecting Sites of Special Scientific Interest. These will form part of our considerations during our early planning. In response to these emerging issues, our latest route strategies take a more balanced view on expanding the future capacity of the SRN. We now seek to develop strategies that produce balanced investment plans with schemes of different magnitudes, delivering across multiple objectives: safety, journey time improvements, network resilience, maintenance and renewals, technology, environmental enhancement, and integration with more sustainable transport modes. The outcome will be an SRN that supports the economy but also delivers on the wider environmental challenges.

GROWING THE ECONOMY

GROWING THE ECONOMY AND LEVELLING UP: The SRN is a vital part of England's – and the UK's - transport infrastructure. It facilitates the movement of people and goods nationally, regionally and locally through connections to the major road network and other transport infrastructure. The Government's levelling up agenda places emphasis on ensuring no community is left behind, particularly as we recover from the COVID-19 pandemic. With such a vital role in supporting the economy and facilitating connectivity - enabling access to jobs and homes, international gateways and supporting road-reliant sectors – National Highways and the SRN have a role to play in supporting the levelling up agenda and the wider aim of economic prosperity.

The Government is committed to strengthening transport connections across the UK. Sir Peter Hendy's *Union connectivity review*¹⁴ was published in late 2021. The Review recommends the creation of UKNET, a strategic transport network spanning the entire United Kingdom based on a series of principal transport corridors between key urban and economic centres, including international gateways. The findings of this report have been considered in the context of our route strategies and will be a key objective for our cross-border routes and the roads connecting to important ports.

Additionally, the SRN plays a critical role in enabling international connectivity and trade by providing reliable and resilient access routes to global markets via the country's network of international ports, airports and the Channel Tunnel. Enhancing these links and supporting these gateway locations to thrive, including maximising the opportunities of Freeports, is a key part of National Highways' role in supporting the national economy.

SPATIAL PLANNING: We recognise that businesses operate from the location that best suits their business requirements in terms of access to customers, the supply chain and employees. Location is equally critical to decision-making in the residential market, both for the house builder and the potential purchaser or occupier. In enabling new employment spaces and homes to be developed, at National Highways we engage appropriately and positively as a statutory consultee in the planning system.

This is in line with our statutory responsibilities as set out in our Licence, and in support of wider government policy and regulation. Our focus is on securing sustainable development, managing cumulative impacts of strategic growth, and minimising the potential for any negative impacts on the SRN.

MANAGING AND PLANNING THE SRN FOR THE FUTURE



We recognise that asset management is our core business. It is the service we provide to maintain, operate, and enhance the SRN safely, reliably and effectively for all our customers. We manage more than 4,500 miles of road, over 20,000 structures and 12 road tunnels, as well as drainage, earthworks, and technology equipment. We recognise that our customers rely on our roads to travel approximately 95 billion miles every year, and our work helps unlock housing and employment sites across the country. One of our main priorities is managing these assets effectively and efficiently, to deliver the outcomes our customers and interested parties want.

We have adopted an asset management approach in order to align our strategy and planning activities to create, maintain, operate, and renew all of the assets that make up our network. Asset management links all our activities and supports our three imperatives: safety, customer service and delivery.

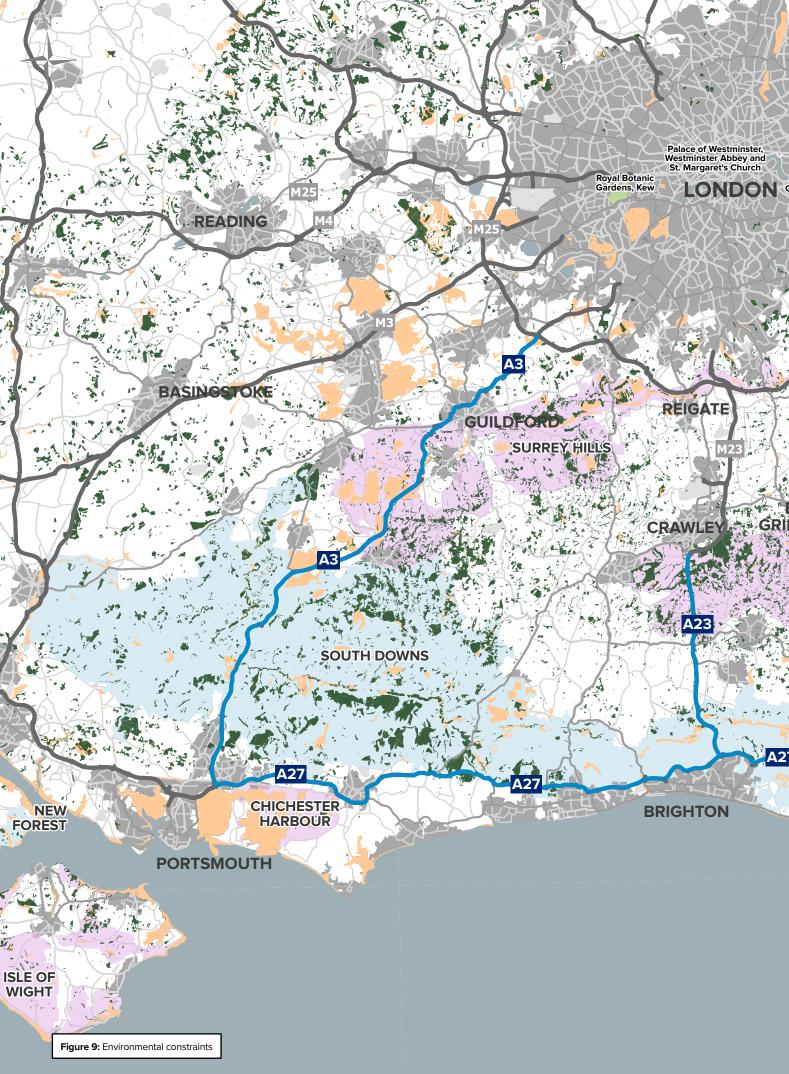
We know that good asset management is about understanding our customers and interested parties, identifying what they need and then using our assets effectively to deliver the right level of service. We are working to understand what satisfies our customers, and what we can do to influence this.

Our vision is to create an approach and establish ways of working that make sure all our asset management activity is aligned by following the key principles set out in our asset management policy. We work across the whole asset lifecycle, understanding that asset decisions we make may affect future service provision. This means that we are planning and accounting for emerging and evolving challenges around customer expectation, climate change and new technology. Since the beginning of the second road period we have continued on our journey to increase our asset management maturity, and our organisational objectives have developed significantly in light of COVID-19 and the Government's carbon plans.

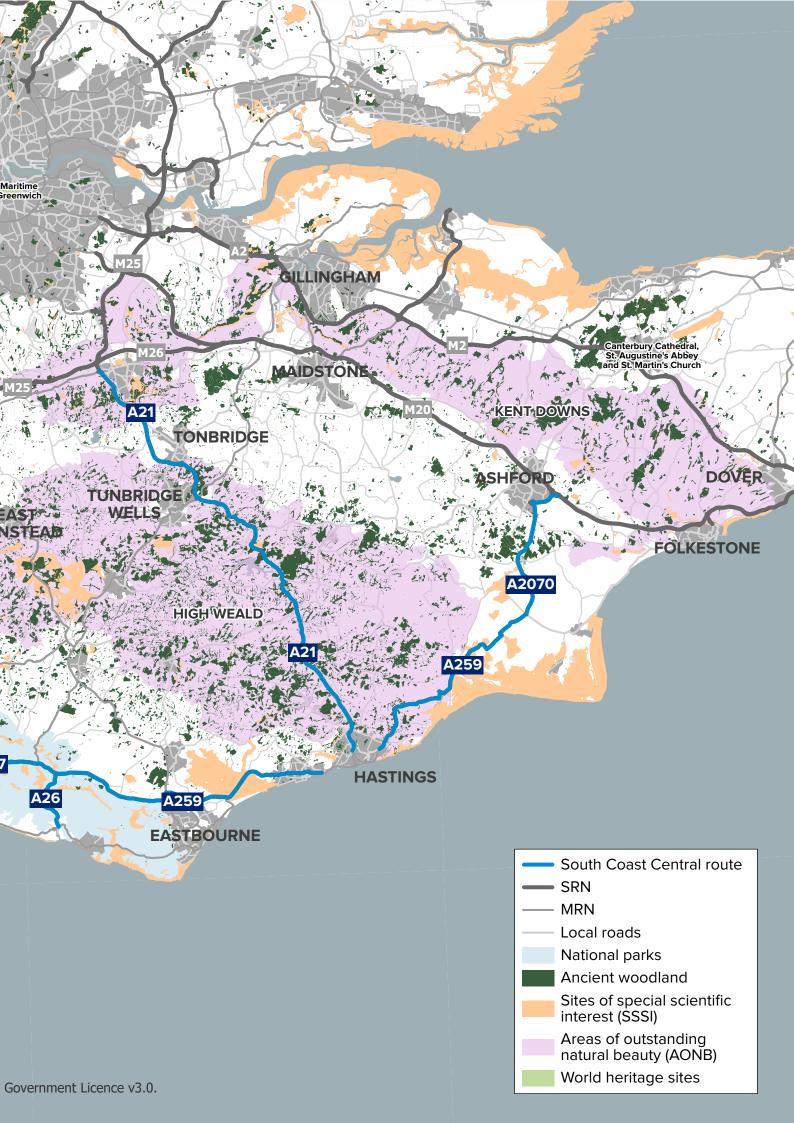
A TECHNOLOGY-ENABLED NETWORK



DIGITAL ROADS: Our ambition for digital roads is to continue to harness data, technology and connectivity of people to places and communities and networks to improve the way the SRN is designed, built, operated and used. Our recently published *Digital roads* strategy (September 2021)¹⁵ sets out how we will harness data, technology and connectivity to improve the way the SRN is designed, built, operated and used. This will also support our ambitions to achieve net zero carbon on the SRN. We have established three themes: Digital design and construction, digital operations and digital for customer. These themes will continue to frame our vision towards 2030 and beyond, increasing connectivity, automation and data.



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02 The route

The South Coast Central route accounts for 206 miles of the SRN, comprising the A3 corridor linking Portsmouth to the M25, the A27 running along the length of the south coast, the A23 running north – south as far as Crawley, and the A21 linking the M25 with towns on the south coast. It also includes the A259 and A2070, which connect the route to Ashford in Kent, and the A26 between Newhaven and the A27 at Beddingham.

South Coast Central is a diverse route supporting economic growth regionally while enabling improved connectivity for travel corridors and linking communities. The A27 is notable as the only element of the SRN running east – west to the south of the M25. It is also strategically important for freight. The A3/A3 (M) corridor provides north – south route access to and from Portsmouth to Guildford and beyond, whilst the A21 and A23 corridors are important north – south routes linking south coast towns to the wider SRN and, in the case of the A23, through to Gatwick Airport and the wider network via the M25 Orbital.

The roads making up the route vary considerably. Some route sections work well, including sections of the A27 west of Chichester, and the A23 north of Brighton. However, many sections regularly experience delay and safety issues. These issues are worsened by high traffic flows and the role of providing a strategic function while also operating as local distributors for shorter journeys.

Sections of the route experience congestion, resulting in delays. This is particularly on single carriageway sections, including the southern section of the A21 and sections of the A27. Road safety issues are a key concern on the A259.

As a consequence of the proximity of properties to the SRN, the A27 at Chichester and Grove Lodge, Worthing, experience localised environmental issues, worsened by congestion. Congestion issues exist as a result of existing traffic pressures and future growth from adjacent development and local plan ambitions at locations such as the A27 at Chichester and Worthing and on the A3 at Guildford.

However, some sections are set to benefit from future Road Investment Strategy scheme investment, including potential improvements at the single carriageway sections of the A27 at Arundel and Worthing.

The proximity of the South Downs National Park to the route leads to some constraints, but may also present opportunities. The presence of the park can lead to increases in the non-motorised user interactions both in terms of parallel journeys and for roads in close proximity to the SRN. However, there is the opportunity for National Highways to be a better neighbour, working with the park on minimising visual and noise intrusion, as well as improving access.

It is recognised that some of the journeys on this route are part of longer trips and therefore need to be considered in conjunction with strategies on other routes.







03 Engagement with customers and neighbours

Engagement with customers and neighbours has been central to developing our route strategies. The development of the route strategies is one of the key steps of initial research in the development of the Road investment strategy (RIS). This engagement, together with data analysis, will inform RIS3 (2025 to 2030) and beyond. It builds on a wealth of evidence from previous route strategies and our ongoing monitoring of road condition and performance.

Engagement with customers and neighbours in the South Coast Central area

Early engagement with the Department for Transport (DfT), Office of Rail and Road, Transport Focus, Transport for the South East (TfSE - Sub-national Transport Body) and Network Rail shaped our engagement with customers and neighbours in the South Coast Central area. We gathered evidence from a cross-section of Members of Parliament (MPs), interested parties, road users and communities at a route level to understand their needs for the future. This built on engagement that had taken place with national interested parties, such as environmental groups, organisations representing road users, business organisations and transport campaigning groups. This engagement has informed the development of the route objectives.

Engagement took place through:

MP roundtables: MPs were invited to a regional roundtable with the Roads Minister to share their views on priorities for our customers and neighbours within their constituencies.

Regional workshops: As part of a programme of workshops with interested parties at a national and regional level, we invited interested parties to workshops on route strategies for the South Coast Central route in late 2021. Attendees included local authorities, airports and port authorities, transport operators, and other key route-based interested parties, such as major businesses.

We designed the workshops to seek views on both current and future challenges and opportunities for the strategic road network (SRN), in relation to the DfT's six strategic objectives. Views were sought on how the routes interacted with the major road network (MRN), local roads, public transport, walking and cycling, and links to the wider SRN. Interested parties also provided insight into key growth proposals and locations along the route, including committed and emerging economic and housing growth and infrastructure proposals. Interested parties shared their own data, studies and observations of the route area.

Route strategies online feedback form: Local interested parties, road users and communities were invited to give their feedback on specific locations on motorways and A-roads and routes, and general comments on the road network, through the route strategies online feedback form. For the South Coast Central route, regional interested parties were invited to workshops or to use the online form to share their views and feedback.

The information gathered was a mix of evidence, studies and personal experience. All the evidence gathered through these engagement methods was considered alongside route analysis and data to inform the development of the route objectives. The evidence was supplemented by routebased information from Transport Focus' Strategic Road User Survey¹⁶ to gain an understanding of the breadth of feedback.

Key themes from engagement

We have drawn out the common themes that emerged from our engagement with our customers and neighbours on the Solent to Midlands corridor to inform our route objectives. The themes have been aligned with the DfT's six strategic objectives:

i) Views on: Improving safety for all

- Improve safety through appropriate integration of local and strategic traffic
- Investigate intervention at locations where vehicles cannot safely overtake
- Improve ease of navigation, ensuring there are clear signs and lanes are not too busy (on the A27)

ii) Views on: Network performance

- Improve mode shift to public transport and active travel investment to provide viable travel alternatives and reduce pressures on the SRN
- Better understand wider impacts of changing travel patterns and routes due to Lower Thames Crossing
- Focus on the provision of active travel routes and improved linkage into the SRN
- Mitigate the impact of roadworks and the displacement of traffic onto diversion routes
- There is a conflict between schemes generating traffic and easing current issues
- Could SRN capacity be opened up by road user charging?
- Managing peak seasonal demands
 peak summertime weekends
 at A23 and A27 junctions

iii) Views on: Improved environmental outcomes

- How do road schemes and decarbonisation fit together?
- Biodiversity Net Gain and re-naturing should be pursued
- Address growing noise / congestion issues around the A27
- Use of more environmentally friendly materials to support network improvements
- Reducing impact of the SRN on human health (air quality, noise, safety)
- Look to provide rapid, reliable public transport (e.g. bus corridors) as an alternative to private cars

iv) Views on: Growing the economy

- The SRN plays a key role in supporting regeneration and growth
- Need to recognise the impact of future infrastructure projects – Gatwick Northern Runway, Southampton Port Expansion
- Improve access to Newhaven Port and Enterprise Zone via the A26. Rail network does not have capacity for more freight from Newhaven leading to more freight on road
- Supporting freight movement is integral to supporting economic growth
- Housing provision and job provision are not always in the same locations, forcing commuting pressures
- Funding from development is beneficial in securing mitigation measures
- Suitability of policy for non-motorway roads so as to encourage a consistency of standards
- The network requires management to support the meeting of Government housing ambitions

v) Views on: Managing and planning the SRN for the future

Our engagement did not highlight any particular comments in this area

vi) Views on: Technology-enabled network

- Improved Electric Vehicle Charging infrastructure investment is needed
- Improved online communications are required to reduce the need for travel
- Need to join up the approach to technology provision between SRN and MRN
- Review Freeport initiatives so as to maximise the opportunities these offer
- Provide alternative travel options by focusing on the opportunities

Engagement quotes from customers and neighbours

"Traffic will often use the MRN to avoid SRN traffic (e.g. on the A27)"

(Route Strategies Engagement)

"There is a need to improve communication between National Highways and Local Highway Authorities about roadworks"

(Route Strategies Engagement)

"Improving safety can be achieved through the appropriate segregation of local and strategic traffic"

(Route Strategies Engagement)

"Was not held up anywhere, was in fairly good condition I had no issues on A21 (Private vehicle driver on A21 September 2021)"

(Transport Focus SRUS)

"Easy to navigate. Clear signs and not too busy (Private vehicle driver on A23 May 2021)"

(Transport Focus SRUS)

"Public transport / active travel to visitor sites is currently poor (e.g. South Downs National Park)"

(Route Strategies Engagement)

"Road surface was reasonable. Traffic was flowing well. (Private vehicle driver on A3 July 2021)"

(Transport Focus SRUS)

"Look to provide rapid, reliable public transport (e.g. bus corridors) as a reasonable alternative to private cars"

(Route Strategies Engagement)

"Housing provision and job provision are not always in the same locations, forcing commuting and increased travel"

(Route Strategies Engagement)

Route satisfaction

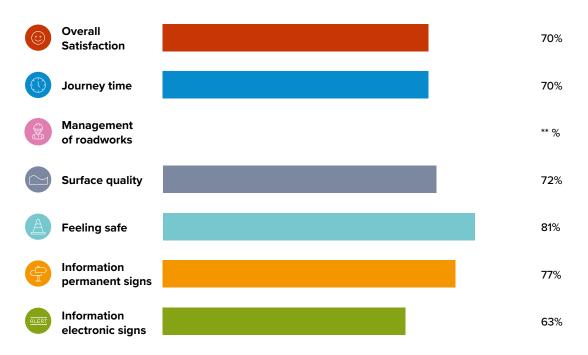
Satisfaction scores have been obtained from Transport Focus through their Strategic Roads User Satisfaction Survey from the last 12 months to May 2022. It covers the roads in this route but it should be noted that the satisfaction scores may not fully align with the extent of the roads in the route. Figure 12 shows how satisfied drivers were with aspects of their journey and how they felt during their journey.

Additional comments and data from the Transport Focus survey of drivers on the SRN can be found on the Transport Focus website data hub¹⁷.

The engagement themes and feedback from MPs, interested parties, road users and communities has been considered as part of the wider analysis in Chapter 5.

Strategic roads user survey satisfaction scores

The survey was not run between April 2020 and March 2021 due to COVID-19. It restarted in April 2021 with a new methodology, so results prior to March 2020 and from April 2021 are not directly comparable.



National Highways Region South East
National Highways Areas 3 & 4
Individual roads A3(M), M3, A21, A23, A26, A27, A259, A2070
Last 12 months*** May 2022 (last 12 months)

^{**} result hidden as less than 75 responses

^{***} Before March 2019 and from April 2021 to February 2022 this is year-to-date, not past 12 months

Figure 12: Satisfaction scores from headline results

¹⁷ Transport Focus data hub: $\underline{\text{https://transportfocusdatahub.org.uk/}}$



04

Network collaboration

The strategic road network (SRN) does not exist in isolation. Most journeys on the SRN are part of a longer journey, involving other road networks or different transport modes.

To deliver safe and efficient journeys for our customers and to support economic and housing growth, at National Highways we have built relationships with other organisations to ensure the SRN maximises its contribution to the overall transport system, which includes local roads, rail networks, links with the devolved nations and international connectivity. We work with other network operators (such as Network Rail), airports and ports, sub-national transport bodies, Transport for Wales and Transport Scotland, as well as combined authorities and local highway authorities. This is in line with National Highways' Licence requirements to consider opportunities for collaborative solutions. We recognise that joint early planning of interventions outside our network will ultimately improve the SRN and deliver greater benefit to the customer than could be achieved alone, where this delivers value for money.

An integrated transport network

Route strategies recognise the role that the SRN plays within the wider transport network. In planning for the future of the SRN, we recognise the importance of working closely with other network planners and operators to ensure our transport networks work well together, and that our investment priorities are aligned where possible.

Sub-national Transport Bodies have a key role in their regions in creating transport strategy and identifying key areas for investment, including for highways. There are seven such bodies in England, who are tasked with developing transport strategies and studies for their particular area. Through the collection of evidence with their local authorities and Local Enterprise Partnerships, their work highlights multimodal issues, needs and opportunities.

A list of potential interventions for transport are then provided to the Secretary of State for Transport, including where to prioritise investment in the major road network (MRN). We work closely with the Sub-national Transport Bodies on interdependencies and align our approaches where possible. The Sub-national Transport Body that covers the route is:

· Transport for the South East

National Highways and Sub-national Transport Bodies have worked together to develop an engagement framework. The need for closer working was highlighted as a priority in DfT's Road investment strategy 218, and within our Strategic business plan¹⁹ and Delivery plan²⁰. It enables National Highways and Sub-national Transport Bodies to work together to achieve mutually beneficial outcomes for transport users, regional economies and the environment. Our approach to engagement is contained in Our vision for route strategies²¹, which sets out a shared commitment for a continued open. constructive and collaborative relationship. This is supported by engagement and action plans for each Sub-national Transport Body, which are proving instrumental in ensuring consistency and transparency in the information we share. The plans are monitored and reviewed regularly, with annual reviews occurring ahead of each new financial year.

At a more local level we also work with local authorities, who are the highway authorities for local roads, including those on the MRN. This collaboration ranges from operational matters to more strategic issues to ensure that the overall highway network operates safely, efficiently and effectively, providing high quality and seamless customer journeys.

¹⁸ Department for Transport March 2020, Road Investment Strategy 2: 2020 - 2025, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951100/road-investment-strategy-2-2020-2025.pdf

¹⁹ Highways England, 2020, Strategic Business Plan: 2020 – 2025, https://nationalhighways.co.uk/strategic-business-plan

²⁰ Highways England, 2020, *Delivery Plan:* 2020 – 2025, https://nationalhighways.co.uk/delivery-plan/

²¹ Highways England, 2021, Vision for route strategies: planning for the future of our roads, https://nationalhighways.co.uk/media/w0vhd3un/vision-for-route-strategies.pdf

The local authority planning teams work closely with our spatial planning teams. In enabling new employment spaces and homes to be developed, we engage appropriately as a statutory consultee in the planning system and the evidence collected through the route strategies will support this decision making.

Transport for the South East

Transport for the South East (TfSE) published its *Transport strategy*²² for the South East in 2020. The plan has been created with the support of the 16 local transport authorities within the TfSE area, along with the five Local Enterprise Partnerships, 46 district and borough councils, and other key interested parties, such as Network Rail.

The strategy sets out the TfSE's 30-year vision for the region, with their strategic goals and priorities. Their 15 strategic priorities sit under three strategic goals: **economy** (to improve productivity and attract investment in the global marketplace), **society** (to improve health, safety, wellbeing, quality of life, and access to opportunities for everyone), and **environmental** (to protect and enhance the South East's environment).

The economic priorities are as follows:

- better connectivity between our major economic hubs, international gateways (ports, airports and rail terminals) and their markets
- more reliable journeys for people and goods travelling between the South East's major economic hubs and to and from international gateways
- a transport network that is more resilient to incidents, extreme weather and the impacts of changing climate
- a more integrated approach to land use and transport planning that helps our partners across the South East meet future housing, employment and regeneration needs sustainably
- a 'smart' transport network that uses digital technology to manage transport demand, encourage shared transport and make more efficient use of our roads and railways

Social priorities are as follows:

- a network that promotes active travel and active lifestyles to improve our health and wellbeing
- improved air quality supported by initiatives to reduce congestion and encourage further shifts to public transport
- an affordable, accessible transport network for all that promotes social inclusion and reduces barriers to employment, learning, social, leisure, physical and cultural activity
- a seamless, integrated transport network with passengers at its heart, making it simpler and easier to plan and pay for journeys and to use and interchange between different forms of transport
- a safely planned, delivered and operated transport network with no fatalities or serious injuries among transport users, the workforce or the wider public

The environmental priorities are as follows:

- a reduction in carbon emissions to net zero by 2050 at the latest, to minimise the contribution of transport and travel to climate change
- a reduction in the need to travel, particularly by private car, to reduce the impact of transport on people and the environment
- a transport network that protects and enhances our natural, built and historic environments
- use of the principle of 'biodiversity net gain' (i.e. development that leaves biodiversity in a better state than before) in all transport initiatives
- minimisation of transport's consumption of resources and energy

The strategic priorities set out in the TfSE Transport Strategy provide a clear framework to inform future decision-making. The strategy is intended to support the creation of a 'more productive, healthier, happier and more sustainable South East'.

²² Transport for the South East (TfSE), 2020, TfSE Transport strategy
https://transportforthesoutheast.org.uk/app/uploads/2020/09/TfSE-transport-strategy.pdf

Interaction with the major road network and local roads

The major road network (MRN) is the middle tier of England's road network, comprising the busiest and most economically important local authority A-roads. It is key to supporting the economic vitality of England, particularly with its role, along with the SRN, of delivering 'first and last mile' connections and onward journeys. It acts as a connecting spine for the SRN, with one of the objectives in establishing the MRN being to support the SRN through improving journeys across both networks. The MRN represents the roads that our partners in local authorities and Sub-national Transport Bodies see as being strategically most important, along with the SRN.

The relationship between the SRN and MRN is complex. The two networks connect people with economically important locations across England, as well as providing resilience for each other. Interventions on one network can also significantly influence travel behaviours on the other. Most SRN journeys involve elements of both networks.

It is therefore important that decisions about the SRN, MRN and other local roads are made in a joined-up way to ensure that the networks are consistent, coherent and complementary. We recognise that the key to the success of the Road Investment Strategy is ensuring the impacts of any interventions are appropriately considered across all networks as well as at their junctions. Both networks play a key role in customers' journeys, and they expect a seamless transition between the two.

We are continually seeking to identify collaborative solutions that meet our obligations under the National Highways Licence to improve network performance and provide integration benefits. In developing the route strategies, we aim to ensure the planning for the SRN, MRN and other local roads is complementary.

For the South Coast Central area, the SRN acts as a spine, with the MRN offering an east - west route alternative to the A27 with the A259 and other local routes effectively providing a complementary east - west function that caters well for local traffic movement.

For north – south movements the MRN function is provided by routes such as the A31 to the west and the A24 and A29 and to a lesser extent the A22 and A26 corridors. These routes provide linkage through to the wider SRN particularly the M25 and the wider SRN.

Freight and logistics

The Future of Freight: a long-term plan (DfT June 2022)²³ sets out priorities for the UK's freight industry. It recognises that in 2019 the sector contributed 10% of the UK non-financial business economy and £127 billion gross value added (GVA) through more than 200,000 enterprises, noting that, with imports and exports comprising 63% of gross domestic product (GDP) in 2019, we are reliant on the freight and logistics sector for our economic wellbeing.

There is generally a sufficient level of lorry parking provision on the South Coast Central route to meet demand. Heavy goods vehicles (HGVs) generally account for a small percentage of traffic on the route, with many trucks using parallel routes, such as the Solent to Midlands via the A34 rather than the M23 and A23. Noise and air quality issues linked to freight movements are concerns for some communities. The Port of Newhaven requires access for vehicles operating specialised freight movement for building or agriculture needs. It is important that parking provision is available for these vehicles. Although provision is generally reasonable, there is a lack of appropriate lorry parking identified along the A27 and A21. Additional specialised spaces would help to alleviate this shortfall.

The National survey of lorry parking²⁴ undertaken by the Department of Transport in 2018 showed that stakeholders highlighted Surrey's border with Hampshire as having HGV parking shortage issues, and suggested that additional parking capacity is required in the Ashford area.

Diversionary routes

To operate a resilient road network, we need to be able to effectively divert traffic off the SRN in the event of unplanned incidents (such as collisions or emergency roadworks), or as part of planned closures (such as planned improvement schemes). The MRN, along with the rest of the local road network, supports the SRN as diversion routes during these events.

We have agreed diversion routes for emergency events with local authorities. Diversion routes for planned events are discussed and agreed with local authorities on a case-by-case basis. These routes are dependent upon the nature of the incident, and the suitability and availability of the surrounding network.

In some cases, the diversion route may not be suitable for certain types of traffic, such as heavy goods vehicles (HGVs), or non-motorway traffic, such as cycles and tractors. In other cases, diversionary routes may not be available due to events on the local road network. We work closely with local authorities to ensure that suitable diversion routes are available.

For the South Coast Central routes there are often limited diversion route alternatives. As noted in our route objectives, there is a general lack of east - west route capacity along the coastal corridor and across the region generally. The A27 corridor in particular has limited route alternatives and, as with the A259, these can become congested as they are intended primarily for local travel. For north – south corridors, such as the A3, A23 and A21, diversionary traffic re-routes away from the SRN corridor, often passing through sensitive environmental or community assets.

National Highways continues to work with partners on assessing the suitability of routes and supporting MRN functions.

²³ Department for Transport, 2022, Future of Freight: a long-term plan, Department for Transport

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1085917/future-of-freight-plan.pdf
24 Department for Transport, 2018, National Lorry Park Survey, Department for Transport, https://assets.publishing.service.gov.
uk/government/uploads/system/uploads/attachment_data/file/723349/national-survey-of-lorry-parking-report.pdf

Network Rail and other network operators

The SRN plays an important role in the movement of passengers and freight across England, and it needs to be considered alongside the wider transport network. The rail network is also important in moving freight and people over longer distances and helping commuters travel into congested cities.

Better integration between road and rail can help to transfer more journeys onto rail. This can help to relieve congestion on the SRN, as well as improve the environment by increasing the use of more sustainable transport modes.

Network Rail's, Our delivery plan 2018²⁵ presents a vision of 'putting passengers and freight users first', recognising that Network Rail can improve the daily lives of people across the country by striving to constantly improve the quality of service across the whole railway system. Network Rail seeks to deliver its vision through a regional structure committed to responding to the needs of local customers and stakeholders, more quickly than if such decisions were made at a national level.

At a strategic level we work closely with Network Rail and train operators to find opportunities to better integrate the two networks to benefit the movement of freight and people. This involves seeking opportunities to place rail stations in strategically important locations with easy access to the SRN.

The route interacts with other transport services at multiple points, particularly rail and bus services throughout the region and along South Coast Central route corridors but the approach to public transport has often not been holistic, meaning accessibility to other modes of transport, including rail and active travel, is not at the level it could be.

Relevant Network Rail strategies include the West Sussex Connectivity Modular Strategic Study²⁶ which sets out capacity constraints and options for the railway. On the A259 corridor in Kent, road re-alignment plans and rail network upgrades are supportive of overall corridor improvements and ambitions with better connectivity often seen as contributing to growing the economy and encouraging job creation at economic growth hubs whilst supporting safety and network resilience. Network Rail have also worked to make the case for extending high speed services to Hastings and Eastbourne via the A259 corridor between Ashford and Hastings, with the aim of improving local and regional connectivity to London.

Similarly National Highways are working with Network Rail and other partners to develop integrated solutions in various locations, such as along the A27 corridor between Solent and Brighton.

We also work with the operators and promoters of urban rapid transit systems where there are opportunities for better integration. For example, through the creation of park and ride sites to remove traffic from the road network.

Strategic connectivity

The SRN plays a key social and economic role in connecting England with the devolved authorities of the UK, particularly Wales and Scotland, but also, via ports, Northern Ireland. We work closely with Transport for Wales and Transport Scotland to ensure our key cross-border routes are joined up effectively with those in Wales and Scotland to ensure easy journeys for our customers. This strategic connectivity is reflected in the Government's commitment to strengthening transport connections across the UK, guided by *Sir Peter Hendy's Union connectivity review* published in late 2021²⁷. The report recommends the creation of UKNET, a strategic transport network spanning the entire United Kingdom.

UKNET would be based on a series of principal transport corridors between key urban and economic centres, including international gateways. The findings of this report have been considered in our route strategies, particularly for our cross-border routes and roads connecting to important ports.

The South Coast Central route enables improved connectivity nationally for freight and air travel, supporting access to the port at Portsmouth, providing access to the wider SRN and nationally via the A3 / A3(M), and supporting access to the port of Newhaven via the A26 and Gatwick airport via the A23/ M23 corridor.

International connectivity

One of the objectives of the SRN is to support the important economic activity involved in international passenger and freight movement via good connections to ports and airports.

A key aspect of route strategies is ensuring that future investment continues to support these essential movements.

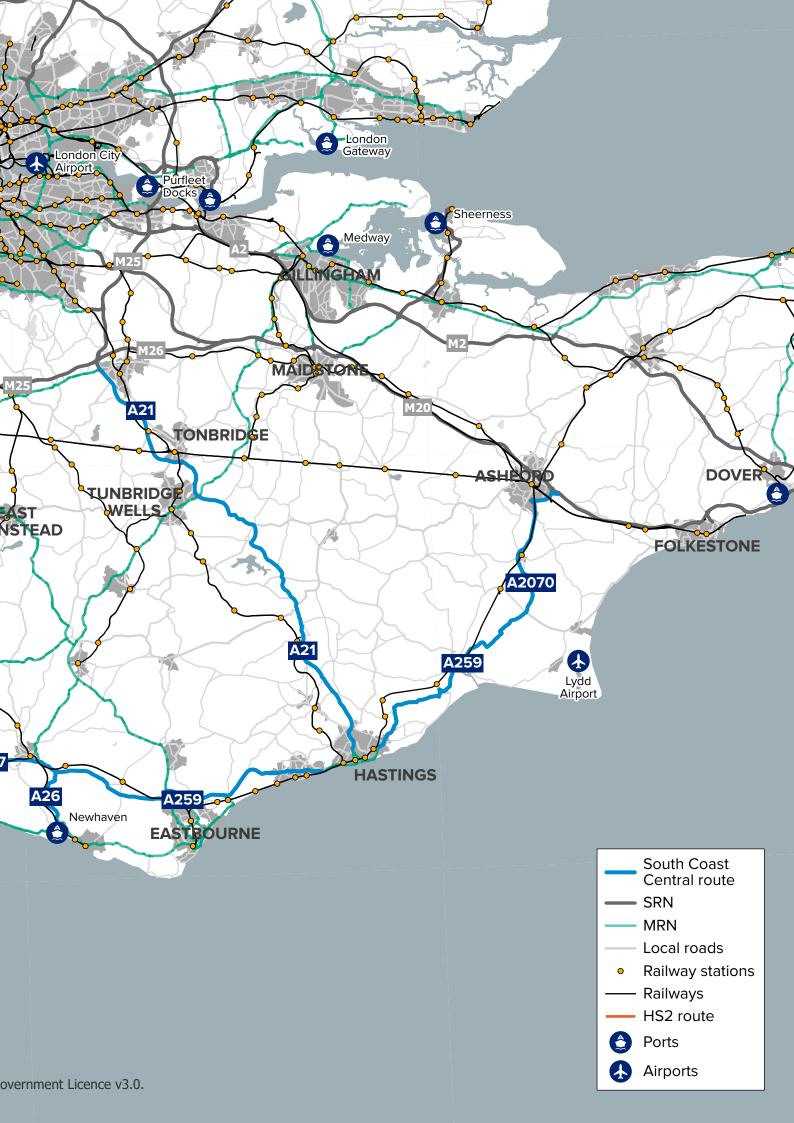
The South Coast Central route supports international trade through the access it provides to the wider SRN via the A3, A23 and A21 corridors. These routes in turn provide links to the London Orbital and M23 route and the wider national network. The route similarly provides access for some Kent and Sussex communities to rail from Ashford, and ultimately to the port at Dover via the Kent Corridors to M25 route. It also provides access, via Newhaven, to ferry services to Dieppe and, via Portsmouth, to European services for France and Spain, and also the Channel Islands.

In addition, for air travel the route provides linkage into airports by directly supporting access to the nationally important airports of Gatwick via the A23/ M23 corridor and onward to the London Orbital, Heathrow and the wider network. The route in turn provides connectivity for coastal communities in the Gatwick Diamond economic areas, via the A23, and further afield.





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05 Challenges and issues

We recognise that there are existing challenges and issues on the network and these are outlined against the Department for Transport's six strategic objectives as part of the route strategy evidence base.



1. Improving safety for all

The International Road Assessment
Programme (iRAP) star ratings are based on
road inspection data and provide a simple
and objective measure of the level of safety
which is 'built-in' to the road. The higher the
star rating, the safer the road. iRAP star ratings
are produced for each 100-metre section
of road, based on detailed inspections of
roadside features as well as traffic flow, speed,
pedestrian and cyclist use, and crash data.

iRAP data helps us to predict future risk within a wider Safe System approach. Safe System thinking accepts that humans will make mistakes but considers what is within the scope of our influence to limit the injuries sustained. The iRAP approach to managing future risk complements the more traditional approach of analysing historical incident data providedby STATS19 as a means of predicting future collisions and casualties.

STATS19 data are the statistical data published by the Office for National Statistics about personal-injury road traffic collisions reported to the police. STATS19 remains the most detailed, complete, and reliable single source of information on road casualties covering the whole of Great Britain, in particular for monitoring trends over time.

For the purposes of National Highways Route Strategies, the total fatal and serious injuries are aggregated by the section of road on which they occurred, based on the National Traffic Information Service (NTIS) network.

The NTIS network used for displaying traffic data is the full extent of the roads for which National Highways are the highway authority. The NTIS network is modelled for each side of the carriageway, such that NTIS links are one-directional and split at junctions. The data used only includes main carriageways; slip roads, roundabouts and other types of road are not modelled in this dataset. The length of an NTIS link can vary greatly depending on what part of the network it represents. Use of the NTIS network provides a common geometry which can be used to compare the STATS19 data with network performance and other metric data.

A combination of star ratings and historic data can help us prioritise route treatments. Where the density of incidents resulting in death or serious injury is high, and the star rating is low (poor), it indicates something can be done to prevent future collisions where people are killed or seriously injured.

Road Safety Foundation (RSF) produce maps that show the statistical risk of fatal or serious injury crash occurring. The risk is calculated by comparing the frequency of road crashes that result in death and serious injury with how much traffic each road is carrying. For example, the risk on a road carrying 10,000 vehicles a day with 20 crashes is ten times the risk on a road that has the same number of crashes but which carries 100,000 vehicles.

Using the latest available data it shows that the following sections of the route have the iRAP star ratings of 1 or 2:

- large sections of the A259 and the A2070
- · the A21 corridor, south of Tunbridge Wells
- a number of sections of the A27, with lowest ratings clustered around Arundel, Worthing, Pevensey and Polegate
- most of the A26 to Newhaven

STATS19 data shows that there are concentrations of collisions on sections of the route where people were killed or seriously injured – including:

- the southern section of the A21
- the A259 between Hastings and Ashford, notably in the eastbound direction
- sections of the A27 to the east of Eastbourne at Stone Cross and Pevensey, west of Polegate and east of Brighton

Using the latest available crash density data, the following parts of the route are classified as medium-high risk roads by the Road Safety Foundation Crash Risk Mapping:

- the A27 between Emsworth and Fontwell, including the section around Chichester
- the A27 east of Lewes to Pevensey

The highest percentage of collisions resulting in death or serious injury of walkers, cyclists or horse riders are on the A3 south of Hindhead, A27 east of Portsmouth to Worthing, and A259 between Pevensey and Bexhill on Sea.

The data shows that between 26 and 50% of collisions resulting in death or serious injury involved motorcyclists on the length of the A27, A23, A259, A2070 and the A21 south of Flimwell. This increases to 60% of recorded collisions resulting in death or serious injury on the A26 (from a small sample size).

Improving safety and minimising collision rates is a key consideration for all our routes

- Much of the A26, several sections of the A27, the A21 corridor south of Tunbridge Wells, plus large sections of the A259 and the A2070 have the lowest iRAP star ratings of 1 or 2
- Higher collision rates and proportions of people being killed or seriously injured in collisions at key locations on the A259, A21 and A27
- A higher percentage of collisions resulting in someone being killed or seriously injured involving walkers, cyclers or horse riders on the A3 south of Hindhead, A27 east of Portsmouth to Worthing, and A259 between Pevensey and Bexhill on Sea
- A high proportion of collisions resulting in death or serious injury involve motorcyclists on much of the network













2. Network performance

Network performance is measured by average delay, seasonal delay and journey time reliability. Many sections of the South Coast Central route experience one or more of these types of delay.

Figure 16 shows the delay caused by congestion during the morning peak in 2019. The lengthiest delays experienced on the South Coast Central route are:

- A27 at Chichester (up to 144 seconds pvpm)
- A27 at Worthing (up to 124 seconds pvpm)
- · A27 Polegate (up to 69 seconds pvpm)
- A27 Arundel (up to 38 seconds pvpm)
- A2070 to Ashford (up to 59 seconds pvpm)
- · A3 Guildford (up to 48 seconds pvpm)

Seasonal delay may be of added significance to tourists and residents, particularly those travelling to airports or other destinations where arriving later than intended could have significant implications.

On the South Coast access to coastal towns and event days at local attractions result in higher traffic volumes being experienced in the summer months. This exacerbates congestion issues.

We want to improve journey times on route sections which currently experience high levels of delay and are expected to worsen in the future

National Highways has a suite of five regional traffic models (RTMs) covering England's SRN. The models allow us to identify future performance and delay on the network, assisting with the development of the route strategies. The RTM models use projected growth, expected trends and changes to the network (including National Highway's RIS2 schemes) to forecast the performance of the network in 2031.

Inconsistency of network layout on the South Coast Central route, and the number of at-grade junctions, can also impact on journey time reliability and worsen peak hour congestion.

Average peak period delay is measured in seconds per vehicle mile and is the difference between average delay in the morning or afternoon peak period and the average delay during free flow conditions.

Seasonal delay refers to the difference between the average afternoon peak delay for Fridays in August 2019 (high demand in summer holidays) and the average delay during very low demand periods (in this case, Christmas day is used). This measure is designed to reflect the parts of the network that do not appear to have a problem on average over the year but have seasonal peaks.

Seasonal delay is of interest to tourist traffic, particularly people travelling to airports, or other destinations where arriving later than intended could have significant implications.

Reliability is the difference between the typical travel time, allowing for recurring delays, and the observed travel time. This measures the amount of variation due to unexpected variations or unplanned events. Like delay, it is measured in seconds per vehicle mile. It is a concern for most drivers, but particularly affects just-in-time freight traffic and other strategic journeys.

The number of local accesses, particularly on the single carriageway sections such as Arundel and Worthing, and in East Sussex between Lewes and Polegate, are of particular concern. These accesses may encourage peak period local traffic, with the appropriate integration with strategic traffic a key consideration for the route.

The A259 and A21 provide key routes to and from Hastings. However, sections of single carriageway and at-grade junctions on both the A21 and A259 can cause issues for congestion and journey time reliability.

On the A3, capacity issues are concentrated both north and south of Guildford, where the carriageway drops from three lanes to two between the A31 and the A320. Capacity issues also occur north of Send on the approaches to the M25 at Junction 10. These issues are particularly prevalent during weekday peak periods.

The lack of suitable alternative routes means this corridor has limited resilience to disruption. Incidents or planned roadworks on the route can create severe disruption. Heavy goods vehicle (HGV) volumes on the network are relatively low. However, some agreed diversion routes are less suitable for HGVs, and the congested nature of local roads parallel to the route means even small incidents on the network can quickly escalate into major congestion problems and delays.

Figure 17 highlights the morning peak delays for 2031, based upon forecasts. The data shows that delays (measured in seconds pvpm) are expected to worsen by 2031 at several locations, particularly along the A27 corridor at Chichester and Worthing, the A2070 at Ashford and the A3 south of Guildford.

- Congestion-related delay occurs on sections of the A27 at Chichester, Worthing, Polegate, Arundel, the A2070 and A3 Guildford
- Inconsistency of network layout, sections of single carriageway and provision of atgrade junctions (for example on the A21 and A259) can impact on journey time reliability and worsen peak congestion
- Access to coastal towns and event days at local attractions also results in higher traffic in the summer months, often worsening congestion issues
- Delays are expected to worsen by 2031 at several locations, particularly along sections of the A27, the A2070 and the A3











3. Improved environmental outcomes

Climate change is affecting society as a whole, and the transport sector is no exception. As a government-owned company tasked with building and maintaining the strategic road network, we need to show both how we can help tackle the causes of climate change and how we are preparing for a changing climate. In 2021 we published our *Net zero highways plan*²⁸ to show how we will meet the target of net zero greenhouse gas emissions.

The latest climate projections from the Met Office have helped us to understand how the climate is changing, including that summers will on average be hotter and drier, while winters will be milder and wetter and critically, that extreme weather will become more common. We have also seen, from reports such as the Climate Change Committee's²⁹ third and most recent independent assessment of climate risk, that there are key risks from a changing climate for infrastructure, such as risks to bridges from flooding and erosion and risks to subterranean and surface infrastructure from subsidence.

Air quality describes how polluted the air we breathe is. Poor air quality can cause both short-term and long-term effects on the health of humans and other living beings. The amount of air pollution depends on the concentrations of different substances in the atmosphere, such as sulphur dioxide, oxides of nitrogen, and particulate matter. In the UK, the concentrations of these pollutants are regulated and regularly monitored. If a local authority identifies any locations within its boundaries where targets are not being achieved, it must declare an Air Quality Management Area (AQMA) and put together a plan to improve air quality in that area.

While noise is often an inevitable consequence of societal activities, it can have serious implications for human health, quality of life, economic prosperity and the natural environment.

We are committed to net zero carbon construction by 2040 and net zero carbon travel by 2050. This will involve significant changes to the way we build and manage our network, including in the including in the South Coast Central area. We will need to consider better integration with other transport modes and how to support the transition to electric cars and zero carbon heavy goods vehicles (HGVs).

The South Coast route encompasses some of the most iconic, attractive landscapes and environmental assets in the country. These assets contribute to the region being an attractive and desirable place to live and work.

The South Downs National Park extends along much of the southern part of the route adjacent to the A27 corridor. This can represent a constraint in terms of local access and severance, particularly for communities within the park, and is a key consideration for future interventions due to possible environmental impacts including biodiversity.

Elevated levels of noise, particularly from traffic, can be associated with heart attacks, strokes and hearing impairment, as well as sleep disturbance and annoyance. While there's no legal limit to road noise, environmental noise regulations in the UK require regular noise mapping and the creation of action plans for Noise Important Areas (areas exposed to the highest levels of noise).

Severance is where transport infrastructure or motorised traffic passes through settlements and acts as a physical or psychological barrier, limiting people's ability or desire to move through that area. This can reduce accessibility to key services, and damage local social networks and community cohesion.

²⁸ National Highways 2021, Net zero highways: our 2030 / 2040 / 2050 plan, https://nationalhighways.co.uk/media/eispcjem/net-zero-highways-our-2030-2040-2050-plan.pdf

²⁹ Climate Change Committee, 2021, Independent Assessment of Climate Risk, https://www.theccc.org.uk/publication/independent-assessment-of-uk-climate-risk/

Of particular strategic relevance for all routes are the impacts on National Parks, Areas of Outstanding Natural Beauty, such as the High Weald and Surrey Hills, and other environmental assets that can constrain opportunities for network enhancements.

Local communities also experience impacts resulting from severance (separation of people from facilities and services they use within their community), congestion and traffic delay. Travel on the SRN contributes to localised environmental impacts on air quality and noise.

In terms of air quality, there are receptors within 100 metres of the strategic road network which may be more likely to experience adverse air quality impacts. The areas most likely affected by air quality issues are on the A3 at Guildford and south of Winchester, the A27 east of Portsmouth, east of Polegate to Hastings, and the A259 east of Rye. There are existing Air Quality Management Areas in close proximity to the SRN on the A27 at Worthing Grove Lodge / Lyons Farm, Lewes and Chichester, the A3 near Guildford and the A26 Newhaven.

There are receptors within 300 metres of the SRN which may be more sensitive to noise levels are on the A23 south of Crawley and north of Brighton, on the A27 between Stone Cross and Pevensey, the A3 adjacent to Waterlooville, and the A21 between Flimwell and Hurst Green. Noise Important Areas identified notably include the A3 at Guildford, the majority of the A23, the A259 at Hastings and the whole length of the A27.

Interested parties would like to see reduced greenhouse gas emissions by providing alternative modes of travel to encourage a lower share of journeys to be made by car, and better managing the SRN to reduce congestion and delay and the resultant high level of emissions.

Where possible we will seek to protect environmentally important locations and reduce air quality and noise impacts on communities served by the route

- Impacts of traffic on iconic environmentally designated assets, such as the South Downs National Park adjacent to the A27, and AONBs such as the High Weald and Surrey Hills corridor
- Traffic-related severance, and noise and air quality impacts on local communities with existing Air Quality Management Areas and Noise Important Areas in place
- Receptor locations within 100m may be more likely affected by air quality include sections of the A3, the A27 and the A259
- Receptor locations within 300m may be more likely affected by higher noise include sections of the A23, A27, A3 and the A21



4. Growing the economy

In order to understand the economic and housing growth aspirations of the area along the route we have considered key growth locations, such as those held in local plans and freeports.

The South Coast Central route supports economic growth regionally, enabling connectivity and linking communities, and, in the case of the A27, providing the primary east – west corridor south of the M25.

Emerging thinking from Transport for the South East (TfSE) area studies identifies that the A27 and M27 should provide a high-quality link for communities from the Solent along the south coast. The route is also important for:

- Portsmouth supporting freight movement and housing growth pressures via the A3 to Guildford and the M25 and beyond
- Newhaven with the A26 providing connectivity from the port to the wider network
- Gatwick airport access and future growth ambitions in the Crawley and Horsham area along the A23 corridor. The route also provides linkage to the south for the 'Gatwick Diamond' and Sussex coastal communities, which are experiencing significant housing growth
- local plan growth, including housing and employment sites south of Crawley and at Portsmouth, and mixed-use allocations along the A27 near Brighton, Worthing, Chichester, and Portsmouth
- potential future growth highlighted during stakeholder engagement and correspondence, including around the A3 at Guildford and the A27 in the south of Wealden District

The strategic road network has a critical economic function in supporting national and cross-border connectivity and areas with high levels of deprivation

Also significant in the corridor are the several areas that fall into the level 1 priority category for levelling up. The index of priority places for the Levelling Up Fund organises local authorities into categories 1, 2 or 3, depending on their identified level of need, with category 1 representing places deemed in most need of investment through this Fund. These include the:

- A27 and A26 east of Brighton and south to Newhaven
- Hastings and the surrounding area - A259, A21, and A2070
- south of the A27 around Eastbourne.

- The route supports regional economic growth by enabling connectivity and linking communities. There is substantial housing growth in the area, including in the 'Gatwick Diamond' and Sussex coastal communities
- Providing access to international gateways such as Gatwick Airport via the A23 corridor, and connectivity between Newhaven Port and the wider network via the A26
- Highway and sustainable travel network constraints risk inhibiting growth, with several areas located along the corridor identified as priorities for the Levelling Up Fund



5. Managing and planning the SRN for the future

Maintaining the strategic road network

We deliver a comprehensive programme of maintenance to keep our assets in the right condition to provide our customers with the right level of service; ensuring that the road network remains safe and fully open for use. We collect data on the condition of all of our assets so that our teams of specialist engineers can fully understand their current condition and identify the optimum time to intervene, maintaining the asset and replacing parts before they fail and impact customer journeys.

Our asset inspections to collect much needed condition data are undertaken through a number of methods - survey vehicles collecting road surface condition for the whole of the network every year right through to structures inspections, where we undertake over 23,000 inspections of individual structures every two years. The majority of our asset routine maintenance activities and the replacement of thousands of asset components as they near end of life are undertaken at night to minimise customer disruption, meaning that most of this work is never seen.

Road surface

The measure for road surface condition has been updated for 2022/23 onwards. The condition is reported as one of our Key Performance Indicators and shows the condition of all available lanes of the main carriageway based on 3 elements of the road surface condition namely - the levels of surface rutting (caused by wheel tracks being formed in the surfacing), skid resistance (how slippery the road is) and longitudinal profile (how bumpy the road feels) with a target of 96.2% or more in good condition. At the time of publication, the road surface had a score of 96.7% in good condition, thereby meeting the national surfacing condition target.

This route consists of 1,100 lane kilometre of road surfacing. The surface condition across the route is considered to be sound, with 95% of pavement asset not requiring investigation for possible maintenance.

Bridges and structures

There are 458 structures across the route, including bridges and large culverts. According to an analysis of current data, 96% of our structures are in very good or good condition. By carrying out inspections of each individual structure every two years, we identify any defects that may require maintenance, thereby helping to ensure that structural components are replaced before they fail.

Figure 18 shows how investment in this route has improved the average condition scores of structures, since 2006. The average condition score is derived from asset inspections on structural components, accounting for the relative importance and size of each component. If no maintenance or renewals were planned, the scores would be expected to decline from 100 (perfect) as the structures deteriorate over time. We have a rolling renewals programme to replace asset components identified in our inspection programme, improving the structure condition to ensure all structures remain in a safe condition and fully open for use.

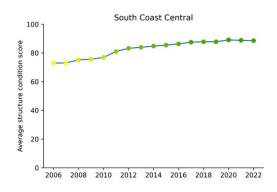


Figure 18: Average condition scores of structures, since 2006

We have identified significant structures renewals for RIS3, and these schemes affect 6 structures in this route.

This route has two tunnels, the Hindhead tunnel, which opened to traffic in 2011, and the Southwick tunnel, which opened to traffic in 1996. The management of tunnel assets vary from the management of other structures in two ways. Firstly, the assets within a tunnel have a wide variety of design lives, from 120 years for the tunnel structure, to far less for the technology systems for operations and fire life safety. Secondly, tunnel systems require 24/7 control by our operations centres, to maintain safe operation.

Drainage

Drainage assets are represented by both linear assets (for example underground pipes, channels, ditches, drains) and nonlinear assets (for example gullies and chambers). At national level, 90% of the drainage assets are in good structural condition and 87% are in good service condition.

Geotechnical features

The geotechnical asset, comprising over 12,000 kilometres of earthworks embankments and cuttings carrying the road network is assessed through a programme of inspections and rated for its ability to provide the right level of safe functionality. The condition assessment of this asset is that 99.61% is in good condition to continue to function correctly. We use the inspection surveys to identify where any of our geotechnical features may require maintenance now or in the future, to ensure they are never at risk of failure.

Future developments

We have been transforming our approach to maintenance through our Operational Excellence and Asset Management Transformation Programmes. Bringing our key asset maintenance decision making and planning activities back in-house so that our own staff are responsible for planning maintenance activities, along with improving the consistency of our end to end maintenance and asset replacement programmes will bring significant benefits.

Our asset management transformation also includes the improved analysis to identify the investment required on the strategic road network during the next road period. The business case will provide evidence to support future maintenance investment, clearly articulating the costs and benefits of delivering an effective maintenance and asset replacement programme.

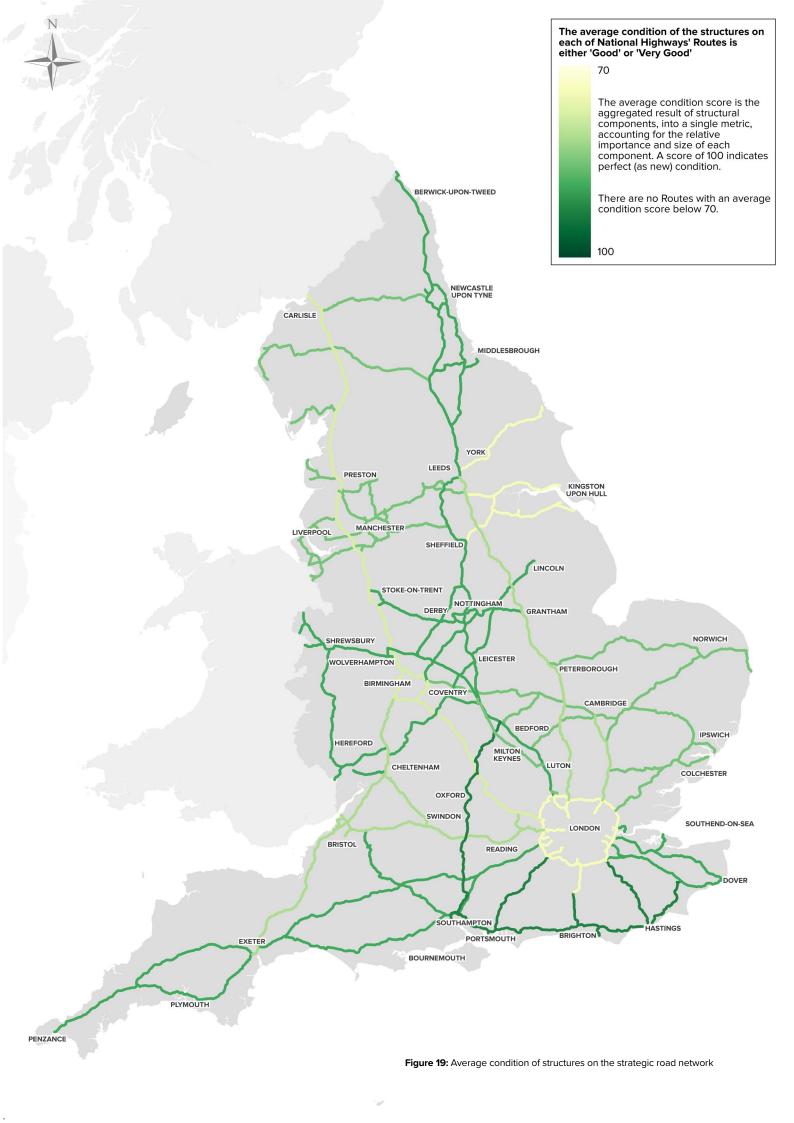
Operations

We are establishing a nationally consistent approach to the management of our operational capability through our Operational Excellence change programme. This will deepen our understanding of how our interventions impact on the performance of the network and on the journeys of our customers. We are using the latest analytical software to process traffic data and gain insight into:

- how our operational services can improve safety and provide security to road users
- how the attendance of a traffic officer has an impact on incident durations
- how information provided by National Highways can benefit road users who plan their journeys beforehand and then while on their journeys

By better understanding our current operational performance, we can create a baseline from which we can identify opportunities for improvement.

- Contributing toward the national target of 96.2% or more of carriageway being in good condition
- Maintaining the good condition of the SRN's geotechnical assets
- Ensuring that drainage assets are maintained so that their good structural and service conditions can be upheld





6. A technology-enabled network

Facilities to improve journey quality and network efficiency on the strategic road network (SRN) are of key concern to our interested parties, road users and communities. High quality travel information before and during travel helps to:

- reduce day-to-day delays and improve reliability of the SRN
- · minimise the adverse impacts of incidents
- · improve quality of journey experience
- allow people to make more informed travel choices, including about when and how to travel

There is limited technology provision within the South Coast Central route as most roads are A-Roads, of varying consistency, and do not meet motorway standards. In addition:

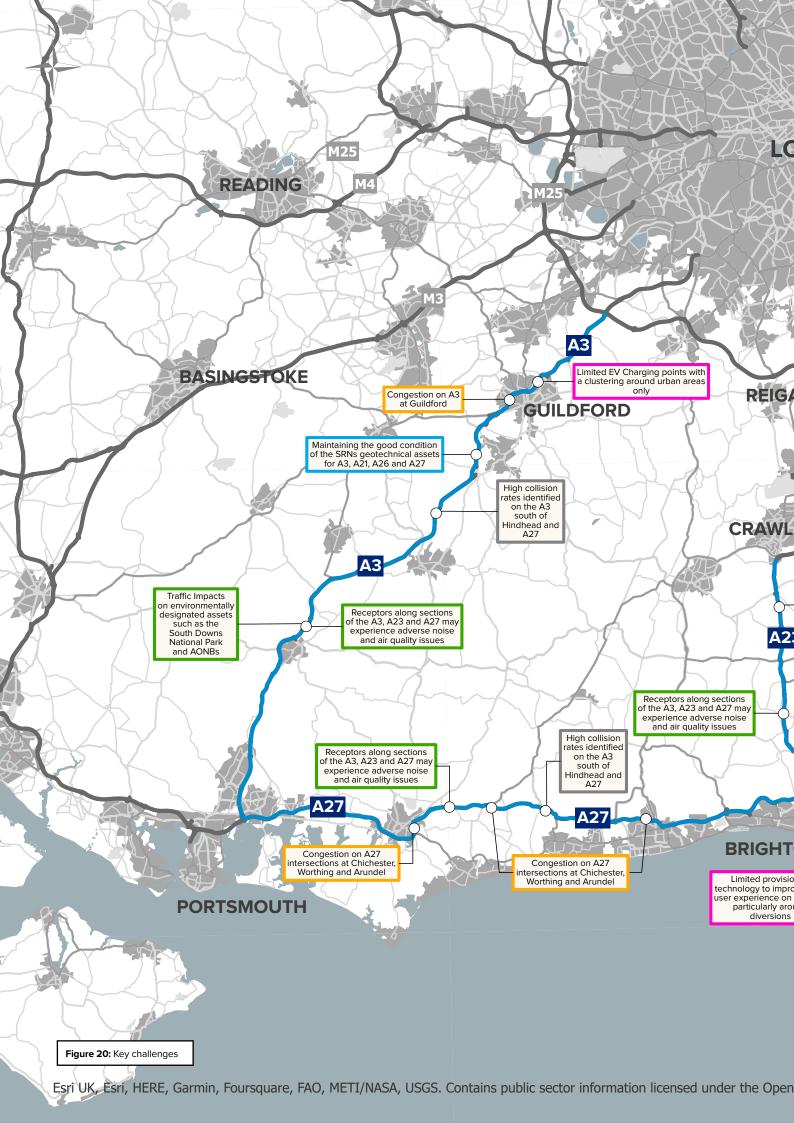
- the current electric vehicle charging points are generally clustered in urban areas, including Brighton, Eastbourne, Portsmouth, and Crawley. Infrastructure is also present in some more rural areas along the route, showing future potential to develop the electric vehicle charging provision in the area
- there is also limited Traffic Officer coverage or depots along the South Coast, and limited traffic control centre integration. This means there is little opportunity for active management of the network. Diversion routes indicated by signs typically involve a significantly longer route for road users

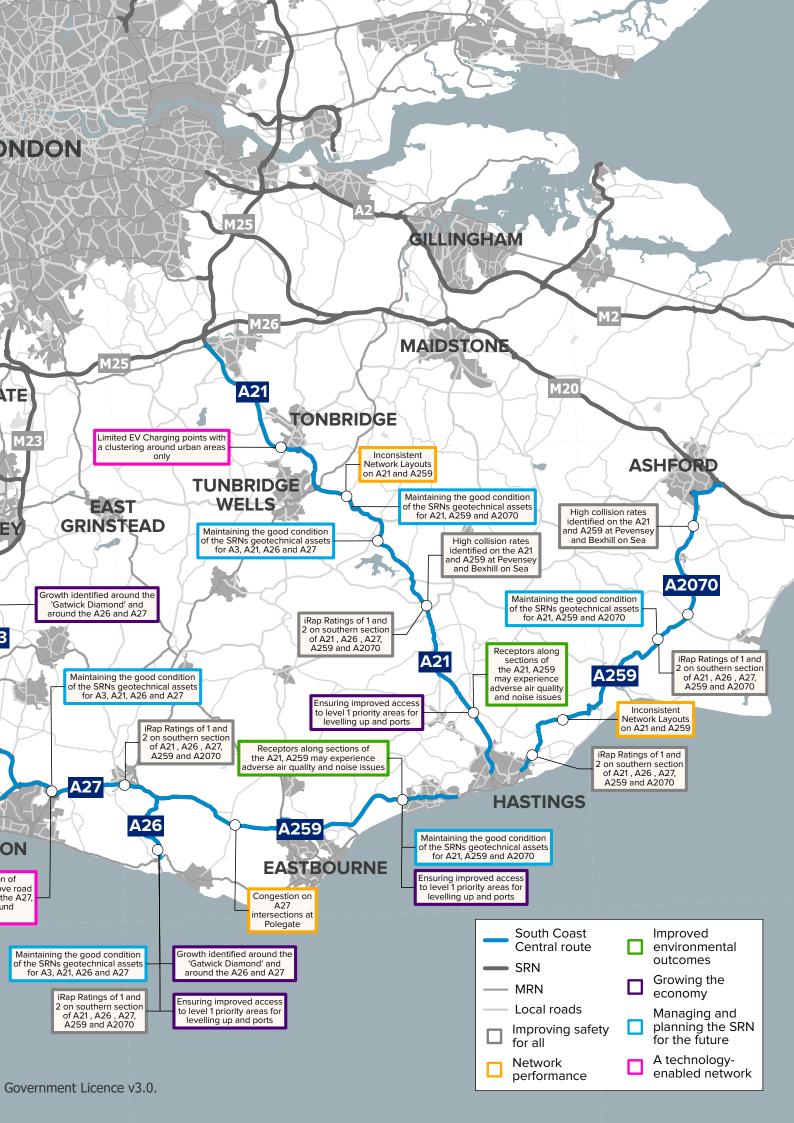
We will support improved communications and facilities for all

- these agreed diversions are often via local, lower standard roads. In some cases, routes are less well suited for HGVs, which can result in increased congestion, reduced air quality and greater noise
- the Government's March 2022 Taking charge: the electric vehicle infrastructure strategy³⁰ sets out a vision for 2030 where charging infrastructure will be removed as both a perceived and real barrier to the adoption of electric vehicles. The Strategy outlines the intention to accelerate the rollout of high-powered chargers on the SRN through the £950m Rapid Charging Fund³¹

- Electric vehicle charging points are largely clustered in urban areas
- Limited provision of technology providing up-to-date information to improve road user experience
- Limited opportunity for active traffic management, with goods vehicle journey particularly affected during diversions









06 Initial route objectives

We want to provide safer and more reliable journeys for all those who use or live alongside our network on the South Coast Central route, and help the region achieve its economic and housing growth ambitions. Based on our engagement and data analysis, we have defined six route objectives for the area.

We developed the route objectives based on:

- feedback from customers and neighbours outlined in Chapter 3
- opportunities to collaborate with other network operators, outlined in Chapter 4
- constraints and challenges, as highlighted in Chapter 5
- how best to contribute to the Department for Transport's (DfT's) six strategic objectives

Each route strategy includes a series of specific route-based objectives. These objectives, informed by extensive data analysis and engagement with customers and neighbours, set out our ambition for each route. Although route objectives are route-specific, they should also be considered in the context of our commitments and ambitions for the whole network, as per our Licence agreement. This means that, while we may identify certain locations within a route for further consideration, we will seek to address these locations in line with our ongoing commitment to achieving our safety, environmental and technology obligations across the strategic road network.

It should be noted that there is overlap between the objectives, and we recognise they cannot be considered in isolation from each other. They should be considered alongside our asset plan.

The route objectives, their supporting narratives, and locations for further consideration will together inform the development of the Road investment strategy (RIS). They do not represent a commitment to road-based interventions but are intended to enable multimodal interventions to be explored as part of later study phases. It should be noted that the route objectives do not signify an assurance of investment in a particular route, nor do they remove the need to follow statutory processes.

As these are initial route objectives subject to wider feedback, we have not at this stage set out in detail how we will measure progress against them. Understanding how interventions and initiatives have addressed the challenges identified is a complex and long-term task and the approach to it will need to be devised alongside the wider performance specification for the third road period. We expect to set out our approach to this more clearly in the finalised route strategy overview reports to be published alongside our *Strategic business plan* and *Delivery plan* later in this road period.

Route objectives and DfT's strategic objectives

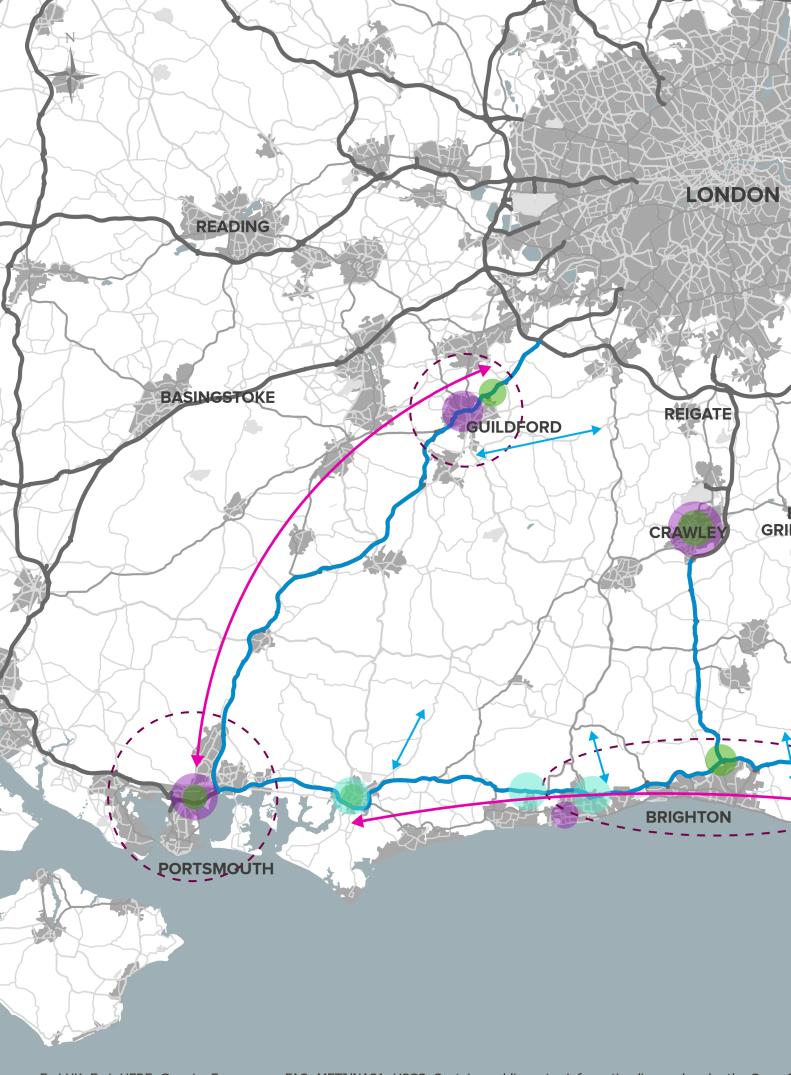
In Figure 21 we illustrate the six route objectives on our route map and, in Table 1, we show how they contribute to the Government's strategic objectives for our network as a whole.

 Table 1: How the route objectives map to the DfT's strategic objectives

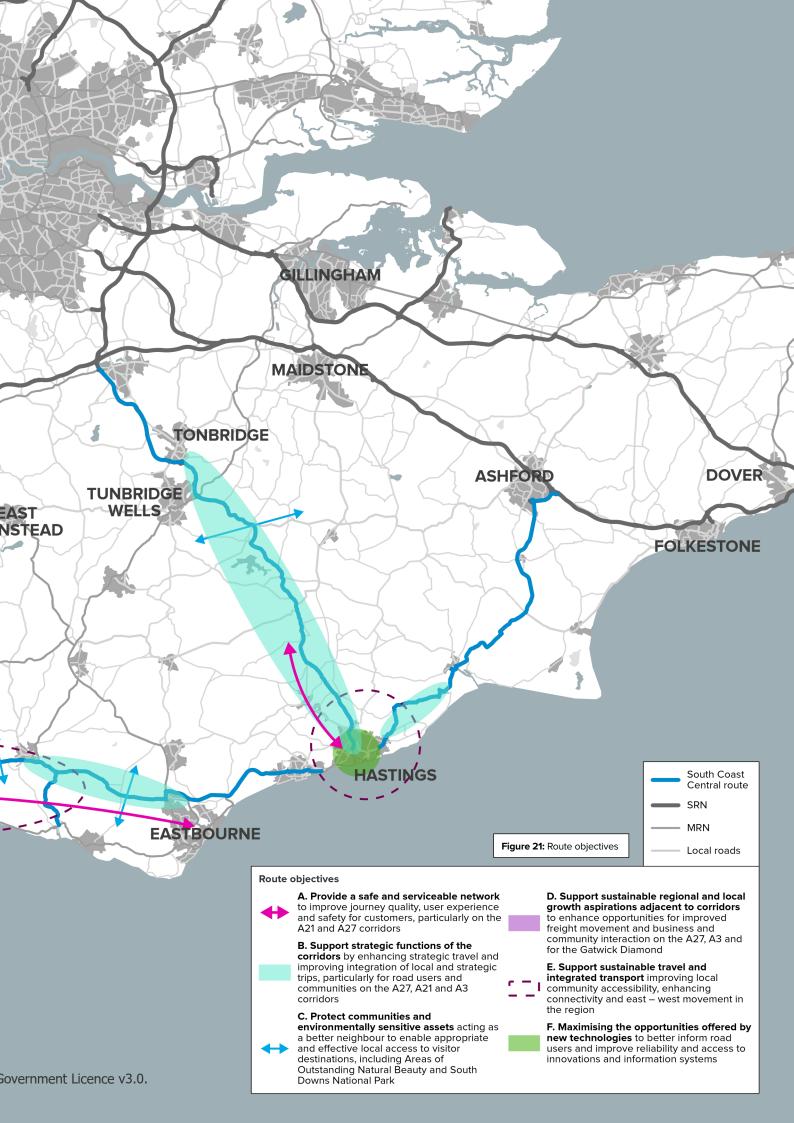
	Ref.	Route objective
	Α	Provide a safe and serviceable network to improve journey quality, user experience and safety for customers, particularly on the A21 and A27 corridors
	В	Support strategic functions of the corridors by enhancing strategic travel and improving integration of local and strategic trips particularly for road users and communities on the A27, A21 and A3 corridors
	С	Protect communities and environmentally sensitive assets acting as a better neighbour to enable appropriate and effective local access to visitor destinations, including Areas of Outstanding Natural Beauty and South Downs National Park
°-0-°	D	Support sustainable regional and local growth aspirations adjacent to corridors to enhance opportunities for improved freight movement and business and community interaction on the A27, A3 and for the Gatwick Diamond
	E	Support sustainable travel and integrated transport improving local community accessibility, enhancing connectivity and east – west movement in the region
	F	Maximise the opportunities offered by new technologies to better inform road users and improve reliability and access to innovations and information systems

DfT's strategic objectives for our route

Improving safety for all	Network performance	Improved environmental outcomes	Growing the economy	Managing and planning the SRN for the future	A technologyi- enabled network
✓	√				
	√	√	√		
		√			
	√		✓		
	✓	✓	√		
				✓	✓



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A. Provide a serviceable and safe network

Objective

Provide a safe and serviceable network to improve journey quality, user experience and safety for customers, particularly on the A21 and A27 corridors

Context

Congestion and safety were key themes noted in the responses of local interested parties, road users and communities.

Sections of the South Coast Central routeexperience safety issues attributable to varying carriageway standards, multiple local junction accesses and the interaction of local and strategic traffic along this corridor.

There are specific safety issues along the route identified via:

- 1 and 2 iRAP star ratings indicating safety risks on large sections of the A2070 and A259, the A26 to Newhaven, the A21 south of Tunbridge Wells, and sections of the A27, including concentrations of collisions near Arundel, Worthing, Pevensey and Polegate
- concentrations of collisions and higher percentages of people being killed or seriously injured in collisions on the A259 between Hastings and Ashford, the southern section of the A21, and the A27 east of Eastbourne at Stone Cross and Pevensey, west of Polegate and east of Brighton

 higher incident rates for walkers, cyclists and horse riders on the A3 south of Hindhead, A27 east of Portsmouth to Worthing and A259 between Pevensey and Bexhill on Sea

Our network considerations

Various strategic and localised area studies and interested party feedback have established that there are short distance journeys and heavily trafficked east - west movements within the corridor, causing substantial traffic interaction and severance issues at key junctions, for example at Worthing and Lancing, the A27 at Falmer and to the east of Lewes.

The A21 Tonbridge to Pembury was recently upgraded to dual carriageway standard. The southern section between Pembury and Hastings remains of varying standard, resulting in issues at locations where the carriageway is narrow and passes through a number of villages.

The A259 also experiences various issues related to congestion, safety and route purpose.

Outcomes

- Improved road safety in the region, particularly at locations experiencing safety issues and a high incidence of collisions, particularly those resulting in fatality or serious injury
- Smoother flowing network reducing congestion caused by incidents

DfT's Strategic objectives



Improving safety for all



Network performance

Timeframe based on the issues and constraints identified



Safety Issues exist particularly on sections of A21 and A27 and at localised points of the corridor

Future Road — Periods

Continuation of issue identified above



B. Support strategic functions of the corridors

Objective

Support strategic functions of the corridors by enhancing strategic travel and improving integration of local and strategic trips particularly for road users and communities on the A27, A21 and A3 corridors

Context

Strategic and local traffic interaction were key themes noted in the responses of local interested parties, road users and communities. The route largely comprises A-roads with variable network layout. Sections of single carriageway and at-grade junctions may result in congestion, delays and safety issues and can undermine accessibility and the linking of local communities. Data indicates that delay caused by congestion is an existing issue, particularly on the:

- A3, north and south of Guildford including north of Send M25 near Junction 10 of the M25
- A27 corridor, at Chichester, Arundel, Worthing
- A259 and A21 to and from Hastings and the A2070 into Ashford

Interested parties raised delay at the A23 / A27 junction at Brighton as being an issue, particularly during peak seasonal summer months. Traffic congestion on routes and corridors undermines the strategic function of the route and can result in reliability issues and delays. This contributes to the creation of local noise, air-quality and environmental impacts, as well as severance issues for local communities, which undermines opportunities for active travel and some public transport alternatives.

Our network considerations

Congestion and journey time reliability issues are a key concern for much of the route, including the A27, A21, A23 and A3, which support radial access to the wider SRN.

The A27 represents the main east – west route to the south of the M25, meaning it serves both a strategic and local distributor function. Future travel demand indicates that longer term network congestion and delays, in part resulting from development pressures, will persist at key locations, including Chichester, Worthing, at the junctions of the A23 and A27 at Brighton, the A27 east of Lewes, along the A21 and A259 to Hastings, A2070 to Ashford, and the A3 at Guildford.

Outcomes

- Reduced delays and local environmental impacts of congestion
- Supported strategic function of the SRN in linking local communities and in enabling improved accessibility for customers

DfT's Strategic objectives



Network performance



Improved environmental outcomes



Growing the economy

Timeframe based on the issues and constraints identified



Existing congestion, severance and unreliability of journey times at key locations

Future Road — Periods Additional delays and localised pressures as a result of traffic growth



C. Protect communities and environmentally sensitive assets

Objective

Protect communities and environmentally sensitive assets acting as a better neighbour to enable appropriate and effective local access to visitor destinations, including Areas of Outstanding Natural Beauty (AONB) and the South Downs National Park

Context

The South East region has some of the most iconic, attractive landscapes and environmental assets in the country, contributing to it being a prosperous and desirable place to live and work. Meeting the demand for increased travel can contribute to adverse environmental impacts, particularly for local communities along the route and for sensitive assets including the South Downs National Park, the A3 adjacent to the Surrey Hills AONB and the A21 running through the High Weald AONB.

Noise and air quality issues impact on local communities, with existing Air Quality Management Areas in close proximity to sections of the A27 and the A3, and Noise Improvement Areas exist along much of the route.

- within 100m receptors may be affected by air quality considerations including on sections of the A3 at Guildford and south of Winchester, the A27 east of Portsmouth and at Worthing and the A259 east of Rye.
- within 300m receptors may be more likely affected by higher noise including on sections of the A23 south of Crawley, the A27 between Stone Cross and Pevensey, the A3 at Waterlooville and the A21 between Flimwell and Hurst Green.

Our network considerations

Much of the South Coast Central route is constrained by the coast to the south, providing an additional consideration in developing any proposed interventions. Along the route, local environmental assets and communities can experience the impacts of congestion and traffic delays.

Interested parties identified that biodiversity net gain and re-naturing should be pursued in planning the network for the future using principles of biodiversity net gain to ensure anydevelopment leaves biodiversity in a better state than before.

Outcomes

- Preserving and enhancing environmental assets along the corridor
- Improving air quality and noise particularly on local communities and receptors in close proximity to the corridor
- Minimising the impacts of the network on biodiversity

DfT's Strategic objectives



Improved environmental outcomes

Timeframe based on the issues and constraints identified



Current congestion and localised access and environmental issues at sensitive locations

Future Road — Periods Deteriorating network performance and environmental concerns at various sensitive sites and for communities





D. Support sustainable regional and local growth aspirations adjacent to corridors

Objective

Support sustainable regional and local growth aspirations adjacent to corridors to enhance opportunities for improved freight movement and business and community interaction on the A27, A3 and for the Gatwick Diamond

Context

The SRN plays a key role connecting people and jobs at a regional level, enabling interaction between growth areas and ensuring connectivity for new communities year-round whilst supporting the levelling up agenda. Key considerations for growth on the South Coast Central route include:

- supporting economic growth regionally, enabling connectivity and linking communities, and, in the case of the A27, providing the primary east – west corridor south of the M25
- providing linkage to the south for 'Gatwick Diamond' and Sussex coastal communities, which are experiencing significant housing growth
- Gatwick airport access and the future growth ambitions in the Crawley and Horsham area along the A23 corridor

Several areas within the corridor fall into Level 1 (most need) for levelling up. The index of priority locations for the Levelling Up Fund places local authorities into categories 1, 2 or 3, depending on their identified level of need, with category 1 representing places deemed in most need of investment through this Fund These include:

- A27 and A26 east of Brighton and south to Newhaven
- Hastings and the surrounding area along the A259, A21, and A2070
- · south of the A27 around Eastbourne

Local Plan Sites and Economic Opportunity Areas identify the following key growth areas and future development sites:

- along the A27, including Chichester, Worthing and Lancing, Brighton and Polegate
- housing and employment sites allocated around Gatwick and the M23 / A23
- urban centre aspirations in Portsmouth
- future growth ambitions at Guildford, including provision of new railway stations supported by Network Rail providing efficient and reliable public transport to improve the local economy

Engagement with interested parties highlights the importance of this route's connectivity to air and seaports including Portsmouth, Newhaven and Gatwick Airport, and wider links to Southampton.

Emerging thinking from Transport for the South East area studies and investment plan consultation identifies that the A27 / M27 should provide a consistent high quality route that links together the two major conurbations in the Solent area and Sussex Coast (Worthing – Eastbourne), with travel being better served by high quality public transport.

The A23 will play a key role in the future, with further planned development of both housing and employment in the Crawley and Horsham area.

Our network considerations

Data identifies that existing congestion is an issue at some locations on the A3, A27, A259 and A21. Additional constraints on resilience and accessibility of the network from high or seasonal demand activities can act as limitations to delivering future growth. Additional pressure on the road network is expected to come from development along the route. Future travel demand analysis from 2031 regional modelling indicates that longer term network congestion and delays, in part resulting from development pressures, will persist at key locations, including on the A27 at Chichester and Worthing, the A2070 at Ashford and the A3 south of Guildford.

Outcomes

- Supporting the economic growth and levelling up of communities
- Joining up strategies to enhance connectivity with identified international gateways at Gatwick Airport and seaports including Portsmouth and Newhaven

DfT's Strategic objectives



Network performance



Growing the economy

Timeframe based on the issues and constraints identified





E. Support sustainable and integrated transport

Objective

Support sustainable travel and integrated transport, improving local community accessibility, enhancing connectivity and east – west movement in the region.

Context

The need for improved sustainable transport and the better integration of transport modes were key themes noted in the responses of local interested parties, road users and communities, being seen as improving traveller accessibility, on the south coast and for Solent, where active travel and rail and bus initiatives are seen as complementary to wider transport investment initiatives.

Emerging thinking from TfSE's Outer Orbital study32 identifies that the A27 / M27 should provide a consistent, highquality route that links together the two major conurbations in the Solent area and Sussex Coast (Worthing - Eastbourne), with travel being better served by high quality public transport. The A23 is also expected to play a key role in the future, with further planned development of both housing and employment nearby. There are also existing and forecast congestion issues identified in the delay data at locations on the A3, A27, A259 and A21.

Relevant Network Rail strategies include the published *West Sussex Connectivity Modular Strategic Study*³³, which sets out capacity constraints and options for the railway, mirroring work undertaken by National Highways on the A21 and the case for extending High Speed services to Hastings and Eastbourne via the A259 corridor between Ashford and Hastings. The purpose of the proposed improvements is to create a joined up transport approach to improving local and regional connectivity, as well as links to London.

Our network considerations

Transport requirements will continue to evolve and need to align with the Government's plan to de-carbonise by responding to changing ways of living and working and effectively using new technology and services to support this agenda. National Highways will continue to work with partners in proposed rail developments. This includes investigating new stations in Guildford and enhancing rail access alongside corridor investment between Worthing and Brighton. Level crossing improvements at locations on the A259 east of Rye where opportunities have been identified for alignment improvements.

Provision of a more sustainable network will reduce the need for car travel, helping to reduce pressure at identified congested locations.

Considering some of the unique opportunities offered by National Parks and the wider environment, we will also seek to enable suitable sustainable access opportunities.

National Highways continue to explore the role of the SRN in enabling wider regional ambitions for future mass transit and active travel.

Outcomes

- Working with partners to support place-based initiatives that will support local travel needs and sustainable transport measures and reduce the need to travel
- Developing an integrated strategy to effectively accommodate and protect network capacity for growing freight rail / other modes
- Reduce the safety, environmental and local community impacts of localised congestion
- Support the strategic function of the SRN in linking local communities and in enabling improved accessibility for the local economy and customers

³² Transport for the South East, Outer Orbital study https://transportforthesoutheast.org.uk

³³ Network Rail, Spring 2020, West Sussex Connectivity Modular Strategic Study https://www.networkrail.co.uk/wp-content/uploads/2020/07/West-Sussex-Connectivity-Modular-Strategic-Study.pdf

DfT's Strategic objectives



Network performance

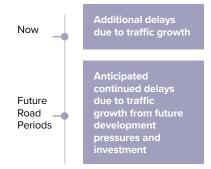


Improved environmental outcomes



Growing the economy

Timeframe based on the issues and constraints identified





F. Maximise the opportunities offered by new technologies

Objective

Maximise the opportunities offered by new technologies to better inform road users and improve reliability and access to innovations and information systems

Context

There is limited road technology provision within the South Coast Central route as most roads are A-Roads, of varying standards, and do not meet motorway standards. Issues of resilience are exacerbated without the provision of technology to advise on diversions, meaning traffic from strategic routes may utilise the local road network. There is therefore scope for the better joining up of technology and information provision in the interaction of the MRN and SRN.

The current electric vehicle charging points are generally clustered in urban areas, including Brighton, Eastbourne, Portsmouth and Crawley. Infrastructure is already present in some more rural areas along the route, showing future potential to develop the electric vehicle charging provision in the area, as highlighted in the engagement workshops as a means of better future-proofing the network.

Our network considerations

As noted, the route generally has relatively low access to technology. It also experiences:

- limited Traffic Officer coverage or depots along the south coast
- minimal traffic control centre integration
- electric vehicle charger investment largely limited to significant urban centres, such as Portsmouth or Brighton

For the A27 there is value in developing our understanding of the opportunities that technology and improved communications systems can offer, particularly for access to tourist sites and environmental assets.

Outcomes

- Improve information provision to support the location and availability of electric vehicle charging infrastructure for electric and alternative fuel vehicles
- Close technology gaps by improved Road Traffic Information to smooth flow and reduce congestion
- Improved network resilience using technology solutions, reducing issues of diversions and cut through traffic from strategic routes on the local road network
- Development of a more integrated approach to transport

DfT's Strategic objectives



Managing and planning the SRN for the future



Creating a technology enabled/enabling network

Timeframe based on the issues and constraints identified





Table 2: Evidence used to inform objectives

			Chapter 3	Chapter 4	
Obj	iective	Extent	Views raised by our customers and neighbours	Integration with our partners' strategies and priorities	Chapter 5 Challenges and issues identified
A	Provide a safe and serviceable network to improve journey quality, user experience and safety for customers, particularly on the A21 and A27 corridors	Whole route but particularly some sections of the A21 and A27 corridors	Concerns of interested parties related to road safety: • safety concerns regarding consistency of standards • a need to identify safety and congestion locations and for minimising interaction of strategic and local traffic. • improved safety through appropriate integration of local and strategic traffic • safety concerns at locations where vehicles cannot safely overtake • a need to improve the ease of navigation, ensuring there are clear signs (on the A27)	Transport for the South East social priorities identify the need for a safely planned, delivered and operated transport network with no fatalities or serious injuries among transport users, the workforce or the wider public	Much of the A26, several sections of the A27, the A21 corridor south of Tunbridge Wells, and sections of the A259 and the A2070 have 1 and 2 star iRap rating Higher collision rates and killed or seriously injury incidents at at key locations on A259, A21 and A27 A higher percentage of collisions resulting in someone being killed or seriously injured involving walkers, cycles or horse riders on the A3 south of Hindhead, A27 east of Portsmouth to Worthing, and A259 between Pevensey and Bexhill on Sea A high proportion of collisions involving motorcyclists on much of the network
В	Support strategic functions of the corridors to enhance strategic travel, and minimising the severance impacts of through and local travel interactions particularly for road users and communities on the A27, A21 and A3 corridors	Whole route but particularly on sections of the A27, A21 and A3 corridors	Concerns of interested parties related to strategic access: • strategic access needs whilst seeking to minimise impacts of through traffic on local communities • variable road standards on A21 and A27 • congestion, safety and delay issues and the need to improve public transport / active travel • a need to better understand wider impacts of changing travel • a need to consider the interaction of the major road network and strategic road network and peak seasonal demands	Transport for the South East priorities focus on better connectivity between economic hubs, more reliable journeys a more resilient network and more integrated planning	Severance impacts on adjacent communities. Congestion-related delay occurs on sections of the A27 at Chichester, Worthing, Polegate, Arundel, the A2070 and A3 Guildford Inconsistency of network layout, sections of single carriageway and provision of at-grade junctions (for example on the A21 and A259) can impact on journey time reliability and worsen peak congestion Delays are expected to worsen by 2031 at several locations, particularly along sections of the A27, the A2070 and the A3

Ob	jective	Extent	Chapter 3 Views raised by our customers and neighbours	Chapter 4 Integration with our partners' strategies and priorities	Chapter 5 Challenges and issues identified
С	Protect communities and environmentally sensitive assets acting as a better neighbour to enable appropriate and effective local access to visitor destinations, including Areas of Outstanding Natural Beauty and South Downs National Park	Whole route, particularly communities within close SRN proximity near environmental assets such as the High Weald and Surrey Hills and South Downs National Park	Concerns of interested parties related to environmentally sensitive assets: • requirements to balance appropriate access to protected areas (SDNP and AONBs) with providing road-based solutions and mitigating climate change. • a need to consider alternatives to private cars, and for investment in rapid and reliable public transport • community impacts of the SRN on human health (Air Quality, noise, safety • impacts associated with roadworks and displacement of traffic onto diversion routes • a need to consider more environmentally friendly materials to support network improvements	Transport for the South East priorities include better connectivity and an integrated approach to planning, whilst minimising the contribution of transport impacts on climate change, air quality and the natural and built and historic environments	Impacts of traffic on iconic environmentally designated assets, such as the South Downs National Park adjacent to the A27, and AONBs such as the High Weald and Surrey Hills corridor Traffic-related severance, and noise and air quality impacts on local communities with existing Air Quality Management Areas and Noise Important Areas in place Receptor locations within 100m may be more likely to be affected by air quality issues on sections of the A3, the A27 and the A259 Receptor locations within 300m may be more likely to affected by by higher noise levels on sections of the A23, A27, A3 and the A21 There is a risk of flooding identified around Lewes and Arundel on the A27, on the A26 towards Newhaven and on sections of the A259
D	Support sustainable regional and local growth aspirations adjacent to corridors to enhance opportunities for improved freight movement and business and community interaction on the A27, A3 and for the Gatwick Diamond	Whole route but particularly on the A27, A26 and A3 and M23 / A23 corridors	Concerns of interested parties related to sustainable regional and local growth: • a need to support housing ambitions • encourage growth by supporting freight movement • a need to consider impact of future infrastructure projects such as Gatwick Northern Runway and Southampton port expansion • housing provision and job provision not always considered in spatial planning terms	Transport for the South East priorities include better connectivity, reliability, affordable and accessible transport and an integrated network that helps to meet future housing, employment and regeneration needs sustainably The TfSE strategy notes that support for freight is seen as integral to enabling economic growth and supporting the regions Gateway functions	Support for freight travel needs – Portsmouth, Newhaven, Shoreham and Gatwick Airport Address site specific and local plan development pressures (Horsham, Guildford, and at various WSCC south Coast towns) Address Level 1 (most need) Levelling Up requirements on the A27 and A26 east of Brighton, Newhaven, Hastings and A259, A21, and A2070, and A27 around Eastbourne Congestion-related delay occurs on sections of the A27 at Chichester, Worthing, Polegate, Arundel, the A2070 and A3 Guildford Delays are expected to worsen by 2031 at several locations, particularly along sections of the A27, the A2070 and the A3

Ob	jective	Extent	Chapter 3 Views raised by our customers and neighbours	Chapter 4 Integration with our partners' strategies and priorities	Chapter 5 Challenges and issues identified
E	sustainable travel and integrated transport A259 corridors. improving local community accessibility, enhancing connectivity and east west movement in the region but particularly particularly the A27 and sustained interest. A259 corridors. intrinsicularly aux particularly particularly sustained in the A27 and sustained in the A259 corridors. intrinsicularly particularly particularly particularly particularly particularly sustained in the A27 and sustained in the A259 corridors. intrinsicularly particularly particularly sustained in the A259 corridors.		Concerns of interested parties related to sustainable and integrated transport: • a need to focus on the provision of active travel routes and improved linkage into the SRN • improve mode shift to public transport and active travel investment to provide viable travel alternatives and reduce pressures on the SRN	Transport for the South East social priorities include providing a seamless, integrated transport network, making it easier to interchange between transport modes; an affordable, accessible transport network for all and promotion of active travel.	Congestion-related delays occur on sections of the A27 at Chichester, Worthing, Polegate, Arundel, the A2070 and A3 Guildford Inconsistency of network layout on sections of single carriageway and at-grade junctions (for example on the A21 and A259) can impact on journey time reliability and worsen peak congestion Access to coastal towns and event days at local attractions result in higher traffic volumes being experienced in the summer months, which worsens congestion issues The route supports regional economic growth by enabling connectivity and linking communities. There is substantial housing growth in the area, including in the 'Gatwick Diamond' and Sussex coastal communities
F	Maximise the opportunities offered by new technologies to better inform road users and improve reliability and access to innovations and information systems	Whole route	Concerns of interested parties related tonew technology: • a need for improved Electric Vehicle Charging infrastructure • improved on-line communications to reduce need for travel • a need for improved communication between National Highway and Local Highway Authorities about roadworks. • a need to join up the approach to technology between SRN and MRN • the limited Traffic Officer coverage and / or depots along the South Coast	Transport for the South East priorities include integrated planning and a 'smart' transport network that uses digital technology to manage transport demand, encourage shared transport and make more efficient use of our roads and railways	Electric vehicle charging points are largely clustered in urban areas There is limited provision of technology to provide up-to-date information to improve road user experience Limited opportunities for active traffic management, with goods vehicle journey particularly affected during diversions





O7 Locational areas for consideration and potential collaboration

We know the importance that investment in our network can make locally, regionally, and nationally. It can make areas more attractive for inward investment, unlock new sites for employment and housing, and facilitate regeneration. It can also ease congestion, improve our customers' journeys, and support environmental improvements.

In this chapter, we outline our proposed locational areas for further consideration, which will be explored in future road periods to achieve the South Coast Central route objectives and the Department for Transport's (DfT's) six strategic objectives. These do not represent a commitment as funding will be considered as part of the development of the third Road investment strategy (RIS) and other investment processes.

Furthermore, they do not represent a final list of our potential investment locations and will be refined in our final Route strategy overview report, published alongside our *RIS3 Strategic business plan* and *Delivery plan* for 2025-2030.

Alignment with government objectives

Route strategies are aligned to the DfT's six strategic objectives and will also contribute to the RIS3 performance metrics set as part of the RIS-setting process.



Improving safety for all

Safety is our top priority and we are committed in the second road period (2020-2025) to reducing the number of road users killed or seriously injured on the strategic road network (SRN), by 50% (from the 2005-2009 baseline) by the end of 2025, with a long-term vision of zero harm. This includes our contractors adopting a safe system approach to ensure roadworker safety. Our operational and strategic planning teams continue to work to prevent incidents from occurring and are focussed on reducing incident severity through a package of activities to promote safer roads, safer people, safer vehicles and coordinated collision response. We are also learning from other organisations and interested parties about what works best and collaborate with them to improve safety for all. Safety is embedded in our study programme to inform future investment priorities for RIS3 and beyond.



Network performance

Our operational and strategic planning teams continue to explore what steps can be taken to make journeys more reliable and not subject to delay, as well as safer, while protecting and respecting the environment. This involves working with our partners such as sub national transport bodies and other operators such as Network Rail to consider interventions to improve network performance as we recognise the SRN does not stand alone from other transport infrastructure, in particular local roads, and users expect journeys to be seamless regardless of transport mode or ownership. Through our study programme we will identify appropriate types of intervention recognising the need for integration, environmental and digital consideration balanced against costs.



Improved environmental outcomes

We are continuously working to ensure our roads work more harmoniously with the communities that live alongside them and the environments that surround them. We embed environmental considerations into all our activities, ranging from infrastructure design to scheme delivery and ensuring we meet our statutory obligations, and the way we manage and operate our network. In developing our intervention programmes, we will consider a broad range of interventions including technology enabled solutions and integration with other operators' networks as we understand the gravity of the climate situation and are committed to playing its part in reducing carbon emissions. Our carbon policy commitments are:

- As a net zero Britain will still travel by road in 2050, we will ensure a properly maintained, future-ready road network, that is fitted to support the transition to electric vehicles, and is key to reducing emissions from transport
- This programmatic coordinated delivery approach will act as a catalyst for: production management, off-site construction, reducing network disruptions, unlocking economies of scale, and supporting delivery of Net Zero targets
- It will also help us understand how interventions should be delivered, either through grouping or as standalone projects
- We expect this approach will create opportunities for increased efficiencies, enable us to deliver more within our funding. We also expect this approach to help us support government's long-term aims for the nation, such as contributing to net zero carbon, and social values

□□□□ Growing the economy

We recognise that the SRN is a significant economic asset for the UK and is essential for people to access jobs, and for businesses and logistics firms moving goods around the country. Our regional planning teams continue to work closely with local planning authorities to support sustainable growth and development aspirations, including integration with other modes. We also continue to work with businesses to understand their needs such as quality lorry parking facilities and ensuring reliable and resilient integration with ports, airports and rail terminals through which we access global markets. The SRN also has a role in achieving the Government's moral, social and economic programme of levelling up the United Kingdom. Our forward intervention programme will seek to support the growth agenda where possible and appropriate.



Managing and planning the SRN for the future

We recognise that our network is complex and varied and requires careful stewardship to keep it in good condition. Our ongoing maintenance programme is essential to safety and keeping our roads open, while our renewals activity allows us to maintain, safeguard and modernise all our assets, and provide increased resilience in relation to extreme weather. Research and data help us to understand what our network needs over the short and long term, and to inform our planning. We continue to be committed to delivering our work in a way that minimises disruption to our customers and maximises value to taxpayers.



A technology-enabled network

In designing our intervention programmes, we will consider our Digital Roads vision for how we harness data, technology, and connectivity to improve the way the SRN is designed, built, operated and used for the future. This will enable safer journeys, faster delivery and an enhanced customer experience for all. The vision is structured around three themes: Design & Construction, Operations, and Customers. The approach embeds digital, data and technology across the intervention programmes, providing the building blocks for a digital future for roads.

Programmatic approach to investment

As part of our new route strategies process, we are developing a more programmatic approach to how we develop our investment plans. This will help us determine the complexity of potential investments and what high value interventions are more deliverable.

This programmatic coordinated delivery approach will act as a catalyst for; production management, off-site construction, reducing network disruptions, unlocking economies of scale and supporting delivery of Net Zero targets.

It will also help us understand how interventions should be delivered, either through grouping or as standalone projects.

We expect this approach will create opportunities for increased efficiency, enable us to deliver more within our funding and in collaboration with other investment programmes.

We also expect this approach to help us support the Government's long-term aims for the UK, such as contributing to net zero carbon.

Figure 22 shows how the route objectives defined in the route strategies, along with the associated cluster analysis of performance metrics, help to refine an initial set of locations for future investigation. Further iterations of sifting as information and analysis evolves will help to inform the Government's setting of RIS3 (2025-2030) and beyond. The input from route strategies early on in this process will ensure that all schemes which are ultimately taken forward align with the route objectives.

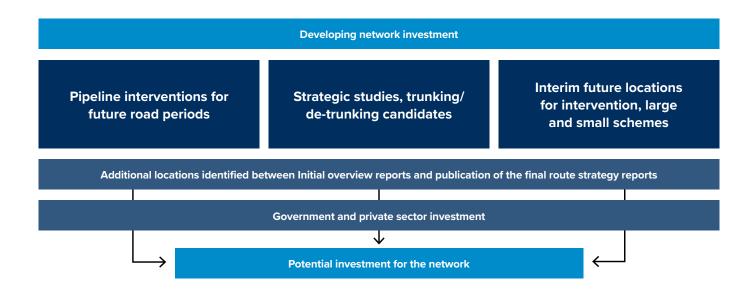


Figure 22: Process to identify potential investment on the network

Types of investment and funding sources

There are a variety of funding streams that enable us to invest in our network and that form part of our investment planning. These streams are summarised in the following section, along with the current committed schemes associated with each funding source for the South Coast Central route. Potential funding sources include:

- RIS Funding a funding stream administered by National Highways, set by the Government's publication of the RIS:
 - RIS2 schemes are committed by DfT to be delivered as part of the Road Investment Strategy, as outlined in the following RIS2 table. The statement of funding confirmed that £24 billion will be provided during the second road period (2020-2025) to deliver this work, noting that some RIS2 commitments will continue into the third road period

- RIS4 (2030-2035) pipeline schemes, previously earmarked for RIS3 (2025-2030), will continue to be developed in line with our statutory processes and considered for inclusion within RIS4. These are potential future schemes originally identified by National Highways and set as part of RIS2 by DfT. These schemes are not currently committed for construction.
- maintenance funding and asset renewal –
 within National Highways there is funding set
 aside for network maintenance and renewing
 ageing assets across the network. The budget
 for these is included in the RIS settlement
- potential targeted funding for streams may be made available to National Highways during the third road period as part of the wider RIS settlement, focused on making improvements that will make the biggest difference and deliver lasting benefits
- other external sources of funding for delivering infrastructure enhancements on, or close to, the SRN including Government, third parties, private sector developments, and inward investment

RIS2

The following schemes are committed for the second road period (2020-2025) on the South Coast Central route:

Scheme number	Scheme	Description	Start of works	Open for traffic
Committe	ed for the second	road period (2020-2025)		
1	A27 Arundel Bypass	Replacement of the existing single carriageway road with a dual carriageway bypass, linking together the two existing dual carriageway sections of the road	Deferred to RIS3 (2025-2030) to allow time to ensure stakeholders' views are fully considered ³⁴	-
2	A27 East of Lewes	Improvements to the A27 between Lewes and Eastbourne, including improvements to junctions around Eastbourne, conversion to dual carriageway south of the Polegate roundabout, and new facilities for cycling and walking	Started	2022-23 Q4
3	A27 Worthing and Lancing Improvements	Package of enhancements between Worthing and Lancing to improve the capacity and flow of traffic	2024-25 Q4	Road Period 3
4	M25 Junction 10	We are proposing four new slip roads for the M25 junction 10 roundabout. The M25 will increase from three to four lanes through the junction, with the A3 also becoming four lanes either side of the junction 10 roundabout. There will also be improvements to the A245, Sevenhills junction and Painshill roundabout. Around the junction, there will be new and safer routes for pedestrians, cyclists and horse riders. Improvements will also be made to the local environment and wildlife	2022-23 Q3	Road Period 3

RIS4 pipeline

The following uncommitted schemes are in the pipeline for consideration for inclusion in the fourth road period (2030-2035) on the South Coast Central route:

Scheme number	Scheme	Description
1	A21 Safety Scheme	We are bringing forward a series of schemes to improve safety along this corridor, which will include, junction improvements, improvements to road alignment and visibility, changes to speed limits, improved signing, markings and road studs, amongst others. Note this scheme has been accelerated and works have started. Planned to open to traffic in 2024-25
2	A27 Lewes to Polegate	Upgrading the A27 between Lewes and Polegate
3	A27 Chichester Improvements	Upgrading the A27 Chichester bypass in West Sussex
4	A3 / A247 Ripley South	Stage 1 scheme currently being progressed - Upgrading the junction between the A3 and A247 near Ripley

³⁴ Deferred for consideration in next five-year road period (2025-2030) https://questions-statements.parliament.uk/written-statements/detail/2023-03-09/hcws625

Other notable schemes

On the South Coast Central Route, in addition to the committed schemes listed above, there are two notable schemes relating to route strategies, which include proposed new rail stations at Guildford West and Guildford East as well as the development south of Crawley where there is both employment and housing allocation within the latest local plan ('Crawley 2030', adopted December 2015).

Strategic studies, trunking and de-trunking

National Highways undertakes strategic studies to analyse complex problems that may need to be addressed over multiple road periods. Strategic studies can involve close working with key partners, including Sub-national Transport Bodies and DfT, and can be used to help to decide on whether to fund any proposed improvements in the future. The M25 South West Quadrant strategic study impacts on the area encompassing the South Coast Central Route.

National Highways were asked to explore changes to the SRN to ensure the network aligns with RIS2 strategic priorities reflected in the Strategic business plan³⁵. This Plan relates to improving connections between main urban centres, to international gateways, to peripheral regions (for levelling up) and strategic cross-border routes (to strengthen union connectivity). It included a commitment to explore potential asset ownership changes between ourselves and local highway authorities that could be implemented no earlier than the start of RIS3. The DfT have produced a shortlist of 18 trunking and two detrunking candidates, identified following the draft RIS2 public consultation in 2018, for us to assess desirability and viability of asset transfer. De-trunking is the process of returning a National Highways road to local Highway Authority control and visa versa for trunking. These candidates were put forward by a range of external stakeholders including local authorities, Local Enterprise Partnerships and Chambers of Commerce, then shortlisted by DfT. There is ongoing work to review the assessment evidence and recommendations, after which government ministers are expected to announce the candidates that will progress to the detailed development stage, which will be led by National Highways and incorporated in the forward study programme and wider RIS3 process.

Locations identified through route strategies for future investigation

National Highways undertakes route studies to investigate problems at identified locations across the network. In addition, locations of interest have been raised by Interested Parties through the route strategy engagement process.

To supplement this, as part of the route strategies process outlined in this document, National Highways has used cluster analysis to identify further locations for future investigation and undertaken an exercise to align these locations to the route objectives for the South Coast Central route route.

The cluster analysis allows decision-makers to easily identify which sections of roads should be prioritised for further investigation. The assessment is a two-part process. In the first part, for each route strategy, the objectives are defined geospatially. This allows us to identify over which sections of the SRN the objectives converge, therefore quickly identifying the links that help us to achieve the maximum number of objectives. The second part of the assessment uses our understanding of the network from performance data to allow a further filter to remove links that are already performing well. This results in a filtered shortlist of SRN links or sections of roads that should be prioritised for further investigation. These have been grouped into areas of interest where they are in close proximity geographically. Should a location not be identified for further investigation as part of this initial process, this does not preclude it from being added to the list of areas of interest in the future.

The use of regional traffic models for the 2031 scenario has helped identify locations for further investigation based on the forecast network operation in the future to plan the future of the network beyond the current RIS3 cycle. Typically, this has resulted in the extension of some areas of interest, as shown in the table of locations overleaf. In the final publication version of the route strategy reports, additional data from the regional traffic models will also be considered to enable the identification of locations for further investigation in future roads periods.

Further development of any proposed intervention at each location will follow National Highways' internal processes. In order to fund any proposed improvements, National Highways will draw on the funding streams as previously identified.

Route strategies and regional traffic models

The route strategies have utilised the National Highways regional traffic models (RTMs) to identify future performance and delay on the network, which is the best data currently available.

Working with key stakeholders and interested parties, we have set out a number of potential candidate intervention locations which may require further development upon validation to check their alignment with the route strategy objectives.

New national traffic growth forecasts have now been released by the Department for Transport and as we carry out this exercise, we will consider how updated growth forecasts will impact on the identified areas for further investigation.

Alongside these more traditional road improvement schemes we will also need to support and encourage modal shift through transport integration and embrace emerging technologies to improve the performance of the network.

The impact on carbon and the environment will be central to all our thinking on which interventions are proposed to be taken forward.

Identified locations for future investigation and collaboration

Our analysis has set out the potential constraints and opportunities across the network and, in parallel, we are developing a RIS programme that is resilient to changing priorities, the carbon and environment agenda.

We have a wide range of potential intervention types within our toolkit, such as both non-roads and road-based solutions, to help us achieve our objectives. These could include:

Potential non-road interventions:

- supporting wider network initiatives to improve the customer experience, such as provision and enhancements of facilities for the freight industry and electric vehicle charging
- exploiting technology to improve safety and network operation, including roll out of connected corridors
- delivering a portfolio of measures to encourage active travel
- making environmental enhancements to minimise the impact of the SRN on surrounding communities
- encourage modal integration and influencing demand for vehicles, particularly at interfaces with urban centres

Potential roads interventions:

- at a strategic level in addition to the Lower Thames Crossing, we will continue to progress those remaining schemes in RIS1 and RIS2³⁶ that will not be in construction at the end of RP2, as well as the RIS4 pipeline.
- the pipeline schemes announced in RIS2 is the most developed portfolio of potential interventions and we propose a renewed focus to ensure schemes: are resilient with an acceptable Value for Money; consider the Carbon Management in Infrastructure standard; are affordable, with lower cost options being developed; are environmentally responsible; are deliverable; and, have strong stakeholder support and/or are a good strategic fit with other Government strategies e.g., ports, levelling up

We will also develop a significant portfolio of smaller safety and congestion interventions that improve localised issues as well as route treatments that address comparably poor safety performance (International Road Assessment Programme 1-star and 2-star roads) along selected all-purpose trunk road corridors. Table 3 and Figure 23 show the areas identified for further investigation, where interventions at these locations have the potential to help us achieve the majority of route objectives.

In line with National Highways' internal processes we will draw upon a wide range of funding streams, further developing any proposed intervention to the issues identified, exploring:

- · collaboration and integration opportunities
- synergies with existing planned schemes
- opportunities with asset and maintenance priorities as set out in Chapter 5.5

As part of the ongoing evolution of the route strategies toward final publication we will further strengthen its role in being a strategic planning tool for interested parties who have a stake in the SRN and its future.

Table 3: Areas of interest for further investigation

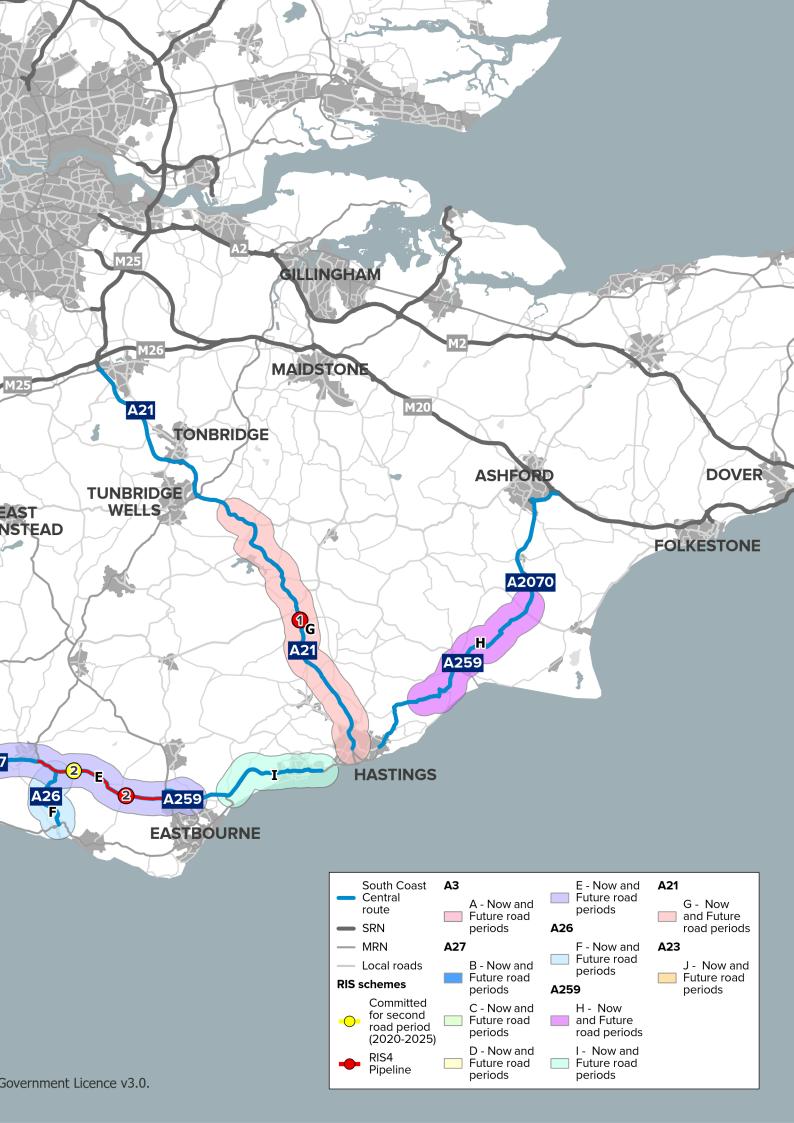
Area location	Area of interest	Area issues	Now	Future road periods
		А3		
A3 Guildford	A	There are safety issues some of which involve motorcyclists on the A3 near Godalming and around central Guildford. There are high levels of total delay and morning peak delays around Compton and afternoon peak, non-recurrent and seasonal delay particularly around central Guildford and at grade separated junctions to the south of Guildford. The A3 also creates noise and air quality impacts where it passes close to receptors.	√	√
		The route also runs adjacent to the Surrey Hills AONB. In combination with the issues noted Growth in economic activity and employment is expected in and around Guildford where significant local plan housing and mix used development is proposed. Catering for strategic travel, particularly for freight , on the A3 between Portsmouth and Guildford remains important to support this.		
		A27		
A27 Chichester Area	В	There are a mix of collision and safety issues as well as peak hour, average, non-recurrent, seasonal and total delay concerns around Chichester, which has impacts on local communities. Receptors may also experience adverse air and noise issues particularly at locations in close proximity to the South Downs National Park. Issues are further compounded by local growth aspirations in the vicinity of the A27 Corridor.	√	✓
A27 Fontwell Area	С	There is peak hour, average, non-recurrent, seasonal delays around Fontwell, with impacts exacerbated by the close proximity of housing to key junctions adjacent to the A27.	√	✓
		These capacity issues will be compounded by housing and development growth pressures arising from development in Bognor and to the east of Chichester.		

Area location	Area of interest	Area issues	Now	Future road periods
A27 East of Angmering to Shoreham Bypass (Shoreham on Sea)	D	There are safety issues throughout much of this section of the A27, with a higher number of collisions near Durrington, Broadwater and Worthing and Shorehamby-Sea which typically involve a higher proportion of walkers, cyclists and horse riders, and a high proportion of motorcyclists. There is also peak hour, average, non-recurrent, seasonal and total delay issues on this section, particularly between Salvington and Shoreham-by-Sea. Receptors may experience adverse noise and air quality impacts , particularly around Worthing, Shoreham and those close to the South Downs National Park. There is also may be a risk of elevated incidences of flooding in the vicinity of Patching and Shoreham by-Sea. Issues are compounded by local growth aspirations in the vicinity of the A27 Corridor.	✓	~
		There is limited charging capability for road users on the A27 with investment largely limited to significant urban centres, such as Portsmouth and Brighton.		
A27 Falmer to Polegate	E	The A27 between Falmer and Polegate has safety issues throughout much of the section. It experiences a high number of collision related issues, around Falmer and Polegate (the latter involving a higher proportion of walkers, cyclists and horse riders). There are also significant delays experienced in this area with peak hour , seasonal and event related delays, at slip roads at and Falmer and in the vicinity of Lewes and Polegate. Compounding these issues there is the proximity of the route to the SDNP and local communities and environmentally sensitive assets particularly around Falmer and Polegate. There may be a risk of flooding in the vicinity of Selmeston and Wilmington. The SRN in this area supports regional and local growth transport aspirations along the A27, and levelling up category 1 locations and Local opportunity areas around Lewes.	~	~
		A26		
A26 Beddingham to Newhaven	F	This section of the A26 experiences safety issues at some locations with higher afternoon peak hour, seasonal and average delays. These are forecast to worsen by 2031, particularly at the junction with the A27 at Beddingham. There are sensitive community and environmental assets, (including the South Downs National Park) and AQMA's in close vicinity to the (SRN). In combination with these issues the route provides an important function connecting Newhaven port to the rest of the network, and supporting regional and local growth aspirations and levelling up priority 1 areas adjacent to corridors.	✓	✓
		A21		
A21 Kippings Cross to Hastings	G	This stretch of the A21 experiences safety issues particularly at locations adjacent to the A21 including Hurst Green and Robertsbridge. There is also a high occurrence of total delay throughout this section of the route, with higher average delay, peak hour, and seasonal delay around Flimwell, Robertsbridge and further north. The corridor, and related diversion routes are in close proximity to communities and environmentally sensitive assets (including the High Weald AONB) particularly between Flimwell and Hurst Green. In combination with the above issues the A21 supports sustainable	V	✓
		regional and local growth aspirations, supporting levelling up needs and strategic access by linking the M25 with South Coast.		

Area location	Area of interest	Area issues	Now	Future road periods
		A259		
A259 Guestling to Rye	н	There are safety issues throughout much of this section of the route, with some locations having higher collision rates , particularly around Guestling and Rye, and potential issues due to railway crossings in this area. There are also locations, particularly near Guestling, Winchelsea and Rye with higher total and average delay although this is reduced by 2031. At these locations, receptors at locations such as lcklesham may also experience adverse air and noise issues . Investment in this part of the corridor supports levelling up priority areas.	✓	✓
A259 Bexhill (between Little Common and	ı	There are safety issues throughout much of this section of the A259, particularly west of Bexhill. There are locations with higher collision rates, with some including a higher proportion of motorcyclists. There is also peak hour , average , non-recurrent , seasonal and total delay issues in the vicinity of Bexhill. This worsens by 2031, particularly in the vicinity of Little Common.	✓	✓
Glyne Gap)		Receptors throughout this section may also experience adverse air and noise issues , with this forecast to worsen in the future. Investment in this part of the corridor supports regional and local growth aspirations and levelling up priority areas.		
		A23		
A23 / A27	J	There are some peak hour congestion issues along this section of the route with interpeak delays and seasonality issues evident. These issues, combined with regional and local growth aspirations and housing and development pressures, compound these impacts. There may be a risk of flooding at locations to the south of the route.	√	V









08 Next steps

Our route strategies allow informed decisions to be made about our network. They have informed our *Strategic Road Network* (SRN) *Initial report*, which sets our vision and priorities for the third road period (2025–2030) and beyond (from 2030). They are a forward planning tool for National Highways and our interested parties in their decision making, helping identify locations on our network for further consideration to inform investment opportunities, as well as to support decisions in prioritising potential solutions to enable us to continue to operate and maintain our network.

Alignment

They also align with the National Highways Connecting the country: Our long-term strategic plan to 205037 which sets out our 2050 vision for the SRN to be part of a seamlessly integrated transport system that meets our customers' needs by connecting the country safely and reliably, delivering economic prosperity, social value and a thriving environment. Our long-term strategic plan to 2050 describes the short, medium and long-term steps to 2050 we believe are needed to make our vision a reality over successive road periods and has been informed by extensive horizon scanning, foresight analysis and engagement with key stakeholders across nine focus areas. The route objectives identified in the route strategies, which also respond to the needs of stakeholders, road users and communities, and the locations for further consideration to achieve these objectives are aligned with the 2050 vision.

Informing the next stage of planning

The route objectives and locations for further consideration will be used to inform our study programmes and consider opportunities for developing integrated and collaborative solutions with our interested parties.

The extensive engagement we have undertaken ensures feedback from our customers and neighbours is used to inform investment decisions. They will help us consider the interaction of our SRN with other transport networks, including the major road network and local roads. We also expect interested parties will use our route strategies to inform their wider investment programmes, supporting collaborative decision making.

For both the Route strategy initial overview reports and *Our long-term strategic plan* to 2050, there will be an opportunity for stakeholders, road users and communities to provide their feedback. This will be alongside DfT's separate consultation on the *SRN initial report* published at the same time.

The 20 finalised Route strategy reports and *Our long-term strategic plan to 2050* will be published by 2025, the end of the current road period (2020-2025), informing the *Strategic business plan* and *Delivery plan*.

Provide your feedback

To find out more about our route strategies and the development process, please visit our website: nationalhighways.co.uk/our-roads/our-route-strategies

Glossary of terms

Term	Acronym	Description
Active users and active modes of transport		Active users and active modes of transport refers to walkers, cyclists and horse riders.
Air quality management area	AQMA	If a local authority identifies any locations within its boundaries where the Air Quality Objectives are not likely to be achieved, it must declare the area as an Air Quality Management Area (AQMA). The area may encompass just one or two streets, or it could be much bigger. The local authority is subsequently required to put together a plan to improve air quality in that area - a Local Air Quality Action Plan.
Area of Outstanding Natural Beauty	AONB	An area of outstanding natural beauty (AONB) is one of the classes of land protected by the Countryside and Rights of Way Act 2000 (CROW Act). It protects the land to conserve and enhance its natural beauty.
All Lane Running	ALR	All Lane Running (ALR) motorways apply controlled motorway technology, permanently converting the hard shoulder as a running lane, and feature emergency areas.
A-roads		Major roads intended to provide large-scale transport links between regional towns and cities.
Assets		National Highways assets include our infrastructure such as pavements, structures and tunnels
At-Grade Junction		An at-grade junction is a junction where two or more roads converge, diverge, meet or cross at the same height, as opposed to an interchange, which uses bridges or tunnels to separate different roads.
Clean Air Zone	CAZ	A clean air zone (CAZ) defines an area where targeted action is taken to improve air quality, and resources are prioritised and co-ordinated to deliver improved health benefits and support economic growth.
		The severity of a collision is based on the severity of the most severely injured casualty and is broken down into:
Collisions		Slight collision: One in which at least one person is slightly injured but no person is killed or seriously injured
		 Serious collision: One in which at least one person is seriously injured but no person (other than a confirmed suicide) is killed
		Fatal collision: A collision in which at least one person is killed

Term	Acronym	Description
Department for Transport	DfT	Department for Transport (DfT) plan and invest in transport infrastructure to keep the UK on the move. DfT work with agencies and partners to support the transport network that helps the UK's businesses and gets people and goods travelling around the country.
Design-Build- Finance-Operate arrangements	DBFO	With a design-build-finance-operate arrangement, the private party provides financing and design, then builds and operates the facility. The public partner provides funding while the project is being used or is active.
Diversionary Routes		National Highways agreed diversion routes represent the recommended routes for road users when a section of road has been closed.
Dynamic Hard Shoulder	DHS	Dynamic Hard Shoulder Running (DHS) motorways apply the controlled motorway technology and temporarily increase capacity by utilising the hard shoulder, and feature emergency areas. The hard shoulder is some of the time, but not always, used as a live running lane, with electronic signs to guide drivers when it is safe to use for live running.
Economic opportunity areas	EOAs	EOAs were developed to give us a more refined understanding of the types of priority economic growth opportunities that exist around the SRN and around the wider road and broader transport network. They are defined in terms of their common economic function and the spatial features of the location. These key growth areas are grouped by broad 'theme' (such as international gateways, multi-modal transport hubs, tourism destinations and housing locations) and their relative reliance on the SRN.
Freeport		Freeports are special areas within the UK's borders where different economic regulations apply. Freeports in England are centred around one or more air, rail, or seaport, but can extend up to 45 kilometres beyond the port(s)
Heavy Goods Vehicle	HGV	A heavy goods vehicle (HGV) is a large vehicle intended for the transportation of heavy loads.
Growth Boards		Growth Boards have been established by some counties as a joined-up way of managing local future growth and supporting economic recovery.
International connectivity		Transport connectivity of the United Kingdom with Europe and the rest of the world.
In-vehicle Technology		This can be in-car systems that typically take the form of a touchscreen or display that is mounted on the dashboard. It can be a collection of hardware and software, which can provide information, data and connectivity to infrastructure to support the customer experience. It can also be the data and technology capability to enable the operation of the car (this might be connected services, autonomous capability, parking sensors, cameras etc.). It can be any technology within a vehicle.

Glossary of terms

Term	Acronym	Description
Levelling up		Levelling up is a moral, social and economic programme for the whole of government. It places emphasis on ensuring no community is left behind.
Local Road Network		England's road network consists of motorways, major 'A' roads, and local classified and unclassified roads. The vast majority of motorways and major 'A' roads for the strategic road network (SRN) and are managed by National Highways. All other roads are managed by local authorities and make up the local road network (LRN)
Major Road Network	MRN	The major road network (MRN) is the middle tier of England's road network, comprising the busiest and most economically important local authority A-roads.
National Highways Licence		The Licence sets out the Secretary of State's statutory directions and guidance to National Highways.
Noise Action Plans		Noise action plans provide a framework to manage environmental noise and its effects. They also aim to protect quiet areas in agglomerations (large urban areas) where the noise quality is good. Noise Action Plans provide a framework for the local management of the Important Areas.
Noise Important Areas		Noise Important Areas (NIAs) for roads and railways are based upon the strategic noise maps results and are produced in line with the requirements set out in the noise action plans.
Office of Rail and Road	ORR	The Office of Rail and Road (ORR) is the independent safety and economic regulator for Britain's railways and monitor of National Highways
Park and ride		A park and ride offers parking with public transport connections that allows commuters and other people heading to city centres to leave their vehicles and transfer to bus, rail or car share for the remainder of the journey.
Platooning		Heavy Goods Vehicle (HGV) platooning is the use of technology to allow HGVs to travel safely in close proximity at speed with the driver of the lead vehicle controlling the speed, acceleration and braking of the whole 'platoon'.
Receptor (Air quality and Noise)		Location which is sensitive to noise/air quality issues
Regional Traffic Model	RTM	National Highways has a suite of five regional traffic models (RTMs) covering England's SRN. The models allow us to identify future performance and delay on the network, assisting with the development of the route strategies
Reliability		Reliability is the difference between the typical travel time, allowing for recurring delays, and the observed travel time. This measures the amount of variation due to unexpected variations or unplanned events. Like delay, it is measured in seconds per vehicle per mile. It is a concern for most drivers, but particularly affects just-in-time freight traffic and other strategic journeys.
Road investment strategy	RIS	A Road investment strategy (RIS) is a strategy that outlines a long-term programme for National Highways' motorways and major A-roads with the stable funding needed to plan ahead.

Term	Acronym	Description
Road period		The defined period of time over which the Government gives a funding commitment. The length of a road period will be specified at the beginning of the RIS development process. Road periods will be multi-year in order to provide the supply chain with increased certainty of investment and intent. Based on current practice within the other infrastructure sectors, it is expected that road periods will continue to be five years in length, though the actual length will be decided by the Government of the day.
Route objectives		Objectives for each route, informed by engagement and analysis, to support the current and future needs of customers and neighbours.
Safe System approach		The Safe System is the current best practice safety culture in road safety, developed over many years and derived most notably from the Swedish Vision Zero and Dutch Sustainable Safety strategies.
		A best practice road safety culture approach based on the principles that humans make mistakes which could lead to serious injury or death for which it is a shared responsibility of the road user, road managers, vehicle manufacturers, etc. to take appropriate actions to ensure road collisions do not lead to serious or fatal injuries.
Seasonal delay		Seasonal delay refers to the difference between the average afternoon peak delay for Fridays in August 2019 (high demand in summer holidays) and the average delay during very low demand periods (in this case, Christmas day is used). This measure is designed to reflect the parts of the network that do not appear to have a problem on average over the year but have seasonal peaks. Seasonal delay is of interest to tourist traffic, particularly people travelling to airports, or other destinations where arriving later than intended could have significant implications.
Severance		The separation of people from facilities and services they use within their community.
Sites of Special Scientific Interest	SSSIs	A Site of Special Scientific Interest (SSSI) is the land notified as an SSSI under the Wildlife and Countryside Act (1981), as amended. SSSI are the finest sites for wildlife and natural features in England, supporting many characteristic, rare and endangered species, habitats and natural features.
		A smart motorway is a section of motorway that employs active traffic management (ATM) techniques to increase capacity through the use of technology including variable speed limits. There are three types of smart motorway:
		 Controlled Motorway: variable speed limits with the hard shoulder operating as it would on a conventional motorway.
Smart motorway		 Dynamic Hard Shoulder (DHS) Running: Variable speed limits with the hard shoulder selectively opened as a running lane during periods where traffic levels are too high for only three lanes of running traffic. When activated, vehicles can use the hard shoulder as a running lane.
		All Lane Running (ALR): variable speed limits with the hard shoulder removed and converted to a permanent running lane.
		Smart motorways have a whole system of inter-related safety features, not present on conventional motorways, working together to help keep drivers and their passengers moving safely. The system includes:
Smart motorway		 variable speed limits to help keep traffic moving, reducing frustrating stop-start traffic and making journeys quicker
		 clearly signed and orange-coloured emergency areas set back from the road and with telephones linking directly to our control rooms
		detection systems to monitor traffic for changes in flows
		 CCTV cameras that our operators are able to move and zoom to monitor and manage congestion and incidents, where notified. The system has the ability to see 100% of the carriageway
		 signs and signals to provide better information to drivers which can alert drivers to hazards ahead and display Red X signs to close lanes to other traffic when a stopped vehicle is identified
		• enforcement cameras to deter the minority who break speed limits and ignore Red X signs
		radar stopped vehicle detection

Glossary of terms

Term	Acronym	Description
Spatial planning		Spatial planning decides how land should be used or protected. It also organises, designs and makes decisions on where new homes, roads and other infrastructure should be built. Spatial planning aims to make places attractive, safe and environmentally friendly. National Highways is a statutory consultee in the planning system and we encouraged others to seek early advice from us if their development proposal is likely to impact the strategic road network.
Special Areas of Conservation	SACs	A Special Area of Conservation (SAC) is the land designated under Directive 92/43/ EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.
STATS19		Data on road traffic casualties on the roads in Great Britain are collected via the STATS19 process. These statistics are collected by police forces, either through officers attending the scene of incidents, from members of the public reporting the incident in police stations after the incident, or more recently online and then validated and published annually by DfT. STATS19 road traffic collision and casualty data is published annually by DfT in the Autumn and provides details of the previous calendar year. These reports have used the data available at the time of analysis, 2015-2018.
Statutory consultee		Statutory consultees are those organisations and bodies, defined by statute, which local planning authorities are legally required to consult before reaching a decision on relevant planning applications.
Strategic Rail Freight Interchange		A large multi-purpose rail freight interchange and distribution centre linked into both the rail and road system.
Strategic Road Network	SRN	The strategic road network (SRN) covers more than 4,500 miles of motorways and major A-roads.
Strategic Traffic / Strategic journeys		Long distance traffic / journeys
Sub-national Transport Bodies	STBs	Sub-national Transport Bodies (STBs) have a key role in formulating transport strategy and identifying investment priorities at the sub-national level, including for highways. There are seven STBs in England, which are tasked with developing transport strategies and studies for their region. Through the development of their evidence bases with their constituent local authorities and Local Enterprise Partnerships, their work highlights multi-modal issues, need and opportunities, with investment priorities provided to the Secretary of State for Transport.
Transport-related social exclusion		Where limited access to transport or other issues with the transport system means that people cannot fully participate in society in the way they would like
Trunking / De-trunking		De-trunking is the process of returning a National Highways road to the local highway authority control and vice versa for trunking
UNESCO World Heritage Site		Inscription as a UNESCO World Heritage Site is an acknowledgement of the global significance of such places.

Term	Acronym	Description
Union connectivity		Transport connectivity between the nations of the United Kingdom.
Variable Messaging Signs		The Traffic Signs Regulations and General Directions 2016 (TSRGD) define a variable message sign as a device "capable of displaying, at different times, two or more aspects". These aspects may take the form of a sign prescribed by the TSRGD, a legend in accordance with Schedule 16 to TSRGD, a non-prescribed temporary sign or a blank grey or blank black face. Thus, the expression "variable message sign" (VMS) encompasses all types of variable sign from simple flap-type signs to complex light-emitting panels
Vulnerable Road User		Walkers, cyclists and horse riders



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