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Route strategies

The division of routes for the programme of route strategies on the Strategic Road Network
1. Introduction

The modernisation of England’s motorways and major A roads, also known as the strategic road network (SRN), is making a vital contribution to economic wellbeing and growth. This Route Strategy – one of 18 such reports – provides a statement on the current performance of, and perceived pressures on, the South Midlands route to inform the planning of future investment.

The SRN supports national and local economic prosperity by:

- linking together major cities
- connecting with extensive local road networks
- providing links to major ports, airports, and rail terminals
- enabling good access to regions and cross-border routes between the nations of the United Kingdom

The establishment of Highways England through the Infrastructure Act 2015 has changed fundamentally the way we plan investment in the network. Funding is now determined every 5 years, in the Road Investment Strategy (RIS), which is set by Government. We are currently delivering on the commitments that were set out in the first RIS covering 2015 to 2020, which are already making a difference for road users across the network.

At the same time, we are working closely with the other 3 bodies with statutory responsibility for the RIS – Department for Transport, Office of Rail and Road and Transport Focus – on preparing for the next RIS (RIS2) for the period after 2020.
Purpose of Route Strategies

Route Strategies provide a high level view of the current performance of the SRN as well as issues perceived by our stakeholders that affect the network. They are one of the key components of research required for developing the RIS. This suite of Route Strategies builds upon the analysis underpinning the first set of Route Strategies undertaken between 2013 to 2015, which together provided the first comprehensive assessment of the entire network. This time the Route Strategies aim to:

▪ bring together information from key partners, motorists, local communities, construction partners, environmental groups and across the business
▪ achieve a better understanding of the condition and performance of our roads, and local and regional aspirations
▪ shape our investment priorities to improve the service for road users and support a growing economy
▪ help inform the next RIS

Strategic themes

The Government’s vision for transforming the SRN is described in the Road Investment Strategy post 2020: Planning Ahead document available on www.gov.uk. This vision builds on the 5 broad aims published in the Road Investment Strategy for 2015-2020: economy; network capability; integration; safety; and the environment. It also builds on Highways England’s 5 strategic outcomes (see Figures 1.1 and 1.2). Using the evidence from this and the other 17 Route Strategies, we will develop proposals that can help bring the Government’s vision for roads to life.

RIS1 Strategic Vision as reiterated in “RIS Post 2020: Planning ahead”

- Economy
- Environment
- Network capability
- Integration
- Safety

Highways England Strategic Business Plan’s key outcomes

- Supporting economic growth through a modernised and reliable network that reduces delays, creates jobs and helps business compete and opens up new areas for development
- More free-flowing network where routine delays are more infrequent, and where journeys are safer and more reliable
- Safe and serviceable network where no one should be harmed when travelling or working on the network
- Improved environment where the impact of our activities is further reduced, ensuring a long-term and sustainable benefit to the environment
- More accessible and integrated network that gives people the freedom to choose their mode of transport and enable safe movement across and alongside the network

Figure 1.1 - RIS1 strategic vision

Figure 1.2 - Highways England strategic outcomes

1See Chapter 6 for more information on the next RIS
Stakeholder engagement

Building on the engagement we started in the first round of Route Strategies, we have continued to work closely with a wide range of stakeholders to enhance our understanding of the strategic road network, and identify where users and other stakeholders feel investment is needed.

We used a number of methods to collate information. For example, we launched an online tool for customers and stakeholders over the summer of 2016 to inform us of the issues and challenges on our roads that affected them. As well as information collated from a range of people within Highways England, more than 300 different stakeholder organisations provided important feedback on the network during the evidence collection period. There were also more than 370 individual members of the public who contributed information. In total, around 2,700 individual points were raised by external stakeholders.

Transport Focus

We commissioned Transport Focus, the road user watchdog, to undertake research on road user priorities. More than 4,400 interviews were undertaken with drivers across the SRN. Figure 1.4 below shows the breakdown by user type and purpose.

The research found that the South Midlands route was well rated, with 61% of users rating their experience of the motorway sections as either extremely good or fairly good, with a slightly higher proportion (66%) giving the same rating to the A road sections. As Table 1.1 shows, 30% of users experienced problems using the route, with congestion and roadworks cited as the two main causes.

The full report has been published on Transport Focus’s website www.transportfocus.org.uk/research-publications/publications/road-to-the-future.

We will continue to work closely with Transport Focus to understand customer priorities to ensure that the next RIS reflects their needs.

Figure 1.3 - External stakeholder responses

We are increasingly working with subnational transport bodies (STBs), including Midlands Connect, England’s Economic Heartland and Transport for the North, so we can ensure that their developing strategies and planning are integrated into our thinking (and vice versa).

Figure 1.4 - Driver sample breakdown

The research found that the South Midlands route was well rated, with 61% of users rating their experience of the motorway sections as either extremely good or fairly good, with a slightly higher proportion (66%) giving the same rating to the A road sections. As Table 1.1 shows, 30% of users experienced problems using the route, with congestion and roadworks cited as the two main causes.

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We will continue to work closely with Transport Focus to understand customer priorities to ensure that the next RIS reflects their needs.
<table>
<thead>
<tr>
<th>Experienced problems %</th>
<th>Route impacted</th>
<th>Largest problem</th>
<th>Second largest problem</th>
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<tr>
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<td>M25 to Solent</td>
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<td><img src="image" alt="icon" /></td>
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<tr>
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<td>South Pennines</td>
<td><img src="image" alt="icon" /></td>
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<tr>
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<td>Felixstowe to Midlands</td>
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<td><strong>South Midlands</strong></td>
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<td>London to Leeds East</td>
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*Table 1.1 - Transport Focus summary*
2. The route

The South Midlands route provides a strategic link between the East and West Midlands, and between the M6 and Birmingham Box and the M1.

The route serves the major towns and cities surrounding the south-east of Birmingham to the East Midlands, through Coventry, Tamworth, Lichfield, Nuneaton, Hinckley, Rugby, Leicester, and towards the south of the Midlands linking the major towns of Warwick, Stratford-upon-Avon, Evesham and Ashchurch. It includes the following roads:

- A38 from Lichfield to Derby (including the A5148)
- M42 from Birmingham to the M1 south of Nottingham via the A42
- A46/M69 from the M5 near Ashchurch to the M1 at Leicester
- A449/A5 from the junction with the M54 to the A5 junction with the M1 at junction 18
- A45 and M45 from Coventry to the M1

The route is mainly made up of dual carriageway all-purpose trunk roads although there are significant sections of single carriageway on the A5 and A46. There are 3 motorway sections, the M45, M42 (junctions 9 to 11) which are 2-lane motorways, and the M69 (M6 junction 2 to M1 junction 21) which has 3 lanes.

Figure 2.1 - Route overview map
The M6 Toll is considered as part of this route as it connects M6 junction 4 near Coleshill to M6 junction 11A north of Wolverhampton, running parallel to the A5 and M42 within the South Midlands route. The toll road construction is funded, operated and maintained, by Midland Expressway Limited, which has a government commission until 2054.

The route links the East and West Midlands and provides access to a number of significant traffic generators, including the National Exhibition Centre, Birmingham and the Donington Park motor racing circuit. Coventry and East Midlands airports are within the route and it links these international freight hubs with the M1 and M6. The A5 is part of the Trans-European Transport Network (TEN-T).

There is a wide variety of use of the route due to the mix of major trunk roads, motorways, and rural and single carriageway sections set within both rural and urban areas. A high proportion of commercial traffic uses the route for east-west movements between Birmingham and Coventry to the M1, with the A5 acting as a local distributor.

There are variations in the type and level of traffic depending on the times of the year, especially at the southern end where the route serves the historic towns of Warwick and Stratford-upon-Avon where tourism is a key part of the local economy.
Figure 2.2 - Route Strategy overview map

KEY
- South Midlands route
- Port
- Airport
- Junction number

Blue sections are motorways
Red sections are all-purpose trunk roads

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South Midlands route
Port
Airport
Junction number
Blue sections are motorways
Red sections are all-purpose trunk roads
3. Current constraints and challenges

This chapter outlines the emerging issues raised by stakeholders and is supplemented by Highways England information.

The following text and figures within this chapter provide a summary of the information collected and applied to our strategic themes.

Congestion is an issue within a number of sections of the route. The M42 between junctions 7 and 10 is one of the most congested parts of the SRN nationally. High levels of congestion on the M42 at junctions 10 to 9 in peak periods can hinder access to/from Tamworth.

The A5 and A46 include sections of both single and dual carriageway with many at-grade junctions, including roundabouts. There are capacity constraints at locations on the A46 and at several junctions of the A38 such as at the Branston interchange and Hilliard’s Cross. Queuing back from the congested junctions can also lead to congestion on the local road network. In Ashchurch, the A46 corridor is largely urban in nature where the number of at-grade signalised junctions and direct accesses cause significant queuing at peak times.

Several roads provide resilience for other strategic roads in the wider corridor in the Midlands. The A46 between M5 junction 9 and the M6 provides an alternative to the Birmingham Box, while the A5 can be an alternative to the M6 and M6 Toll. However, that means that when an incident occurs on the Birmingham Box, the A5 and A46 can experience increased congestion. The A5 corridor runs roughly parallel to the M6 Toll between the M6 and the A38 but, while giving resilience for those routes, the junctions are not best-suited for the non-typical traffic flows that occur when disruption elsewhere leads to strategic re-routing onto the A5.

Peak period congestion at some grade-separated junctions can affect the mainline due to queuing. On the A46 these are the M40 at junction 15 and Stoneleigh Road junction, and the M5 at junction 9.
The route provides critical strategic links between the East, West and South Midlands and hence is vital to the regional and national economy as well as providing local access to many major urban areas. The ambitious economic growth being promoted by the Midlands Engine will increase the case for better and more reliable connectivity between regions to help grow economic hubs.

A large number of current and proposed development opportunities are likely to come forward either alongside the route or near to other major highway corridors that take direct access from it. In particular, flows on the M42 at junction 9 and junction 10 (with the A5) will increase.

There is significant logistics activity in the economic opportunity area made up of sections of the M1, M6 and M69 motorways and served by junctions with the A5 and A46. Two rail freight terminals are located within the route, next to the A5. Daventry International Rail Freight Terminal (DIRFT) is close to M1 junction 18 while Birch Coppice Business Park is close to M42 junction 10. Expansion of both is planned. Further strategic rail freight interchanges (SRFIs) are planned adjacent to the A38 (East Midlands Intermodal Park) and the A5 (Four Ashes).

Along the A38, A5 and around the M1, M6 and M69 motorways, there is significant further planned investment in logistics sites that will likely drive additional use of the network.

Significant housing growth is underway, planned or proposed at a number of sites close to the A5 and A38. Housing growth is also proposed at locations on the A46 corridor near towns in south Warwickshire, Worcestershire and Gloucestershire.

The evidence review highlighted locations of significance for the integration between the route and other transport modes.

Severance has been identified as an issue at locations along the A5 and A46 corridors where the route intersects with the local road network. There is limited and inconsistent provision for pedestrians and cyclists that may not meet future demand, including on parts of the route with adjacent planned major growth of housing and employment sites. These include rural locations between villages while, on the A5, urban locations affected include Bridgtown and Churchbridge near Cannock, Dordon, Grendon and Mancetter near Atherstone.

The A46 contributes to severance between rural communities north and east of Stratford-upon-Avon, between Leamington and Kenilworth, alongside the town of Evesham, and through the town of Ashchurch.

Birmingham Airport’s projected passenger growth will increase pressure on the adjacent SRN including the M42 in this route.

The evidence review also highlighted locations where HS2 will potentially affect demand on parts of the route. The construction of HS2 Phase 1 may have impacts on the SRN as it crosses the A38, A5 and M42 (at several locations between junctions 6 and 10) and the A46. When services begin in 2026, the adjacent Birmingham Interchange station will have associated traffic growth on the nearby SRN, especially the M42.
Current issues with congestion and growth around Birmingham and M42 J9

Local development around M42 junction 9 will put pressure on an already congested network

Local development in North Warwickshire and Nuneaton & Bedworth will increase network pressures on the A5

Expansion of existing rail freight hubs will increase freight traffic flows where they connect to the route

Development of rail freight hubs will increase freight traffic flows where they connect to the route

Local development around M42 junction 9 will put pressure on an already congested network

Along the A5, severance issues exist between communities and employment sites

Significant housing planned next to A5 north of Hinckley

Many at-grade junctions on the A5 have conflicting traffic flow movements

Concentration of Noise Important Areas near A38

Safety challenges at A38 junctions north and south of Burton (Clay Mills and Branston)

Construction of HS2 will potentially increase traffic flows and congestion on the A38, M4 and A5

Local development around M42 junction 10 will increase existing network pressures on the junction

Local development around M42 junction 9 will increase capacity pressures locally

Many at-grade junctions on the A5 have conflicting traffic flow movements

Expansion of existing rail freight hubs will increase freight traffic flows where they connect to the route

Supporting economic growth

Free-flowing network

Safe and serviceable network

Improved environment

Accessible and integrated network

South Midlands - Route Strategy: Map 1 of 2

Figure 3.1 - Key challenges for the route
Construction of HS2 is likely to affect the M42 between junctions 6 and 7.

Severance problems for non-motorised users between Leamington and Kenilworth.

Capacity constraints on single carriageway A46 between Stratford-upon-Avon and Alcester.

Surface water problems associated with severe weather on A46 between M40 junction 15 and A4177.

Future housing developments proposed in Ashchurch and Evesham.

Coventry A452 \ A45

Birmingham M5

M6

M6

Warwick

Coventry

M45 A5

Rugby

A14

M1

M40

M40

A41

Worcester

M5

M50

17

M45

M42

Redditch

A46

Stratford-upon-Avon

Local development in Warwick District and Stratford-upon-Avon will increase network pressures on the A46.

Significant housing and employment sites planned next to A5 east of Rugby.

Severance issues in rural areas north and east of Stratford-upon-Avon.

Construction of HS2 is likely to increase traffic flows and congestion on the A46.

Congestion on A46, linked to inconsistent carriageway standards and multiple at-grade junctions and side accesses.

Proposed growth adjacent to the corridor will put further pressure on the route.

Congestion at M5 junction 9 approaches in peak times. Congestion at this junction and along the A46 and A463 causes queuing which backs onto the M5 mainline.

Figure 3.2 - Key challenges for the route
Diversionary Routes

An essential facet of a resilient road network is the ability to effectively divert traffic away from closed carriageways in the event of an unplanned incident. The map indicates the diversionary routes that currently exist on this route and that have been agreed with the local road network operator. However, it should be noted that the provision of these routes is dependent upon the nature of the incident and the suitability and availability of the surrounding network. In some instances, the diversion route may not be suitable for HGV traffic or might not be available due to events on the local road network. A review is currently underway to improve the quality and coverage of these routes, and to improve the traffic management procedures that are relied upon to implement these routes in the event of a carriageway closure.

Figure 3.3 - South Midlands diversionary routes
Maintaining the strategic road network

We carry out routine maintenance and renewal of roads, structures and technology to keep the network safe, serviceable and reliable. We also ensure that our contractors deliver a high level of service on the SRN to support operational performance and the long-term integrity of the asset.

The heavy year-round use of all our routes means that they require regular maintenance and inspections for repairs to keep them fully operational, in order to support economic growth. Our maintenance regime focuses on 4 key aspects of the routes: road surfaces, bridges and structures, drainage and earthworks. The summary condition of each on this route is set out below:

Road surface
The surface condition across the route is considered to be sound or having some deterioration with less than 0.5% having severe deterioration that would require focused investigation.

Bridges and structures
The structures across the route are mostly in very good or good condition. According to an analysis of current data, fewer than 1% of our structures are in poor or very poor condition.

Drainage
Drainage assets are represented by both linear assets (for example pipes, channels, ditches, drains) and non-linear assets (for example gullies, chambers). Across the route, drainage assets are considered to be in good condition for linear assets and fair condition for non-linear assets. Of those assets inspected more than 55% of the linear assets have been assessed as having no defects (grade 1), while more than 65% of the non-linear assets have been assessed as having no defects or only superficial defects.

Earthworks
The geotechnical earthworks across the route are considered to be in good condition, with the total length of earthworks that require further investigation amounting to less than 1%.

New assets have an operational ‘life’, during which, under normal conditions and maintenance, the risk of failure is expected to be low. Beyond this period, the risk of asset failure is expected to increase, although for many types of asset the risk of failure remains low and we do not routinely replace assets solely because they are older than their expected operational life. We use a combination of more regular maintenance and inspection, along with a risk-based approach to ensure that assets remain safe while achieving value for money from our maintenance and renewal activities.

Future developments
We have taken steps to transform our approach to maintenance by establishing an asset management programme that develops and implements the Asset Management Framework for Highways England.

The framework aligns strategic objectives with regional asset management plans and lifecycle asset management plans. It also includes the analysis required to plan the investment and expenditure on the strategic road network during the next road period, developing the business case options for capital renewals. It will provide a clear articulation of the total value that will be delivered by investment in RIS2, including the costs and benefits of delivering the capital renewals 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 Highways England 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.
4. Current investment plans and growth potential

Investment in the strategic road network can make areas more attractive for inward investment, unlock new sites for employment and housing and facilitate regeneration.

From servicing the UK’s logistics needs, linking our manufacturing heartlands and connecting to our international gateways, supporting services-driven activity in high-growth towns and cities, to meeting the needs of our visitor economy, the SRN is critically important to servicing the UK economy.

Economic context

Highways England has been working with a wide range of stakeholders to develop a strategic economic growth plan, which we are calling The Road to Growth. This plan explores the economic role of the strategic road network, and aims to explain how we will further increase our contribution to the UK economy. As part of the evidence base for The Road to Growth, over 400 economic hotspots – or economic opportunity areas (EOAs) – around the SRN have been identified in consultation with Local Enterprise Partnerships (LEPs). The figures in this chapter highlight the EOAs which most closely align and are supported by the route.

To inform the development of The Road to Growth and assess the relationship between the SRN and economic growth, a suite of evidence reports were completed. These reports were published alongside The Road to Growth discussion paper and were subject to public consultation from November 2016 to January 2017. Alongside the engagement we have undertaken with all LEPs across England, the following evidence reports have ensured we have a more comprehensive economic evidence base and a better understanding of future challenges and opportunities:

- commercial development – an assessment of the relationship between the main property sectors and the SRN
- international gateways – a review of principal international gateways (ports and airports) and their contribution to the economy
- socio-economic analysis and future forecasts – mapping of socio-economic data (population, deprivation and employment) and sectoral forecasts up to 2030. This included identification of the likely growth forecasts for all sectors with a particular focus on those sectors heavily dependent on the SRN

The Road to Growth sets out our evidence findings to date and the steps we will take to enhance our enabling role in supporting economic growth.

Innovation

In April 2016, we published our Innovation, Technology and Research Strategy which set out how Highways England will use pioneering behaviours to help support our strategic objectives and create value for customers and stakeholders.

The £150 million Innovation Designated Fund was established to support innovative capital projects and to support developing the use of emerging technologies, new materials and ways of working.

Investment plans

The following figures show the location of Highways England major improvement projects which have previously been announced to help tackle some of the issues on the network. The Highways England website and delivery plan updates should be consulted for the latest information.

The figures also show strategic studies which have been progressed during RIS1, innovation projects and economic opportunity areas.
South Midlands - Route Strategy: Map 1 of 2

**KEY**

- Highways England major improvement project
- Innovation
- Strategic study

**Economic opportunity areas**

- Housing and mixed use
- Mixed employment cluster
- Urban centre
- International gateway
- Industrial
- Research and technology
- Energy
- Intermodal transport hub
- Logistics

**Figure 4.1 - Investment plans and economic opportunity areas**
**South Midlands - Route Strategy: Map 2 of 2**

**KEY**
- Highways England major improvement project
- Innovation
- Strategic study

**Economic opportunity areas**
- Housing and mixed use
- Mixed employment cluster
- Urban centre
- International gateway
- Industrial
- Research and technology
- Energy
- Intermodal transport hub
- Logistics

**Figure 4.2 Investment plans and economic opportunity areas**
5. Future challenges and opportunities

Route Strategies have identified study areas on the strategic road network which require further investigation of the issues raised by stakeholders and identified through Highways England intelligence. These study areas will now be assessed further as part of our development for RIS2.

Note: The map presents the extent of study areas within the route. Colours/shading are for presentational purposes only and no prioritisation has been considered at this stage.

Figure 5.1 - Map of all study areas
**A38 between A50 and A5**

- Continuation and/or worsening of congestion and associated delays at several junctions along the route.
- RIS1 improvements scheme for the A38 Derby junctions, just north of the route, may attract additional traffic onto the A38 route.
- Significant housing developments planned in the Lichfield area will further increase pressure on the A38 and nearby junctions.
- Proposed Strategic Rail Freight Interchange (SRFI) near to A38/A50 junction would increase pressure on the A38.
- An AQMA has been declared along the A38 between Lichfield and Alrewas. Any increase in congestion may worsen air quality along the route.
- The HS2 Phase 1 route crosses the A38 in this study area. Its construction may have major impacts on the SRN.

**M42 junction 6 to junction 10**

- Congestion will continue to be experienced at all junctions in the study area.
- Economic growth around Birmingham Airport, UK Central and regional growth around Tamworth and North Warwickshire Borough close to M42 junctions 9 and 10 is limited by the performance of the SRN and its capability to facilitate the transport demands created by such growth.
- The HS2 Phase 1 route runs close to, and crosses the M42 at 3 locations in this study area between junctions 6 and 9. Its construction may have major impacts on the SRN. The Phase 2b route runs close to the M42 between junctions 9 and 10.
- An AQMA has been declared along the M42 between junctions 7 and 7A. Increasing congestion could further affect air quality along the route.
Existing regular congestion at junctions may worsen in areas where there is likely to be future development growth.

Congestion at the A5 Churchbridge junction may affect growth sites in Cannock included in the local plans.

Queuing back from M42 junction 10 along the A5 westbound impedes flows from the local road network onto the A5 at Stoneydelph, which may restrict growth around Tamworth.

Peak period congestion at the Wall interchange (M6 Toll junction T5) and the A5 at Weeford interchange may impact development in north-east Birmingham and Lichfield.

Safety issues at Churchbridge and the Wall and Weeford interchanges could be exacerbated by future traffic growth.

AQMAs are located at several locations along the route, especially the urban areas of Walsall and Cannock. Increasing congestion may worsen the situation for air quality and noise issues.

Proposed SRFI at Four Ashes, west of the M6 may increase traffic levels on the A5 at Churchbridge.

There are continuing severance issues in the study area. Limited safe crossing points and lack of facilities in the study area can discourage choice of travel by walking or cycling for the nearby population.

HS2 Phase 1 route crosses the A5 east of Weeford Island. Construction period may cause traffic congestion.
- Congestion may worsen as future developments attract more traffic to the area.
- Any worsening in congestion will also exacerbate queues at junctions. This will be experienced particularly through the centre of Ashchurch and on the Evesham and Stratford bypasses. Any increase in existing journey times will make the A46 a less desirable alternative to the M5/M42/M6 route.
- Collision risk may increase as a consequence of congestion. Furthermore, driver frustration could be caused due to congestion and single carriageway sections creating limited overtaking opportunities.
- There could be an increase in adverse noise impacts for those living adjacent to the corridor.
- Severance for non-motorised users could worsen at locations where there are no controlled crossing points as traffic increases on the A46.
Congestion on the A5 may act as a restriction to growth in the economic opportunity areas Enterprise Zone, rail freight terminals and other developments as set out in local plans near the route.

Housing developments planned at various locations in all boroughs through the study area will add to existing congestion issues.

Worsening peak period congestion at junctions and on the A5 east of M42.

There is the potential to make better use of the A5 in providing resilience to the parallel M6 and the Birmingham Box.

This study area contains some of the worst performing parts of the network for road safety.

Air quality in the designated AQMAs on the route may worsen with increased traffic and congestion, as might conditions in noise sensitive areas.

No improvement or worsening conditions for pedestrians and cyclists crossing or using the corridor to access new housing and employment sites.

HS2 Phase 2b route (the eastern leg) is planned to cross the A5 corridor close to M42 junction 10. Its construction period may have major impacts on the SRN.
There is potential to make better use of the A46, enabling wider Midlands movements and providing resilience to the Birmingham Box.

The existing congestion may worsen, exacerbating queues at junctions (particularly at the A46 junction at Stoneleigh and Leamington Road, mainline queuing on the A46, and also at the approaches to the junction with the A45).

The severity and frequency of collisions could worsen, in relation to the presence of and/or layout of the layby north of the A4177 near Warwick and queuing from slip roads.

Continued severance issues for non-motorised users, making it difficult for them to cross the A46. Particularly at the A46 junction with Leamington Road (A452) where the A46 currently severs the link between Leamington and Kenilworth.

The HS2 Phase 1 route crosses the A46 in this study area between Kenilworth and Coventry. Its construction may have major impacts on the SRN.
6. Next steps

Our findings from this and other Route Strategies, as well as other research, will inform our first Strategic Road Network Initial Report which is to be published later this year. This will form the basis of a public consultation, which in turn will feed into decision-making on the next Road Investment Strategy (RIS2).

We are looking ahead to the next RIS and how we can support the Secretary of State in ensuring that value for money investments are made in the road network. The process for developing RIS2 is set out in our licence, and is in 3 phases: research, decision and mobilisation.

We are currently in the first phase – research phase – where we are gathering wide-ranging evidence on the state of the network and how we can ensure that improvements have maximum impact. The series of Route Strategies, of which this is one, is an important part of this phase alongside the outcomes of strategic studies which looked at particularly complicated problems on parts of the network and how to tackle them. Another key source of evidence is the Strategic Economic Growth Plan (*The Road to Growth*), which examines where and how the SRN can help support economic growth. This will emphasise that sectors dependent on the road network employ 7.4 million people, that we are already doing a great deal to support growth and that we want to do even more.

Now that this series of Route Strategies is published, we will continue our engagement with stakeholders, including other transport providers and authorities, on how best to address problems and maximise opportunities. For example, in working towards seamless end-to-end journeys for our customers, we will be focussing on how the strategic road network links with local roads and other modes of transport.

Findings from the research phase will feed into Highways England’s Strategic Road Network Initial Report, expected to be published later this year, which will outline Highways England’s ambitions for the network across 2020–2025 and beyond. The Initial Report will be the subject of public consultation.

In the decision phase, the consultation feedback will assist the Department for Transport in developing RIS2. In turn we will develop a Strategic Business Plan (SBP) setting out how we will deliver RIS2 as a business. Both the RIS and SBP will be reviewed by the regulator of roads, the Office of Rail and Road, to ensure that we have made the most efficient decisions. The final documents are to be published in 2019.

Figure 6.1 - RIS2 high-level process
In the final mobilisation phase, we will set out a Delivery Plan with a detailed programme of investment to be carried out in 2020 to 2025 on the basis of the commitments in RIS2.

Continued investment in modernisation, maintenance and operation will further improve the road network on top of the measures and schemes currently being undertaken, and will allow us to further support users of the strategic road network and the UK’s economy. The rigorous process of developing RIS2 should ensure that the best use is made of taxpayers’ money and that investments have the maximum impact.

The views and perspectives of different stakeholders, including motorists, are important to us. Stakeholders may also wish to contact one of the partner organisations. For example, stakeholders can keep up to date with Transport Focus’ work, by signing up to their monthly electronic newsletter Road User Voice. Alternatively, stakeholders may prefer to make their views known through one of the many organisations involved in RIS2. They include the AA, RAC, RAC Foundation, Road Haulage Association, Freight Transport Association, Campaign for Better Transport, Confederation of British Industry and many others.

We will provide information about the process and emerging findings at events for representative organisations in spring 2017. At the same time, we are developing the dialogue with emerging STBs, local government, LEPs, business groups and environmental organisations. We want to align our analysis, and eventually our decision-making, with that of other organisations, so that we can maximise the benefit of investment, for example focusing on improving the interconnectivity between different modes and between the strategic and local road networks. This should lead to a richer discussion during public consultation on the Strategic Road Network Initial Report.