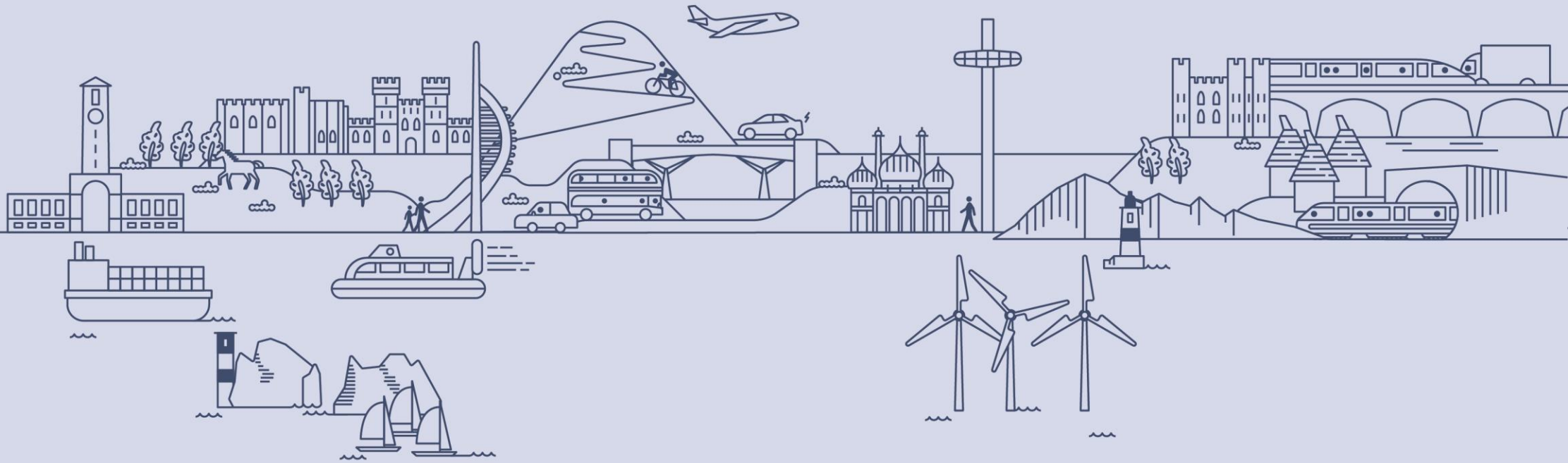


Delivery Plan

Version 6

June 2022



Part 1

Introduction

Introduction

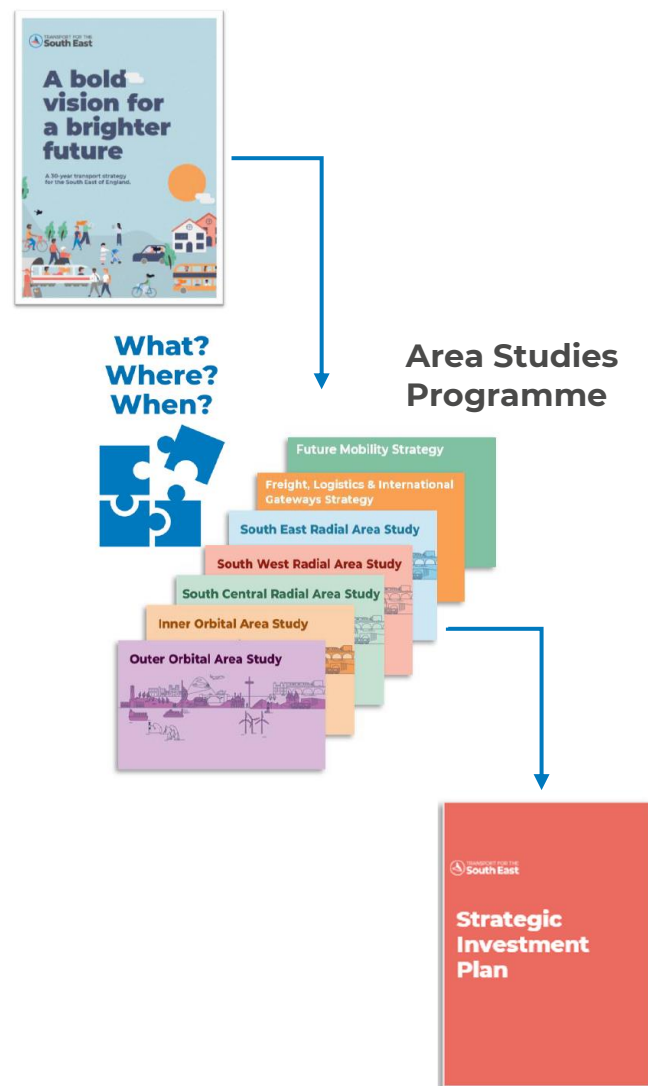
Purpose

This document provides a TfSE area Delivery Plan for the packages of interventions identified through the Area Studies programme. This informs the Strategic Investment Plan and builds on TfSE's published Transport Strategy (see Figure 1). It presents the means of funding, phasing, and wider deliverability considerations for the packages of interventions identified as part for the Area Studies programme that have been taken forward into the Strategic Investment Plan. This Delivery Plan represents the culmination of TfSE's Area Study Programme, and this document should be read alongside other parallel and more detailed technical documents (see Figure 2) which include:

- **Strategic Narrative** for the packages of interventions;
- **Strategic Outline Programme Cases (SPOC)** for four areas within the TfSE area; and
- six Thematic Plans for **Decarbonisation; Levelling-up; Railways; Bus, Mass Transit and Shared Mobility; Strategic Active Travel and Micro Mobility; and Highways.**

This Delivery Plan also includes a description of the “global” package of interventions to be applied TfSE area wide. In this context, “Global” is taken to mean applied or applicable across the whole TfSE area.

Figure 1: Route map from Transport Strategy to Strategic Investment Plan via the Area Studies programme



The method followed for the Area Studies programme is displayed in **Figure 2** and aligns with the Department for Transport's Transport Analysis Guidance, including extensive stakeholder engagement to identify priorities.

Contents

The rest of this Plan is presented in six Parts, which are listed below.

The rest of this report is structured as follows:

- Definition of Areas (Part 2)
- Packages and Interventions (Part 3)
- Costings (Part 4)
- Phasing (Part 5)
- Funding and Financing (Part 6)
- Commercial viability and procurement (Part 7)
- Management and Governance (Part 8)
- Appendix A: Place Based Packages
- Appendix B: Summary Tables of Delivery Plan

Background

Transport for the South East (TfSE), in their role as the Sub National Transport Body for South East England, are delivering a programme of Strategic Studies that will prioritise interventions that help deliver TfSE's vision for the South East. This is a key step towards developing a Strategic Investment Plan to secure funding for the South East's transport network.

Geographic Scope

The Area Studies focus on the key transport corridors that serve and connect the South East's Major Economic Hubs and international gateways. They also play an important national role in connecting the rest of the UK to some of the busiest gateways in the country.

The five studies captured three radial geographies from London to the South Coast, addressing among other priorities, radial resilience and capacity, access to gateways, and levelling up our coastal communities; and two orbital or east-west studies, which typically contain lower speed corridors, and in the case of the outer orbital study, very high levels of deprivation.

For presentation of the business cases as final deliverable, it was identified that more coherent and integrated packages of intervention were emerging around four place-base geographies. As such, this is slightly different in Stage D compared to Stages B and C. In summary:

- The **Outer Orbital Area Study** has become the **Solent and Sussex Coast Study**. The Isle of Wight (IoW) is now within the scope of this study, whereas East Kent is no longer in scope.
- The **Inner Orbital Area Study** has been merged with the South West Radial Area Study to create the **Wessex Thames Study**. The Upper Tier Authorities are largely the same as for the South West Radial Area Study (minus Kent and IoW).
- The **South Central Radial Area Study** has been renamed the **London – Sussex Coast Study**, and Kent is no longer in scope.
- The **South East Radial Area Study** has been renamed the **Kent, Medway, and East Sussex Study**.

For each of these areas a Strategic Programme Outline Case (SPOC) has been produced, setting out the key issues, challenges and opportunities relevant to their scope, and show how targeted interventions will enable TfSE and its partners to deliver TfSE's Transport Strategy for the South East.

- **Solent and Sussex Coast** – encompassing the strategic corridors that serve and connect the two largest conurbations in the South East, covering an area from the New Forest in Hampshire to Hastings in East Sussex.
- **London – Sussex Coast** – encompassing the corridors that share the London-Gatwick corridor in the north and fan out in the south to connect much of the Sussex coastline to the capital.
- **Wessex Thames** – encompassing the strategic corridors and Major Economic Hubs in Berkshire, North Hampshire, and West Surrey.
- **Kent, Medway, and East Sussex** – encompassing the transport corridors connecting the Channel Tunnel and Port of Dover to London, as well as serving Kent, Medway, and East Sussex.

Process

This Delivery Plan is a key deliverable for the Technical Programme of work. The Figure below shows the stages and steps that are being delivered as part of this programme of work to date.

The programme comprises five Stages, which in turn are formed of twelve steps.

The first stage, **Stage A (Mobilisation)**, was completed in September 2020. This stage helped define the leadership team, partners, Subject Matter Experts, methodology and a Delivery Plan for the technical programme.

This led onto **Stage B (Evidence Base)**, which undertook an in-depth review of the current and future issues and opportunities in the SPOC Areas. This covered a wide range of economic, social and environmental issues and opportunities.

Stage B also identified corridor specific transport issues and defined the study’s Vision, Objectives, and Problem Statements.

An **Options Assessment Report (OAR)** was then prepared, which describes how a Long List of intervention options was prioritised to develop Packages of Interventions for each area.

This Delivery Plan is a key deliverable of **Stage D**, complimenting the aforementioned SPOC.

Stage E (Integrated Sustainability Appraisal), which runs concurrently with all stages, will seek to ensure objectives, problem statements and interventions can be achieved through sustainable measures.

Figure 3 overleaf shows the relationship between the Delivery Plan and other documents delivered as part of the Area Studies programme and the Stragic Investment Plan.

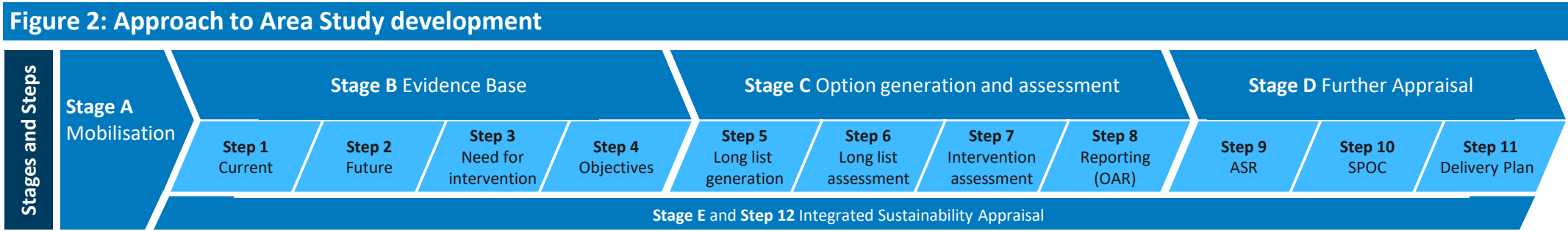
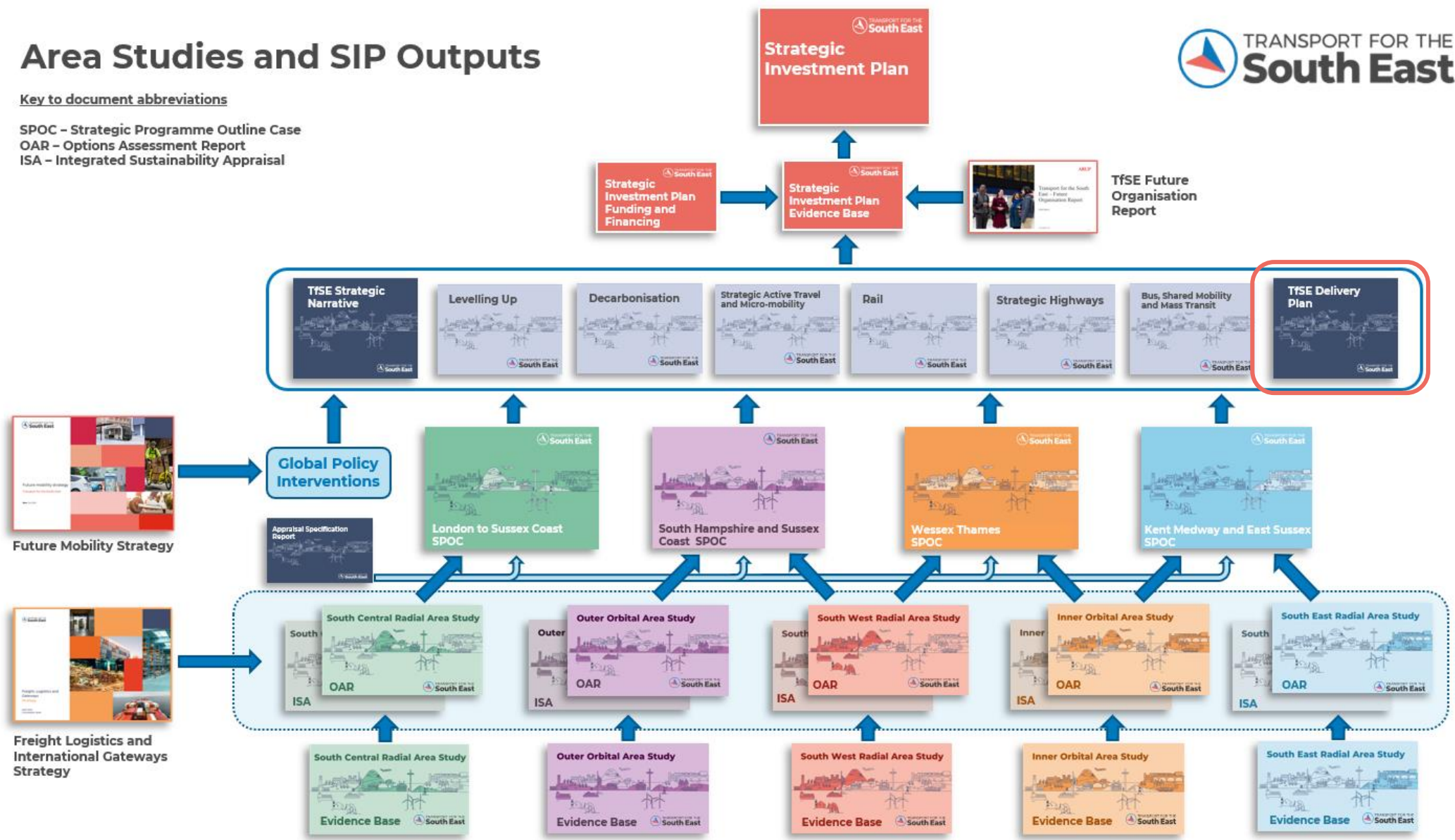


Figure 3: Area Studies programme and Strategic Investment Plan document hierarchy

Area Studies and SIP Outputs

Key to document abbreviations
SPOC – Strategic Programme Outline Case
OAR – Options Assessment Report
ISA – Integrated Sustainability Appraisal



Key Actors in this Study

Project Team

The technical programme of studies area led by a TfSE Project Management Office and is supported by a Technical Advisor Team.

The Technical Advisor Team is led by **Steer**, who led the development of the Evidence Base (Stage B of this project).

Steer is supported by:

- **Atkins**, who led the Options Stages of the project (Stage C); and
- **WSP**, who provide significant support to the Delivery (Stage D) and Integrated Sustainability Appraisal (Stage E) stages.

Most of the technical work and content delivered for the SPOC was developed by WSP and Steer. Atkins has supported this work through developing the Multi Criteria Assessment Framework (MCAF) that was used to qualitatively assess proposed interventions.

For the purposes of this report, TfSE's Project Management Office and the Steer/Atkins/WSP Technical Advisor Team are referred to as the 'Project Team'.

Stakeholders

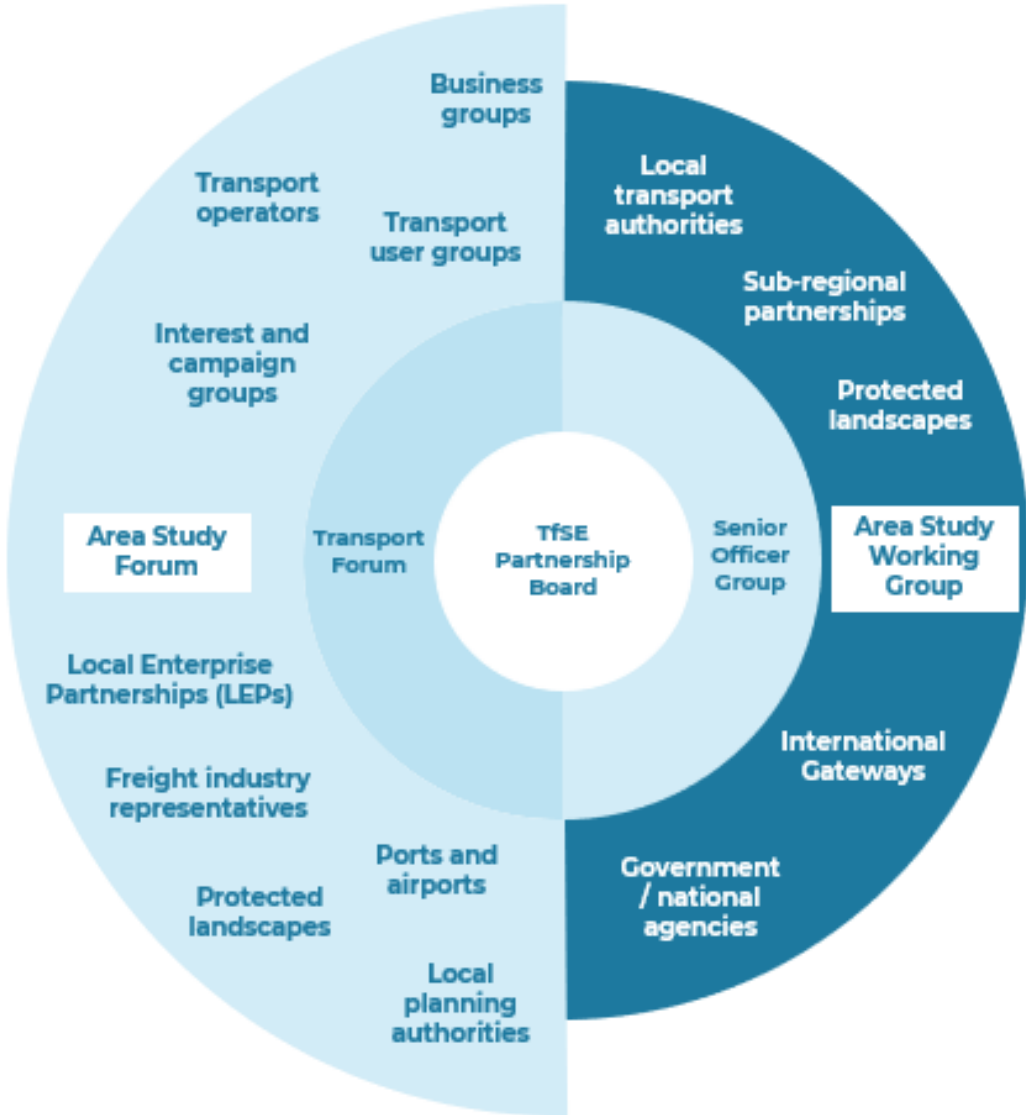
On the mobilisation of the studies, TfSE and the Technical Advisor team undertook stakeholder mapping exercises for each of the four SPOC areas to categorise key organisations and individuals according to their interest and influence.

- **Tier 1 Stakeholders** have a direct interest and involvement in leading and supporting investment in a given SPOC area. These stakeholders include Local Transport Authorities (County Councils and Unitary Authorities), National Highways, Network Rail, a representative from a Local Enterprise Partnership, and the South Downs National Park where appropriate.
- **Tier 2 Stakeholders** potentially have a direct influence over the success of the Area Studies via their development process or contents of the studies. This group includes Local Planning Authorities (Districts and Boroughs) operators, International Gateways, other statutory bodies (e.g. Homes England and Environmental/Heritage bodies), and special interest groups such as environmental groups.
- **Tier 3 Stakeholders** are those parties that may influence Tier 1 and 2 Stakeholders through their activities, including through the media/social media and public affairs. These include Town and Parish Councils, residents' groups, education and health providers, and representatives from youth councils.
- **Tier 4 Stakeholders** are any other stakeholders who have limited interest and/or influence in this work and will therefore not be directly engaged in the Area Study programme.

Most Tier 1 stakeholders at an "officer-level" have been engaged, among other channels, through an **Area Study Working Group** to help steer the direction and content of each study. The membership of this group is shown in **Figure 4** overleaf.

Most Tier 2 stakeholders at an "officer-level" have been engaged, among other channels, through an **Area Study Forum**, to provide input and "check and challenge". The membership of the forum is shown in **Figure 5** overleaf.

Figure 4: Area Study Working Group membership



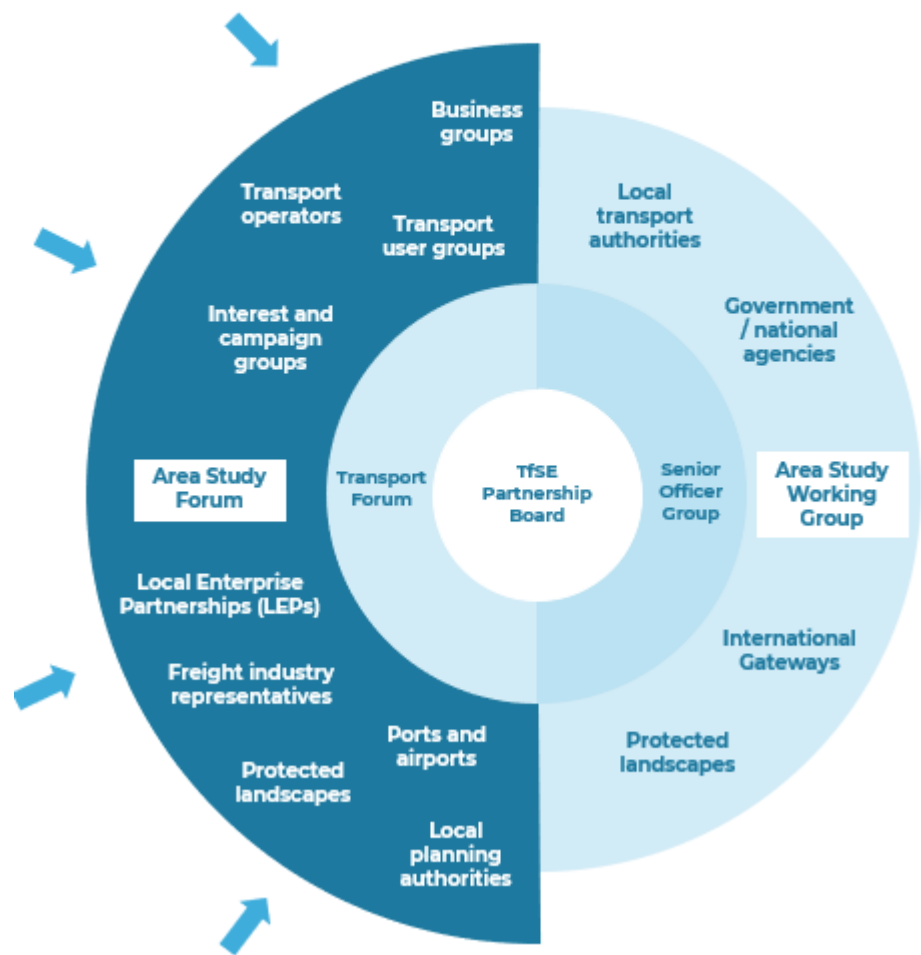
The role of the Working Group is to provide technical leadership to the Area Study, to drive the area study and make key decisions to allow the study to progress to schedule.

The group will provide professional, technical and strategic insight to TfSE and the consultants commissioned to develop the study.

Figure 5: Area Study Forum membership

The role of the Area Study Forum is to provide stakeholder expertise, intelligence and advice to the Working Group and project team. The forum will add to the knowledge base of both TfSE and the consultants commissioned to develop the study.

Members will offer local and strategic insight to key themes, helping to develop strategic outputs that are of benefit the entire area study geography.



Stakeholder Engagement

Tier 1 Stakeholders

Most Tier 1 Stakeholders were invited to join the respective study Area Study Working Group (see Figure 4) and play a direct role in leading and shaping the study.

These stakeholders have helped TfSE develop the Vision, Objectives, and Problem Statements for the study.

These stakeholders provided significant input into the development of the long list of interventions that were assessed using the MCAF and have moderated the initial results from the MCAF long list assessment.

They also supported the strategic assessment of each intervention and advised on the extent to which each long listed intervention aligns with their organisation's priorities.

Tier 2 Stakeholders

Further (remaining) Tier 1 Stakeholders and all Tier 2 Stakeholders were invited to join a Stakeholder Forum (see Figure 5).

The first workshop focussed on identifying stakeholder aspirations for the studies and understanding their perceptions of the strengths, weaknesses, opportunities, and challenges of the area.

The second workshop focussed on validating/amending the Vision, Objectives, and Problem statements developed by the Area Study Working Group. It also provided these stakeholders with an opportunity to contribute to the long list of interventions.

A third workshop, which is expected to focus on validating packages and delivery, will be held in Stage D of the project.

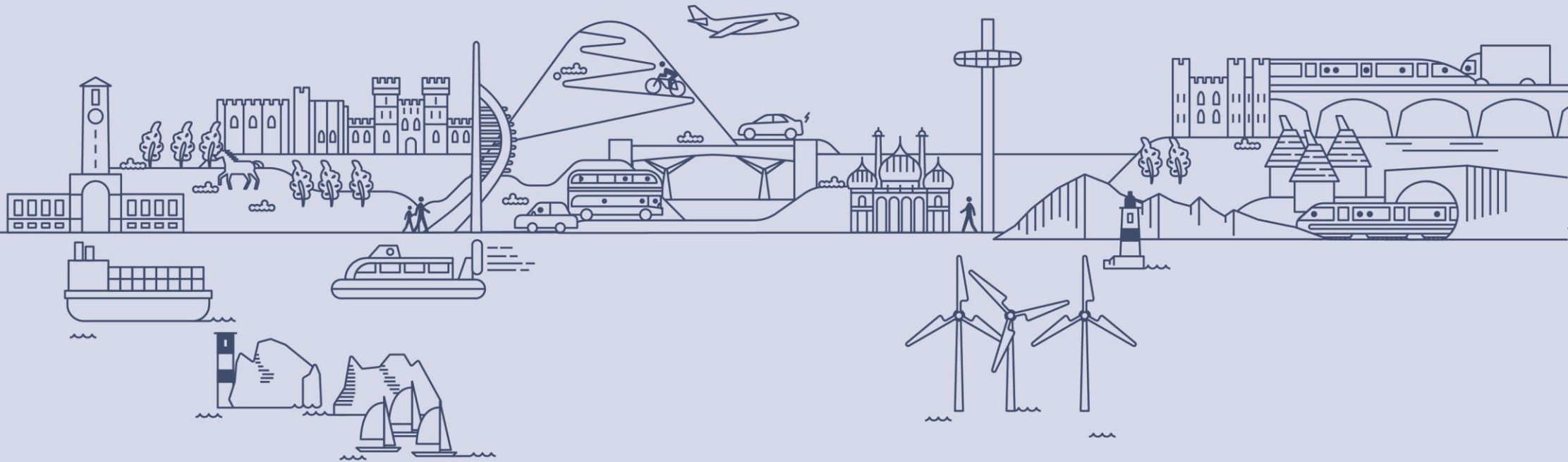
Other Stakeholders

Members of Parliament (MPs) have been further engaged through a bespoke process led by TfSE.

This process engaged MPs on a wider portfolio of topics, including the Area Studies. Any insights drawn from these discussions (e.g., whether an MP supports or does not support a particular intervention) was incorporated into the policy alignment scores.

Tier 3 and Tier 4 stakeholders were not directly engaged in this part of the study.

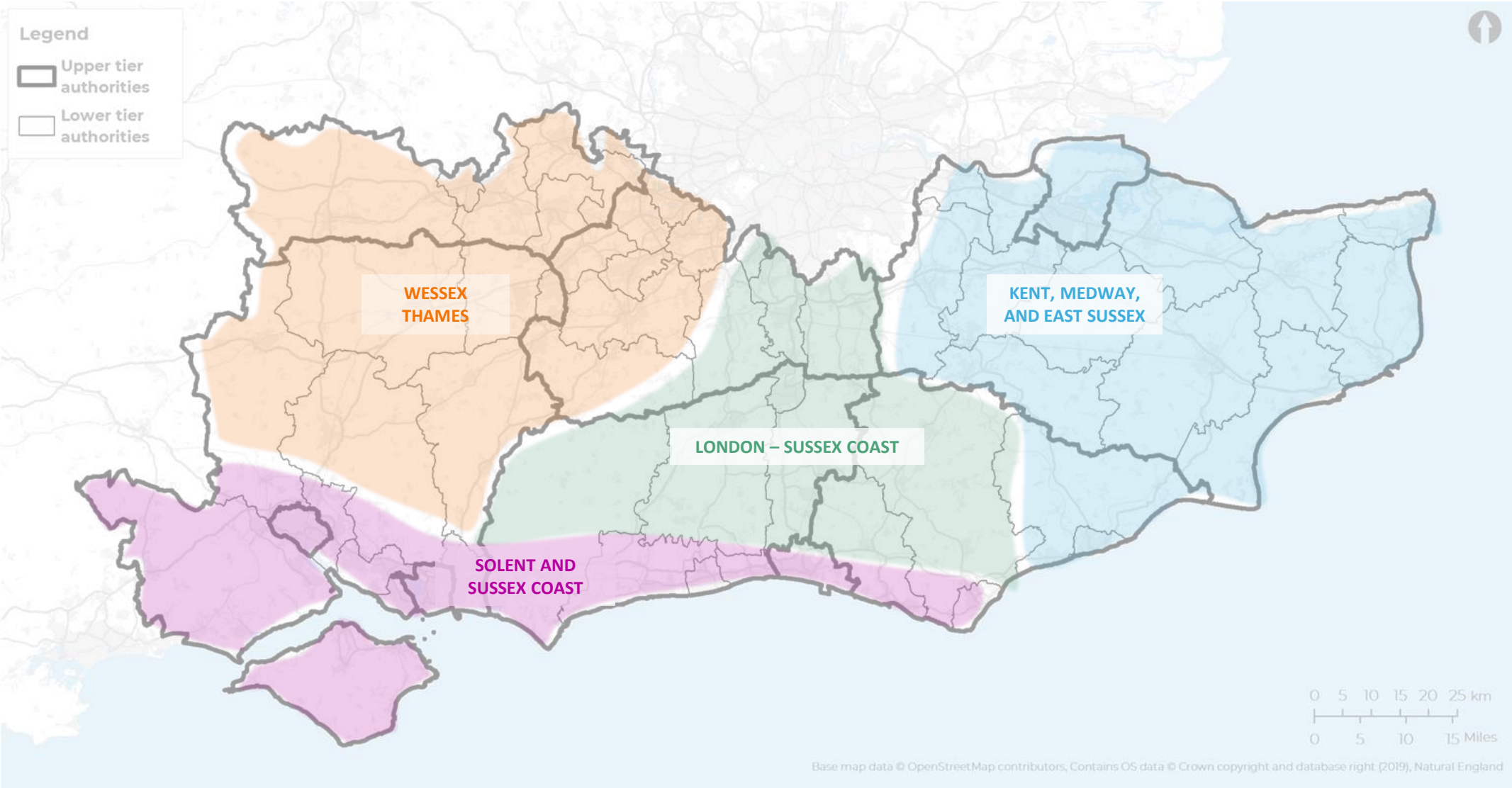
Any organisation that subscribes to TfSE's newsletter has received regular updates about the progress of each study. These stakeholders will also have an opportunity to engage with TfSE when the Draft Strategic Investment Plan is published for consultation.



Part 2

Definition of Areas

Figure 6: Strategic Outline Business Case geography



Solent and Sussex Coast - Profile

The Solent and Sussex Coast Area encompasses the strategic corridors that run along the South Coast from the New Forest in the west to Hastings in the east. It includes some of the largest and most dynamic conurbations in the South East and boasts varied landscapes protected by two national park authorities.

Profile

The Solent and the Sussex Coast area is socially, economically, and environmentally diverse. It has some of the highest areas of deprivation in the country as well as areas of high economic productivity and prosperity. It is home to some of the country's most iconic natural and historic environments and some of the UK's most iconic cities.

The varied strengths and weaknesses of the Solent and Sussex Coast make planning a challenge. There are complex interdependencies, constraints, and in some cases, conflict, between competing pressures and aspirations in the area.

There are significant opportunities for this area. Investment in transport can help support the government's levelling up agenda for deprived communities, and enhance air quality, safety, and improve wider health and wellbeing outcomes.

Transport Networks

The Solent and Sussex Coast area is served by a transport network that, at present, provides better quality infrastructure to and from London, and less developed infrastructure along the South Coast.

Strategic highway connectivity along the South Coast is mixed. While there is good provision in the Solent area, there are significant gaps in West and East Sussex.

The area is served by a relatively dense railway network. However, the level of service provided on east-west routes is generally slower and less frequent than on radial routes.

The area has several important ports, including the Port of Southampton, Portsmouth International Port, Shoreham Harbour, and Newhaven Port. It also is home to Southampton International Airport.

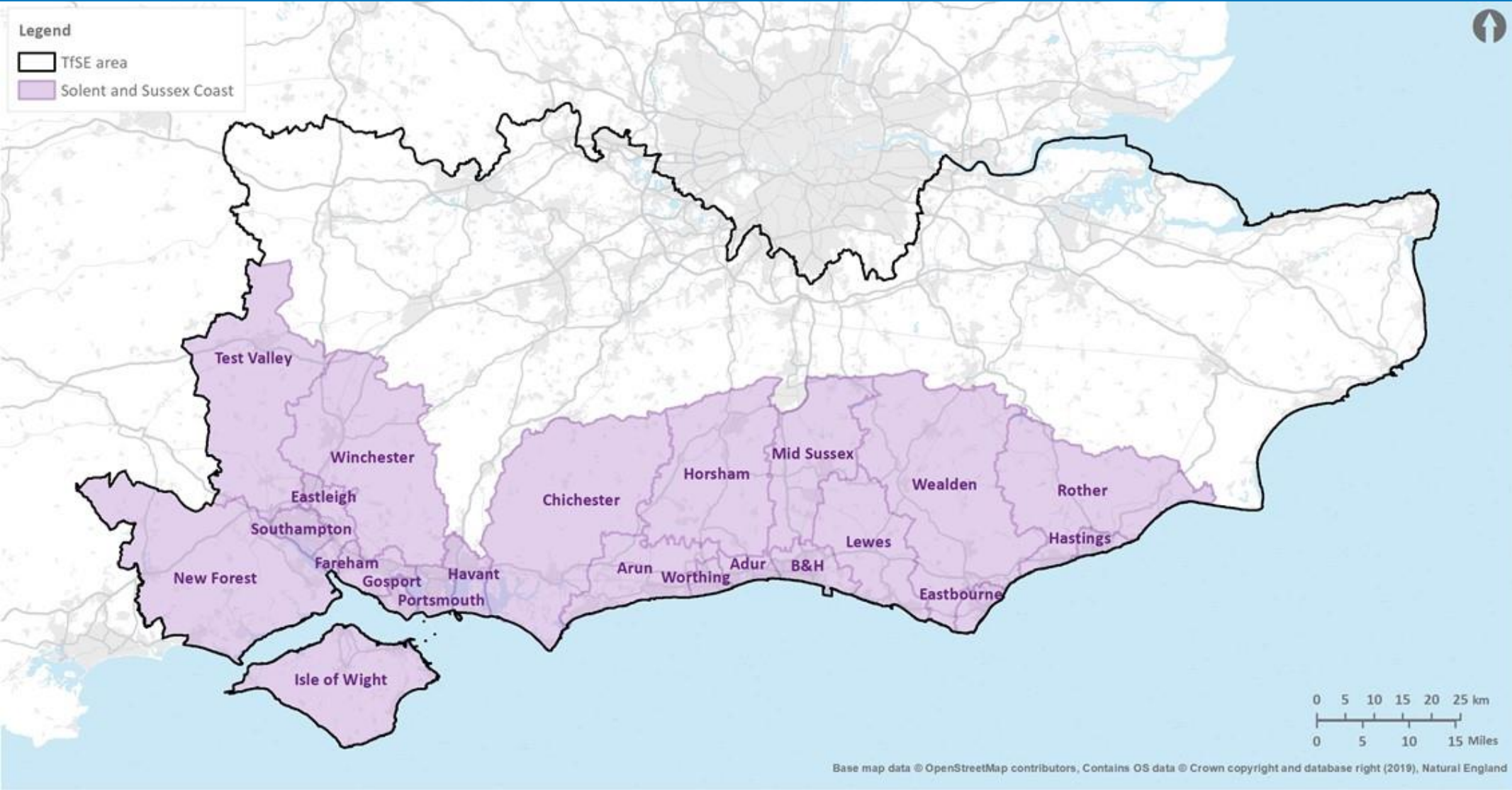
Connectivity to and from the Isle of Wight is also dependent on port infrastructure and ferry services operating between the island and the mainland.

Some of the area's cities benefit from high quality bus services. However, in general, public transport provision is currently not equitable between urban areas across the South East. Public transport provision for the largest Travel To Work flows in the area's largest conurbations is generally poor.

Solent and Sussex Coast - Study Corridors and Local Planning Authorities

The Solent and Sussex Coast area encompasses the Local Transport Authority areas of Isle of Wight, Southampton, Portsmouth, East Sussex, and large parts of Hampshire and West Sussex. The Local Planning Authorities shown in the map below. The area is also served by four Local Enterprise Partnerships (LEPs) – running from west to east – Enterprise M3 LEP, Solent LEP, Coast to Capital LEP, and South East LEP.

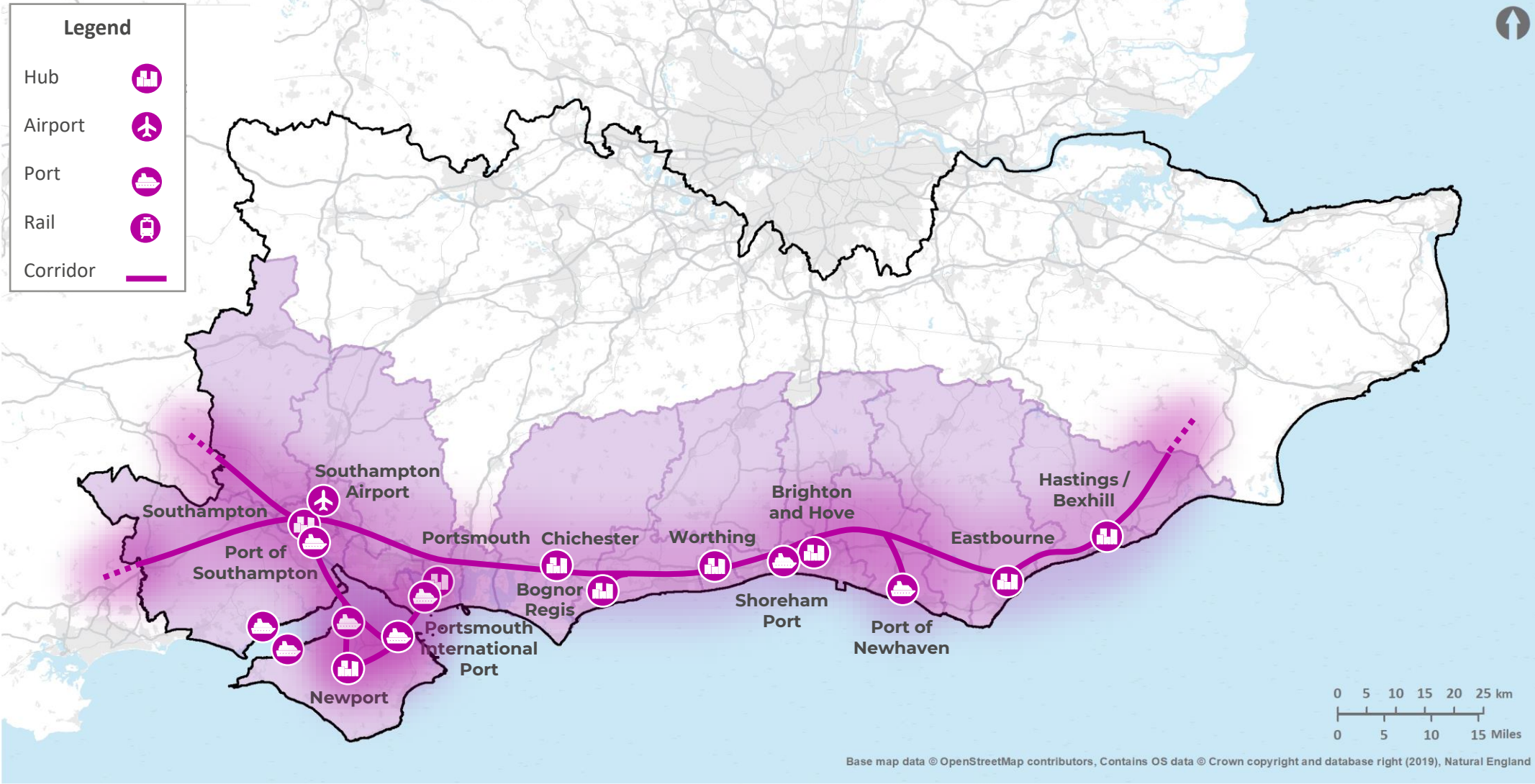
Figure 7: Solent and Sussex Coast SPOC – Local Planning Authorities



Solent and Sussex Coast – Corridors, Major Economic Hubs and International Gateways

The Solent and Sussex Coast area contains the strategic corridors that run along the South Coast from the New Forest in the west to Hastings and Rother in the East. The largest Major Economic Hub in the geography is the Solent conurbation, which includes Southampton, Portsmouth and the surrounding areas. The other prominent Major Economic Hub is Brighton and Hove, which, with Worthing, forms the second largest conurbation. Other Major Economic Hubs include Newport, Chichester, Bognor Regis, Eastbourne, and Hastings/Bexhill.

Figure 8: Solent and Sussex Coast SPOC – Corridors, Major Economic Hubs, and International Gateways



London & Sussex Coast - Profile

The London – Sussex Coast Area is one of the most prosperous and dynamic areas of the South East. Its transport networks perform a key link between the Sussex Coast, the Gatwick Diamond, and London. It is home to some of the fastest growing communities in the UK. However, some communities and sections of society risk being left behind by the area's prosperity.

Profile

The London - Sussex Coast Area links the largest conurbation in the UK (Greater London) with the second largest conurbation in the South East. The latter "Sussex Coast" built up area runs from Bognor Regis in the west to Eastbourne in the east. Brighton and Hove sits at the centre of this thriving conurbation.

Gatwick Airport – the busiest single runway airport in the world pre-COVID (46.6m passengers in 2019) – lies half- way between both conurbations. Gatwick supports a cluster of Major Economic Hubs that are known as the "Gatwick Diamond".

The area is also home to the North Downs, which lie between the Gatwick Diamond and London, and the South Downs, which lie between the Gatwick Diamond and Brighton. The location of these protected areas has heavily influenced development planning, and explains why significant growth is focussed on the Gatwick Diamond.

Transport Networks

The area's transport networks support significant north-south demand.

Rail demand is particularly intense between Gatwick Airport and East Croydon. Gatwick Airport enjoys the highest public transport mode share outside London, which reflects the quality of the rail service provided here.

There is a high-quality highway between the M25 London Orbital motorway (the M23 /A23) and the A27 South Coast expressway. Part of this highway has recently benefitted from investment in being upgraded to a Smart Motorway.

The area is home to several successful bus networks – including the Fastway Bus Rapid Transit network in Crawley, which has enjoyed triple digit percentage growth in the last decade. Bus services outside urban areas, however, have struggled to maintain market share.

Key Challenges

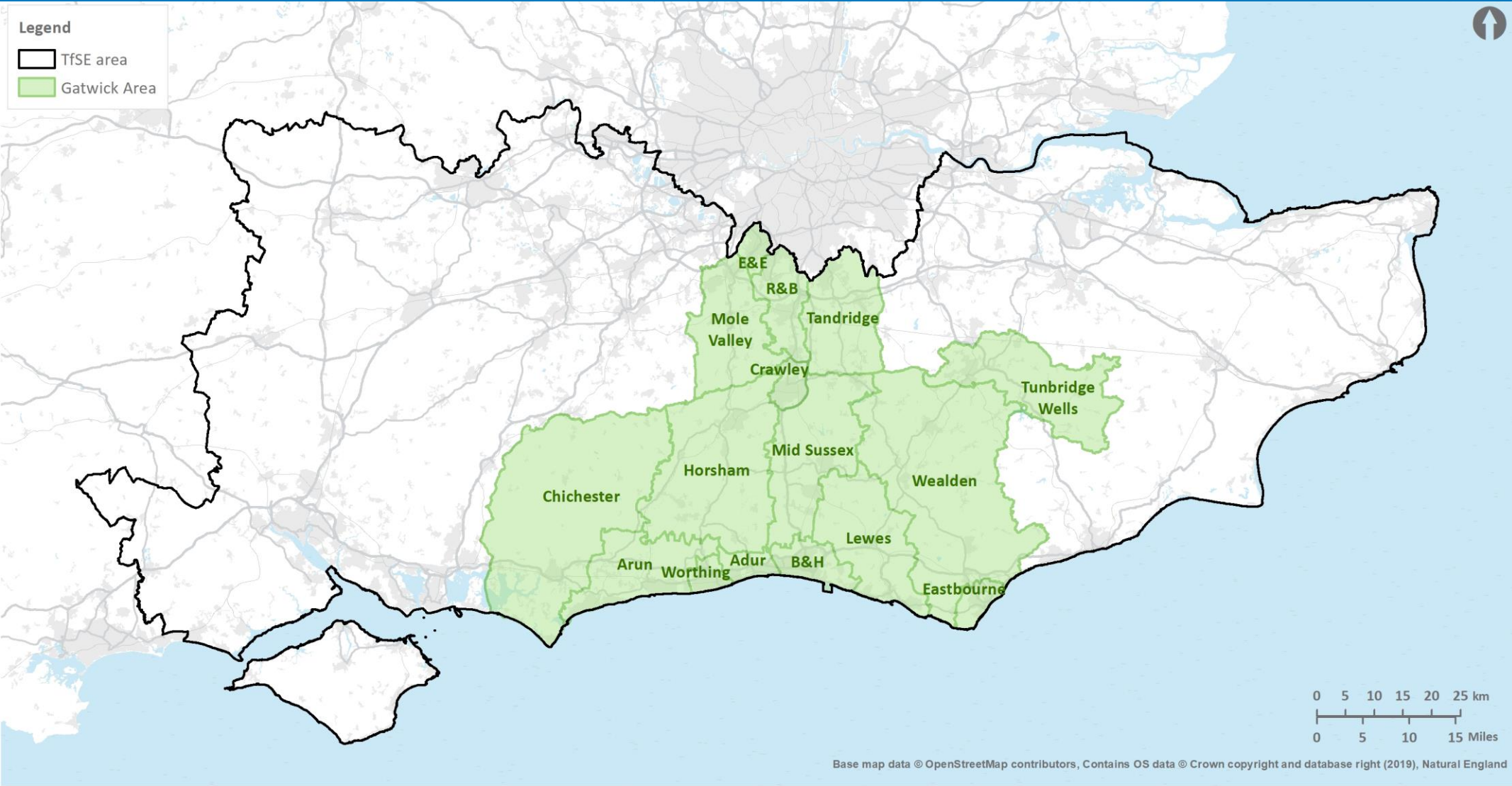
The London - Sussex Coast Area is a generally prosperous area. However, this prosperity, combined with development planning constraints, has resulted in the least affordable housing of all the areas included in the Area Study programme. To address the challenge, significant housing development is planned in the Gatwick Diamond area. This will place additional demand on the transport network, especially if employment growth is higher in London and Brighton than it is in the Gatwick Diamond area (which is quite likely as the aviation industry is still recovering from the COVID-19 pandemic). There are also significant challenges with resilience and east – west movements in this area.

This suggests transport investment will need to be targeted at interventions that support housing growth, deliver more sustainable transport outcomes, and strengthen the resilience of the area's transport networks.

London & Sussex Coast - Study Corridors and Local Planning Authorities

The London - Sussex Coast Area encompasses the strategic radial corridors between South London and the Sussex coast. The Local Transport Authorities in this area include Brighton and Hove City Council, East Sussex County Council, Surrey County Council, and West Sussex County Council. The Local Planning Authorities that are included in this area are labelled on the map below.

Figure 9: London to Sussex Coast SPOC – Local Planning Authorities



London to Sussex Coast – Corridors, Major Economic Hubs and International Gateways

The London to Sussex Coast Area encompasses the strategic radial rail and highway corridors between South London and the Sussex Coast. The largest Major Economic Hub in geography is Brighton and Hove, which, with Worthing, forms the second largest conurbation regionally. Other Major Economic Hubs include Chichester, Bognor Regis, Eastbourne, Epsom / Ewell, Redhill / Reigate, Crawley, Horsham, Burgess Hill / Haywards Heath, Redhill and Reigate, and Royal Tunbridge Wells. Global Gateways include Gatwick Airport and Port of Newhaven

Figure 10: London to Sussex Coast SPOC – Corridors, Major Economic Hubs, and International Gateways



Wessex Thames - Profile

The Wessex Thames area encompasses the strategic corridors that provide connectivity between conurbations in Berkshire, Surrey and North Hampshire. It includes many growing, regionally significant conurbations in the South East and boasts varied landscapes protected by national park authorities.

Profile

The Wessex Thames Area is socially, economically, and environmentally diverse.

It is home to some of the country's most iconic natural and historic environments.

It includes areas of very high economic productivity and prosperity, however there are also pockets of deprivation which need addressing.

The varied strengths and weaknesses of the Wessex Thames area make planning a challenge. There are complex interdependencies, constraints and in some cases, conflict between competing pressures and aspirations in the area.

Despite these challenges, it is this diversity of the area that makes it such an appealing place to live and work. This study will seek to build on this diversity to achieve the ambitions of the people who live here.

Transport Networks

The Wessex Thames Area is served by a transport network that, at present, provides high quality road and rail infrastructure to and from London.

The South West Main line supports fast and local services between London with Southampton with routes also serving Winchester, Basingstoke and Woking. Services continue along the coast from Southampton to Bournemouth and Weymouth. The Portsmouth Direct Line branches from the South West Main line and provides a link from Woking to Portsmouth. The Great Western Mainline links London to Reading and Newbury and onto the West Country.

The area is dependent on the M3, A3 and A34 for strategic passenger and freight movements.

Key Challenges

Despite strong radial connectivity, there are a number of strategic gaps in the highway and railway network making adjacent Major Economic Hubs difficult to get to by sustainable modes.

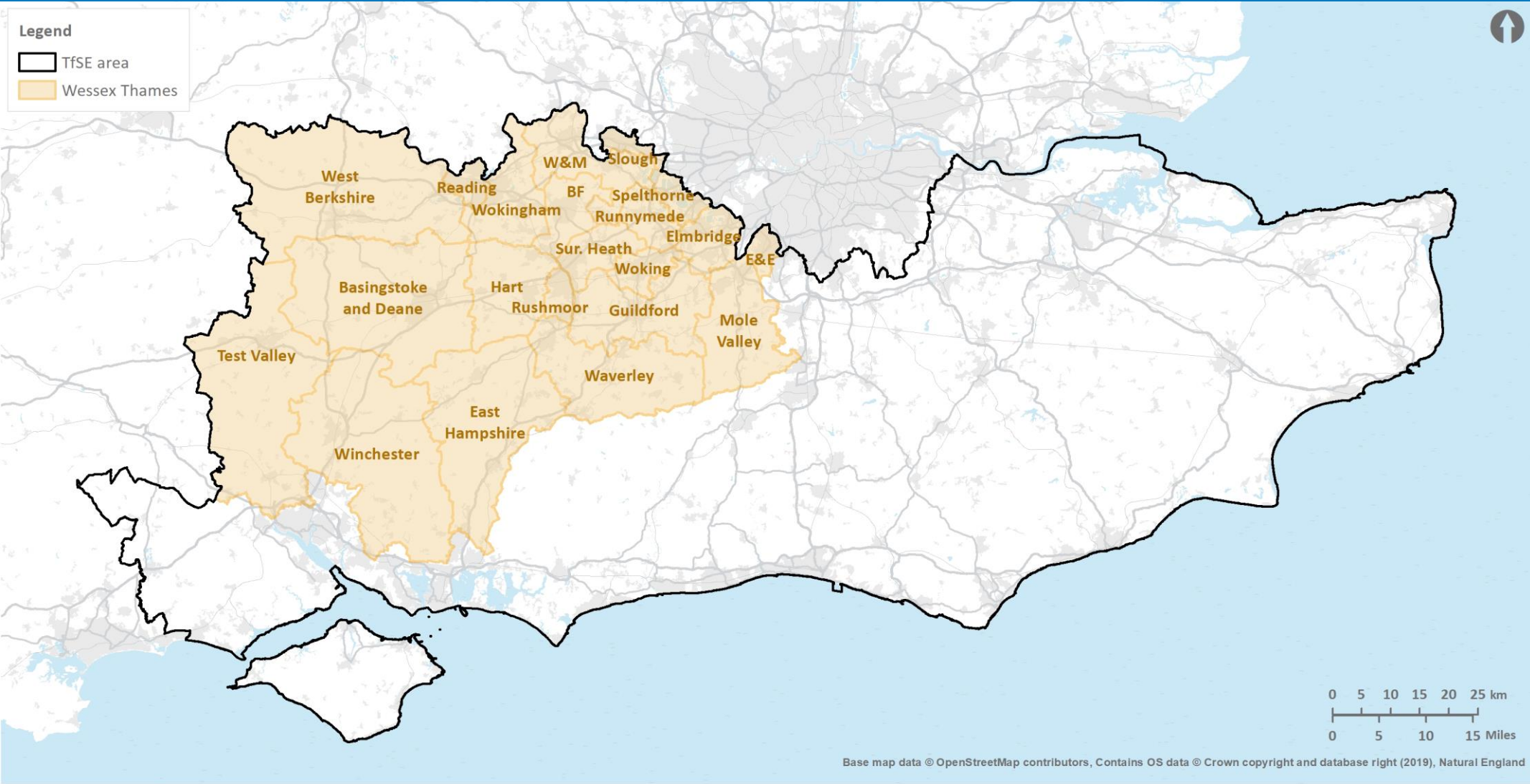
Some of the area's cities benefit from high quality bus services. However, in general, public transport provision is currently not equitable between urban areas across the South East. Public transport provision for the largest Travel to Work flows in the area's largest conurbations is generally poor.

The area is nationally significant and plays a key role in connecting Southampton Port to the rest of Great Britain by road and rail. It is also on the boundary with London Heathrow Airport. Whilst not being in this study area, connectivity to these international gateways is very important and directly contributes to the socio-economic prosperity of the area.

Wessex Thames – Local Authorities

The Wessex Thames area encompasses the Local Transport Authority areas of West Berkshire, Reading, Wokingham, Windsor & Maidenhead, Bracknell Forest, Slough, and large parts of Surrey and Hampshire. The area contains strategic corridors that provide connectivity between the conurbations and other Major Economic Hubs in Berkshire, Surrey and north Hampshire. The Local Planning Authorities in this area are listed in the map below. The area is also served by three Local Enterprise Partnerships – Enterprise M3, Thames Valley Berkshire, and Coast to Capital.

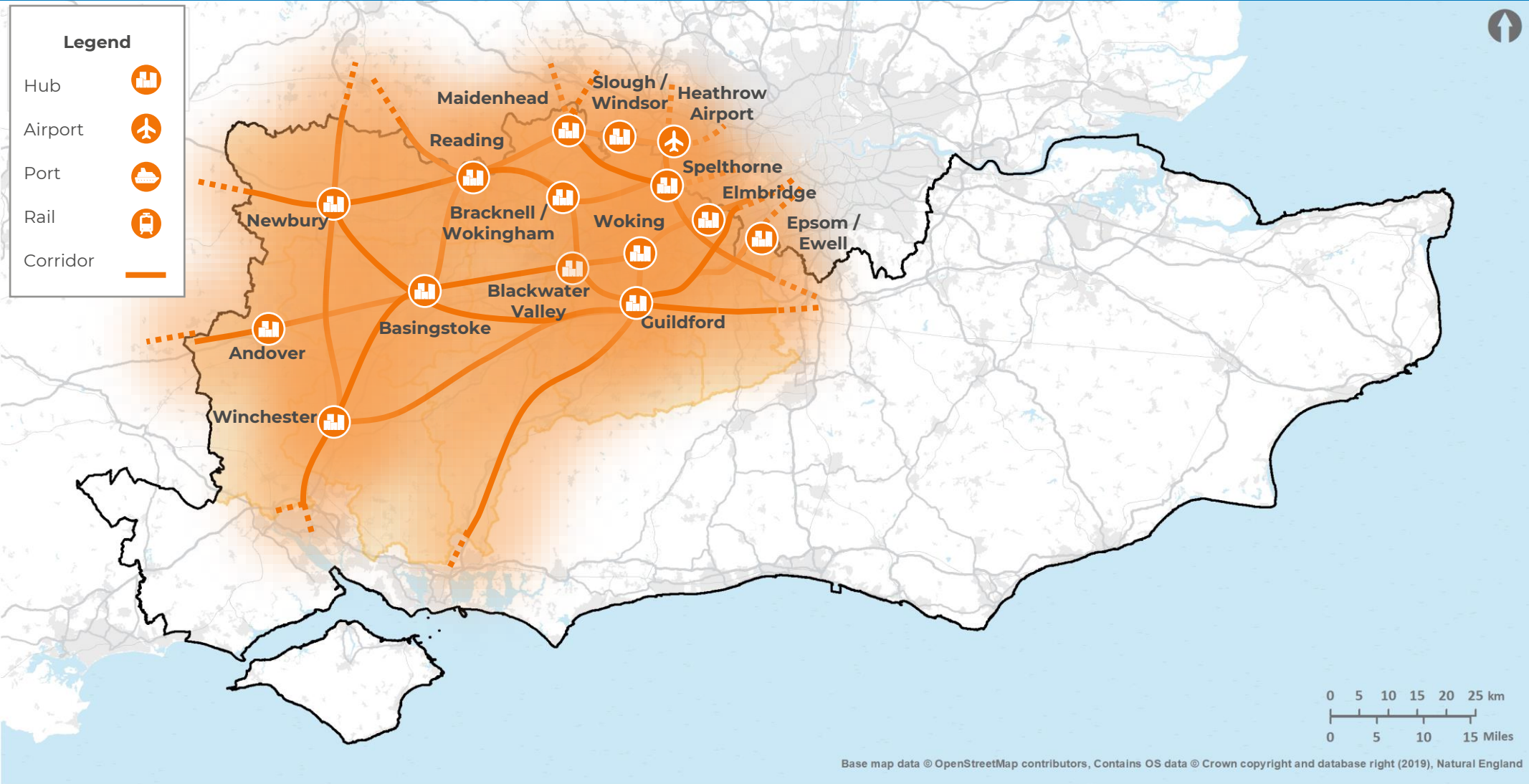
Figure 11: Wessex Thames SPOC – Local Planning Authorities



Wessex Thames – Corridors, Major Economic Hubs and International Gateways

The Wessex Thames area encompasses the strategic corridors that provide connectivity between Major Economic Hubs in Berkshire, Surrey and north Hampshire. Corridors in the area also connect nearby Heathrow Airport and the Solent Ports with the rest of the country. Reading and the Blackwater Valley (Farnborough / Aldershot) are the region's fourth and fifth largest conurbations. Other Major Economic Hubs include Newbury, Bracknell / Wokingham, Maidenhead, Slough / Windsor, Windsor, Andover, Winchester, Basingstoke, Guildford, Woking, Spelthorne, Elmbridge, and Epsom / Ewell.

Figure 12: Wessex Thames SPOC – Corridors, Major Economic Hubs, and International Gateways



Kent, Medway, and East Sussex - Profile

The Kent, Medway, and East Sussex Area is England's Gateway to Mainland Europe, and Europe's Gateway to the British Isles. It is home to one of the largest counties in England (Kent) and one of the largest conurbations in the South East (Medway). It has hosted some of the key historical moments in the UK's past (the Battle of Hastings and Battle of Britain). It is well placed to leverage significant opportunities for growth and regeneration in the future.

Profile

The Area is a diverse and dynamic part of South East England. Its transport network performs a key link between some of the UK's busiest international gateways and the rest of the country. It is home to some of the fastest growing communities in the UK, and some of its most historic towns.

However, there is a risk that some are being left behind as the area's transport network comes under increasing strain, and housing remains unaffordable in places.

Transport Networks

The area is served by good transport networks and is home to the UK's (currently) only High Speed Railway – HS1. It is also served by the South Eastern Main Line, Chatham Main Line, and several secondary and branch railways.

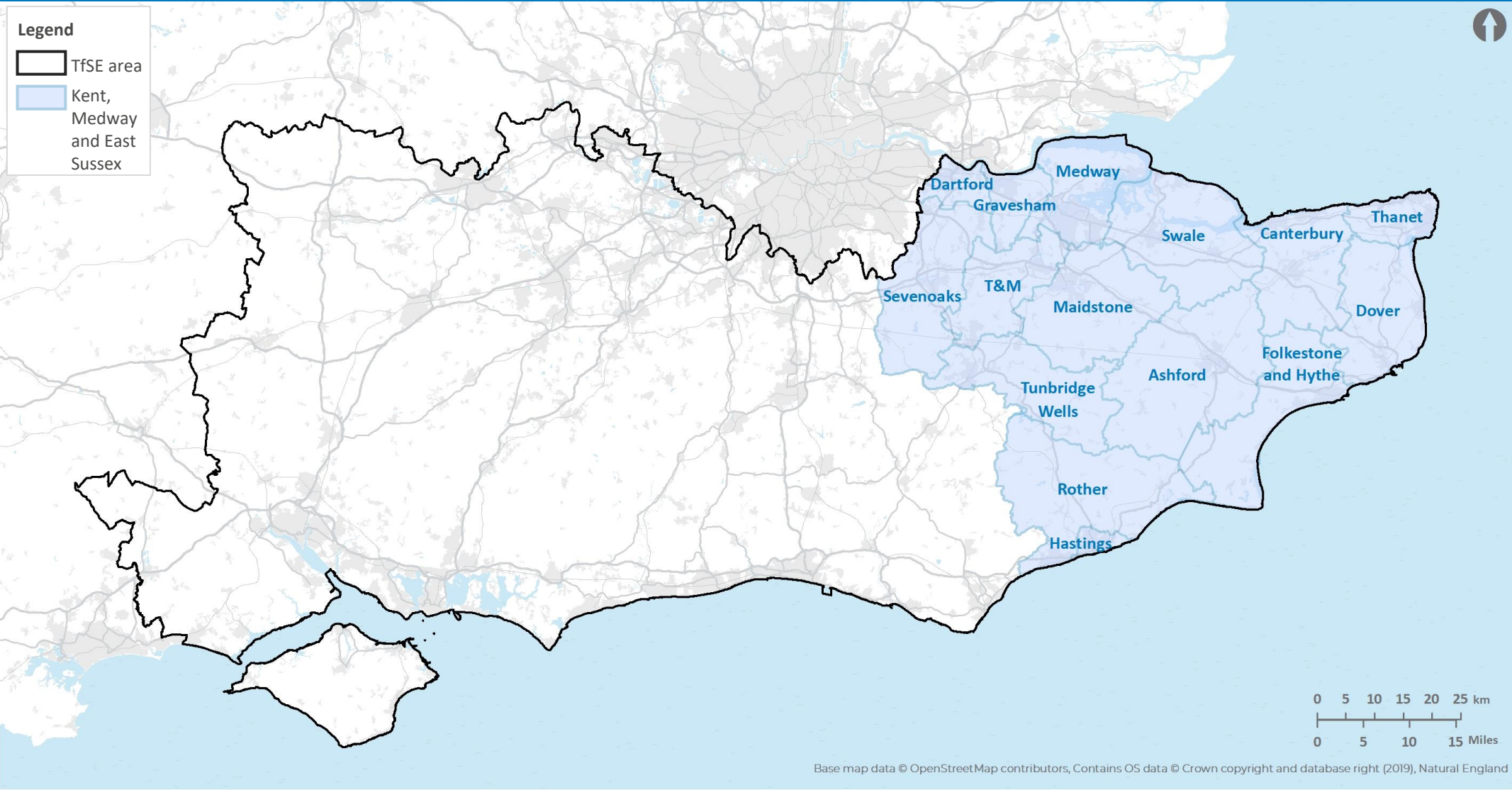
The area is served by two motorway corridors – the M2/A2 and M20/A20 – which both connect the Channel Ports to the M25. These two key corridors are joined together by several Strategic and Major Roads. West Kent and East Sussex are also served by the A21.

The area is home to several International Gateways. These include the port of Dover, one of the world's busiest maritime passenger ports, the Channel Tunnel terminal at Folkestone along with Ebbsfleet and Ashford International stations, and several ports in North Kent and Medway.

Kent, Medway and East Sussex – Local Authorities

The Kent, Medway and East Sussex Area encompasses the strategic radial corridors between South London and the Kent and East Sussex coasts. The Local Transport Authorities in this area include Kent, Medway, and parts of East Sussex. The Local Planning Authorities are Medway, all Districts and Boroughs in Kent, and Hastings and Rother in East Sussex. The area is served by the South East Local Enterprise Partnership.

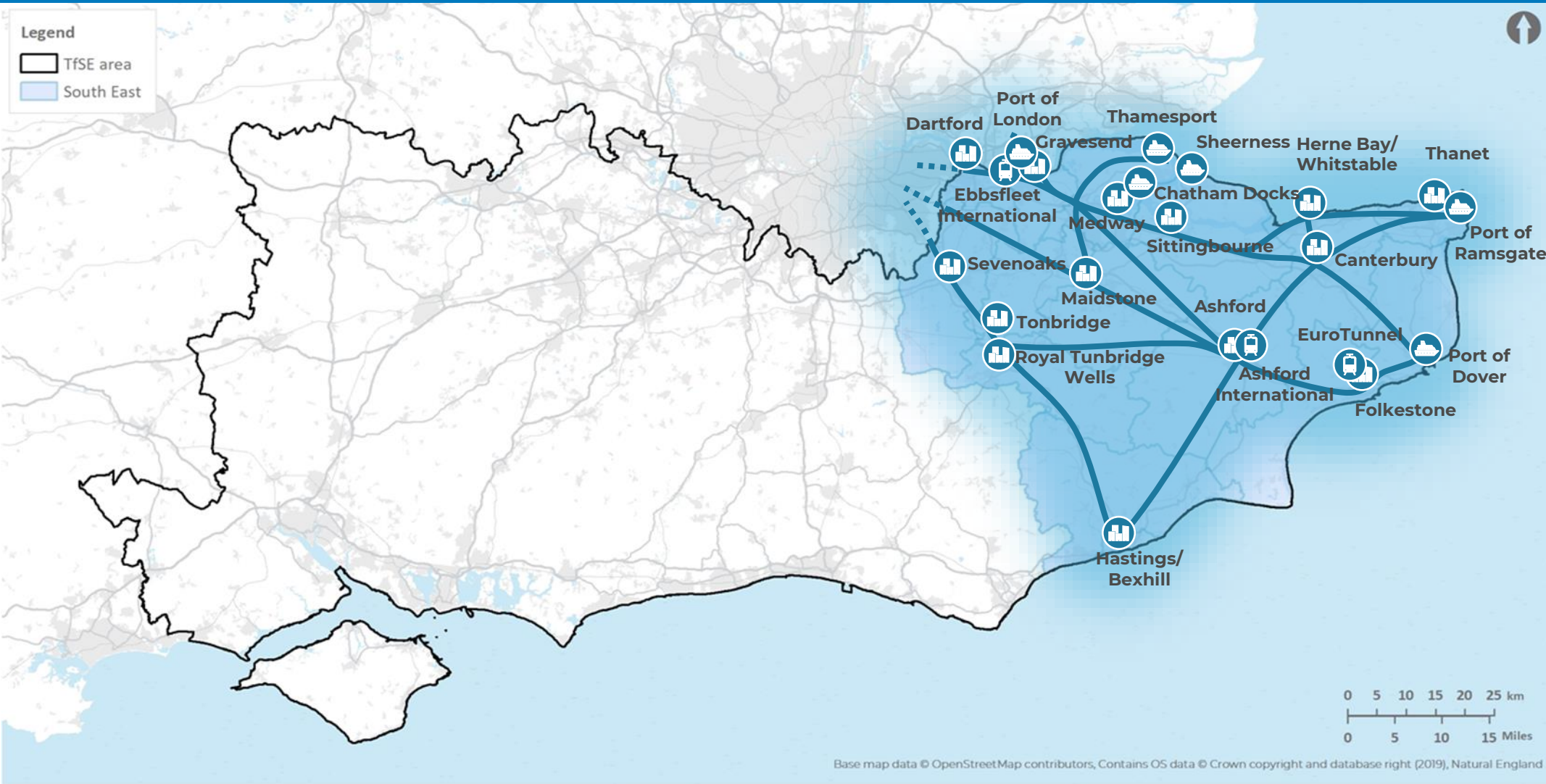
Figure 13: Kent, Medway and East Sussex SPOC – Local Planning Authorities

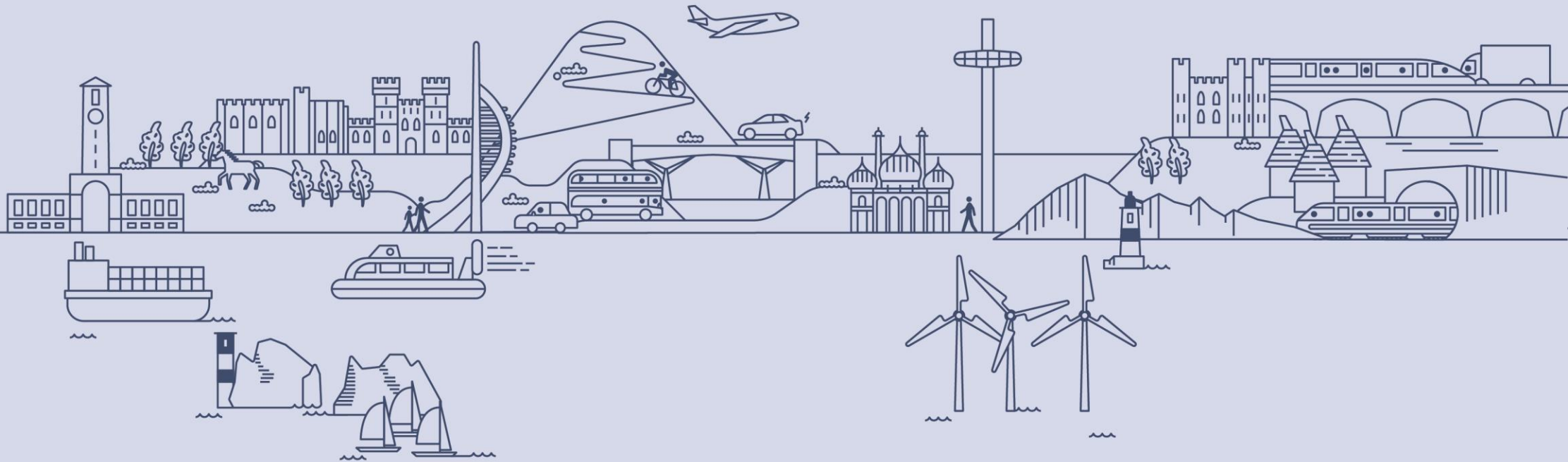


Kent, Medway and East Sussex – Corridors, Major Economic Hubs and International Gateways

The Kent, Medway and East Sussex area encompasses the strategic corridors between London, Hastings, and the South East Coast. The Major Economic Hubs include the Medway Towns Built Up Area (which is the third largest conurbation in the TfSE Area). Other Major Economic Hubs include Dartford, Gravesend, Sittingbourne, Herne Bay / Whitstable, Thanet, Sevebnoaks, Maidstone, Tonbridge, Royal tunbridge Wells, Ashford, Folkestone, and Hastings / Bexhill. The area includes some of the busiest global gateways in the UK – notably Port of Dover and the Channel Tunnel, including the EuroTunnel station at Folkestone and Ashford International and Ebbsfleet International stations – served by HS1 and the M20. Other major ports include Port of London (Gravesend), Chatham Docks, Sheerness, Thamesport, and Port of Ramsgate.

Figure 14: Kent, Medway and East Sussex SPOC – Corridors, Major Economic Hubs, and International Gateways





Part 3

Packages and Interventions by Area

Development of Packages of Interventions

A Top Down and Bottom Up View

TfSE has worked with key stakeholders and technical advisors to develop a set of coherent multi-modal Packages that, together, are designed to deliver TfSE's vision and objectives for the Solent and Sussex Coast Area.

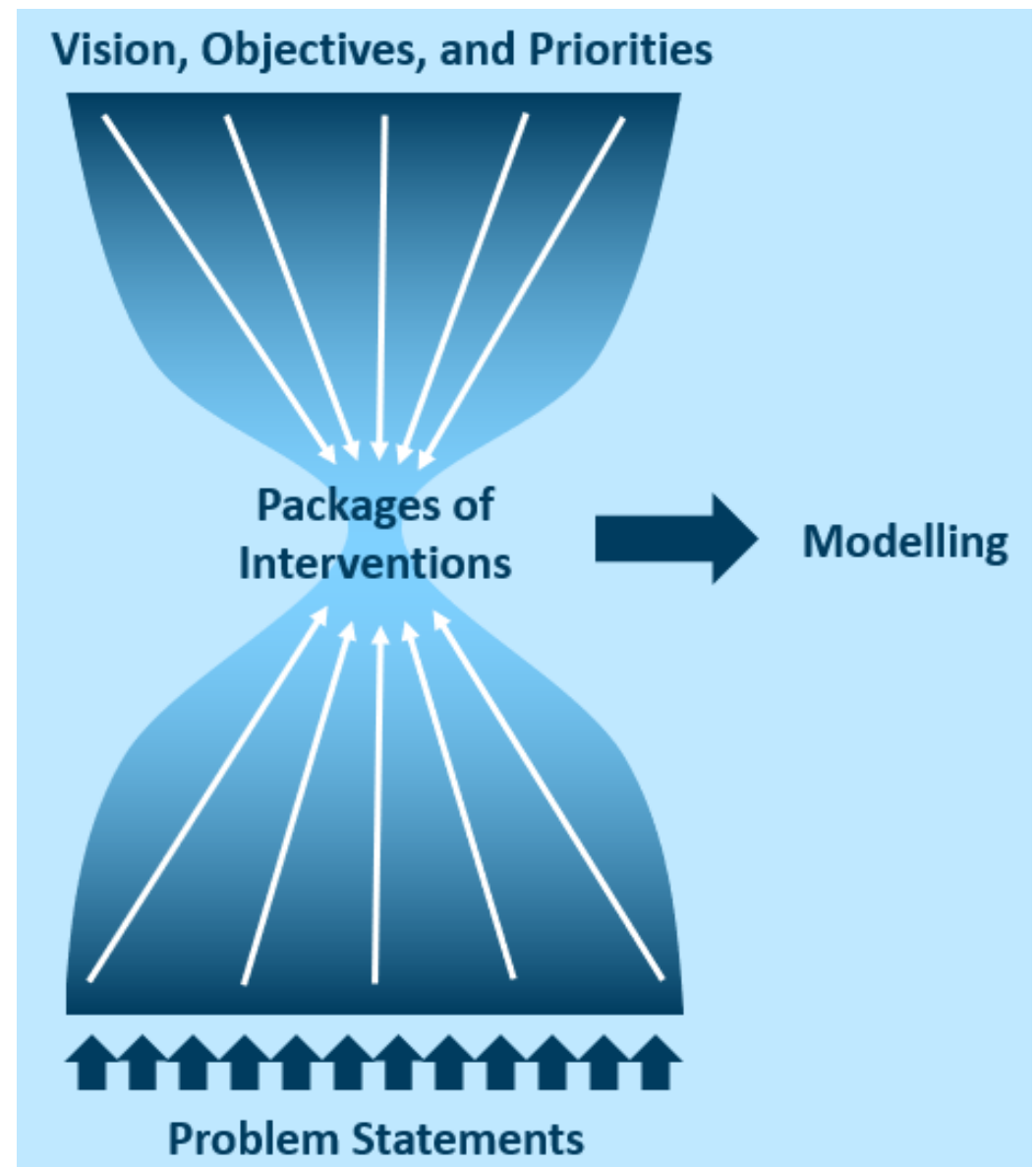
These Packages have been developed through workshops, discussions, and careful analysis of results of the assessment of the long list of multi-modal interventions described earlier.

The Packages combine an overarching vision for the Solent and Sussex Coast Area with the results of the Multi Criteria Assessment Framework.

In essence, this reflects both a 'top down' i.e., vision led approach and a 'bottom up' i.e., individual intervention assessment approach. While planning has taken place considering multi-modal options and how Packages group and integrate, they are presented in the following narrative by mode or groups of modes. This is partly as a product of how they needed to be modelled, but also to talk directly to key stakeholders and modal-based planners of national networks (e.g. Network Rail and National Highways), and possible funding sources – often siloed.

Figure 15 to the right illustrates the essence of this combined approach.

Figure 15: Approach to Package development



Packages of Interventions

Place Based Packages of Interventions

There are 24 Place Based Packages of Interventions. These focus on site specific interventions that tend to yield benefits at a more local level. Many of these are multi-modal (or agnostic about modes), and so they are presented at a sub-regional level.

The Place Based Packages of interventions are grouped by the areas defined by the Strategic Programme Outline Cases (SPOC):

- **Solent and Sussex Coast** (9 Packages)
- **London – Sussex Coast** (4 Packages)
- **Wessex Thames** (4 Packages)
- **Kent, Medway, and East Sussex** (7 Packages)

Lists and maps of packages are provided at a SPOC level over the next nine pages.

Descriptions of each place-based package can be found in **Appendix A**.

Solent and Sussex Coast

1. South Hampshire Rail (Core)
2. South Hampshire Rail (Enhanced)
3. South Hampshire Mass Transit
4. South Hampshire Active Travel
5. Isle of Wight
6. Sussex Coast Rail
7. Sussex Coast Mass Transit
8. Sussex Coast Active Travel
9. Solent and Sussex Coast Highways

London – Sussex Coast

1. London – Sussex Coast Rail
2. London – Sussex Coast Mass Transit
3. London – Sussex Coast Active Travel
4. London – Sussex Coast Highways

Wessex Thames

1. Wessex Thames Rail
2. Wessex Thames Mass Transit
3. Wessex Thames Active Travel
4. Wessex Thames Highways

Kent, Medway, and East Sussex (KMES)

1. KMES Class Rail
2. KMES High Speed Rail (East)
3. KMES High Speed Rail (North)
4. KMES Mass Transit
5. KMES Active Travel
6. KMES Highways
7. Lower Thames Crossing

Global Policy Packages of Interventions

There are 6 Global Policy Interventions. These are largely regulatory and policy interventions that affect the whole of the South East (and in most cases the wider UK).

1. **Decarbonisation**: This delivers a faster trajectory towards net-zero than current trends are expected to yield.
2. **Public Transport Fares**: This reverses the real terms increase in the cost of public transport compared to motoring.
3. **Road User Charging**: This assumes the UK government develops a national road user charging system to replace funding currently raised from fuel duty,
4. **New Mobility**: This reflects the potential for new mobility (e.g., electric bikes) to boost active travel in the South East.
5. **Virtual Living**: The pandemic has shown how virtual working can help reduce demand for transport services.
6. **Integration and Access**: This delivers improvements in integration and accessibility across and between all modes of transport.

Solent and Sussex Coast – South Hampshire Interventions List

Core Rail Package

- A1** Solent Connectivity Strategic Study
- A1a** Botley Line Double Tracking
- A1b** Netley Line Signalling and Rail Service Enhancements
- A1c** Fareham Loop / Platform
- A1d** Portsmouth Station Platforms
- A1e** South West Main Line - Totton Level Crossing Removal
- A1f** Southampton Central Station Upgrade and Timetabling
- A1g** Eastleigh Station Platform and Approach Flyover Enhancement
- A2** Waterside Branch Line Reopening
- A3** West of England Service Enhancements
- A4** Additional Rail Freight Paths to Southampton

Enhanced Rail Package

- B1** Southampton Central Station - Woolston Crossing
- B2** New Southampton Central Station
- B3** New City Centre Station
- B4** South West Main Line - Mount Pleasant Level Crossing Removal
- B5** West Coastway Line - Fareham to Cosham Capacity Enhancements
- B6** West Coastway Line - Cosham Station Relocation
- B7** Eastleigh to Romsey Line - Electrification
- B8** Havant Rail Freight Hub
- B9** Fratton Rail Freight Hub
- B10** Southampton Container Port Rail Freight Access and Loading Upgrades
- B11** Southampton Automotive Port Rail Freight Access and Loading Upgrades

Mass Transit

- C1** Southampton Mass Transit
- C2** South East Hampshire Rapid Transit
- C3** New Southampton to Fawley Waterside Ferry Service
- C4** Southampton Cruise Terminal Access for Mass Transit
- C5** M271 Junction 1 Strategic Mobility Hub
- C6** M27 Junction 5 / Southampton Airport Strategic Mobility Hub
- C7** M27 Junction 7/8 Strategic Mobility Hub
- C8** M27 Junction 9 Strategic Mobility Hub
- C9** M275 Junction 1 Strategic Mobility Hub
- C10** Clarence Pier Bus-Hovercraft Interchange
- C11** Improved Gosport - Portsmouth and Portsmouth - Hayling Island Ferries

Active Travel

- E1** Solent Active Travel (including LCWIPs)

Highways

- I1** M27 Junction 8 (RIS2)
- I2** A31 Ringwood (RIS2)
- I6** Southampton Access (M27 Junction 2 and Junction 3) (RIS3 Pipeline)
- I9** A326 Capacity Enhancements (LLM)
- I10** West Quay Realignment (LLM)
- I11** Portsmouth City Centre Road (LLM)
- I12** Northam Rail Bridge Replacement and Enhancement (MRN)
- I13** New Horsea Bridge and Tipner Bridge
- I19** M27/M271/M275 Smart Motorway(s)

Solent and Sussex Coast – South Hampshire Interventions Map

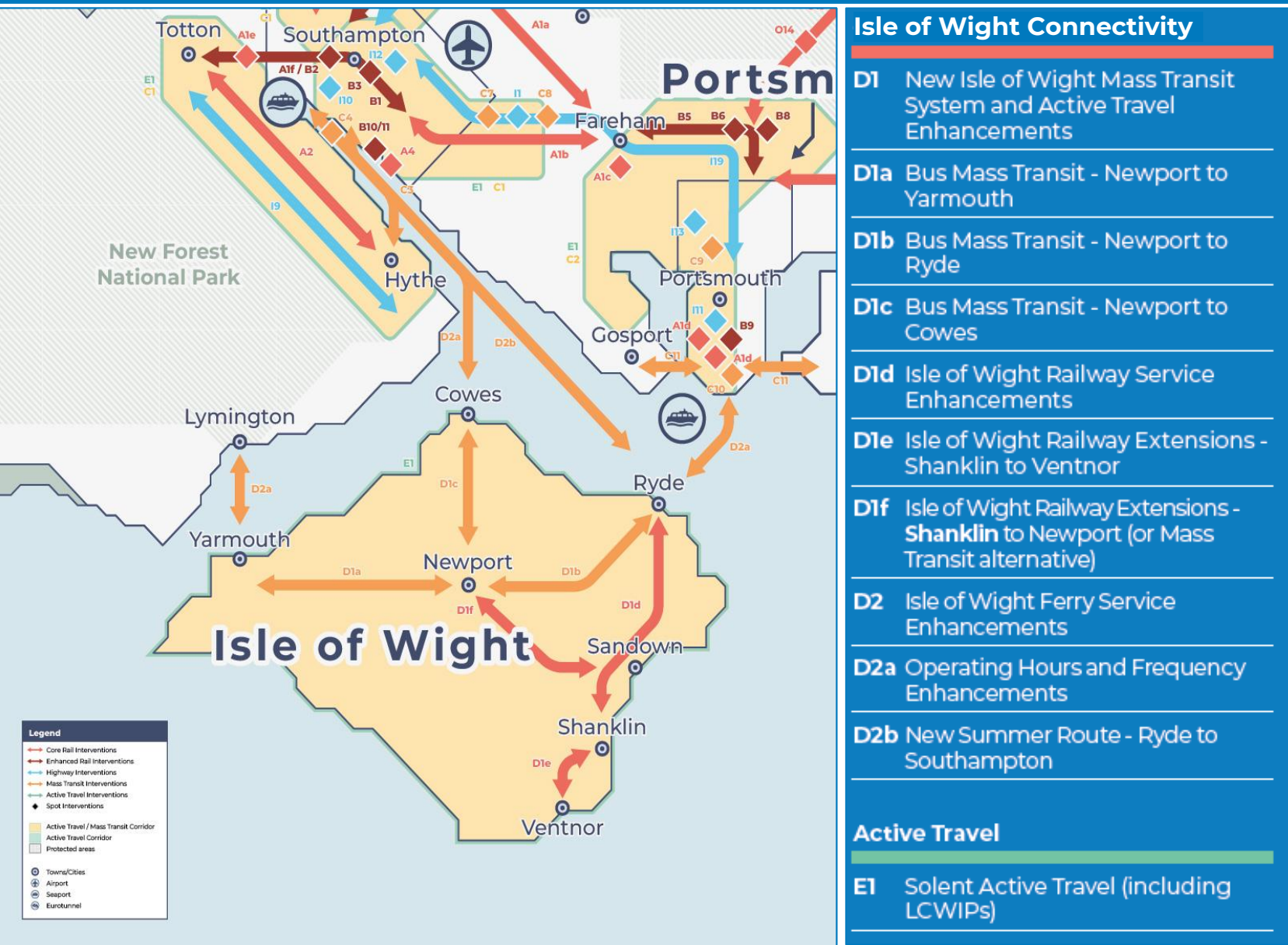
Figure 16: South Hampshire Multi-Modal Packages and Interventions



Note: List of interventions refers to Packages A — C & E only.

Solent and Sussex Coast – Isle of Wight Interventions Map

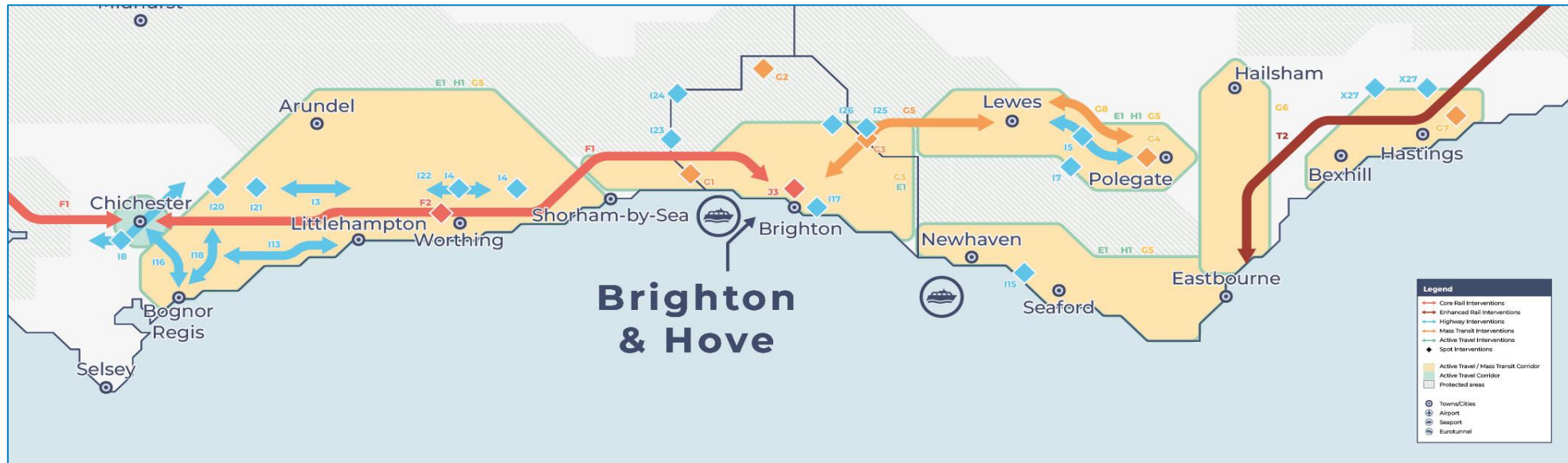
Figure 17: Isle of Wight Multi-modal Package and Interventions



Note: List of interventions refers to Packages D & E only.

Solent and Sussex Coast – Sussex Coast Interventions Map

Figure 18: Sussex Coast Multi-modal Packages and Interventions



Note: List of interventions refers to Packages E — I only.

Core Rail Package	Mass Transit	Highways		
F1 West Coastway Strategic Study	G1 Shoreham Strategic Mobility Hub	I1 M27 Junction 8 (RIS2)	I12 Northam Rail Bridge Replacement and Enhancement (MRN)	I20 A27 Tangmere Junction Enhancements
F2 West Worthing Level Crossing Removal	G2 A27/A23 Patcham Interchange Strategic Mobility Hub	I2 A31 Ringwood (RIS2)	I13 New Horsea Bridge and Tipner Bridge	I21 A27 Fontwell Junction Enhancements
Active Travel	G3 Falmer Strategic Mobility Hub	I3 A27 Arundel Bypass (RIS2)	I14 A259 Bognor Regis to Littlehampton Enhancement (MRN)	I22 A27 Worthing (Long Term Solution)
E1 Solent Active Travel (including LCWIPs)	G4 Eastbourne/Polegate Strategic Mobility Hub	I4 A27 Worthing and Lancing Improvement (RIS2)	I15 A259 South Coast Road Corridor - Eastbourne to Brighton (MRN)	I23 A27 Hangleton Junction Enhancements
H1 Sussex Coast Active Travel Enhancements (including LCWIPs)	G5 Sussex Coast Mass Rapid Transit	I5 A27 East of Lewes Package (RIS2)	I16 A259 Chichester to Bognor Regis Enhancement (MRN Pipeline)	I24 A27 Devils Dyke Junction Enhancements
	G6 Eastbourne/Wealden Mass Rapid Transit	I6 Southampton Access (M27 Junction 2 and Junction 3) (RIS3 Pipeline)	I17 A259 (King's Road) Seafront Highway Structures Renewal Programme (MRN)	I25 A27 Falmer Junction Enhancements
	G7 Hastings/Bexhill Mass Rapid Transit	I7 A27 Lewes - Polegate (RIS3 Pipeline)	I18 A29 Realignment including combined Cycleway and Footway	I26 A27 Hollingbury Junction Enhancements
	G8 A27 Falmer – Polegate Bus Stop and Layby Improvements	I8 A27 Chichester Improvements (RIS3 Pipeline)	I19 M27/M271/M275 Smart Motorway(s)	
		I9 A326 Capacity Enhancements (LLM)		
		I10 West Quay Realignment (LLM)		
		I11 Portsmouth City Centre Road (LLM)		

London to Sussex Coast Interventions Map

Figure 19: London to Sussex Coast Multi-Modal Packages and Interventions



Note: List of interventions refers to Packages J — N only.

Core Rail Package

- J1 Croydon Area Remodelling Scheme
- J2 Brighton Main Line - 100mph Operation
- J3 Brighton Station Additional Platform
- J4 Reigate Station Upgrade
- J5 Arun Valley Line - Faster Services
- J6 East Coastway Line - Faster Services
- J7 Brighton Main Line - Reinstate Cross Country Services
- J8 New Station to the North East of Horsham
- J9 Newhaven Port Capacity and Rail Freight Interchange Upgrades
- J10 Uckfield Branch Line - Hurst Green to Uckfield Electrification
- J11 Redhill Aerodrome Chord
- K1 Uckfield - Lewes Wealden Line Reopening - Traction and Capacity Enhancements
- K2 Uckfield - Lewes Wealden Line Reopening - Reconfiguration at Lewes
- K3 Spa Valley Line Modern Operations Reopening - Eridge to Tunbridge Wells West to Tunbridge Wells

Active Travel

- M1 Burgess Hill/Haywards Heath Local Cycleways
- M2 East Grinstead Local Cycleways
- M3 Eastbourne/Hailsham Local Cycleways
- M4 Gatwick/Crawley Local Cycleways
- M5 Horsham Local Cycleways
- M6 Lewes/Newhaven Local Cycleways
- M7 Reigate/Redhill Local Cycleways
- M8 East Sussex Inter-urban Cycleways

Mass Transit

- L1 Fastway Extension: Crawley - Horsham
- L2 Fastway Extension: Crawley - East Grinstead
- L3 Fastway Extension: Haywards Heath - Burgess Hill
- L4 Fastway Extension: Crawley - Redhill
- L5 A22 Corridor Rural Bus Service Enhancements
- L6 A23 Corridor Rural Bus Service Enhancements
- L7 A24 Corridor Rural Bus Service Enhancements
- L8 A26 Corridor Lewes - Royal Tunbridge Wells Rural Bus Service Enhancements
- L9 A26 Corridor Newhaven Area Rural Bus Service Enhancements
- L10 A272 Corridor Rural Bus Service Enhancements
- L11 A264 Corridor Rural Bus Service Enhancements
- L12 A29 Corridor Rural Bus Service Enhancements
- L13 A283 Corridor Rural Bus Service Enhancements
- L14 A281 Corridor Rural Bus Service Enhancements
- L15 Three Bridges Strategic Mobility Hub

Highways

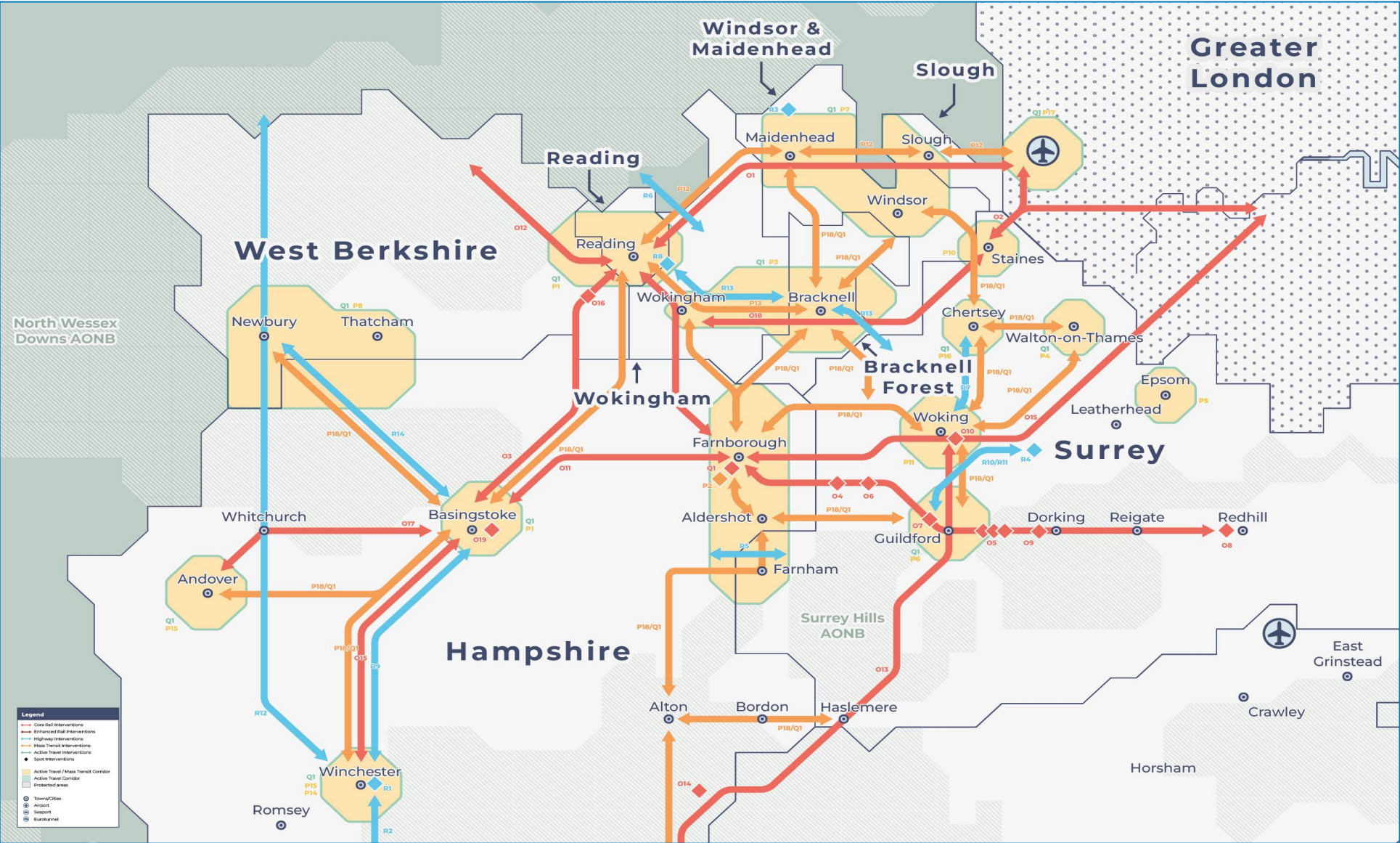
- N1 A22 N Corridor (Tandridge) - South Godstone to East Grinstead Enhancements (LLM Pipeline)
- N2 A24/A243 Knoll Roundabout and M25 J9A (MRN Pipeline)
- N3a A22 Corridor Package
- N3b A22 Corridor - Hailsham to Uckfield
- N4 A2270/A2101 Corridor Movement and Access Package (MRN Pipeline)
- N5 M23 Junction 8a New Junction and Link Road - Redhill
- N6 M23 Junction 9 Enhancements - Gatwick
- N7 A23 Carriageway Improvements - Gatwick to Crawley
- N8 A264 Horsham - Pease Pottage Carriageway Enhancements
- N9 A264 Crawley - East Grinstead Dualling and Cycleway
- N10 Crawley Western Link Road and Cycleway
- N11 A24 Dorking Bypass
- N12 A24 Dorking - Capel New Roundabout
- N13 A24 Corridor Improvements Horsham to Capel (LLM Pipeline)
- N14 A23 Hickstead and Bolney Junction Enhancements
- N15 A23/A27 Patcham Interchange Junction Enhancements
- N16 A26 Lewes - Newhaven Realignment and Junction Enhancements
- N17 A26 Lewes - Uckfield Enhancements
- N18 A22 Uckfield Bypass Dualling
- N19 A22 Smart Road Trial Proposition Study

Wessex Thames Interventions List

Core Rail Package	Mass Transit	Highways
O1 Western Rail Link to Heathrow	P1 Basingstoke Mass Rapid Transit	R1 M3 Junction 9 (RIS2)
O2 Southern Rail Link to Heathrow	P2 Blackwater Valley Mass Rapid Transit	R2 M3 Junction 9 - Junction 14 Smart Motorway (SMP)
O3 Reading to Basingstoke Electrification	P3 Bracknell/Wokingham Bus Enhancements	R3 A404 Bisham Junction (RIS2)
O4 North Downs Line - Electrification	P4 Elmbridge Bus Enhancements	R4 A3/A247 Ripley South (RIS3 Pipeline)
O5 North Downs Line - Level Crossing Removals	P5 Epsom/Ewell Bus Enhancements	R5 A31 Farnham Corridor (LLM)
O6 North Downs Line - Service Level and Capacity Enhancements	P6 Guildford Bus Enhancements	R6 New Thames Crossing East of Reading (LLM)
O7 Guildford Station Upgrade	P7 Slough/Windsor/Maidenhead Area Bus Enhancements	R7 A320 North Corridor (HIF)
O8 Redhill Station Upgrade	P8 Newbury/Thatcham Bus Enhancements	R8 M4 Junction 10 Safety Enhancements
O9 Dorking Deepdene Station Upgrade	P9 Reading Mass Rapid Transit	R9 M3 Junction 6 - Junction 8 Safety Enhancements
O10 South West Main Line / Portsmouth Direct Line - Woking Enhancement Scheme	P10 Spelthorne Bus Enhancements	R10 A3 Guildford Local Traffic Segregation
O11 South West Main Line / Basingstoke Branch Line - Basingstoke Enhancement Scheme	P11 Woking Bus Enhancements	R11 A3 Guildford Long Term Solution
O12 Cross Country Service Enhancements	P12 A4 Reading - Maidenhead - Slough - London Heathrow Airport Mass Rapid Transit	R12 A34 Junction and Safety Enhancements
O13 Portsmouth Direct Line - Line Speed Enhancements	P13 A329/B3408 Reading - Bracknell / Wokingham Mass Rapid Transit	R13 A322 and A329(M) Smart Corridor
O14 Portsmouth Direct Line - Bursledon Tunnel Upgrade	P14 Winchester Bus Enhancements	R14 A339 Newbury to Basingstoke Safety Enhancements
O15 South West Main Line - Dynamic Signalling	P15 Andover Bus Enhancements	R15 M4 Junction 3 to Junction 12 Smart Motorway (SMP)
O16 Theale Strategic Rail Freight Terminal	P16 Runnymede Bus Enhancements	
O17 West of England Main Line - Electrification from Basingstoke to Salisbury	P17 London Heathrow Airport Bus Access Enhancements	
O18 Reading to Waterloo Service Enhancements	P18 Berkshire, Hampshire and Surrey Inter-urban Bus Enhancements	
	Active Travel	
	Q1 Berkshire, Hampshire and Surrey Urban and Inter-urban Cycleways	

Wessex Thames Interventions Map

Figure 20: Wessex Thames Multi-Modal Packages and Interventions



Note: List of interventions refers to Packages O — R only.

Kent, Medway and East Sussex Interventions List

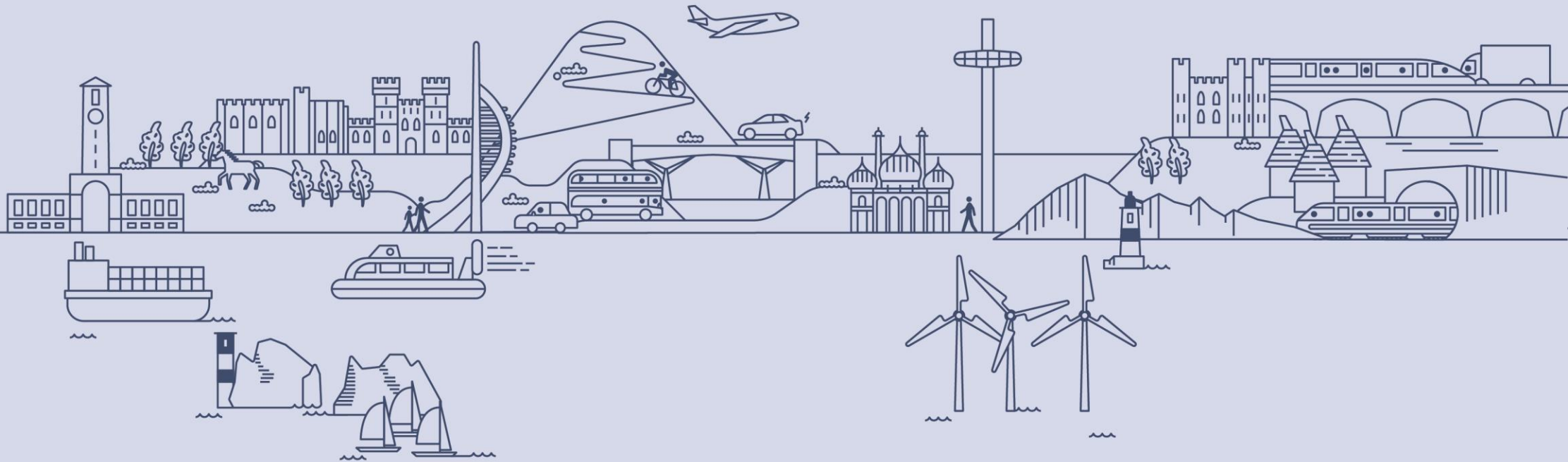
Core Rail Package		Enhanced Rail Package		Mass Transit		Active Travel		Highways	
S1	St Pancras International Domestic High Speed Platform Capacity	T1	High Speed East - Dollands Moor Connection	V1	Fastrack Expansion - Swanscombe Peninsula	W1	Medway Active Travel Enhancements	X1	M2 Junction 5 (RIS2)
S2	London Victoria Capacity Enhancements - Signalling and Digital Rail	T2	High Speed 1/ Marsh Link - Hastings, Bexhill and Eastbourne Upgrade	V2	Fastrack Expansion - Northfleet to Gravesend	W2	Medway Active Travel - Chatham to Medway City Estate River Crossing	X2	A2 Brenley Corner Enhancements (RIS3 Pipeline)
S3	Bakerloo Line Extension	U1	High Speed 1 - Link to Medway (Chatham)	V3	Fastrack Expansion - Medway	W3	Kent Urban Cycleways	X3	A2 Dover Access
S4	South Eastern Main Line - Chislehurst to Tonbridge Capacity Enhancements	U2	High Speed 1 - Additional Services to West Coast Main Line	V4	Medway Mass Transit	W4	Kent Inter-urban Cycleways	X4	A21 Safety Enhancements (RIS3 Pipeline, brought forward to RP2)
S5	London Victoria to Shortlands Capacity Enhancements			V5	Medway Mass Transit - Extension to Hoo Peninsula	W5	Faversham - Canterbury - Ashford - Hastings National Cycle Network Enhancements	X5	A229 Bluebell Hill Junction Upgrades (LLM)
S6	Hundred of Hoo Railway - Hoo Peninsula Passenger Rail Services			V6	Medway Mass Transit - Extension to Maidstone	W6	Tonbridge - Maidstone National Cycle Network Enhancements	X6	A28 Birchington, Acol and Westgate-on-Sea Relief Road (MRN)
S7	North Kent Line / Hundred of Hoo Railway - Rail Chord			V7	Medway Mass Transit - Chatham to Medway City Estate New Bridge	W7	Sevenoaks - Maidstone - Sittingbourne National Cycle Network Enhancements	X7	A228 Colts Hill Strategic Link (MRN Pipeline)
S8	Thameslink - Extension to Maidstone and Ashford			V8	Medway Mass Transit - Chatham to Medway City Estate Water Taxi	W8	Bromley - Sevenoaks - Royal Tunbridge Wells National Cycle Network Enhancements	X8	Digital Operations Stack and Brock
S9	North Kent Line - Service Enhancements			V9	Maidstone Bus Enhancements	W9	East Sussex Local Cycleways	X9	A20 Enhancements for Operations Stack & Brock
S10	North Kent Line / Chatham Main Line - Line Speed Enhancements			V10	Dover Bus Rapid Transit	W10	East Sussex Inter-urban Cycleways	X10	Kent Lorry Parks (Long Term Solution)
S11	Otterpool Park/Westenhanger Station Additional Platform			V11	Sittingbourne Bus Enhancements	W11	Royal Tunbridge Wells - Hastings National Cycle Network Enhancements	X11	Dover Freight Diversification
S12	Integrated Maidstone Stations			V12	Sevenoaks Bus Enhancements	W12	Canterbury Placemaking and Demand Management Measures	X12	Kent Freight Consolidation Centres
S13	Dartford Station Remodelling/ Relocation			V13	Thanet Bus Enhancements	W13	Medway Placemaking and Demand Management Measures	X13	M2 Junction 4 - Junction 7 Smart Motorway (RIS3 Pipeline/ SMP)
S14	Canterbury Interchange Rail Chord			V14	Folkestone Bus Enhancements	W14	Dover Placemaking and Demand Management Measures	X14	A2 Canterbury Junctions Enhancements
S15	New Station - Canterbury Interchange			V15	Ashford Bus Enhancements			X15	M20 Junction 3 - Junction 5 Smart Motorway
S16	New Strood Rail Interchange			V16	Royal Tunbridge Wells/Tonbridge Bus Enhancements			X16	M20 Junction 6 Sandling Interchange Enhancements
S17	Rail Freight Gauge Clearance Enhancements			V17	Thames Gateway/Gravesham Bus Enhancements			X17	M25 Junction 1a Enhancements
S18	Crossrail - Extension from Abbey Wood to Dartford/Ebbsfleet			V18	Canterbury/Whitstable/Herne Bay Bus Enhancements			X18	M25 Junction 5 Enhancements
S19	High Speed 1/ Waterloo Connection Chord - Ebbsfleet Southern Rail Access			V19	Ferry Crossings - New Sheerness to Hoo Peninsula Service			X19	Herne Relief Road
S20	Ebbsfleet International (Northfleet Connection)			V20	Ferry Crossings - Sheerness to Chatham/Medway City Estate/ Strood Enhancements			X20	Canterbury East Relief Road
S21	Ebbsfleet International (Swanscombe Connection)			V21	Ferry Crossings - Harty to Whitstable Enhancements			X21	New Maidstone South East Relief Road
S22	Gatwick - Kent Service Enhancements			V22	Ferry Crossings - Harty to Oare Enhancements			X22	A228 Medway Valley Enhancements
				V23	Ferry Crossings - Ebbsfleet - Tilbury Enhancements			X23	A228 Hoo Peninsula Enhancements
				V24	Inland Waterway Freight Enhancements			X24	Strood Riverside Highway Enhancement and Bus Lane
								X25	A259 Level Crossing Removals - east of Rye
								X26	A21 Kippings Cross to Lamberhurst Dualling and Flimwell and Hurst Green Bypasses
								X27	Hastings and Bexhill Distributor Roads
								Y1	Lower Thames Crossing (costings for Kent-side only)

Kent, Medway and East Sussex Interventions Map

Figure 21: Kent, Medway and East Sussex Multi-Modal Packages and Interventions



Note: List of interventions refers to Packages S — Y only.



Part 4

Costings

Overview

The capital cost estimates have been prepared to a level of detail commensurate with the maturity of the design of the interventions.

Items and quantities have been priced using either published costs or built up based upon industry standard rates.

Where intervention estimates have been built up, percentage allowances have been added for design fees, STATS and land costs.

To reflect the maturity of the design a risk allowance has been applied.

All estimates have a base year of 2020.

The maintenance and renewal estimates are based on an allowance of the capital cost estimate and presented separately.

Operating costs have not been included.

Capital cost estimates for the interventions are based on current published OAR, SOC, OBC and FBC estimates where these exist and have been located.

Those interventions that have no published cost information available have had their construction costs built up based on type of intervention (rail, MRT, highways, active

travel and placemaking), high level scope (route lengths, number of stations, allowances for structures, major junction improvements etc), location (urban or rural), nature (standard or high spec/'statement' intervention, all new or upgrades).

The resulting items and quantities have been priced using historic project data and industry standard published data, with cognisance made of the location and nature of the intervention. Allowances have been made for main contractor's preliminaries and overhead and profit on the same basis.

Percentage allowances to cover for professional/client fees, STATS and land costs have been applied to the construction costs at levels based on amounts allowed for generally in business cases and from experience in working on rail and highway schemes with Network Rail and National Highways.

The costs estimated by TfSE, where those could not be taken from existing estimating work, have not yet been subject to assurance or review by the organisations responsible for their delivery.

Risk

To reflect the lack of maturity of the design on which these 'bottom up' estimates are based, risk allowances have been applied at levels commensurate with SOC estimates, informed by TAG as follows detailed in the table below.

Table 1: Risk allowances		
Mode	Allowance	Rationale
Rail and Mass Rapid Transit	56%	Latest TAG (as of May 2021) SOC level OB for rail – Considered to be similar for MRT
Highways and Active Travel	46%	Latest TAG (as of May 2021) SOC level OB for roads

Price Ranges

Estimates have been presented as low, medium and high range of costs. This reflects a level of uncertainty in cost estimating accuracy, due to the lack of maturity of the design for many schemes, but these are typically +/- 10-15% in relation to the medium cost.

The exception to this is higher cost Interventions (e.g. the South Hampshire Rail (Enhanced) package) where the range is significantly greater, as there is less certainty around these schemes at present.

Costing Methodology (contd.)

Nominal costs

Construction inflation in the period 1990 - 2020 averaged 3% (compound) per annum (according to BCIS Road Tender Indices).

Based upon the assumed delivery programme for the interventions and packages of interventions forecast construction inflation has been applied at an annual 3% compound interest to the 2020 capital cost estimates (medium) for each intervention to the final year of construction (opening year).

Example cost calculation based on rates

As mentioned above, where capital costs were not available from published sources, such as Options Assessment Reports and business cases, estimates were calculated based upon rates of the type of intervention.

Estimates also allowed for Indirect Construction Costs, Project Design Team Fees, and Risk.

An example is provided to the right in **Figure 22**.

Figure 22: Example costing table using unit costs

Ref	Description	Qty	Unit	Rate	Amount
1	Direct Construction Works				
					0.00
	New four platform station west of the current stat	1.00		2,500,000.00	2,500,000.00
					0.00
	over bridge	1.00		650,000.00	650,000.00
					0.00
	Decommission old station	1.00		2,200,000.00	2,200,000.00
					0.00
	Resignalling	1,000.00	m	1,000.00	1,000,000.00
	Passing Loops	400.00	m	5,000.00	2,000,000.00
					0.00
					0.00
					0.00
					0.00
					0.00
					0.00
					0.00
	TOTAL DIRECT CONSTRUCTION COSTS:				8,350,000.00
	ADD				
2	Indirect Construction Costs				
2.01	Preliminaries			20%	1,670,000.00
2.02	Overheads and Profit			6%	601,200.00
	ADD				2,271,200.00
3	Project/Design Team Fees and Other Project Costs				
3.01	Design Team Costs			10%	835,000.00
3.02	Project Management Team Costs			15%	1,252,500.00
3.03	Other Project Costs				
					2,087,500.00
	ADD				
4	Risk				
4.01	Total Risk Allowance			56%	7,116,872.00
					19,825,572.00

Costing Methodology (contd.)

Maintenance and Renewals

In addition to the development of forecast capital costs and likely funding sources, maintenance and renewal costs have also been calculated.

Having reviewed historical data of similar types of schemes, maintenance and renewals average circa 2.56% of capital costs for rail, over a 30-year period.

This is made up of a typical rate of:

- 0.08% per year for maintenance
- + 0.1% in year 20 for renewal
- + 0.16% in year 30 for a further renewal

7.5% of capital costs for mass transit, active travel and highways, over a 30-year period.

This is made up of a typical rate of:

- 0.1% per year for maintenance
- + 1.5% in year 20 for renewal
- + 3% in year 30 for a further renewal

Operating costs have not been calculated as part of this exercise. Operating costs will need to be calculated as part of scheme and business case development.

Capital Costs

The tables below present a summary of the estimate capital costs for the SPOC areas.

Mid Range Costs by SPOC Area (2020 prices)			
SPOC Areas	Total Low Cost (£m)	Total Mid Cost (£m)	Total High Cost (£m)
Solent and Sussex Coast	9,700	11,200	12,800
London to Sussex Coast	3,200	3,600	3,900
Wessex Thames	9,100	10,400	12,000
Kent, Medway, East Sussex	17,400	19,400	20,900
Total	39,400	44,600	49,600

Capital Costs (1 of 2)

The tables below present a summary of the estimate capital costs for the Place Based Packages of Interventions.

Solent and Sussex Coast Mid Range Costs by Package (2020 prices)			
Package	Total Low Cost (£m)	Total Mid Cost (£m)	Total High Cost (£m)
South Hampshire Rail (Core)	400	600	900
South Hampshire Rail (Enhanced)	3,300	3,700	3,900
South Hampshire Mass Transit	1,600	1,800	1,900
South Hampshire Active Travel	300	350	400
Isle of Wight	200	250	250
Sussex Coast Rail	150	350	650
Sussex Coast Mass Transit	400	450	450
Sussex Coast Active Travel	250	250	300
South Coast Highways	3,100	3,500	4,100
Total	9,700	11,200	12,800

London to Sussex Coast Mid Range Costs by Package(2020 prices)			
Package	Total Low Cost (£m)	Total Mid Cost (£m)	Total High Cost (£m)
London to Sussex Coast Rail	450	500	550
London to Sussex Coast Mass Transit	350	400	400
London to Sussex Coast Active Travel	1,000	1,100	1,200
London to Sussex Coast Highways	1,400	1,600	1,800
Total	3,200	3,600	3,900

Capital Costs (2 of 2)

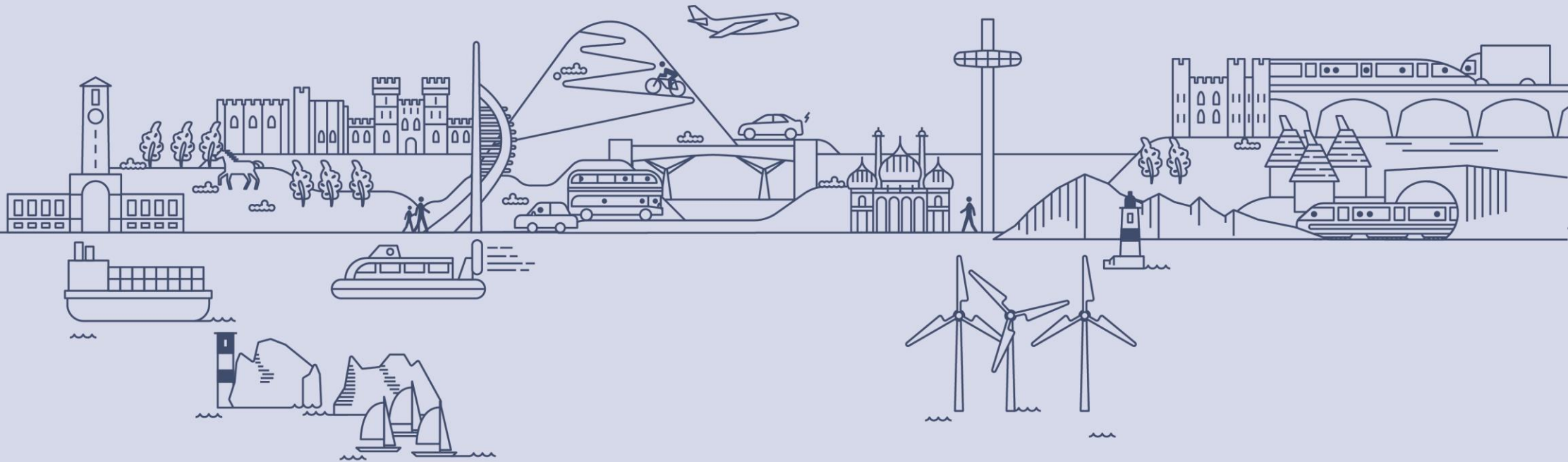
The tables below present a summary of the estimate capital costs for the Place Based Packages of Interventions.

Wessex Thames Mid Range Costs by Package (2020 prices)			
Package	Total Low Cost (£m)	Total Mid Cost (£m)	Total High Cost (£m)
Wessex Thames Rail	6,400	7,200	7,600
Wessex Thames Mass Transit & Active Travel	1,300	1,400	1,500
Wessex Thames Highways	1,400	1,800	2,900
Total	9,100	10,400	12,000

Kent, Medway, and East Sussex Mid Range Costs by Package (2020 Prices)			
Package	Total Low Cost (£m)	Total Mid Cost (£m)	Total High Cost (£m)
KMES Classic Rail	3,300	3,700	4,100
KMES High Speed Rail (East)	850	950	1,000
KMES High Speed Rail (North)*	6,500	7,300	7,700
KMES Mass Transit	650	700	750
KMES Active Travel	50	100	100
KMES Highways	3,400	3,800	4,200
Lower Thames Crossing ⁺	2,500	2,800	3,100
Total	17,400	19,400	20,900

* Assumes High Speed Rail option goes via Chatham rather than Medway City Estate or Rochester

⁺ Assumes assignment of 40% of Lower Thames Crossing capital costs to Kent geographically



Part 5

Phasing

Phasing Methodology

Overview

The phasing embodies the ambition of TfSE’s Transport Strategy and Area Studies. However, it has been recognised that all of the interventions cannot be brought forward at the same time, and allowance has been made for:

- committed schemes based on published information and existing funding cycles (e.g. MRN schemes, RIS2);
- typical scheme development times for Intervention types categories and their current stage (e.g. pre-feasibility, SOBC, FBC) – including time for securing planning / powers, and delivery/construction – see **Table 2**;
- experience of working with DfT, Network Rail, National Highways and local transport authorities, and working within their project governance frameworks such as Network Rail’s Governance for Railway Investment Projects (GRIP) and National Highway’s Project Control Framework (PCF) – see **Figure 23**;
- the capacity and resources of scheme promoters, recognising TfSE has a role to play in accelerating delivery;
- the interdependency of interventions and packages; and
- the aspirations to accelerate the decarbonisation of transport.

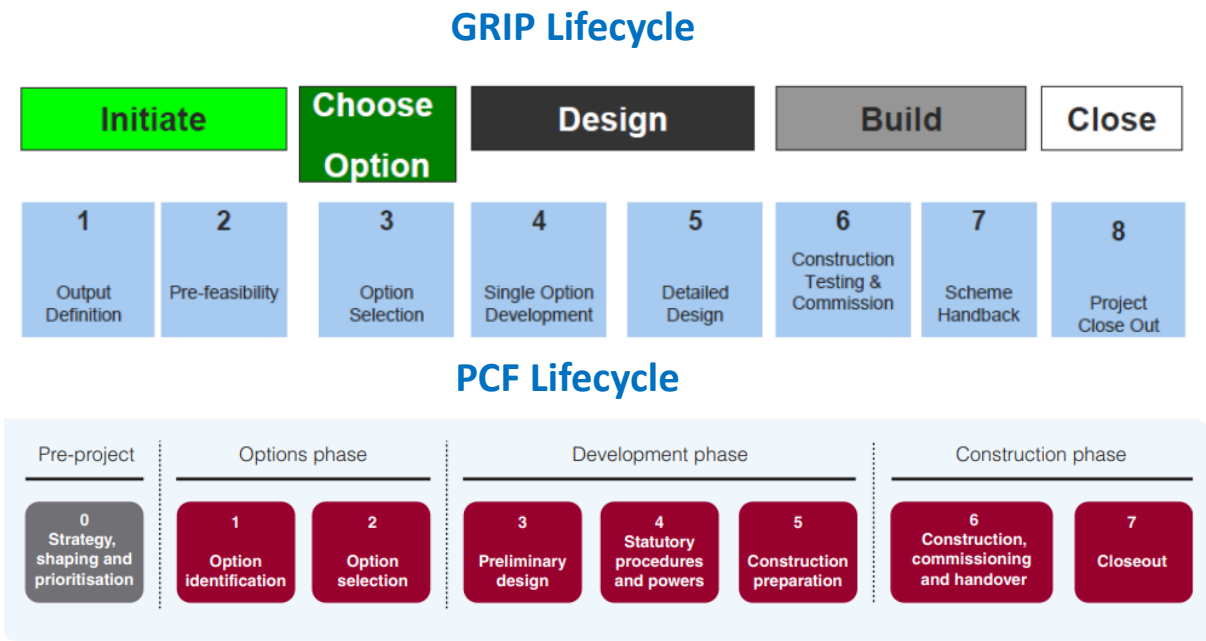
Quick wins

‘Quick wins’ have also been identified – interventions that can be designed, constructed and opened relatively quickly and help accelerate the decarbonisation of transport, such as Active Travel and Placemaking interventions. These have been brought forward in the phasing. Interventions which have the possibility of being implemented the fastest were tallied up in each area.

These include:

- Improvements to MRT services
 - Improvements to active travel services
 - New footways
 - New cycleways
 - Online active travel improvements
- Across over 250 interventions, about 75 (including 3 global interventions) have been identified as “quick wins”.

Figure 23: GRIP and PCF Lifecycle Stages



Phasing Methodology (contd.)

Table 2: Indicative timescales for different Intervention type categories

Category	Sub-Category	Time	Max Years	Pre-SOBC	SOBC	OBC	FBC	Pre-DCO/PI*	DCO/PI*	Delivery
Rail	Rail - New Offline Rail Infrastructure	15-20 years	20	20	15	12	10	8	6	5
Rail	Rail - New Online Rail Infrastructure	5-10 years	10	10	7	6	5	4	3	2
Rail	Rail - Service Improvement	0-7 years	7	7	5	4	3	N/A	N/A	1
Rail	Rail - Reinstating Line	10-15 years	15	15	12	10	8	7	5	4
Rail	Rail - Level Crossing Removal	5-7 years	7	7	6	5	4	3	2	1
Mass Rapid Transit	MRT - New BRT/MRT	5-10 years	10	10	7	6	5	4	3	2
Mass Rapid Transit	MRT - New Ferry/Waterway	5-8 years	8	8	6	5	4	N/A	N/A	2
Mass Rapid Transit	MRT - Service Improvement	0-5 years	5	5	4	3	2	N/A	N/A	1
Mass Rapid Transit	MRT - New Strategic Mobility Hub	3-5 years	5	5	4	3	2	2	1	1
Mass Rapid Transit	MRT - Infrastructure Improvement	3-5 years	10	10	8	7	6	N/A	N/A	1
Active Travel	Active Travel - New Cycleway/Footways	2-5 years	5	5	4	3	2	N/A	N/A	1
Active Travel	Active Travel - Improved Cycleways/Footways	1-3 years	4	4	3	2	1	N/A	N/A	1
Active Travel	Active Travel - Service Improvement	0-2 years	4	4	3	2	1	N/A	N/A	1
Active Travel	Active Travel - Mobility Hubs	2-3 years	3	3	3	3	2	2	1	1
Active Travel	Active Travel - Online Road Improvements	2-3 years	3	3	3	3	2	N/A	N/A	1
Active Travel	Active Travel - Offline Road Improvements	3-5 years	5	5	4	3	3	2	1	1
Highways	Highways - Junction Improvement	3-5 years	5	5	4	3	3	2	1	1
Highways	Highways - Widening	3-5 years	5	5	4	3	3	2	1	1
Highways	Highways - New Online Infrastructure Improvement	3-5 years	5	5	4	3	3	2	1	1
Highways	Highways - Bridge/Tunnel	15-20 years	20	20	15	12	10	8	6	5
Highways	Highways - Bypass/Relief road	10-15 years	15	15	12	10	8	7	5	4
Highways	Highways - Lorry Park	5-7 years	7	7	6	5	4	3	2	1
Highways	Highways - Service Improvement	2-5 years	4	4	3	2	1	N/A	N/A	1

* If required.

Phasing Methodology (contd.)

Current Stage

Stages of scheme development for each intervention type are identified below and used in the **Table 2** on the previous page. The project stages used were:

- Pre-SOBC (Preparation for the Strategic Outline Business Case)
- SOBC (Strategic Outline Business Case)
- OBC (Outline Business Case)
- FBC (Full Business Case)
- Pre-DCO (Development Consent Order) / PI (Public Inquiry)
- DCO (Development Consent Order) / PI (Public Inquiry)
- Delivery (or construction / implementation)

Where information on the project stage was missing or clearly in a very early concept stage, the intervention was assumed to be at the Pre-SOBC stage.

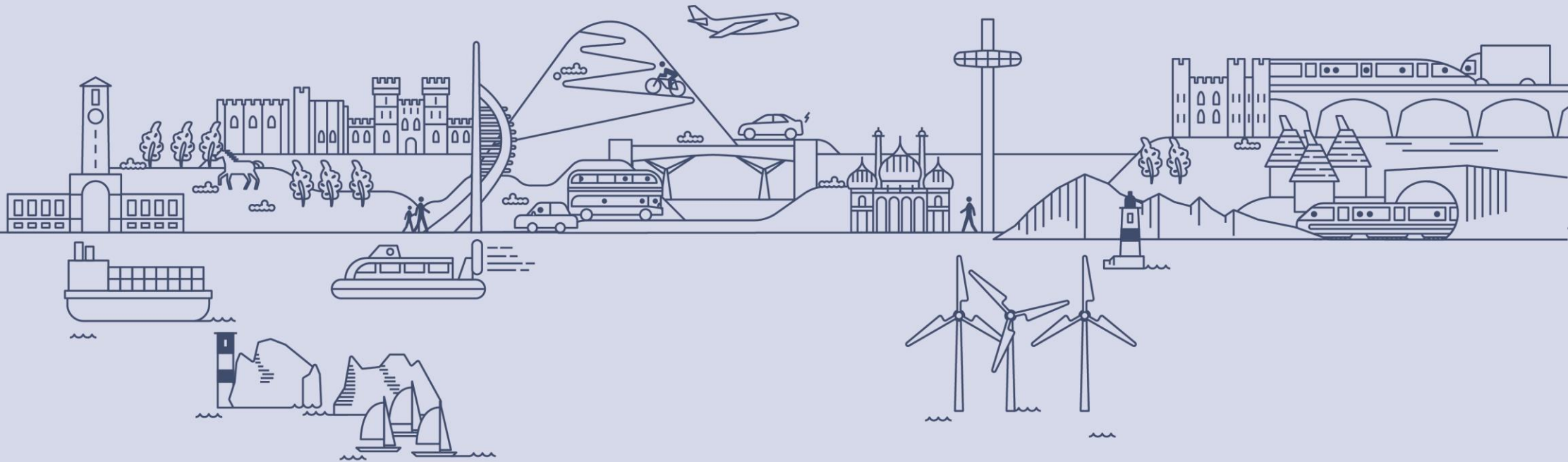
For smaller or simpler interventions, not all stages may be required.

Construction Time Categories

The phasing of each Intervention is provided in Appendix B and is based on the consideration presented in Part 5.

Phasing is summarised at a high-level given the pre-feasibility stage of many of the Interventions. Interventions have been categorised by period of “opening”:

- Short-term: today - 2030
- Medium-term: 2030 - 2040
- Long-term: 2040 - 2050



Part 6

Funding and financing

Funding and Financing

Sources

There are a number of funding sources to potentially support infrastructure investment across the TfSE area.

These funding sources, identified below, vary in the likely amount of funding they will generate and the challenges associated with their implementation. Additionally, new funding sources may emerge in response to environmental, economic and social changes over the life of TfSE's Transport Strategy.

Potential funding sources include:

- Central Government grant funding (e.g. Housing Infrastructure Fund, Transforming Cities Fund, Integrated Transport Block) or loans (e.g. PWLB)
- Rail Enhancement/Renewals funding, (e.g. Rail Network Enhancements Pipeline)
- National Roads Fund (e.g. Roads Investment Strategy, Major Road Network, Large Local Majors)
- Third party contribution e.g. from major private sector investors, land/asset owners, and developers

Additional funding sources could also include:

- Borrowing against future revenues
- Public Private Partnerships / Private Finance Initiatives
- Land value capture
- Alternative income streams (e.g. retail at rail stations)
- Road user charging and hypothecation
- Local rates/levies (e.g. Workplace Parking Levy, Business Rate Supplement)

To afford the identified cost of the proposed packages a range of funding and financing sources will be required.

As large a proportion as possible of this funding should be secured from local and private sector sources, with the funding strategy seeking to capture part of the value from the investment that accrues to the range of beneficiaries.

The development of the funding strategy will therefore consider ways of capturing the uplift in benefits enabled by the interventions as this will reduce reliance on the public purse.

Currently, Transport for the South East do not have the powers to raise funding. Dependent on the level of devolution granted by central government, TfSE could gain these powers, as well as utilising the powers available to local councils and authorities that are partners to TfSE.

Given the scale of investment proposed and the range of transport infrastructure interventions, a portfolio of funding sources will be required reflecting the nature of beneficiaries and the criteria for the funds.

An additional potential funding source will be farebox revenue from the surplus from public transport services, once operating costs are met.

TfSE would not collect these additional funds themselves so they would be required to work with local transport providers to understand if this is a viable funding mechanism for transport infrastructure improvements.

Funding and Financing (contd.)

Financing upfront costs

To bridge the mismatch in timing between the costs of implementing the interventions and the realisation of the resulting funding streams, financing for the packages will be required.

As with the funding sources described above, there are a number of potential financing opportunities, each with different criteria and challenges to TfSE. These include:

- Public Work Loans Board (PWLB), the largest lender to local authorities
- UK Infrastructure Bank (UKIB), recently established by government to increase infrastructure investment
- Commercial Lending, an option if more attractive options such as PWLB or UKIB are unavailable

Funding and Financing Strategy

A robust funding and financing strategy is required to ensure the affordability of the packages set out in this SPOC.

At this stage it is anticipated that the strategy will be framed by the following principles:

- Drawing on central government and local funding sources for a significant proportion of funding required to deliver the transport infrastructure proposals
- Funding sources to cover operating, maintenance and ideally renewal costs
- TfSE working with local authorities to ring-fence revenue for transport infrastructure investment
- Attracting new investment (with associated taxes) to the region through enhanced connectivity brought by the new infrastructure

Further detail on the funding and financing strategy will be set out in the Strategic Investment Plan, which will document the anticipated investment profile over the life of the Transport Strategy and the associated funding and financing mechanisms required to deliver them.

The Strategic Investment Plan will further explore the requirement for government funding, which will partially be used for the development of schemes.

Funding and Financing (contd.)

Spend profiles

An indicative distribution of spend by potential scheme promoter has been developed.

This is based on the profiling of Packages and Interventions outlined in Part 3.

In addition to considering these profiles by SPOC area (see **Figure 16**), consideration has also been given to spend by likely potential scheme promoter for different Intervention types:

- **Rail** – Network Rail (and Great British Railways from 2023 subject to legislation)
- **Mass Rapid Transit** – Local Transport Authorities
- **Active Travel** – Local Transport Authority
- **Strategic Road Network** – National Highways
- **Major Road Network** – Local Transport Authorities

The anticipated spend profile for Local Transport Authorities is shown in **Figure 17**. From this profile, it is identified that local authority spending increases sharply and peaks between 2027 to 2033 ranging from £450m a year to £825m.

This is not to suggest that additional interventions and extensions will not be identified that increase the spend profile of the “tail” post 2033.

It is important to stress that these ambitious levels of spending will be subject in part, to successful funding bids, and that timescales for delivery are dependent upon funding being secured at the right time. If this is not the case, the proposed programme is likely to slip and could potentially have an impact of other schemes or even packages. Perhaps it is also worth highlighting what similar levels of funding would look like across the country if funding was evenly split. It is important to note that every time we bid, we are competing against other areas and their ambitions.

There is an important role for TfSE to help Local Transport Authorities and their partners preparing for this delivery challenge, including:

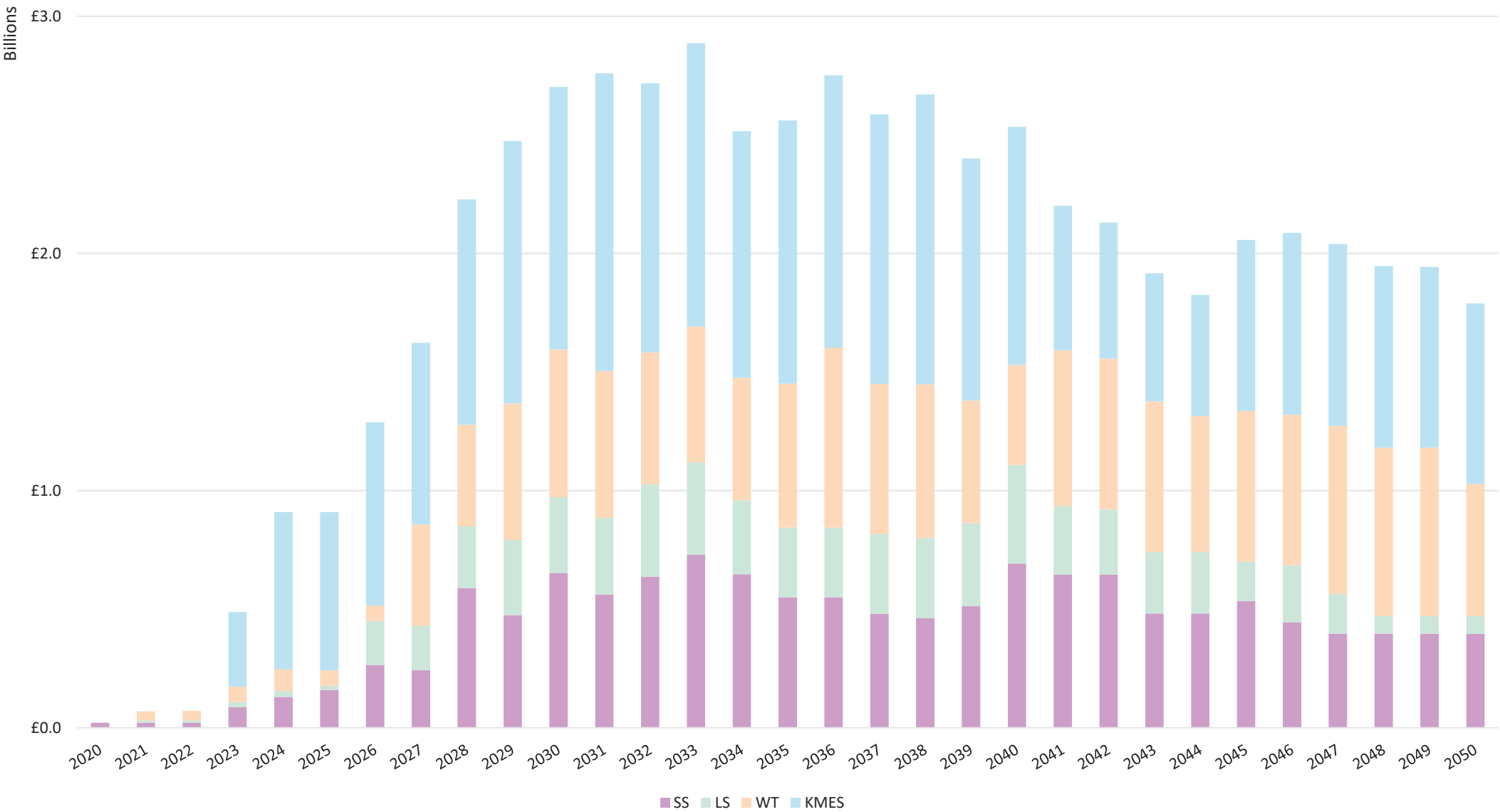
- **programme management;**
- **resourcing and funding for additional resource to build capacity and capability;**
- **scheme and business case development, including the use of TfSE’s analytical framework;**
- **joint scheme promotion; and**
- **advocacy and securing funding.**

TfSE also has a role to bring scheme promoters and their partners together across the public and private sectors. These roles and responsibilities will be developed further as work progresses. More detailed development of funding distribution and spend profile will be undertaken as part of the Strategic Investment Plan.

If there was published information about scheme promoters and spend profiles, then these were applied instead of the assumed profiles.

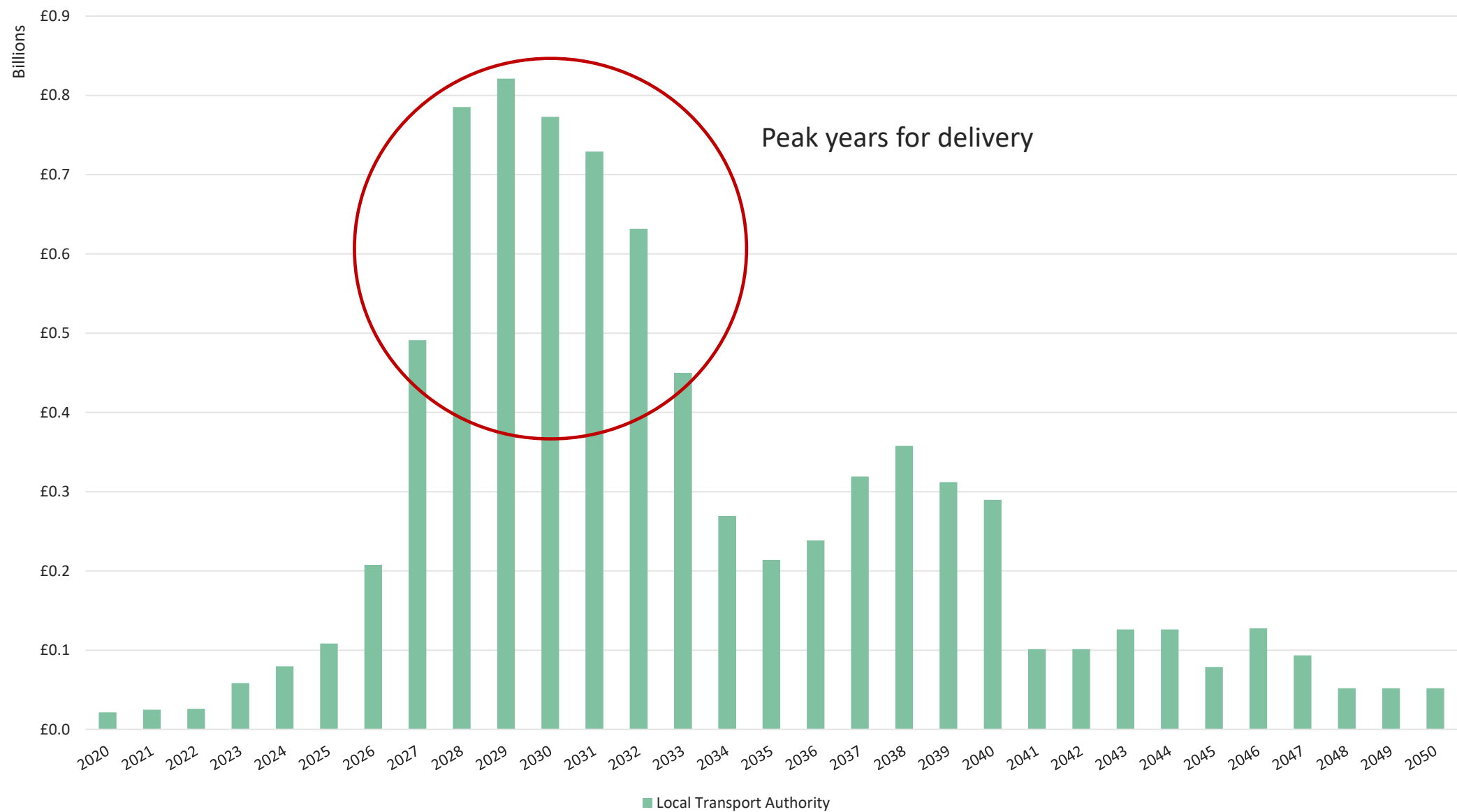
Funding and Financing (contd.)

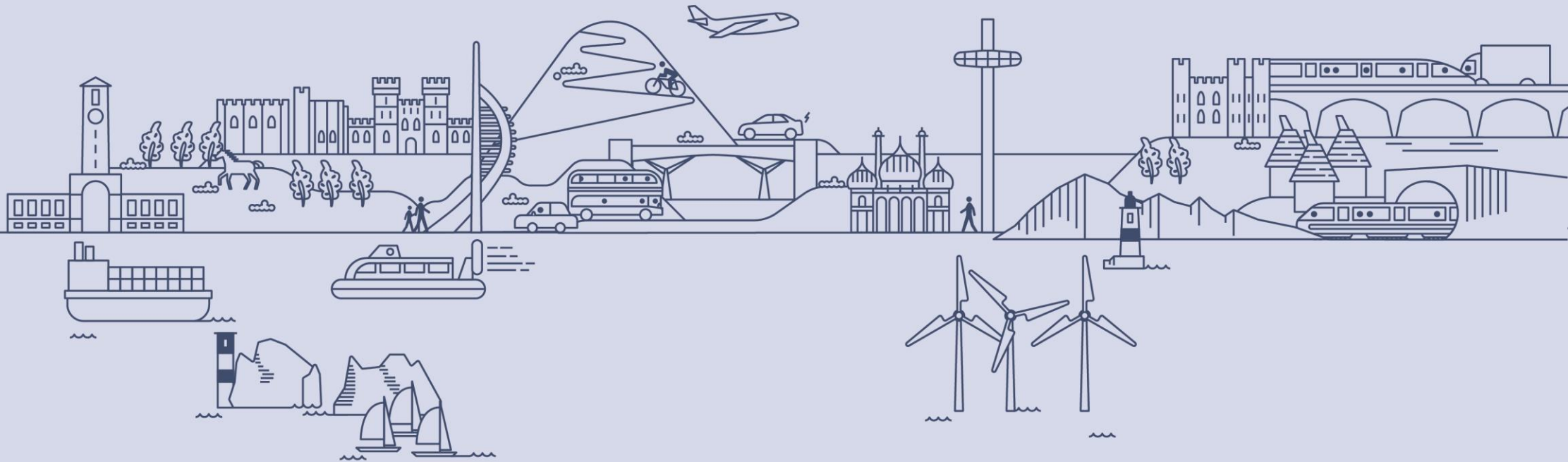
The chart below presents the forecast capital cost spend on the place-based Packages of Intervention by year in outturn prices by SPOC area.



Funding and Financing (contd.)

The chart below presents the forecast capital spend by Local Transport Authorities by year in outturn prices.





Part 7

Commercial viability and procurement

Commercial viability and procurement

Overview

This part considers the commercial viability and procurement options for Packages of Interventions.

Commercial viability and procurement considerations require engagement with the appropriate service providers in the planning, design, and delivery of the Package of Interventions.

In considering options for commercial viability and procurement, the potential roles for TfSE and its partners will also be defined.

Commercial viability considers the elements needed to structure a procurement strategy, such as:

- understanding of the services;
- output specification;
- market assessment;
- deliverability assessment, and
- risk assessment and management.

Procurement options assess the available routes in terms of:

- procurement models;
- delivery models; and
- contract strategies.

Understanding the Services

At this stage TfSE will act as the leading promoter of the Packages of Interventions. It has been established that this includes a variety of projects, stakeholders and potential service providers.

Confirmation of the scope and key service requirements of each Package of Interventions will be the first step towards the understanding of its viability.

TfSE in discussion with relevant partners identified hereafter should seek to confirm in principle:

- ‘Core’ services to be procured to justify the investment and achievement of benefits as set out in the Strategic Dimension;
- ‘Desirable’ additional services which can be still justified on a VfM basis; and
- ‘Optional’ services that are beneficial, possible and affordable.

Table 3 presents our assumptions for the proposed key delivery partners for each Package of Interventions included in this SPOC. It is likely to be a combination in many instance, either for a single intervention or different interventions within a package.

Table 3: Packages of Interventions

Package of Intervention	Proposed Key Delivery Partners
Rail	DfT – Network Rail – Local Authorities – Operators – Private Sector
Bus, Ferries, Mass Transit and Shared Mobility	DfT – Local Authorities – Network Rail – National Highways – Operators – Private Sector
Active Travel	DfT – Local Authorities – Sustrans – National Highways – Private Sector
Highways	DfT – National Highways – Local Authorities – Private Sector
Global Policy Packages	DfT – National Highways – Network Rail – Other Government Departments and their agencies – Operators – Local Authorities – Operators – Private Sector

For many interventions, it is likely TfSE will be a key delivery partner, and for some interventions, it may be beneficial for TfSE to be a (co-)scheme promoter.

In many instance, DfT are likely to be a key delivery partner through funding or interventions requiring ministerial approval.

Commercial viability and procurement (contd.)

Output Specification

To ensure the ‘right thing, is being bought in the right way’ a clear output specification will be required for each Intervention.

Reflecting the level of definition for many of the Interventions under consideration in this SPOC, the Deliverability Assessment undertaken for the Options Assessment Report (OAR) considered a range of criteria at a high level for each typology. (These are set out under MCAF below.)

Central to ensuring a robust procurement strategy will be determining a detailed output specification for each intervention and reconfirming their deliverability and areas of risks.

Market Assessment

The range of intervention typologies represented in the SPOC Packages are generally reasonably technically mature proposals and therefore there is confidence that the supplier market has the capability and capacity to deliver them.

As illustrated in the MCAF analysis of deliverability for the OAR, each of the typologies was assessed not to present a significant technical risk and an established supplier market is known to exist (e.g. for highway and rail enhancements, mass rapid transit, mobility hubs).

Additionally, the Packages of Interventions identified in this SPOC provide a divisible programme of schemes. This provides flexibility in the scale and timing of delivery of the interventions, aiding the development of a pipeline and hence ensuring supplier capacity.

Sponsorship/ Procurement Options

The range of typologies and divisible nature of the Packages of Interventions identified in this SPOC provides an opportunity to select the best sponsorship and delivery model for each Intervention or Package of Interventions.

Given this flexibility, there are a range of routes to market. It is anticipated that a number of separate scheme promoters and delivery contracts will be required. Further, given the anticipated timescales for delivering the full set of Packages, it is likely that the procurement options available to the scheme promoters, particularly in terms of specific contracts, will change during the lifecycle of the project. Therefore, the commercial and procurement strategy will evolve as the programme develops. Potential sponsors will include, among others:

- TfSE
- Local Transport Authorities
- National Highways
- Network Rail
- DfT
- Third sector (e.g. Sustrans)
- Private sector partners

Risk Assessment

For each Package risks should be identified, quantified and mitigated in line with the methodical approach outlined within HM Treasury’s Green Book.

The scheme risks can largely be grouped into the following categories:

- Risks to the project programme
- Political risks
- Risks to scheme cost
- Risks to scheme funding
- Risks to operations
- Design and information risks
- Health and safety risks
- Reputational risks

Risk should be quantified by assessing the likelihood (or probability) of them occurring, denoted as ‘P’, and the severity of impact on the project, denoted as ‘I’. Using a 5-point scale from 1 (low) to 5 (high) the significance of these factors can be scored. These scores are multiplied by each other ($P \times I$) to determine the total risk score, which ranges from 0 to 25.

Figure 24: Approach to Risk Assessment



An illustration of an approach to risk assessment is shown in **Figure 24** above.

Following the initial assessment of scheme risks, a systematic approach should be adopted to respond to risks and allocate responsibility to the most appropriate party in line with the governance arrangements.

One of the following four strategies can be adopted for each risk when developing a suitable response plan:

- **Accept or tolerate** consequences in the event that the risk occurs, where a) the cost of taking any action exceeds the potential benefit gained; or b) there are no alternative courses of action available
- **Treating the risk:** continuing with the activity that caused the risk by employing four different types of control – preventative, corrective, directive and detective controls
- **Transferring the risk:** risks transferred to a third party e.g. insurer or contractor
- **Terminating** the activity that gives rise to the risk

Following the implementation of these strategies, if a risk can be treated and its effects mitigated, the risks should be ‘re-scored’, and this new score included in the risk register.

Commercial viability and procurement (contd.)

Sourcing Options

In place of the Official Journal of the European Union's Tenders Electronic Daily (OJEU/TED), the Find a Tender Service (FTS) is the new UK e-notification service where notices for new procurements are required to be published.

All public-sector tenders valued above £4,551,413 (for infrastructure projects) must be advertised. Furthermore, Public Contract Regulations PCR 2021 indicate that:

- Minimum thresholds for sub-central governments is £25,000
- Public supply and services contract and their design context threshold is £213,477

There are several procurement procedures available to schemes to which the FTS/OJEU values apply. These each have particular benefits and use cases, as follows.

Open Procedure

This procedure allows an unlimited number of interested parties to tender against defined parameters. There are no restrictions (e.g. pre-qualification) on the parties who are permitted to tender, meaning that some parties may not be suitable to carry out the work. This procedure is straightforward and transparent but can attract a large number of potential bidders (which will require a greater degree of assessment and resource requirements).

This route is not usually recommended for construction projects due to the high number of tenders that could be expected and the particular skills and experience that may be required of potential bidders.

Restricted Procedure

This is a two-stage procedure. The first stage allows the contracting authority to set the minimum criteria relating to technical, economic and financial capabilities that the potential bidders must satisfy. Following evaluation of the responses to the first stage a minimum of five bidders (unless fewer qualify) are invited to tender in the second stage. This process is typically used to appoint consultants or contractors on traditionally procured projects.

Accelerated Restricted Procedure

As for the Restricted Procedure, but used where, for reasons of urgency, the contracting authority must procure the contract in a reduced time frame. Any contracting authority wishing to use this procedure must be able to demonstrate the reasons of urgency.

Commercial viability and procurement (contd.)

Competitive Dialogue Procedure

This procedure is appropriate for complex contracts where contracting authorities:

- Are not objectively able to define the technical means capable of satisfying their needs or objectives, and / or
- Are not objectively able to specify the legal and/or financial make-up of a project.

This is a multi-stage procedure. The first stage is a pre-qualification to select the potential bidders to participate in the dialogue. In the second stage, the contracting authority enters into a dialogue with the potential bidders to identify and define the means best suited to satisfying their needs. Any aspect of the contract may be discussed, including technical requirements for the works to be delivered and the commercial / contractual arrangements to be used. The dialogue may be conducted in successive phases with the remaining bidders being invited to tender.

By the end of the dialogue phase the contracting authority's requirements will have been determined such that the scheme can be tendered. In the final stage, the remaining bidders from the dialogue phase are invited to tender for the scheme.

Competitive Procedure with Negotiation

Within this procedure, bidders initially submit tenders based on the information issued by the contracting authority. The contracting authority is then able to review the tenders it has received and negotiate with the bidders, following which the tenders will be resubmitted. This procedure may therefore be useful where the requirements are well developed initially, and full tender documents can be produced but it is felt that there may be advantage in retaining the ability to hold negotiations if there are certain aspects which bidders raise.

Preferred Procurement Procedure

Considering the size, complexity and value of the Packages and Interventions within the SPOC, it is likely that a combination of the above procurement procedures will be used to procure the necessary services to support the delivery of TfSE's Transport Strategy.

As the SPOC interventions will be delivered using a programme approach, the opportunity to deliver individual interventions or packages of work within the programme will dictate the procurement and sourcing options for individual packages of work.

Commercial viability and procurement (contd.)

Programme Sequencing

There may be a requirement in due course to prioritise the Packages of Interventions. For this purpose, a framework for programme sequencing could be based on:

- objective fit / benefit impact / cost-benefit analysis;
- deliverability – ease of delivery based on sponsor funding and staffing resource availability;
- profitability – potential of revenue generation;
- by nature of intervention - geography, value, ongoing liability; and
- link to wider benefits; and
- Interdependencies with other Packages and Interventions.

Further consideration of the programming of the interventions will be addressed in the Strategic Investment Plan.

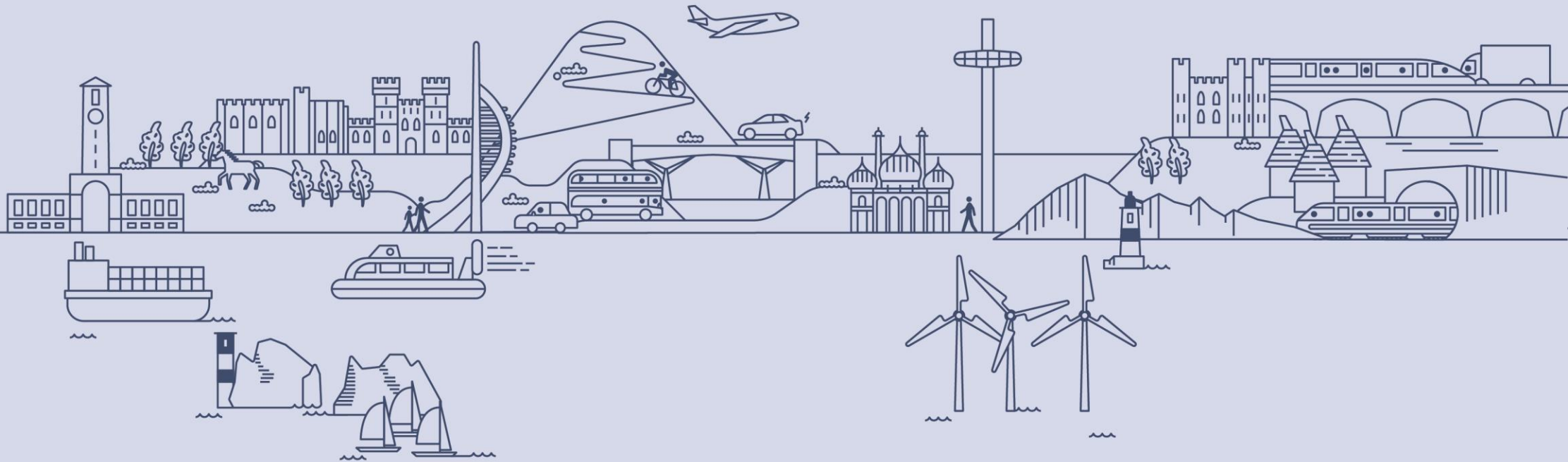
Challenges/Blockers

The risks identified during the viability review should be taken forward through procurement. Risk should be captured in contracts and passed on where possible. Additional risks related to the chosen procurement method should also be considered.

Additional Resourcing

TfSE will provide resource where appropriate. This could involve:

- further strategy and investment plan development;
- programme management including scheme prioritisation, government and stakeholder engagement, and monitoring and evaluation;
- pre-feasibility work and funding for relevant scheme promoters, likely delivery partners, and other key stakeholders;
- Joint scheme promoter;
- onward business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework;
- advocacy and securing funding; and
- procurement and sourcing supply chains for development / planning and construction / operations staff resource and resource funding to support the above as well as build capacity and capability within scheme promoters' own organisations.



Part 8

Management and Governance

Management and Governance

Overview

TfSE will work with partners to deliver both place-based and Global Packages of Interventions, infrastructure and services outlined in the previous Part.

The delivery of the packages of interventions will need consider:

- governance;
- roles and responsibilities;
- Stakeholder engagement;
- monitoring and evaluation;
- delivery planning; and
- risk management.

This part provides an overview of a suggested approach to the topics listed above.

Robust arrangements will need to be put in place for delivery and monitoring and evaluation of the scheme (including feedback into the organisation's strategic planning cycle).

Each project will need to be supported **Management Plan**, which will ensure that each intervention is being managed in accordance with best practice.

This will need to include:

- change and contract management
- benefits realisation
- risk management

Governance

TfSE and local transport authorities should establish appropriate governance to oversee the development, delivery, and benefits realisation arising from interventions included in this strategy (particularly the larger and/or more complex interventions). The arrangements will vary according to the type of intervention and its stage of development. Sponsors will need to consider which Governance Arrangements are appropriate for their scheme, including:

- Programme management
- Governance structure
- Communications Plan

Sponsors will need to develop a Delivery Plan that includes:

- Project Plan
- Benefits Realisation Plan

Sponsors will also need to manage Delivery Risks in terms of planning, strategies and mitigation.

Governance

Managing, Successful Programmes

The Cabinet Office’s recommended methodology for the delivery of programmes is Managing Successful Programmes (MSP).

MSP represents proven good practice for successfully delivering transformational change and is drawn from the experiences of both public and private sectors. TfSE’s approach will align with this.

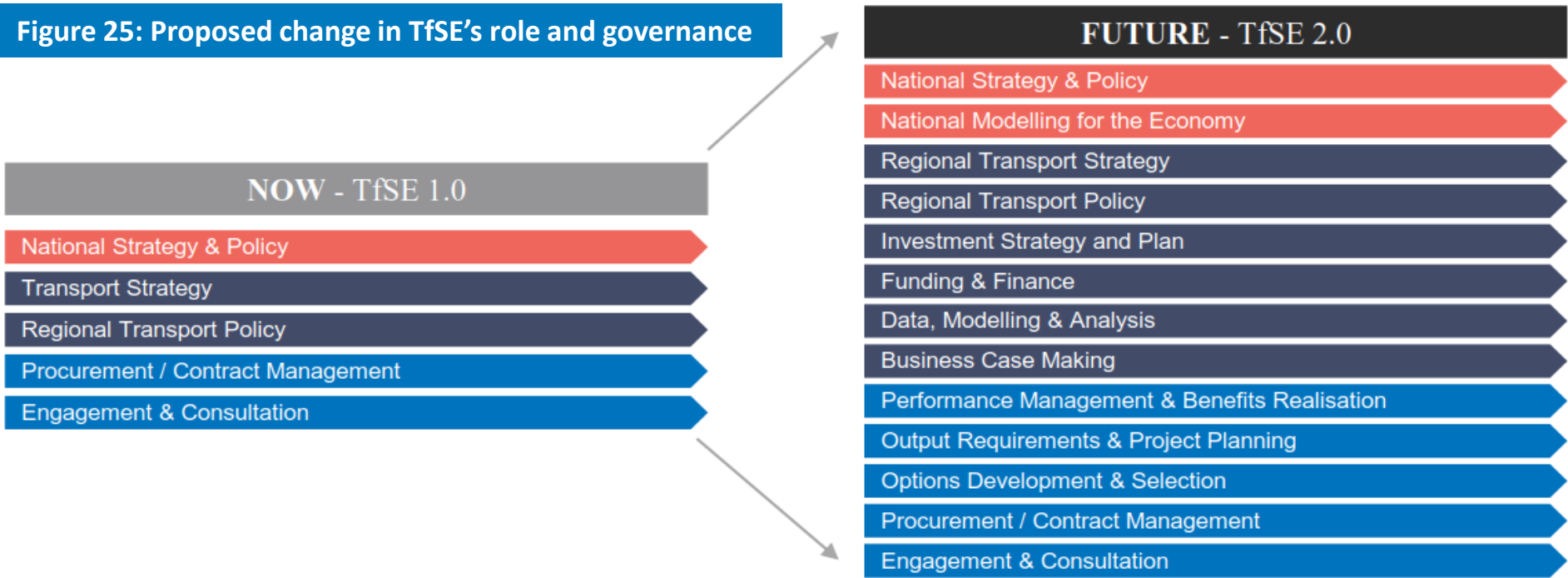
TfSE Future Capability Requirements

To deliver the Transport Strategy and successfully manage the SPOC Programme it is recognised that TfSE will need to grow and develop new capabilities to undertake a greater range of activities, including the governance of major programmes.

This is captured in TfSE’s Future Organisation Report (2021) and an example structure for TfSE is shown in **Figure 25** below.

An organisational set up such as TfSE 2.0 would enable TfSE to lead and work more directly on the Package of Interventions Delivery Plans, monitor benefit realisation plans and take Senior Responsible Officer roles where suitable.

The successful delivery of the programmes and projects will build upon the experience of the delivery partners.



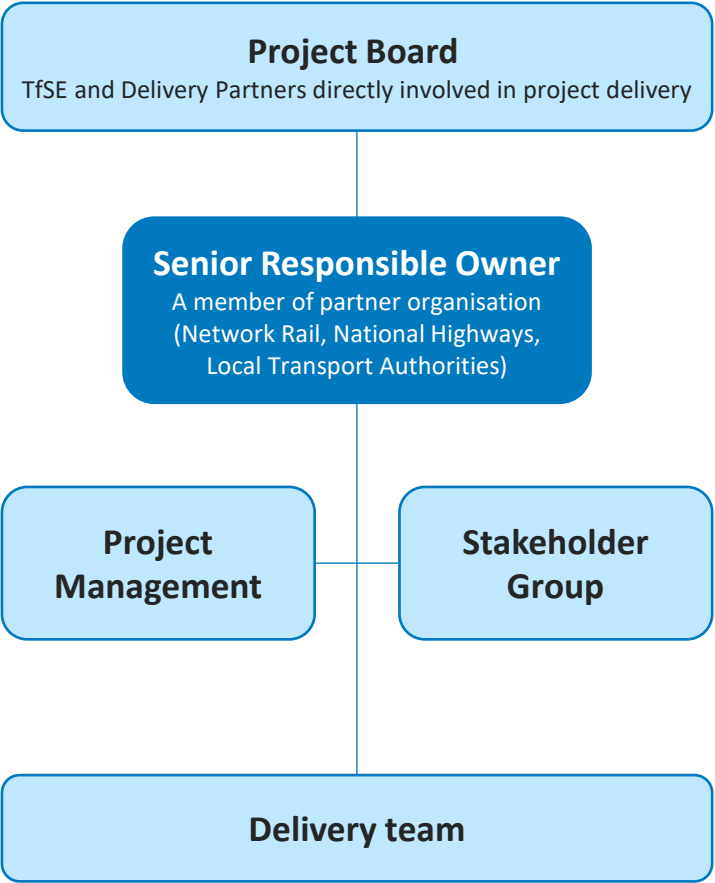
Governance Structure

Project specific governance will need to be defined for each project. The overall structure should include a Senior Responsible Owner (SRO), a Project Board, and key stakeholder group. An example structure is shown in the Figure 26 to the right.

- The SRO will be the sponsor of the project and, as such, will be responsible for the project outcomes and delivery.
- The SRO can be a member of the project delivery partner organisation (e.g., Network Rail, National Highways, Local Transport Authorities).
- If sponsors/SROs are separate from delivery partners, there must be lines of control between them.
- The board should include members of TfSE and key delivery partners directly involved in the project delivery.
- The project board should meet regularly to review project progress and make decisions. The board will review the business case at appropriate project plan milestones.

- The stakeholder group will include organisations indirectly linked to the delivery of the project but interested in the project outcomes.

Figure 26: Typical project governance structure



Strategy, Framework and Plans

For each Package of Interventions the Management Plan will include:

- estimated timing of the delivery of each intervention in the Package;
- identified ‘owners’ and/or ‘sponsors’ for each intervention;
- estimated costs for each intervention;
- governance frameworks (or options thereof) to support the delivery of the Packages; and
- key delivery risks.

Roles and Responsibilities

Overview

As outlined in the Introduction, local transport authorities will typically be responsible for delivering the Area Study Packages and Global Interventions, with support from partners where necessary.

TfSE’s role will reflect its current and likely future status as an established Sub National Transport Body for South East England. It is assumed there would be no significant change in the current distribution of powers, funding mechanisms, and democratic accountability in South East England at a local level.

TfSE’s role will therefore focus on building consensus and capacity to deliver its transport strategy through others. It will tailor its approach to the mode, scale, and level of development of each prioritised intervention.

A suggested approach for delivering the Packages of Interventions – including Global Policy Interventions – is provided in **Table 4** overleaf.

Roles and Responsibilities (contd.)

Table 4: Roles and Responsibilities – global packages

Intervention	Potential Scheme Promoter	TfSE Role
Global Package - lower public transport fares	<ul style="list-style-type: none"> Central Government (e.g. Department for Transport) / Local Authorities 	<ul style="list-style-type: none"> Stakeholder engagement Pre-feasibility work and funding for relevant scheme promoters, likely delivery partners and other key stakeholders Business case development and support, including use of and providing access to TfSE's emerging analytical framework Advocacy and securing funding
Global Package – active travel (e.g. delivery of LCWIPs, trends in micro-mobility, wider behavioural change programmes)	<ul style="list-style-type: none"> Local Transport Authorities 	<ul style="list-style-type: none"> Pre-feasibility work and funding for relevant scheme promoters, likely delivery partners and other key stakeholders Business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework Advocacy and securing funding
Global Package – national road user charging	<ul style="list-style-type: none"> Central Government (e.g. Department for Transport) 	<ul style="list-style-type: none"> Further strategy development Stakeholder engagement Pre-feasibility work Advocacy
Global Package – integrated spatial and transport planning	<ul style="list-style-type: none"> Central Government (e.g. Department for Transport and Department for Levelling up, Housing and Communities) / Local Transport Authorities / Local Planning Authorities 	<ul style="list-style-type: none"> Stakeholder engagement Pre-feasibility work Use of TfSE's emerging analytical framework Advocacy
Global Package – digital technology and use of remote working and virtual access to services	<ul style="list-style-type: none"> Central Government (e.g. Department for Transport and Department for Culture, Media, Sports and Digital) / Local Authorities / Private Sector 	<ul style="list-style-type: none"> Further strategy development Stakeholder engagement Pre-feasibility work Business case development and support Advocacy and securing funding
Global Package – decarbonisation: faster adoption and regulation for zero emission vehicles	<ul style="list-style-type: none"> Central Government (e.g. Department for Transport and Department for Business, Environment and Industrial Strategy) / Local Authorities / Private Sector 	<ul style="list-style-type: none"> Further strategy development Stakeholder engagement Pre-feasibility work Business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework Advocacy and securing funding

Roles and Responsibilities (contd.)

Table 4: Roles and Responsibilities - rail

Intervention	Potential Scheme Promoter	TfSE Role
Passenger rail services that can be introduced without new infrastructure, but which will likely require government support and/or capacity allocation within a passenger service contract (or franchise)	<ul style="list-style-type: none"> • Today: Department for Transport • Future: Great British Railways 	<ul style="list-style-type: none"> • Stakeholder engagement between Central Government, operators and local partners • Business case development, including use of and providing access to TfSE's emerging analytical framework • Advocacy and securing funding
Passenger rail services that can be introduced without new infrastructure, and without central government intervention (e.g. more international services to Mainland Europe, more freight services).	<ul style="list-style-type: none"> • Open Access Operators 	<ul style="list-style-type: none"> • Stakeholder engagement with operators, local partners and Central Government • Use of and providing access to TfSE's emerging analytical framework • Advocacy
For passenger or freight rail services requiring new infrastructure (e.g. high speed services to Hastings)	Schemes under development	
	<ul style="list-style-type: none"> • Department for Transport (very large projects e.g. Crossrail) • Network Rail (most schemes e.g. Croydon Area Remodelling) 	<ul style="list-style-type: none"> • Stakeholder engagement with Central Government and local partners • Business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework if at an earlier stage of development • Advocacy and securing funding
	Schemes not currently under development	
	<ul style="list-style-type: none"> • Likely Network Rail and, later on, Great British Railways • TfSE could be a joint scheme promoter 	<ul style="list-style-type: none"> • Stakeholder engagement with Central Government and local partners • Pre-feasibility work • Business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework • Advocacy and securing funding

Roles and Responsibilities (contd.)

Table 4: Roles and Responsibilities – bus, ferry, mass transit and shared mobility

Intervention	Potential Scheme Promoter	TfSE Role
Mass Transit services that can be introduced without new infrastructure, but which will likely require local government support.	<ul style="list-style-type: none"> Local Authority TfSE could be a joint scheme promoter 	<ul style="list-style-type: none"> Stakeholder engagement between Central Government, operators and local partners Business case development, including use of and providing access to TfSE's emerging analytical framework Advocacy and securing funding
Mass Transit services that can be introduced without new infrastructure, and without Central Government Intervention (e.g., more Fastrack services).	<ul style="list-style-type: none"> Local Authority TfSE could be a joint scheme promoter 	<ul style="list-style-type: none"> Stakeholder engagement with operators, local partners and Central Government Use of and providing access to TfSE's emerging analytical framework Advocacy
For Mass Transit services requiring new infrastructure (e.g. the larger mass transit interventions/networks proposed in the South East	Schemes under development	
	<ul style="list-style-type: none"> Department for Transport (very large projects) Local Transport Authorities (smaller schemes e.g. HIF) 	<ul style="list-style-type: none"> Stakeholder engagement with Central Government and local partners Business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework if at an earlier stage of development Advocacy and securing funding
	Schemes not currently under development	
	<ul style="list-style-type: none"> Local Transport Authorities TfSE could be joint scheme promoter 	<ul style="list-style-type: none"> Programme management, including stakeholder engagement with local partners and operators Pre-feasibility work Potential joint scheme promotion Business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework Advocacy and securing funding

Roles and Responsibilities (contd.)

Table 4: Roles and Responsibilities – active travel and micromobility		
Intervention	Potential Scheme Promoter	TfSE Role
Active travel packages	<ul style="list-style-type: none">Local Transport Authorities / Active Travel England / Sustrans National Highways / TfSE	<ul style="list-style-type: none">Stakeholder engagement, where appropriate, with local partners, Sustrans, National Highways and Central GovernmentPre-feasibility workPotential joint scheme promotionBusiness case and scheme development and support, including use of and providing access to TfSE’s emerging analytical frameworkAdvocacy and securing funding

Roles and Responsibilities (contd.)

Table 4: Roles and Responsibilities

Intervention	Lead Authority	TfSE Role
For Strategic Road Network infrastructure	Schemes under development	
	<ul style="list-style-type: none"> National Highways 	<ul style="list-style-type: none"> Stakeholder engagement with Central Government and local partners Business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework if at an earlier stage of development Advocacy and securing funding
	Schemes not currently under development	
	<ul style="list-style-type: none"> National Highways Local Transport Authorities 	<ul style="list-style-type: none"> Programme management, including stakeholder engagement with central government and local partners Pre-feasibility work Business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework Advocacy and securing funding
For other highways infrastructure	Schemes under development	
	<ul style="list-style-type: none"> Local Transport Authorities 	<ul style="list-style-type: none"> Programme management, including stakeholder engagement with central Government and local partners Pre-feasibility work Business case and scheme development and support, including use of and providing access to TfSE's emerging analytical framework Advocacy and securing funding

Monitoring and Evaluation

Monitoring and Evaluation

A selection of potentially suitable KPIs for monitoring and evaluation the Packages of Interventions in this Plan are presented in **Table 5** on the following pages.

During the consultation period on the Strategic Investment Plan, a set of KPIs and targets will be identified.

Monitoring and Evaluation (contd.)

Table 5: Theory of Change Monitoring and Evaluation Framework Key Performance Indicators - rail

Inputs	Outputs	Outcomes	Impacts
<ul style="list-style-type: none"> • Integrated planning for transport, land use and wider policy • Policy and guidance shaping the nature of the interventions developed • Funding invested in rail • Staff resource to create, design and deliver schemes 	<ul style="list-style-type: none"> • Delivery of Global Policy Interventions: reduction in public transport fares • Delivery of rail Interventions: capacity (seats, services per hour), and connectivity (better journey times, frequencies, direct/indirect services, 'turn up and go' service, internet connectivity) 	<ul style="list-style-type: none"> • Journey Time/Reliability: improvements for specific groups, perturbation recovery • Demand: increased public transport usage • Modal shift: public transport mode share increased, move to non-carbon emitting transport modes • Resilience and performance: Operating performance indicators (e.g. minutes delay/early, cancellations, etc.) • Quality: Customer Satisfaction Surveys, Service Quality Regimes, Mystery Shopper Regimes, other "trust" related/reliable indicators, enhanced interchange • Accessibility: improvement for all passengers, especially people with protected characteristics. number of fully accessible stops and stations, portion of buses, ferries, trams and other vehicles that are fully accessible • Affordability: Affordable fares for all, new products to make attractive • Revenue: Revenue raised per annum 	<ul style="list-style-type: none"> • Reduced carbon emissions to net-zero: reduced trip rates, higher sustainable transport mode share, fewer private vehicle kilometres, lower or zero emission per vehicle kilometre • Productivity: Boosted through better skills matching, knowledge sharing and agglomeration • Reduce poverty: for all residents and enable the "levelling up" of socioeconomic outcomes. • More financially sustainable public transport: Portion of operating costs recovered through revenue • Realisation of TfSE's Vision and Objectives presented in Part 4 of this Plan • Resolution of the Problem Statements identified in Part 4 of this Plan

Monitoring and Evaluation (contd.)

Table 5: Theory of Change Monitoring and Evaluation Framework Key Performance Indicators – bus, ferry, mass transit and shared mobility

Inputs	Outputs	Outcomes	Impacts
<ul style="list-style-type: none"> • Integrated planning for transport, land use and wider policy • Policy and guidance shaping the nature of the interventions developed • Funding invested in bus, ferry, mass transit and shared mobility • Staff resource to create, design and deliver schemes 	<ul style="list-style-type: none"> • Delivery of Global Policy Interventions: reduction in public transport fares • Delivery of bus, ferry, mass transit and shared mobility Interventions: capacity (seats, services per hour), and connectivity (better journey times, frequencies, direct/indirect services, ‘turn up and go’ service, internet connectivity) 	<ul style="list-style-type: none"> • Journey Time/Reliability: improvements for specific groups, perturbation recovery • Demand: increased public transport usage • Modal shift: public transport mode share increased, move to non-carbon emitting transport modes • Resilience and performance: Operating performance indicators (e.g. minutes delay/early, cancellations, etc.) • Quality: Customer Satisfaction Surveys, Service Quality Regimes, Mystery Shopper Regimes, other “trust” related/reliable indicators, enhanced interchange • Accessibility and reduced community severance: improvement for all passengers and communities, especially for people with protected characteristics - number of fully accessible stops and stations, portion of buses, ferries, trams and other vehicles that are fully accessible • Affordability: Affordable fares for all, new products to make attractive • Revenue: Revenue raised per annum 	<ul style="list-style-type: none"> • Reduced carbon emissions to net-zero: reduced trip rates, higher sustainable transport mode share, fewer private vehicle kilometres, lower or zero emission per vehicle kilometre • Productivity: Boosted through better skills matching, knowledge sharing and agglomeration • Reduced poverty: for all residents and enable the “levelling up” of socioeconomic outcomes. • More financially sustainable public transport: Portion of operating costs recovered through revenue • Realisation of TfSE’s Vision and Objectives presented in Part 4 of this Plan • Resolution of the Problem Statements identified in Part 4 of this Plan

Monitoring and Evaluation (contd.)

Table 5: Theory of Change Monitoring and Evaluation Framework Key Performance Indicators – active travel, micromobility and demand management

Inputs	Outputs	Outcomes	Impacts
<ul style="list-style-type: none"> • Integrated planning for transport, land use and wider policy • Policy and guidance shaping the nature of the interventions developed • Funding invested in Active Travel and Micromobility • Staff resource to create, design and deliver schemes 	<ul style="list-style-type: none"> • Delivery of Global interventions: including national and local road user charging, increased digital connectivity, and accelerated roll-out and take-up of active travel, shared mobility, and micro-transit solutions • Delivery of Active Travel, Public Realm and Micromobility Interventions: kilometres of safe and convenient routes; number of cycle hubs and parking; number of public transport hubs well served by active travel routes; number of behavioural change initiatives delivered. 	<ul style="list-style-type: none"> • Trip rates: reduced demand for travel • Increases in Active Travel and Micromobility: More people are walking, cycling or using micromobility due to new infrastructure • Motor traffic volumes reduced: Due to fewer people are driving shorter trips (or driving less often) • Improved connectivity: Increased ability for people to access local services by walking, cycling or micromobility • Increased accessibility to public transport: Greater access to public transport as part of multi-modal journeys 	<ul style="list-style-type: none"> • Reduced carbon emissions to net-zero: reduced trip rates, higher sustainable transport mode share, fewer private vehicle kilometres, lower or zero emission per vehicle kilometre • Improved air quality: Due to fewer people driving and reduction in congestion • Reduced congestion: Due to fewer people driving local journeys • Road safety improved: Due to high quality routes protecting people cycling from motor traffic • Public health improved: Due to more people getting exercise while using Active Travel or Micromobility modes • Realisation of TfSE's Vision and Objectives presented in Part 3 of this Plan • Resolution of the Problem Statements identified in Part 4 of this Plan

Monitoring and Evaluation (contd.)

Table 5: Theory of Change Monitoring and Evaluation Framework Key Performance Indicators - highways

Inputs	Outputs	Outcomes	Impacts
<ul style="list-style-type: none"> • Funding invested in highways packages • Delivery of interventions 	<ul style="list-style-type: none"> • Connectivity: Faster average journey times (e.g. between Eastbourne and Chichester) • Capacity: Appropriate capacity is provided for normal demand • Reduced conflicts: Fewer flat junctions, right hand turns, and roundabouts 	<ul style="list-style-type: none"> • Reliability: Journey Time Reliability • Safety: Reduced collisions and injuries (KSI) • Air quality: Reduced particulate, SOx and NOx emissions. • Other transport interventions are easier to deliver – especially those requiring road space reallocation such as bus and active travel. 	<ul style="list-style-type: none"> • Improved place: Highways in built up areas are better suited to the needs of residents, especially vulnerable users • Agglomeration: More efficient allocation and sharing of resources within and across the region • Realisation of TfSE's Vision and Objectives presented in Part 3 of this Plan • Resolution of the Problem Statements identified in Part 3 of this Plan

Stakeholder Engagement

Stakeholders

The Area Study Programme has been supported by extensive stakeholder engagement activity.

Across the Area Studies programme, TfSE and the Technical Advisor team undertook a stakeholder mapping exercise to categorise key organisations and individuals according to their interest and influence.

This exercise enabled TfSE to define four distinct tiers of stakeholder. For each of these tiers, a tailored engagement approach has been followed.

TfSE has refreshed the Stakeholder Mapping exercise undertaken at the beginning of the Area Study Programme to update their approach for the Strategic Investment Plan development and forthcoming consultation.

.

Stakeholder and Communication Plan

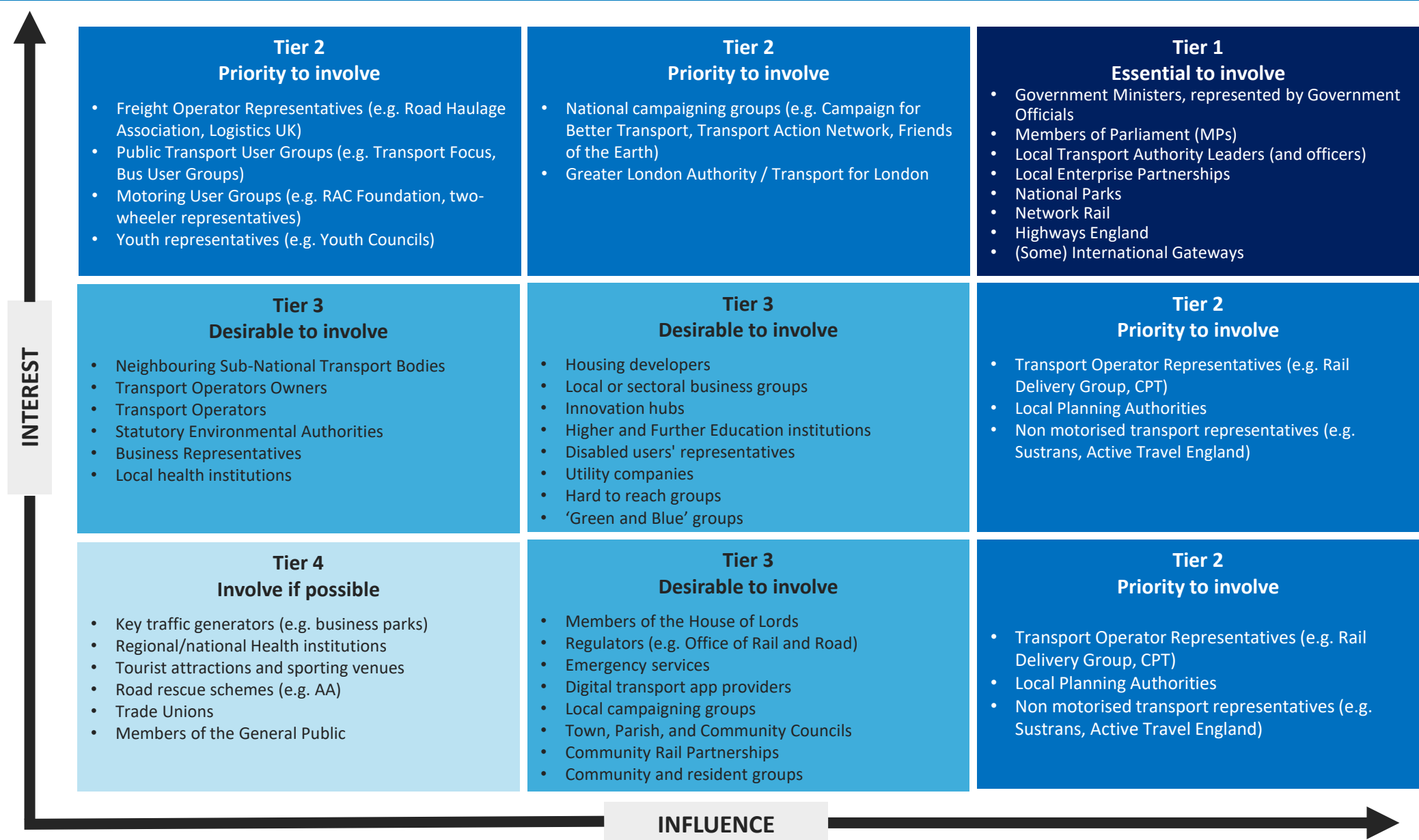
Building on the stakeholder engagement to date, it is proposed that a Stakeholder and Communications Plan be developed to support the delivery of the Strategic Investment Plan.

Given the wide range of stakeholders across the region, their differing views and specific local contexts, this Stakeholder and Communications Plan will reconfirm the stakeholders and their tiers, set out how and when and by whom they will be engaged, and the input sought from them and the purpose in the overall project programme.

An example of stakeholder mapping is summarised in **Figure 27** overleaf.

The profile of stakeholders who will need to be engaged in future stages may be different to those involved at earlier stages. For example, there will likely need to be more engagement with potential funders and delivery partners (developers, constructors, operators, etc) to ensure the development of the Packages of Interventions are informed by the best available advice.

Figure 27: Stakeholder Tiers



Delivery Plan

Project Management

PRINCE – PROjects IN Controlled Environment (PRINCE2) represents proven good practice in project management and is drawn from the experiences of both public and private sectors over many years.

PRINCE2 is the Cabinet Office's recommended methodology for the delivery of projects and will be appropriate for the programme and project framework for the further development of the SPOC Packages and their successful delivery and realisation of forecast benefits.

In developing the Package Delivery Plans, consideration will be given to:

- Projects structure
- Reporting arrangements
- Governance arrangements
- Key roles and responsibilities
- Appointed personnel and any vacancies

A Senior Responsible Owner will be identified in the Delivery Plan.

Senior Responsible Owner

The SRO is accountable for the programme and for ensuring that it meets its objectives and delivers the expected benefits.

The individual who fulfils this role should be able to lead and champion the programme and must be empowered to direct the programme and take decisions; for example, whether to delay or stop any part of the programme. The SRO must have sufficient seniority and authority to provide leadership to the programme and take on accountability for delivery.

The day-to-day leadership may be undertaken by a Programme Director, but this is not an alternative to the SRO role.

The Package programme business case will identify a SRO as suitable based on the project type and availability. It is anticipated that SRO could be sourced from:

- Network Rail for rail related projects and possibly DfT and TfSE;
- National Highways and possibly DfT for Strategic Road Network related projects; and
- Local Authorities or TfSE for local highway, placemaking or policy related projects.

Programme Plan

The Programme Plan is used to control and track the progress and delivery of the programme and resulting outcomes.

It supports the Delivery Plan and describes how, when and by whom a specific project, milestone or set of targets will be achieved. It is the detailed analysis of how identified programme targets, milestones, deliverables and products will be delivered to timescales, costs and quality.

The current assumptions for the indicative durations for the different types of interventions comprising the different Packages are presented below. The number of years until delivery reflects the current stage of the scheme, e.g. pre-SOBC, SOBC, OBC etc.

For each Package a Programme/Project Plan will be developed indicating milestones and critical paths.

Benefits Realisation Plan

Benefits Management

A benefit is defined as *“the measurable improvement resulting from an outcome perceived as an advantage by one or more stakeholders, which contributes towards one or more organisational objectives”*.

In the 30-year Transport Strategy TfSE outlines its goals, priorities and principles to achieve a sustainable transport strategy which has the potential to deliver £450 billion GVA backing high growth sectors and create 475,000 jobs.

To support the realisation of this benefits management should be undertaken throughout the project lifecycle and into operations/business-as-usual, not just during investment decision-making. The identification of benefits should happen before a project is even initiated, informed by a defined problem, strategy or policy.

At a strategic level TfSE has undertaken this benefit identification within the Transport Strategy. These benefits are then developed throughout the project lifecycle, and then typically measured during project delivery and after the project has closed.

Best Practice

For benefits management to be successful the SROs should consider applying the following principles throughout the lifecycle:

- Benefits management should be integrated into other project management activities and should be a regular, continuous activity.
- Project benefits should be identified, quantified and managed in line with the programme to ensure consistency between projects.
- Benefits management should be evidence-based and driven by data.
- As far as practicable, benefits should be specific enough and isolated enough so that their realisation can be directly attributed to the project/programme.

Outputs, Outcomes, and Impacts



The TfSE Transport Strategy KPIs should form the basis from which the package business case should develop the initial desired outputs, outcomes and impacts for the packages of interventions programme.

These desired outputs, outcomes and impacts are the actual benefits that are expected to be derived from the programme:



- **Desired outputs** – tangible effects that are funded and result from the programme.
- **Desired outcomes** – what happens as a result of the outputs.
- **Desired impacts** – the final impacts brought about by the scheme in the short, medium and long term as a result of the outputs and outcomes.

The TfSE Transport Strategy KPIs, as set in ‘A bold vision for a brighter future’ monitoring section are set out overleaf. These describe the desired outputs, outcomes and impacts in the Economic, Social and Environmental dimensions. Targets will be identified during the consultation on the Strategic Investment Plan.

Benefits Realisation Plan - The benefits (1 of 2, source: TfSE Transport Strategy)

	Strategic Priorities	Indicators
 Economic	Better connectivity between our major economic hubs, international gateways (ports, airports and rail terminals) and their markets.	<p>The delivery of improved road and railway links on corridors in need of investment.</p> <p>Improved public transport access to Heathrow and Gatwick Airports.</p> <p>Improved long-distance rail services (measured by journey time and service frequency).</p>
	More reliable journeys for people and goods travelling between the South East's major economic hubs and to and from international gateways.	<p>Improved Journey Time Reliability on the Strategic Road Network, Major Road Network, and local roads (where data is available).</p> <p>Improved operating performance on the railway network, measured by Public Performance Measure (PPM) and other available passenger and freight performance measures, where available (e.g. right time delivery).</p>
	A transport network that is more resilient to incidents, extreme weather and the impacts of a changing climate.	<p>Reduced delays on the highways network due to poor weather.</p> <p>Reduced number of days of severe disruption on the railway network due to poor weather.</p> <p>Metrics relating to reduced delay on road network suffering from Road Traffic Collisions.</p>
	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.	The percentage of allocated sites in Local Plans that are developed in line with Local Plans.
	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.	<p>Increase in the number of bus services offering 'Smart Ticketing' payment systems.</p> <p>Number of passengers using 'Smart Ticketing'.</p> <p>Number of passengers using shared transport.</p>
 Social	A network that promotes active travel and active lifestyles to improve our health and wellbeing.	<p>Increase in the length of the National Cycle Network in the South East.</p> <p>Increase in the length of segregated cycleways in the South East.</p> <p>Increase mode share of trips undertaken by foot and cycle.</p> <p>Number of bikeshare schemes in operation in the area.</p> <p>Mode share of walking and cycling.</p>

Benefits Realisation Plan - The benefits (2 of 2, source: TfSE Transport Strategy)

	Strategic Priorities	Indicators
 Social	Improved air quality supported by initiatives to reduce congestion and encourage further shifts to public transport.	Reduction in NOx, SOx and particulate pollution levels in urban areas.
	An affordable, accessible transport network for all that promotes social inclusion and reduces barriers to employment, learning, social, leisure, physical and cultural activity.	A reduction in the indicators driving the Indices of Multiple Deprivation in the South East, particularly in the most deprived areas in the South East area.
	A seamless, integrated transport network with passengers at its heart, making it simpler and easier to plan and pay for journeys and to interchange between different forms of transport	Increase in the number of cross-modal interchanges and/or ticketing options in the South East.
	A safely planned, delivered and operated transport network with no fatalities or serious injuries among transport users, workforce or the wider public.	Reduction in the number of people Killed and Seriously Injured by road and rail transport.
 Environmental	A reduction in carbon emissions to net zero by 2050 to minimise the contribution of transport and travel to climate change.	Reduction in carbon emissions by transport.
	A reduction in the need to travel, particularly by private car, to reduce the impact of transport on people and the environment.	<p>A net reduction in the number of trip kilometres undertaken per person each weekday.</p> <p>A reduction in the mode share of the private car (measured by passenger kilometres).</p>
	A transport network that protects and enhances our natural, built and historic environments.	<p>No transport schemes or interventions result in net degradation in the natural capital of the South East, instead aiming for environmental net gain for priority ecosystem services (such as natural flood risk management).</p> <p>No transport schemes or interventions result in a net loss of biodiversity, but seek to achieve a minimum of 10% net gain in biodiversity managed for 30 years, in line with the requirements of the Environment Bill.</p>
	Use of the principle of 'biodiversity net gain' (i.e. development that leaves biodiversity in a better state than before) in all transport initiatives	<p>Use of the principle of 'biodiversity net gain' in all transport initiatives.</p> <p>No transport schemes or interventions result in a net loss of biodiversity, but seek to achieve a minimum of 10% net gain in biodiversity managed for 30 years, in line with the requirements of the Environment Bill.</p>
	Minimisation of transport's consumption of resources and energy.	Reduction in non-renewable energy consumed by transport.

Management of Risks

Governing Principle

The governing principle, as described by HM Treasury, is that specific risks should be allocated to the party best able to manage it, subject to the risk premium.

This is intended to share risk between the promoter, stakeholders and potential service providers. As the development of the Packages of Interventions progresses and the commercial strategy to support their delivery is developed, the following principles should be taken into account:

- The public sector should consider transferring risk to the private sector when the service provider is better able to influence the outcome than the procuring authority.
- The degree to which risks may be transferred depends on the specific proposal under consideration.
- The private sector should be encouraged to take the risks it can manage more effectively than the public sector; particularly where it has clear ownership, responsibility and control.
- The successful negotiation of risk transfer requires a clear understanding by the procuring authority of the risks presented by a proposal; the broad impact that these risks may have on the service provider's incentives and financing costs (cost drivers); and the degree to which risk transfer offers Value for Money.

Consideration of Risks

TfSE should seek to apportion or share the different types of risks between parties, with risks allocated to the party best placed to manage them subject to achieving value for money.

The delivery of the Packages should be set in a way that:

- allocates risk appropriately across contracts;
- incentivises the intended outcomes in terms of performance, efficiency and innovation;
- facilitates the delivery of the project to time and budget; and
- secures the targeted economic, social and environmental benefits of the project as discussed with stakeholders and agreed with decision makers.

A Draft Risk Register is presented overleaf.

Delivery Risks

Planning Risk Management

Risk management is a structured approach to identifying, assessing and controlling risks that emerge during the course of the policy, programme or project lifecycle.

Its purpose is to support better decision making through understanding the risks inherent in a proposal and their likely impact.

Effective risk management supports the achievement of wider aims, such as:

- effective change management.
- the efficient use of resources.
- better programme and project management.
- minimising waste and fraud.
- innovation.

Risk Management Strategy

Strategies for the proactive and effective management of risk involve:

- identifying possible risk in advance and putting mechanisms in place to minimise the likelihood of them materialising with adverse effects.
- having processes in place to monitor risks, and access to reliable, up-to-date information about risks.
- the right balance of control to mitigate against the adverse consequences of the risks if they should materialise.
- decision making processes supported by a framework for risk analysis and evaluation.

Risk management strategies for individual policies, programmes and projects should be adopted in a way that is appropriate to their scale.

Risk Mitigation and Management

Recognised methods for the mitigation of risk throughout the lifespan of the policy, programme or project include:

- early consultation.
- avoidance of irreversible decisions.
- pilot studies.
- flexible design.
- precautionary action.
- procurement and contractual mitigation.
- manage reliance on technology.
- Alternative options.

Programme risk registers should be developed for each Package of Intervention to include the risks to the project delivery and consideration of the above-mentioned mitigation methods.

A draft programme risk register has been developed and is presented below.

Draft Risk Register (1 of 3)

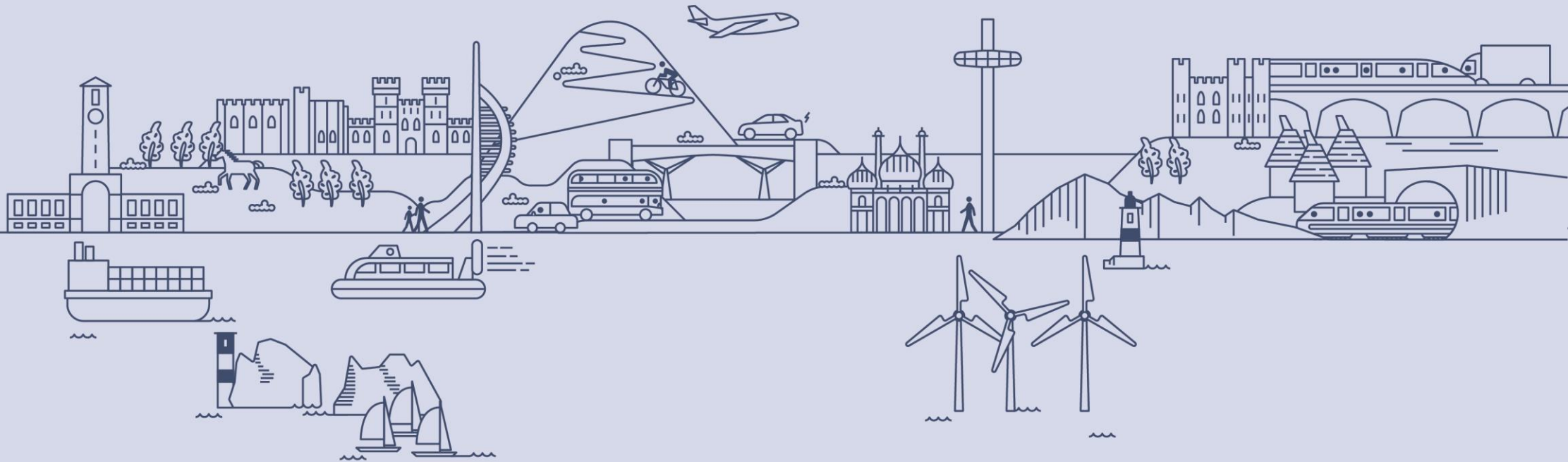
Risk	Impact	Likelihood	Mitigation	Owner	P	I	Risk
Project Programme External Dependencies	Project realisation and benefit realisations are delayed because of external Package of Interventions dependencies (e.g., DfT funding programmes)	Likely	Identify external dependencies and seek alternatives. Where alternatives are not possible identify critical path on Package programme and liaise with external stakeholders as soon as practical	TfSE	3	5	15
Project Cost	Value for Money and Benefit Realisation can be affected (negatively) by raising cost (or positively by decreasing cost)	Very Likely	Consideration of risk and optimism bias In the cost plan should be accounted for, e.g. in relation to optimism and effects of the wider UK economy on project capital cost (labour, material...)	TfSE	5	3	15
Funding	Scheme realisation might be impacted by change in funding availability	Likely	Alternative funding plans should be explored to mitigate the risk of funding un-availability including capturing point of no-return on Package	TfSE	3	5	15

Draft Risk Register (2 of 3)

Risk	Impact	Likelihood	Mitigation	Owner	P	I	Risk
Project Programme Inter - Dependencies	Benefit realisation and programme delays due to dependencies between Packages of Interventions	Likely	Identify dependencies between packages either due to practical programme rationale (e.g. deliver station and cycle interchange prior to opening MRT) or benefit realisation (e.g. passengers unable to reach MRT station due to missing first/last mile links)	TfSE	3	4	12
Political Risk	Policy is driven by political agenda and changes in political leadership might impact the realisation of project and benefits	Likely	Keep all political stakeholders appraised of programme benefits and progress	TfSE	4	3	12
Design, Information & Engagement	High level nature of specification of package interventions inherently carries risks associated with implications of ultimate design, which will be confirmed at a later stage and stakeholder opposition	Very Likely	Set up and keep updated a package specific risk register as soon as practical and communicate benefits clearly	TfSE	4	3	12

Draft Risk Register (3 of 3)

Risk	Impact	Likelihood	Mitigation	Owner	P	I	Risk
Operational	Package of Interventions need to be defined in more detail to confirm operating company's interest in participating in their delivery	Likely	Define the scope of the intervention in further detail and consult operating companies on viability and interest	TfSE	3	3	9
Reputational Risk	Risk related to misperceptions over timescales, nature of interventions and their impacts	Likely	An information management plan should be drafted including the level of information access and protection of sensitive information, with clear definition of roles and responsibilities for disseminating information	TfSE	3	3	9
Health and Safety	Risk of project delays and costs resulting from exposure to future waves of COVID-19 and health and safety of staff working on Package development	Likely	Each organisation involved should keep a risk register and sign up to TfSE risk management processes. Each organisation should follow UK government advice on COVID-19 related practices in relation to the work environment	TfSE and other parties involved	3	2	6



Appendix A: Place Based Packages

Packages of Interventions – Solent and Sussex Coast

The Options Assessment Report (OAR) recommended eight Packages of Interventions to be included in the SPOC. These are listed here and described in detail in the following pages. This details the scope of the intervention and summarises its strategic benefits.

Core Rail Package

A1	Solent Connectivity Strategic Study
A1a	Botley Line Double Tracking
A1b	Netley Line Signalling and Rail Service Enhancements
A1c	Fareham Loop / Platform
A1d	Portsmouth Station Platforms
A1e	South West Main Line - Totton Level Crossing Removal
A1f	Southampton Central Station Upgrade and Timetabling
A1g	Eastleigh Station Platform and Approach Flyover Enhancement
A2	Waterside Branch Line - Reopening and Electrification
A3	West of England Service Enhancements
A4	Additional Rail Freight Paths to Southampton

Enhanced Rail Package

B1	Southampton Central Station - Woolston Crossing
B2	New Southampton Central Station
B3	New City Centre Station
B4	South West Main Line - Mount Pleasant Level Crossing Removal
B5	West Coastway Line - Farnham to Cosham Capacity Enhancements
B6	West Coastway Line - Cosham Station Relocation
B7	Eastleigh to Romsey Line - Electrification
B8	Havant Rail Freight Hub
B9	Fratton Rail Freight Hub
B10	Southampton Container Port Rail Freight Access and Loading Upgrades
B11	Southampton Automotive Port Rail Freight Access and Loading Upgrades

Mass Transit

C1	Southampton Mass Transit
C2	South East Hampshire Rapid Transit
C3	New Southampton to Fawley Waterside Ferry Service
C4	Southampton Cruise Terminal Access for Mass Transit
C5	M271 Junction 1 Strategic Mobility Hub
C6	M27 Junction 5 / Southampton Airport Strategic Mobility Hub
C7	M27 Junction 7/8 Strategic Mobility Hub
C8	M27 Junction 9 Strategic Mobility Hub
C9	M275 Junction 1 Strategic Mobility Hub
C10	Clarence Pier Bus-Hovercraft Interchange
C11	Improved Gosport - Portsmouth and Portsmouth - Hayling Island Ferries

Isle of Wight Connectivity

D1	New Isle of Wight Mass Transit System and Active Travel Enhancements
D1a	Bus Mass Transit - Newport to Yarmouth
D1b	Bus Mass Transit - Newport to Ryde
D1c	Bus Mass Transit - Newport to Cowes
D1d	Isle of Wight Railway Service Enhancements
D1e	Isle of Wight Railway Extensions - Shanklin to Ventnor
D1f	Isle of Wight Railway Extensions - Shanklin to Newport (or Mass Transit alternative)
D2	Isle of Wight Ferry Service Enhancements
D2a	Operating Hours and Frequency Enhancements
D2b	New Summer Route - Ryde to Southampton

Active Travel

E1	Solent Active Travel (including LCWIPs)
-----------	---

Core Rail Package

F1	West Coastway Strategic Study
F2	West Worthing Level Crossing Removal

Mass Transit

G1	Shoreham Strategic Mobility Hub
G2	A27/A23 Patcham Interchange Strategic Mobility Hub
G3	Falmer Strategic Mobility Hub
G4	Eastbourne/Polegate Strategic Mobility Hub
G5	Sussex Coast Mass Rapid Transit
G6	Eastbourne/Wealden Mass Rapid Transit
G7	Hastings/Bexhill Mass Rapid Transit
G8	A27 Falmer - Polegate Bus Stop and Layby Improvements

Active Travel

H1	Sussex Coast Active Travel Enhancements (including LCWIPs)
-----------	--

Highways

I1	M27 Junction 8 (RIS2)	I20	A27 Tangmere Junction Enhancements
I2	A31 Ringwood (RIS2)	I21	A27 Fontwell Junction Enhancements
I3	A27 Arundel Bypass (RIS2)	I22	A27 Worthing (Long Term Solution)
I4	A27 Worthing and Lancing Improvement (RIS2)	I23	A27 Hangleton Junction Enhancements
I5	A27 East of Lewes Package (RIS2)	I24	A27 Devils Dyke Junction Enhancements
I6	Southampton Access (M27 Junction 2 and Junction 3) (RIS3 Pipeline)	I25	A27 Falmer Junction Enhancements
I7	A27 Lewes - Polegate (RIS3 Pipeline)	I26	A27 Hollingbury Junction Enhancements
I8	A27 Chichester Improvements (RIS3 Pipeline)		
I9	A326 Capacity Enhancements (LLM)		
I10	West Quay Realignment (LLM)		
I11	Portsmouth City Centre Road (LLM)		
I12	Northam Rail Bridge Replacement and Enhancement (MRN)		
I13	New Horsea Bridge and Tipner Bridge		
I14	A259 Bognor Regis to Littlehampton Enhancement (MRN)		
I15	A259 South Coast Road Corridor - Eastbourne to Brighton (MRN)		
I16	A259 Chichester to Bognor Regis Enhancement (MRN Pipeline)		
I17	A259 (King's Road) Seafront Highway Structures Renewal Programme (MRN Pipeline)		
I18	A29 Realignment including combined Cycleway and Footway		
I19	M27/M271/M275 Smart Motorway(s)		

Global Policy Packages: Decarbonisation, Public Transport Fares, Road User Charging, New Mobility, Virtual Living, and Integration and Access

Package A: South Hampshire Rail (Core)

Overview

Network Rail, Solent Transport, and the Solent Authorities have developed a comprehensive package of interventions that will deliver improvements to urban and inter-urban rail journeys.

These form part of the Solent Connectivity Strategic Study (formerly the Solent Continuous Modular Strategic Plan), the main objective of which is to deliver additional local rail services so that most of the stations in the area currently served by infrequent one train per hour (1tph) services get a much more frequent "semi metro" 2 to 3tph (or perhaps "metro" 4tph) service frequency.

The plan includes interventions such as the provision of an additional through line / overtaking line at Fareham, increasing capacity on the Botley line to twin tracks, adding platform capacity at Portsmouth Harbour, signalling improvements on the Netley Line, and timetable changes to maximise capacity at Southampton Central.

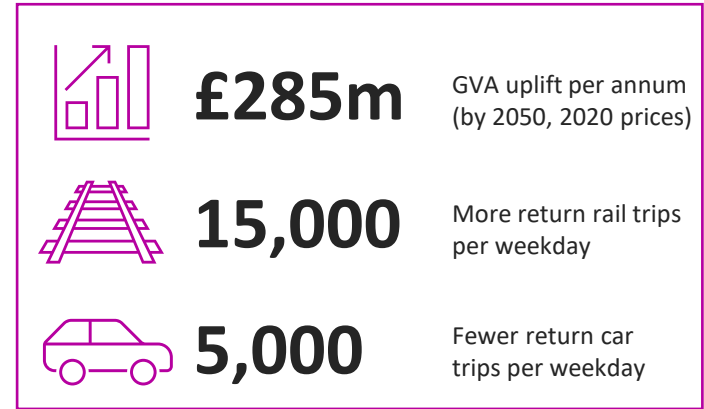
A key enabler to the plan is the provision of sidings at Totton and a solution to a level crossing constraint in this area. This would then allow many local trains from Southampton to be run on to Totton for two reasons: 1) to reduce platform demand/improve capacity at Southampton Central by having fewer trains terminate there, and 2) to improve service to Totton which is currently under-served.

The Solent Connectivity Strategic Study will also complement passenger rail services to be introduced to the Fawley Branch Line and serve a large planned development in this area. While alternative uses for this railway have been explored, there appears to be consensus that this corridor should develop as (an ideally electrified) heavy rail service. Ferries could also complement this service.

Benefits

- **Capacity** enhancements across the whole Solent conurbation
- Improvements in **service frequencies**, especially for urban metro services
- Better **interchange** and **service quality** at Southampton Central station
- More new and growing communities will have **access** to the national rail network

Modelling Results



Package A: South Hampshire Rail (Core)



Package B: South Hampshire Rail (Enhanced)

Overview

Building on the core package, TfSE’s strategic studies have a horizon as far as 2050 and an ambition to deliver transformational change in sustainable travel options across South Hampshire. Solent Transport and Local Transport Authorities have previously stated an ambition to deliver a level of service on urban metro routes comparable to suburban London, akin to four trains per hour – a “metro” level of service.


There are also aspirations to grow freight and provide better connectivity between South Hampshire, the West of England, the Midlands, and beyond. This requires more capacity than the current network can provide. The key bottleneck preventing this from being realised is the tunnel between Southampton Central and St Denys.

TfSE has worked with key stakeholders to develop a longer-term package of scheme that unlock significant capacity and shorter journey times between Southampton and Portsmouth City Centres. This could include a potential new underground link between Southampton Central and the Netley Line providing a more direct route and deconflicting north-south and east-west rail movements.


Benefits

- Transformational capacity and connectivity benefits – especially on east-west rail journeys (30 – 35 minute Southampton – Portsmouth journeys)
- Supports regeneration of Southampton City Centre and other growth areas
- Significant boost to GVA in a relatively deprived part of the South East
- Large reduction in carbon emissions.


Modelling Results (additional to core)

**£305m**

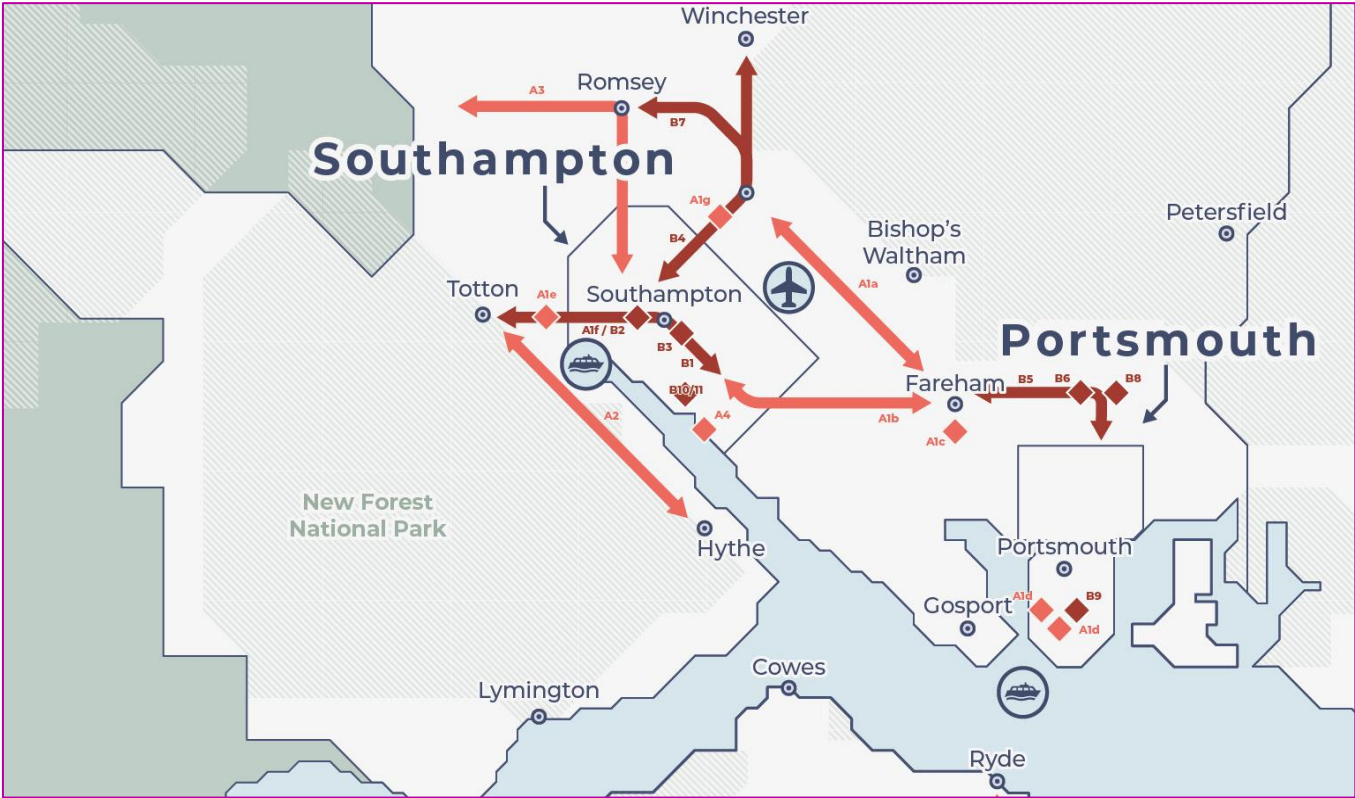
GVA uplift per annum
(by 2050, 2020 prices)

**15,000**

More return rail trips
per weekday

**5,000**

Fewer return car
trips per weekday



Package C: South Hampshire Mass Transit

Overview

TfSE and the Area Study Working Group believe the South Hampshire conurbation is large enough and dense enough to support world class mass transit systems.

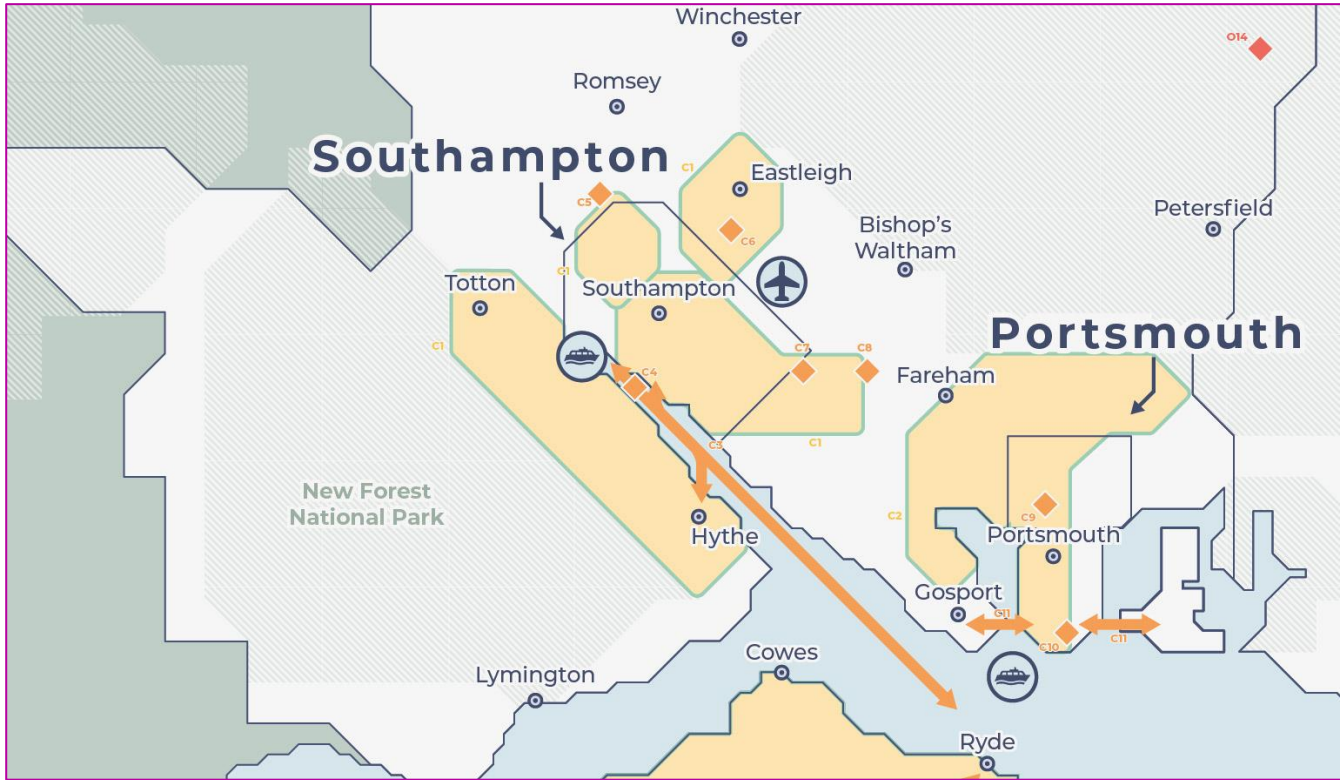
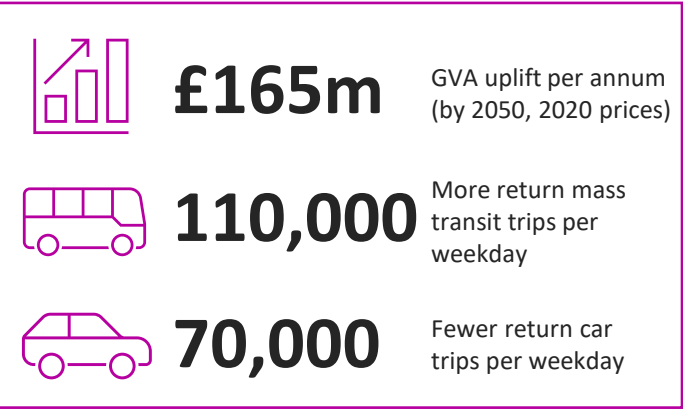
Portsmouth City Council are developing and delivering a comprehensive high quality Bus Rapid Transit that will serve the Portsmouth City Region. Southampton City Council also aspire to develop a Mass Transit System for their city region – which could take the form of Light Rail Transit, tram-train, Bus Rapid Transit, and/or ferries (and terminal facilities).

Both mass transit systems will be supported by a high-quality urban rail service (see packages for core and enhanced rail in South Hampshire) and, where good interchange opportunities are available, strategic mobility hubs. These hubs should provide interchange across a range of modes including active travel and new mobility choices, as well as having the potential for the co-location of services and potentially new development and enhanced public realm to improve place-making. This package includes interventions to improve access for peninsulas/islands, in particular, through improving and expanding ferry services.

Benefits

- Transformation improvement in the quality, speed, and frequency of mass transit services in the Solent
- Better interchange and service quality at Strategic Mobility Hubs
- Improvements in connectivity between islands and peninsulas in the Solent
- Significant mode shift from car to bus, ferry, and tram, and enhance place-making

Modelling Results



Package E: South Hampshire Active Travel

Overview

All three Local Transport Authorities in the Solent have ambitious plans to improve cycling and walking in their areas. This ambition is supported by this study.

Active travel interventions across South Hampshire support a number of key priorities, including reducing congestion, helping to tack climate change, improving air quality, and supporting placemaking - creating high-quality attractive, liveable towns and cities.

Enhanced infrastructure also benefits bike hire schemes, e-bikes and e-scooters.

Several highway interventions – including the Southampton West Quay Road scheme – will unlock opportunities for pedestrians and cyclists by freeing up more public space in town and city centres.

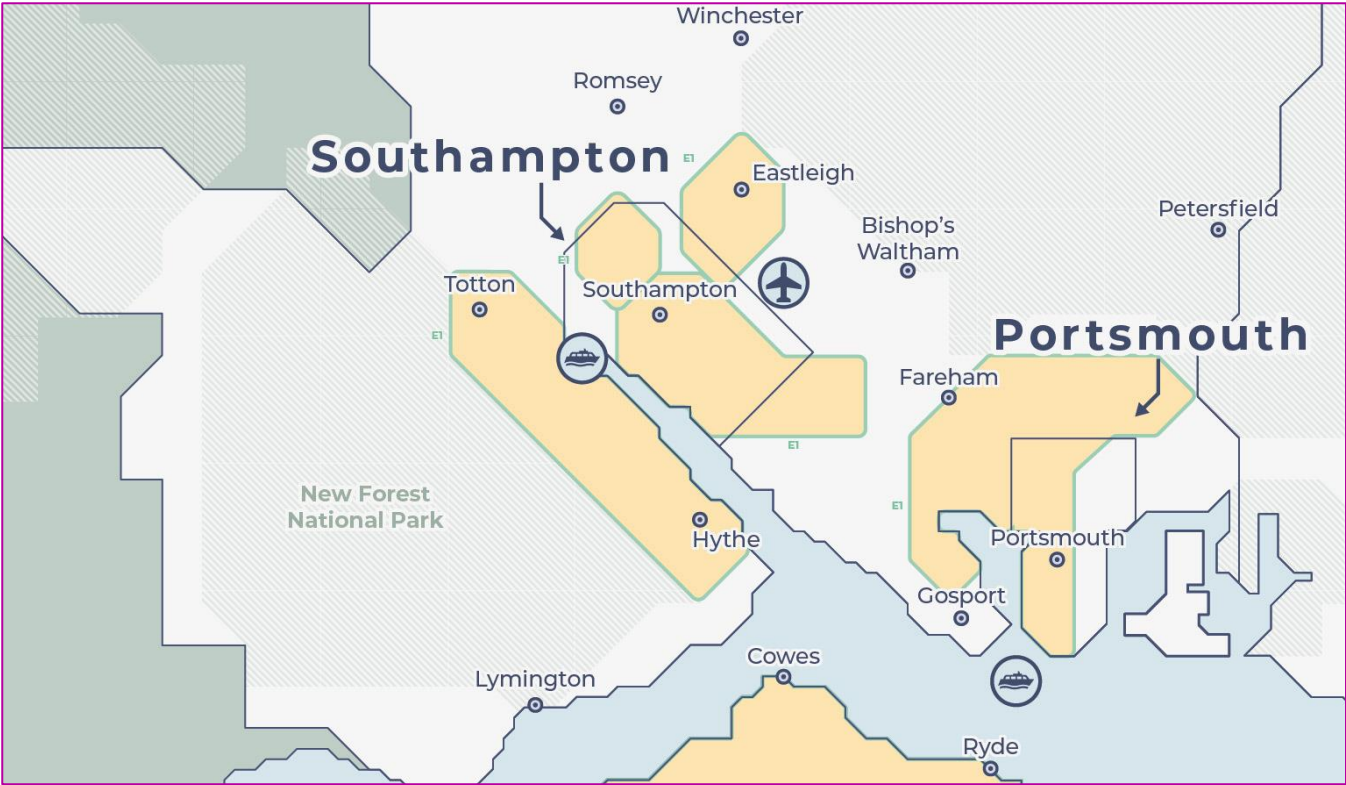
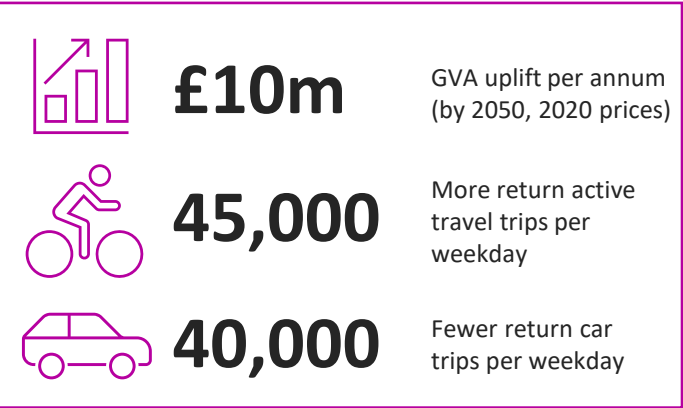
The Portsmouth Clean Air Zone (CAZ) is also identified. Whilst being delivered, it is held up as good practice, a model to be built upon by other authorities as well as expanded within Portsmouth.

As with all sustainable mode packages, behaviour change interventions, locally, are required to optimise benefits.

Benefits

- **Material improvements to the urban realm** of the Solent Built Up Area, unlocking active travel, placemaking and regeneration/development opportunities
- Improvements in **air quality** in urban areas
- Significant **mode shift** from car to active travel, with associated health benefits

Modelling Results



Package D: Isle of Wight Connectivity

Overview

TfSE believe the Isle of Wight has the characteristics to support a high-quality, integrated mass transit system.

TfSE and key stakeholders have identified a package of interventions aimed at improving connectivity between the Isle of Wight and the Mainland and improving connectivity within the Isle of Wight itself.

Stakeholders from the Isle of Wight and wider Solent region all raised opportunities to transform ferry services, through increasing frequency of services, extending hours of operation, more affordable ferry fares, and the possibility of new seasonal routes.

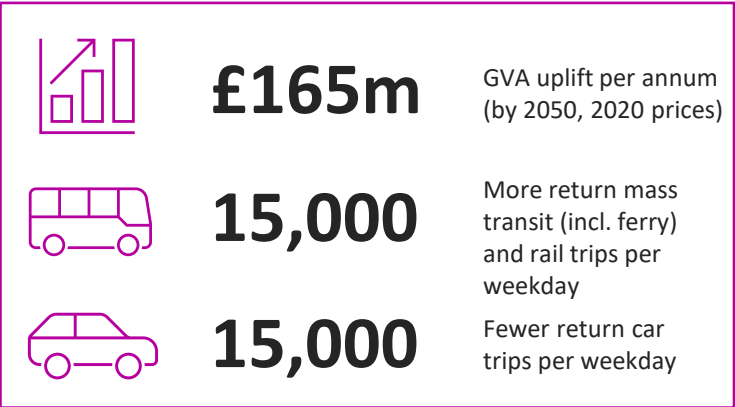
The Isle of Wight has the potential to be an exemplar for public transport given its size and unique characteristics.

With investment in ferries and public transport on the Island, there is opportunity to make the most of existing infrastructure by reinstating disused railways and complementing rail with a bus-based Mass Transit system connecting key destinations across the Island including ferry terminals and tourism hotspots and delivery of the LCWIP and island-wide segregated active travel routes.

Benefits

- **Transformational improvement** in the quality, speed, and frequency of ferry services between the Isle of Wight and Mainland.
- **Seamless integration** between ferry and public transport on the mainland and the Isle of Wight supporting sustainable onward connectivity.

Modelling Results



Package F: Sussex Coast Rail

Overview

Network Rail has worked with Local Transport Authorities to develop a package of improvements for the West Coastway and East Coastway lines.

The West Coastway Strategic Study (formerly Continuous Modular Strategic Planning), if delivered, would result in faster journeys and more capacity between Brighton and Hove and Southampton. However, there is not enough capacity to accommodate all stakeholder aspirations on this corridor.

The package identified here supports those interventions that best support inter-urban and long-distance journeys – those for which car alternatives have greatest emissions and other sustainable modes are less likely to provide attractive alternatives.

In the east of Sussex Coast area, a package (see Kent, Medway and East Sussex – High Speed Rail – East), includes extending high speed rail services off High Speed 1 at Ashford along an upgraded Marsh Link Line to Hastings, Bexhill and Eastbourne. This has the potential to almost half journey times between Hastings as London, as well as considerable improvements to more local, and inter-urban travel.

Benefits

- **Faster journeys** between Brighton, Chichester, Portsmouth, and Southampton
- Potentially **more frequent longer distance services** between Brighton, Chichester, Portsmouth, and Southampton
- **Additional capacity** between Worthing and Brighton for shorter journeys

Modelling Results (excl. High Speed services to Hastings, Bexhill and Eastbourne)



Package G: Sussex Coast Mass Transit

Overview

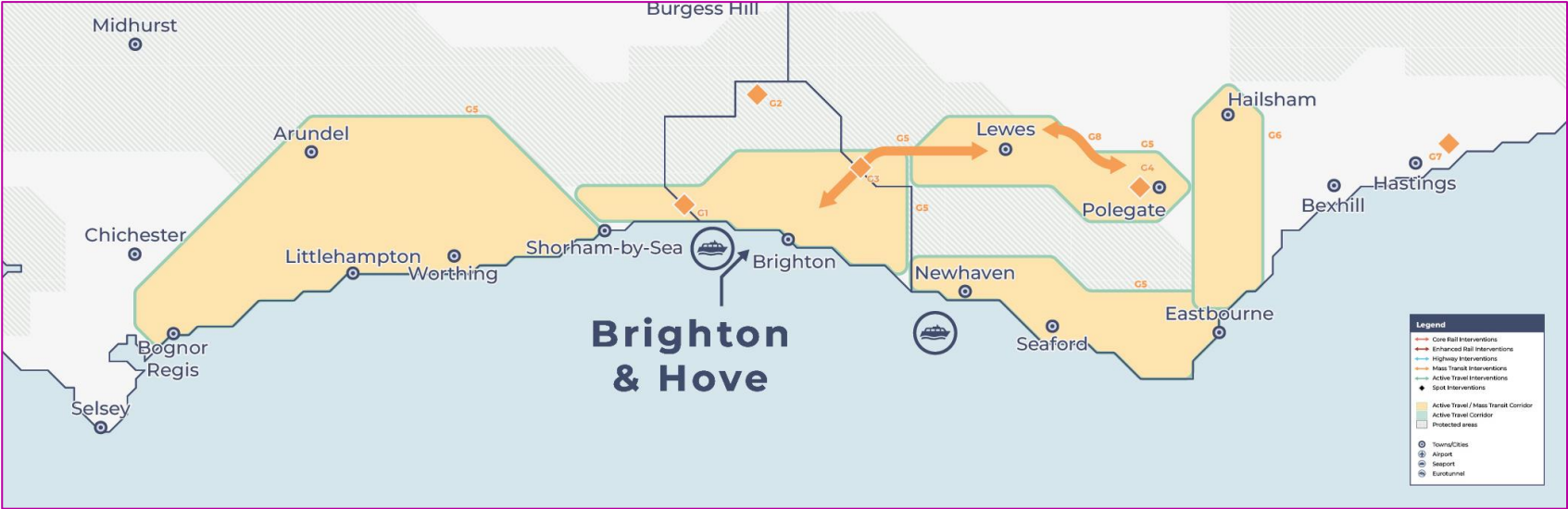
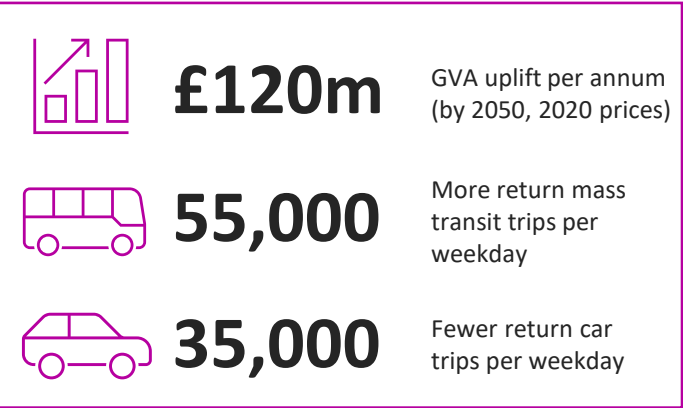
TfSE believes there is a strong case for high-quality mass transit on the Sussex Coast.

Brighton and Hove City Council is developing plans for a high-quality public transport system along the Brighton seafront, and how to best integrate all public transport across the city, including using strategic mobility hubs to intercept car trips heading into the city. Details are to be finalised, but the typology of the city lends itself strongly to Bus Rapid Transit. There are longer term options to extend or compliment this system in East and West Sussex. At this stage, extending in East Sussex appears to be more technically feasible than West Sussex where the focus is in on supporting the existing bus network. Additionally, there are proposals for improved mass transit infrastructure and services Eastbourne and Hastings.

Benefits

- Significant improvement in the quality, speed, and frequency of mass transit services in Sussex Coast conurbation
- Better **interchange** and **service quality** at intermodal Strategic Mobility Hubs on the periphery of Brighton & Hove and, potentially, Eastbourne
- Significant mode shift from car to mass transit services

Modelling Results



Package H: Sussex Coast Active Travel

Overview

All three Local Transport Authorities on the Sussex Coast have ambitious plans to improve cycling and walking in their areas. This is fully supported by this study.

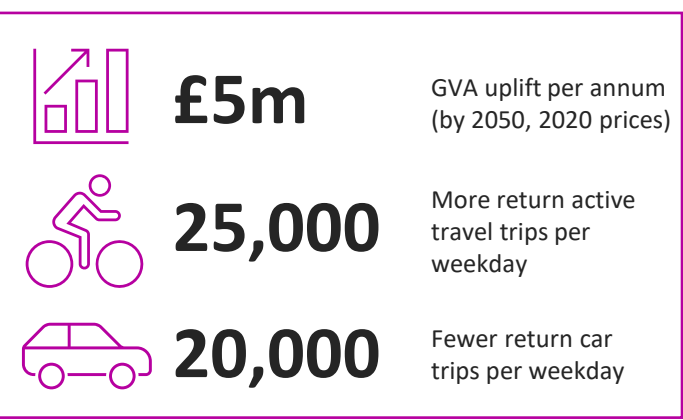
Within Brighton & Hove, there is a sizeable intervention to renew seafront structures to support active travel.

Several smaller scale highways interventions are also proposed to support housing growth along the Sussex Coast. Most of these interventions include public transport and active travel elements, such as those being proposed for the A29 between Bognor Regis and Littlehampton, and the A259 between Chichester and Bognor Regis.

Benefits

- Material improvements to the urban realm of the Sussex Coast Built Up Area, unlocking active travel and regeneration opportunities
- Improvements in **air quality** in urban areas
- Significant **mode shift** from car to active travel, with associated health benefits

Modelling Results



Package I: Solent and Sussex Coast Highways

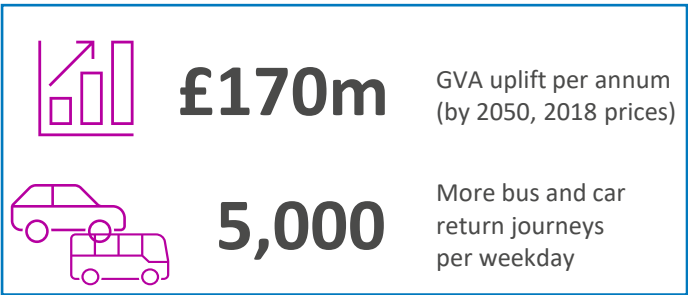
Overview

This package contains interventions that help deliver TfSE’s vision for a high-quality highway between the areas’ two largest conurbations. This does not necessarily mean delivering a grade separated dual carriageway – more modest interventions may be appropriate, but a priority is a long-term solution for Worthing. Addressing pinch-points along the A27, but not at Worthing, is likely to increase congestion in the town. Any highway intervention proposed in this package should be designed to de-conflict local and longer-distance traffic, and address safety and air quality issues. They should support (and be supported by) public transport and active travel improvements. Several interventions unlock opportunities to reallocate road-space to active travel and public transport.

This is reflected in modelling analysis that indicates these highways interventions could stimulate almost as many more bus trips on the A27 corridor as private car trips if supported by service enhancements. The parallel A259 corridor provides a complimentary function alongside the A27 in providing access to coastal communities (Bognor and Littlehampton) from the SRN but also linking coastal communities (Brighton - Peacehaven - Newhaven - Seaford – Eastbourne – Bexhill – Hastings).

Southampton Access M27 Junctions and A326 Capacity Enhancements open up residential and commercial development (e.g. Fawley Waterside) and improve access to the Port of Southampton and the wider Solent Freeport and its growth.

Modelling Results



Benefits

- Safer highways, notably in urban areas
- Faster, more reliable highway journeys between Brighton and South Hampshire
- Improved air quality in urban areas
- Scope to reallocate road-space to active travel and public transport
- Reduced impact of road traffic on the South Downs National Park



Packages of Interventions – London to Sussex Coast

The OAR recommended eight Packages of Interventions to be included in the SPOC. These are listed here and described in detail in the following pages. This details the **scope of the intervention** and summarises its **strategic benefits**.

Global Policy Package

To be defined but likely to include new mobility, rural connectivity, freight, demand management, and accelerated decarbonisation interventions

Core Rail Package

J1	Croydon Area Remodelling Scheme
J2	Brighton Main Line - 100mph Operation
J3	Brighton Station Additional Platform
J4	Reigate Station Upgrade
J5	Arun Valley Line - Faster Services
J6	East Coastway Line - Faster Services
J7	Brighton Main Line - Reinstated Cross Country Services
J8	New Station to the North East of Horsham
J9	Newhaven Port Capacity and Rail Freight Interchange Upgrades
J10	Uckfield Branch Line - Hurst Green to Uckfield Electrification and Capacity Enhancements
J11	Redhill Aerodrome Chord
K1	Uckfield - Lewes Wealden Line Reopening - Traction and Capacity Enhancements
K2	Uckfield - Lewes Wealden Line Reopening - Reconfiguration at Lewes
K3	Spa Valley Line Modern Operations Reopening - Eridge to Tunbridge Wells West to Tunbridge Wells

Active Travel

M1	Burgess Hill/Haywards Heath Local Cycleways
M2	East Grinstead Local Cycleways
M3	Eastbourne/Hailsham Local Cycleways
M4	Gatwick/Crawley Local Cycleways
M5	Horsham Local Cycleways
M6	Lewes/Newhaven Local Cycleways
M7	Reigate/Redhill Local Cycleways
M8	East Sussex Inter-urban Cycleways

Mass Transit

L1	Fastway Extension: Crawley - Horsham
L2	Fastway Extension: Crawley - East Grinstead
L3	Fastway Extension: Haywards Heath - Burgess Hill
L4	Fastway Extension: Crawley - Redhill
L5	A22 Corridor Rural Bus Service Enhancements
L6	A23 Corridor Rural Bus Service Enhancements
L7	A24 Corridor Rural Bus Service Enhancements
L8	A26 Corridor Lewes - Royal Tunbridge Wells Rural Bus Service Enhancements
L9	A26 Corridor Newhaven Area Rural Bus Service Enhancements
L10	A272 Corridor Rural Bus Service Enhancements
L11	A264 Corridor Rural Bus Service Enhancements
L12	A29 Corridor Rural Bus Service Enhancements
L13	A283 Corridor Rural Bus Service Enhancements
L14	A281 Corridor Rural Bus Service Enhancements
L15	Three Bridges Strategic Mobility Hub

M9	Surrey Inter-urban Cycleways
M10	West Sussex Inter-urban Cycleways
M11	New London - Brighton National Cycle Network Corridor
M12	New Crawley - Chichester National Cycle Network Corridor
M13	London - Paris New "Avenue Verte"

Highways

N1	A22 N Corridor (Tandridge) - South Godstone to East Grinstead Enhancements (LLM Pipeline)
N2	A24/A243 Knoll Roundabout and M25 J9A (MRN Pipeline)
N3	A22 Corridor Package 2 (Polegate - Hailsham New Offline Carriageway) (MRN Pipeline)
N4	A2270/A2101 Corridor Movement and Access Package (MRN Pipeline)
N5	M23 Junction 8a New Junction and Link Road - Redhill
N6	M23 Junction 9 Enhancements - Gatwick
N7	A24 Carriageway Improvements - Gatwick to Crawley
N8	A264 Horsham - Pease Pottage Carriageway Enhancements
N9	A264 Crawley - East Grinstead Dualling and Cycleway
N10	A272 Crawley Western Link Road and Cycleway
N11	A24 Dorking Bypass
N12	A24 Dorking - Capel New Roundabout
N13	A24 Corridor Improvements Horsham to Capel (LLM Pipeline)
N14	A23 Hickstead and Bolney Junction Enhancements
N15	A23/A27 Patcham Interchange Junction Enhancements
N16	A26 Lewes - Newhaven Realignment and Junction Enhancements
N17	A26 Lewes - Uckfield Enhancements
N18	A22 Uckfield Bypass Dualling
N19	A22 Smart Road Trial Proposition Study

Packages J & K: London – Sussex Coast Rail (Core) | London – Sussex Coast Rail (Reinstatements)

Overview

In collaboration with Network Rail and the Local Transport Authorities a package of rail interventions has been developed which will enhance connectivity, and reliability between London and the Sussex Coast.

The **Core Rail Package** addresses key bottlenecks on the Brighton Main Line, enabling faster, more reliable services. It also provides line speed enhancements allowing for faster journeys on the Arun Valley Line and the East Coastway Line. Electrification of the Uckfield Branch of the Oxted Line stimulates positive operational and environmental impacts.

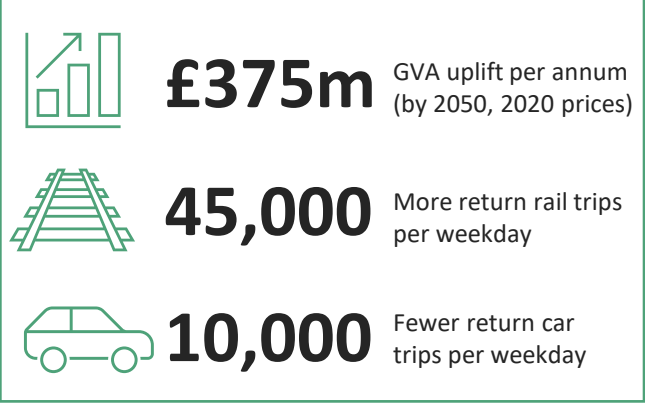
The **Railway Reinstatements Package** brings back into use the Uckfield – Lewes railway and the Tunbridge Wells West – Tunbridge Wells (Central) railway. This will increase resilience of rail connectivity between the South Coast and London whilst creating a new east west rail link between the Brighton Main Line and Hastings Line.

Several other historical railways have been considered for reinstatement, but the study found the conversion to active travel corridors would have a more positive impact.

Benefits

- Improvements to **resilience** of north south trips
- Increased **reliability** on Brighton Main Line serving key strategic locations
- **Faster journeys** on Brighton Main Line, Arun Valley Line and East Coastway Line.
- Improved access to **boost** (currently) **less prosperous coastal areas**.
- Enhanced **connectivity** from Brighton via Lewes and Uckfield to Tunbridge Wells.
- Large reduction in **carbon emissions**.

Modelling Results



Package L: London – Sussex Coast Mass Transit

Overview

TfSE and the Area Study Working Group believe that there are parts of the London to Sussex Coast Area which are populous and dense enough to support a bus based-transit network.

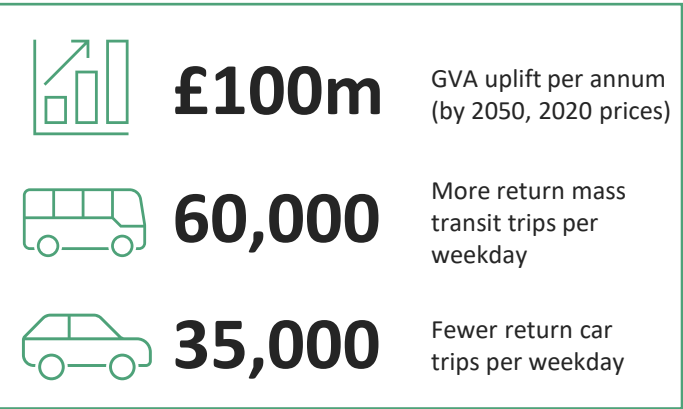
The **Mass Transit Package** will build on the success of the Fastway Bus Rapid Transit system in Crawley/Gatwick. Its expansion will be on high growth corridors towards (and within) nearby Major Economic Hubs. This expansion will include investing in segregated bus infrastructure where feasible on corridors to the north (Redhill), south (Haywards Heath), east (East Grinstead and Tunbridge Wells) and the west (Horsham). In addition, mass transit systems are proposed for Brighton and Hove and the wider Sussex Coast, if feasible, including the Eastbourne/South Wealden area.

This system will be supported by general improvements to non-BRT buses and Strategic Mobility Hubs at Falmer, Three Bridges, and on the periphery of Eastbourne. The overall mass transit network and service provision will be designed to provide an integrated network which facilitates seamless journeys across the London to Sussex Coast area and beyond.

Benefits

- Improvement in the **speed, frequency** and **connectivity** of mass transit services
- Better **interchange** and **service quality** at Strategic Mobility Hubs
- Improvement in the **journey experience** with better quality vehicles
- **Significant mode shift** from car to bus

Modelling Results



Package M: London – Sussex Coast Active Travel

Overview

All four Local Transport Authorities in the London to Sussex Coast area have ambitious plans to improve cycling and walking in their areas. This ambition is supported by this study.

The **Active Travel Package** expands on this, delivering improvements to enable reinstatement of the National Cycle Network routes between Crawley and Brighton & Hove and between Crawley and Chichester. This will be complemented by a more direct Avenue Verte, serving international leisure trips.

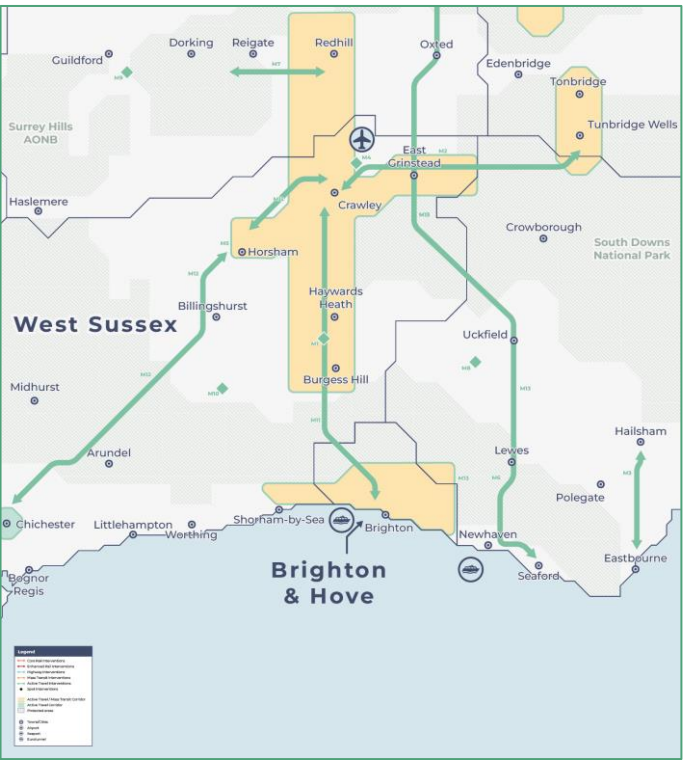
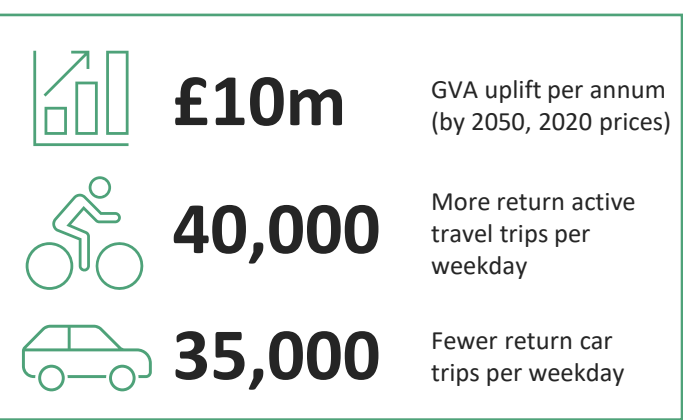
The package also includes continued roll out of regional cycleways in the four Local Transport Authorities. This will involve development of consistent branding and wayfinding and creation of an integrated network with assurance of cycle path quality.

Several highway interventions – including bypasses at Godstone and improvements to the Uckfield bypass – unlock opportunities for pedestrians and cyclists by freeing up more public space in town centres.

Benefits

- Significant **mode shift** from car to active travel, with associated health benefits
- Improvements in **air quality**, particularly in urban parts of the area
- Improvements to the urban and rural public realm in London to Sussex Coast Area, improving **quality of life** and unlocking **regeneration** opportunities

Modelling Results



Package N: London – Sussex Coast Highways

Overview

Components of the London to Sussex Coast highways package have been designed to de-conflict local and longer-distance traffic, and support safety and air quality objectives. They should support (and be supported by) public transport improvements.

This package includes interventions that support access to international gateways (M23 Junction 9), regeneration areas (Crawley Western Link Road), and placemaking (a Godstone bypass and improvements to the Uckfield bypass to reduce the amount of traffic diverting through the town, unlocking public spaces).

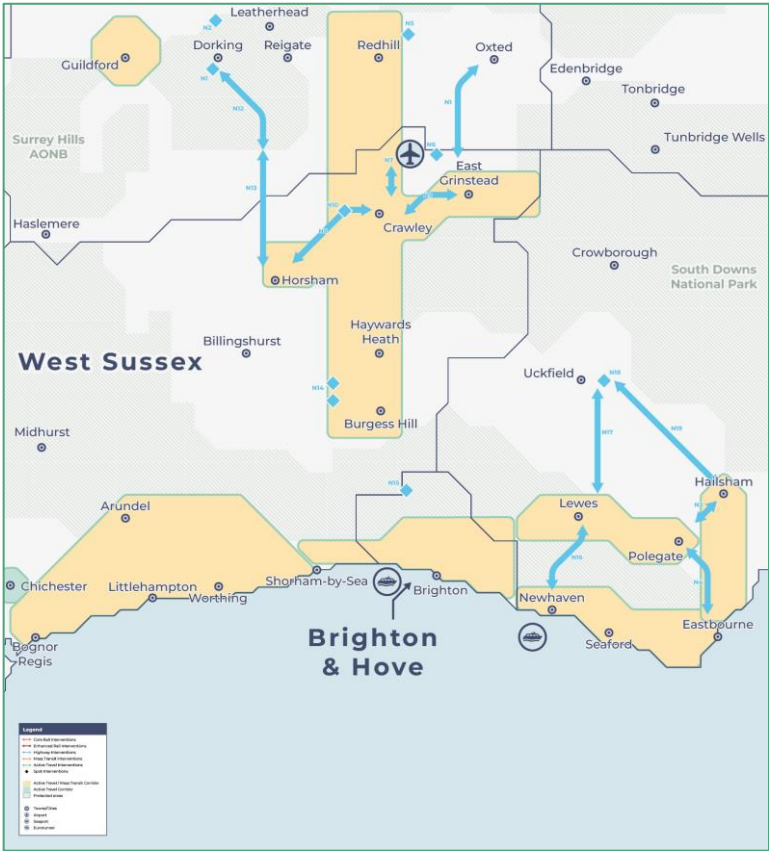
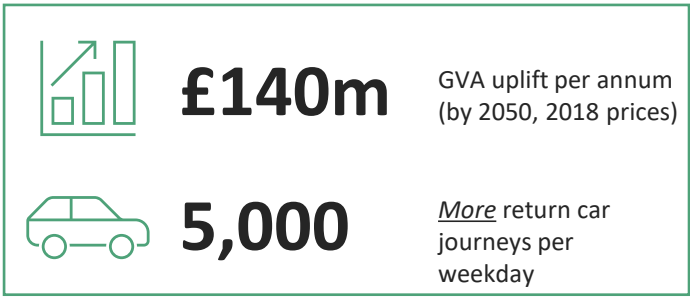
Also included is a new junction on the M23 for Redhill, which could be linked to the A23 and East Surrey Hospital by a new road running near to a nearby aerodrome. This would help relieve pressure on the A217 at Reigate Level Crossing, facilitating more rail services on the North Downs Line.

Several interventions unlock opportunities to reallocate road-space or to create shared road space to active travel and public transport such as A24 Horsham – Leatherhead and East Sussex’s A2270/A2101 MRN Scheme.

Benefits

- Safer highways, notably in urban areas
- A more reliable and resilient highway network
- Improved air quality in urban areas
- Scope to reallocate road space to active travel and public transport

Modelling Results



Packages of Interventions – Wessex Thames

The OAR recommended eight Packages of Interventions to be included in the SPOC. These are listed here and described in detail in the following pages. This details the **scope of the intervention** and summarises its **strategic benefits**.

Core Rail Package

- O1** Western Rail Link to Heathrow
- O2** Southern Rail Link to Heathrow
- O3** Reading to Basingstoke Electrification
- O4** North Downs Line - Electrification
- O5** North Downs Line - Level Crossing Removals
- O6** North Downs Line - Service Level and Capacity Enhancements
- O7** Guildford Station Upgrade
- O8** Redhill Station Upgrade
- O9** Dorking Deepdene Station Upgrade
- O10** South West Main Line / Portsmouth Direct Line - Woking Enhancement Scheme
- O11** South West Main Line / Basingstoke Branch Line - Basingstoke Enhancement Scheme
- O12** Cross Country Service Enhancements
- O13** Portsmouth Direct Line - Line Speed Enhancements
- O14** Portsmouth Direct Line - Buriton Tunnel Upgrade
- O15** South West Main Line - Dynamic Signalling
- O16** Theale Strategic Rail Freight Terminal
- O17** West of England Main Line - Electrification from Basingstoke to Salisbury
- O18** Reading to Waterloo Service Enhancements

Mass Transit

- P1** Basingstoke Mass Rapid Transit
- P2** Blackwater Valley Mass Rapid Transit
- P3** Bracknell/Wokingham Bus Enhancements
- P4** Elmbridge Bus Enhancements
- P5** Epsom/Ewell Bus Enhancements
- P6** Guildford Bus Enhancements
- P7** Slough/Windsor/Maidenhead Area Bus Enhancements
- P8** Newbury/Thatcham Bus Enhancements
- P9** Reading Mass Rapid Transit
- P10** Spelthorne Bus Enhancements
- P11** Woking Bus Enhancements
- P12** A4 Reading - Maidenhead - Slough - London Heathrow Airport Mass Rapid Transit
- P13** A329/B3408 Reading - Bracknell/ Wokingham Mass Rapid Transit
- P14** Winchester Bus Enhancements
- P15** Andover Bus Enhancements
- P16** Runnymede Bus Enhancements
- P17** London Heathrow Airport Bus Access Enhancements
- P18** Berkshire, Hampshire and Surrey Inter-urban Bus Enhancements

Active Travel

- Q1** Berkshire, Hampshire and Surrey Urban and Inter-urban Cycleways

Highways

- R1** M3 Junction 9 (RIS2)
- R2** M3 Junction 9 - Junction 14 Smart Motorway (SMP)
- R3** A404 Bisham Junction (RIS2)
- R4** A3/A247 Ripley South (RIS3 Pipeline)
- R5** A31 Farnham Corridor (LLM)
- R6** New Thames Crossing East of Reading (LLM)
- R7** A320 North Corridor (HIF)
- R8** M4 Junction 10 Safety Enhancements
- R9** M3 Junction 6 - Junction 8 Safety Enhancements
- R10** A3 Guildford Local Traffic Segregation
- R11** A3 Guildford Long Term Solution
- R12** A34 Junction and Safety Enhancements
- R13** A322 and A329(M) Smart Corridor
- R14** A339 Newbury to Basingstoke Safety Enhancements
- R15** M4 Junction 3 to Junction 12 Smart Motorway (SMP)

Package O: Wessex Thames Rail

Overview

TfSE, in collaboration with Network Rail and local stakeholders, have developed a comprehensive package of interventions that will deliver greater capacity and resilience to strategic railways which will translate to a higher number of passenger and freight services to be run across the Wessex Thames area.

This package includes new infrastructure interventions, the largest of which involve establishing new rail links to Heathrow, possibly via interchange Reading in the medium-term.

This package also includes targeted infrastructure enhancements at known bottlenecks along Strategic Rail corridors including Woking, Guildford and Basingstoke. This will translate to more capacity for both passenger and freight services to the Solent Ports.

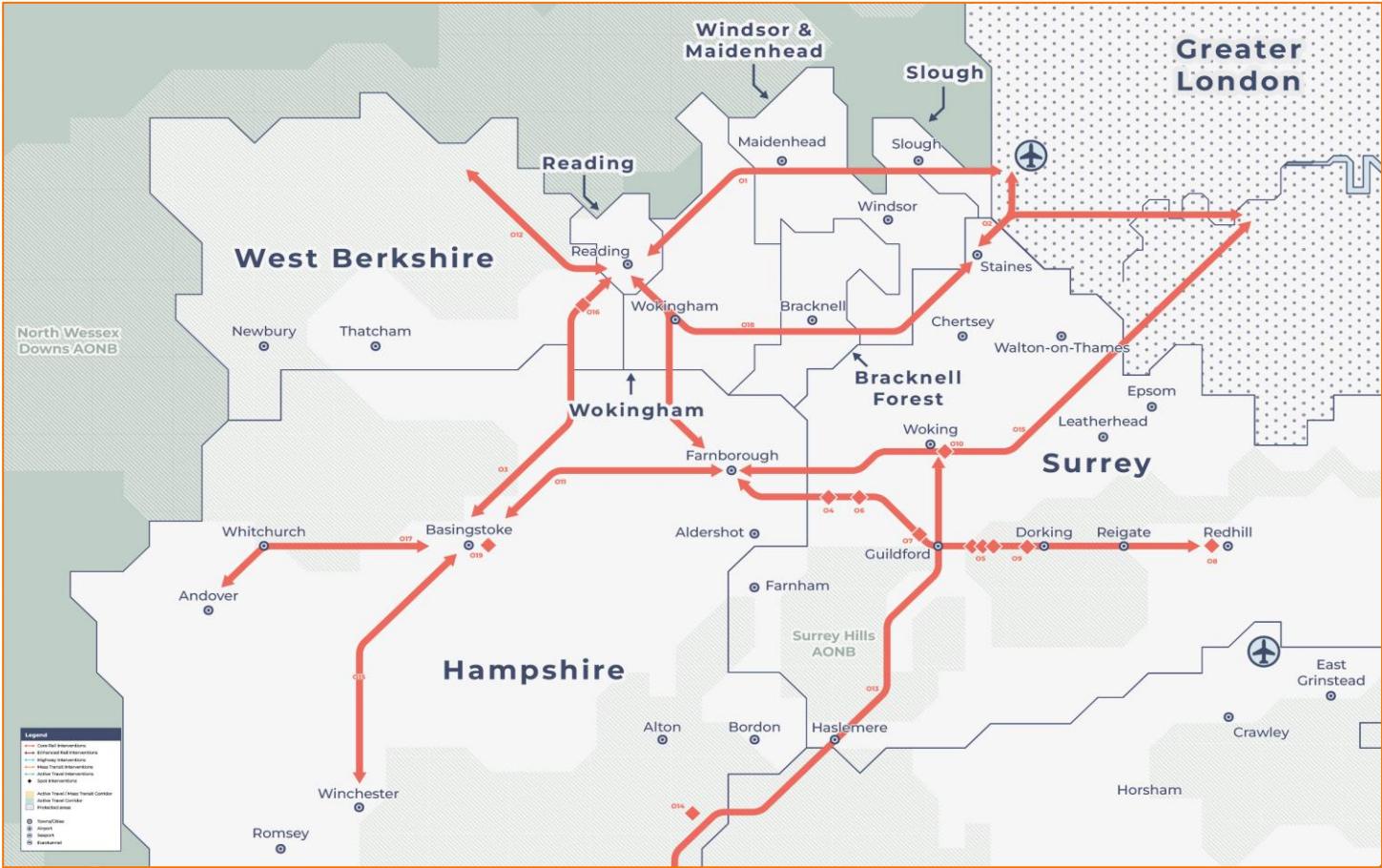
This package delivers a transformational change in orbital rail connectivity, connecting Major Economic Hubs across the area. Additionally, there is a focus on out-of-region connectivity to other prominent regions in Great Britain.

Benefits

- Increased capacity on key corridors
- Increased resilience and reliability
- Faster, more frequent services connecting Major Economic Hubs
- Faster, more frequent services connecting the area to Global Gateways

Modelling Results

	£850m	GVA uplift per annum (by 2050, 2020 prices)
	50,000	More return rail trips per weekday
	5,000	Fewer car journeys per weekday



Package P: Wessex Thames Mass Transit

Overview

TfSE and local stakeholders are committed to providing an alternative to car use in urban centres across the area.

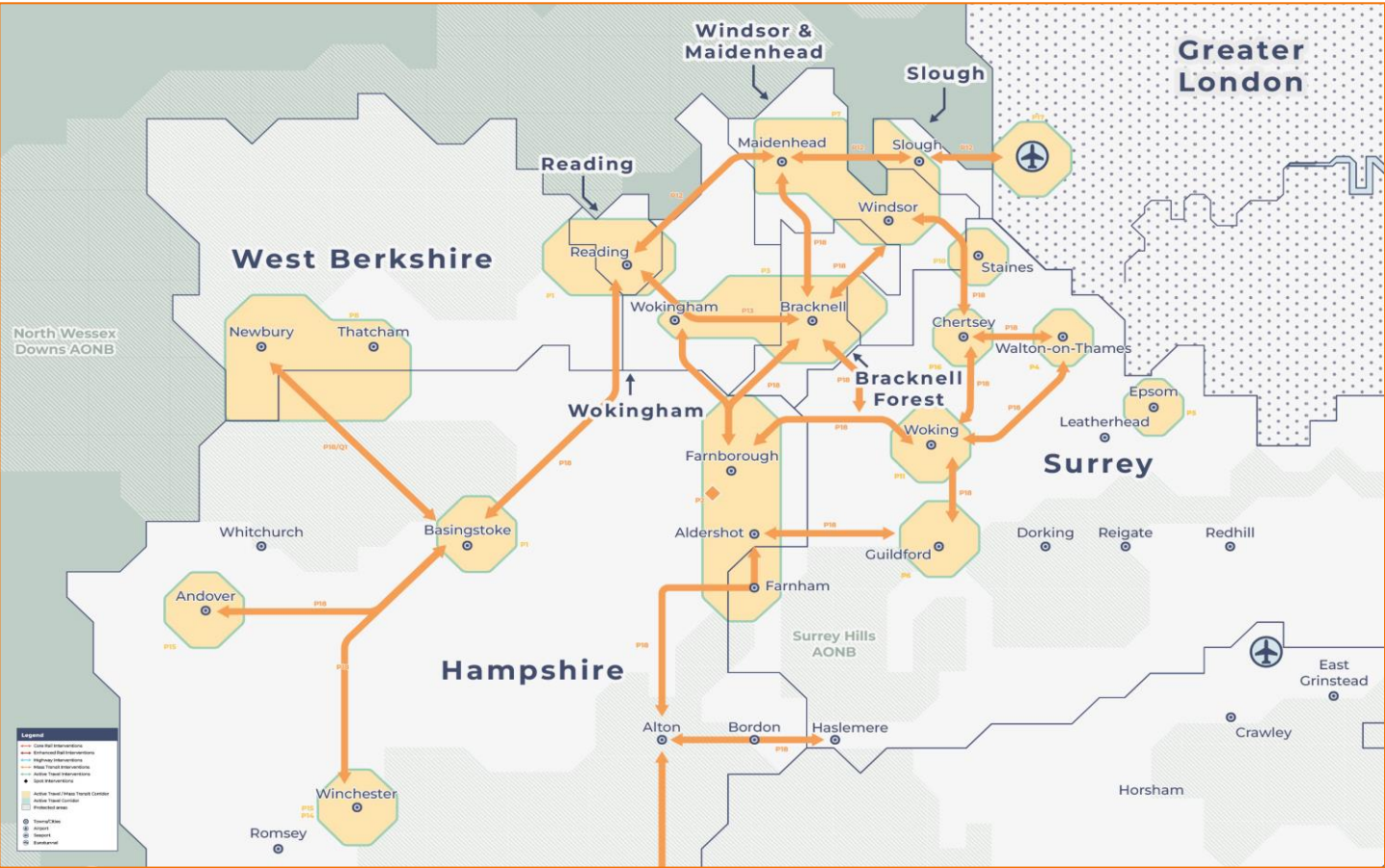
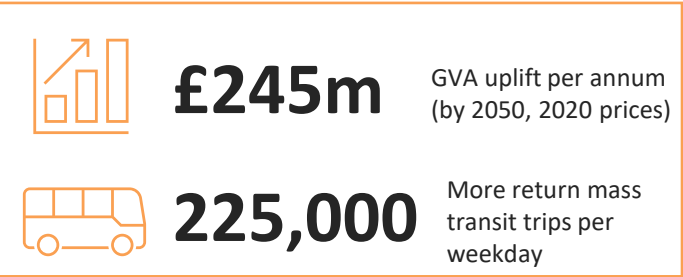
Mass transit options have been considered for Major Economic Hubs across the area. Enhancements include increasing the frequency, operating hours, reliability and catchment of bus services, supported with bus priority infrastructure where appropriate. Corridors with strong existing bus patronage, sufficient density and an appropriate network for bus priority include the Slough-Maidenhead-Windsor corridors, on corridors within Reading and in the Blackwater Valley – Farnham, Aldershot, Farnborough, Frimley, Camberley, Owlsmoor, Sandhurst, Yately and Blackwater.

There is a focus on ensuring Mass Rapid Transit interventions are supported by Strategic Mobility Hubs in Major Economic Hubs to provide an integrated network which facilitates seamless journeys between modes across the area.

Benefits

- Improvement in the speed, frequency and connectivity of mass transit services
- Better interchange and service quality at Strategic Mobility Hubs
- Better service quality
- Significant mode shift from car to bus

Modelling Results



Package Q: Wessex Thames Active Travel

Overview

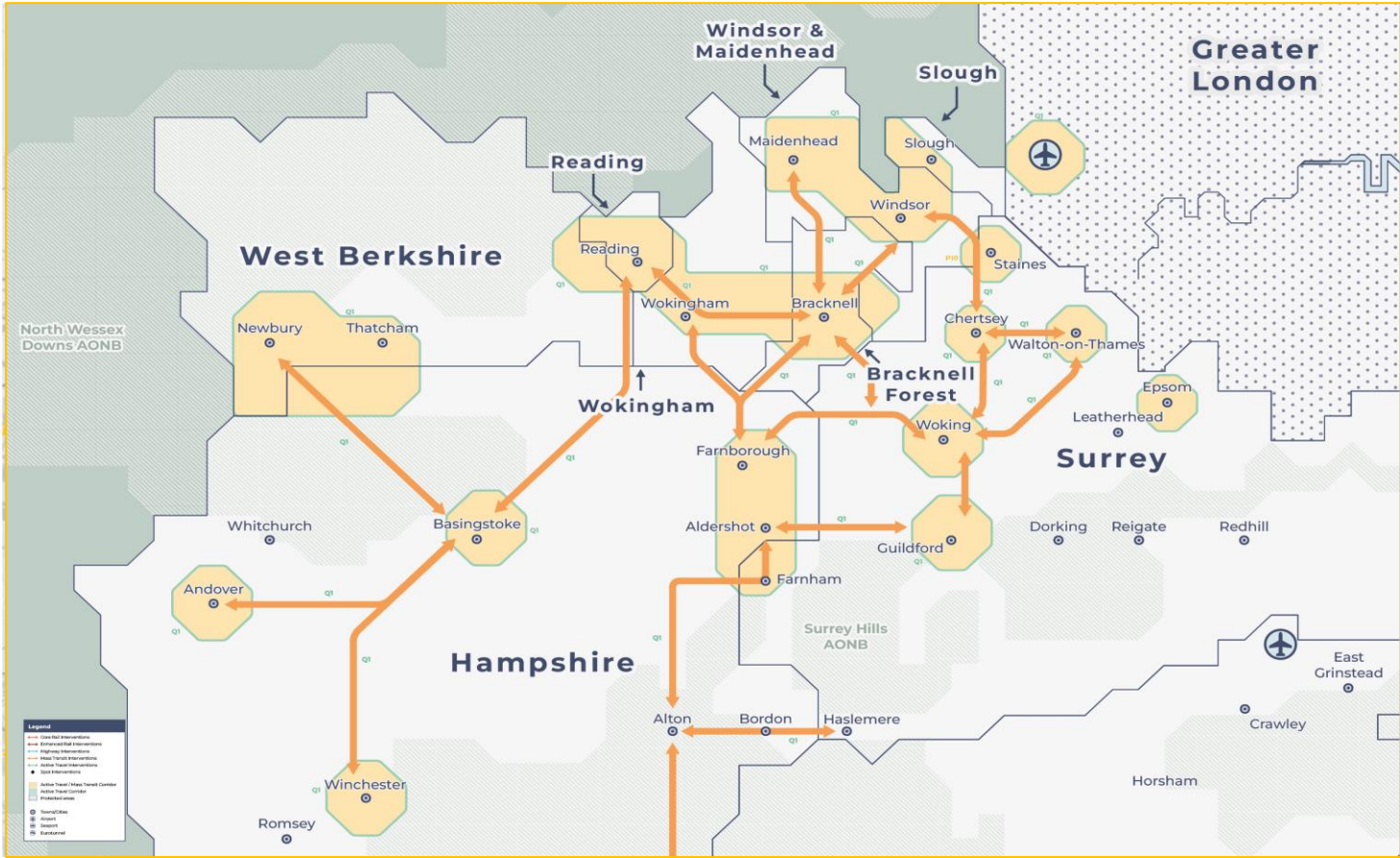
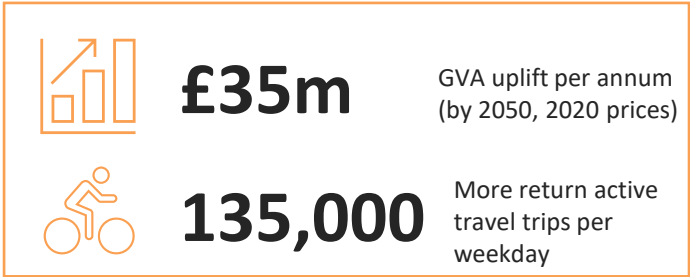
Local Transport Authorities supports the creation of extensive walking and cycling networks that serve the requirements of local residents and connect key destinations within centres such as railway stations, schools, hospitals and promote local placemaking.

For each of the centres and corridors identified previously which stand to benefit from bus service enhancements, priority, and Mass Transit, the opportunity for a series of urban mobility interventions which increase the attractiveness of active travel have been identified. Innovations such as e-bikes now make cycling longer-distances between centres possible. Through providing segregated cycling infrastructure in line with LTN 1/20 where capacity permits, there is opportunity to make these cycle trips safer, more accessible and faster for users. Inter-urban mobility corridors can also support cycling for leisure and other purposes for those who live along or near corridors. Lastly, they can support local placemaking, with new mobility infrastructure acting as the spine which supports a transformation of public places.

Benefits

- Significant mode shift from car to active travel, with associated health benefits
- Improvements in air quality
- Improvements to the urban and rural public realm, improving quality of life and unlocking regeneration opportunities

Modelling Results



Package R: Wessex Thames Highways

Overview

The Wessex Thames highways package delivers targeted improvements which support strategic passenger and freight movements through de-conflicting local and longer-distance traffic, and supports safety and air quality objectives. Many interventions support (and are supported by) public transport improvements.

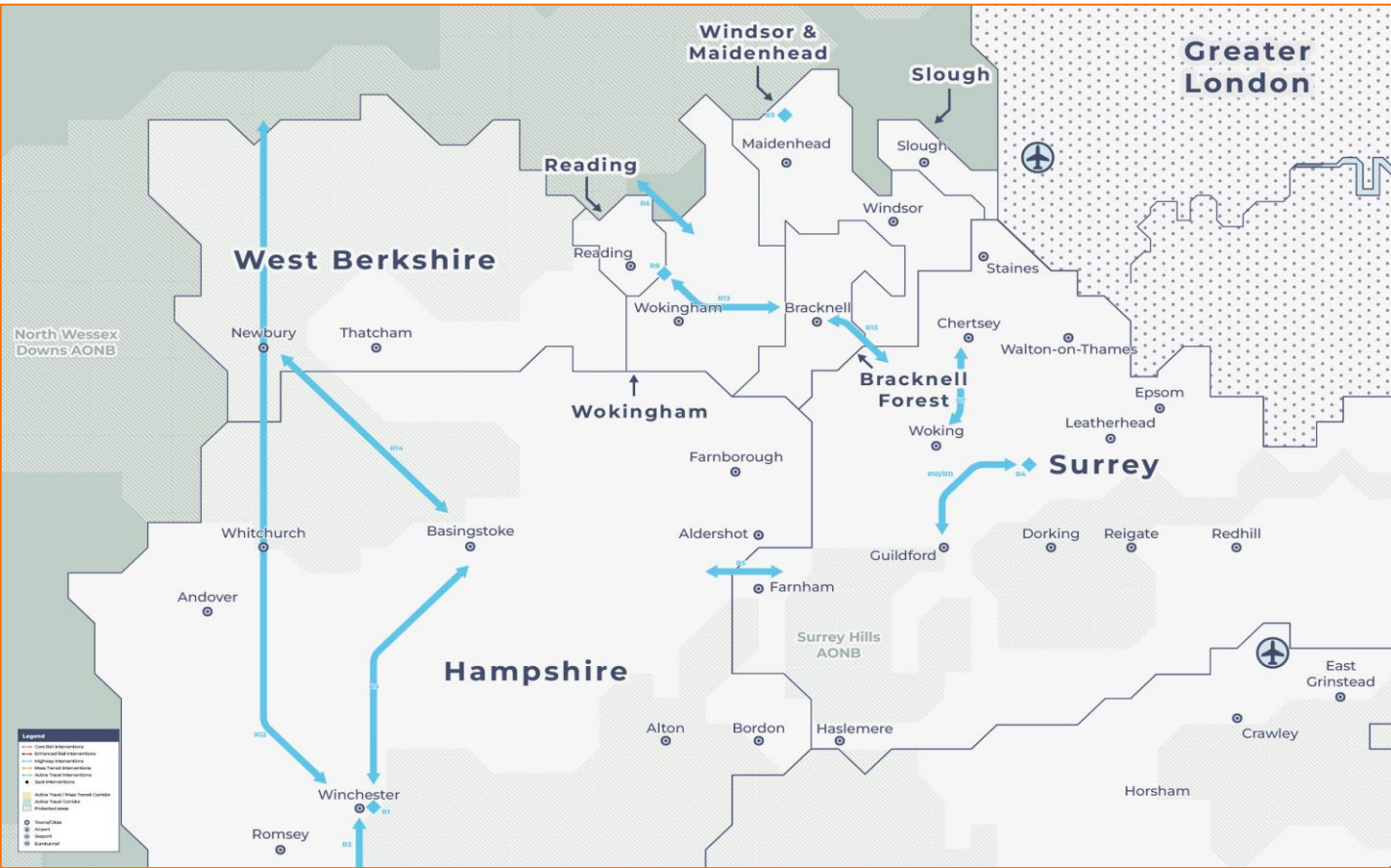
This package includes interventions that support better access to the Solent Ports, a significant contributor to economic growth in the region. These include Smart Motorway enhancements along the M3 and targeted junction enhancements and climber lanes for HGVs and other slower vehicles, where appropriate, on the A34.

This package also includes interventions which support the sustainable regeneration of areas and local placemaking, such as A3 Guildford, the A320 North Corridor and a new Thames River Crossing to the east of Reading. These schemes are designed to unlock opportunities to reallocate road-space to active travel and public transport.

Benefits

- More reliable and resilient highway network
- Safer highways, notably in urban areas
- Improved air quality in urban areas
- Scope to reallocate road space to active travel and public transport

Modelling Results



Packages of Interventions – Kent, Medway and East Sussex

The OAR recommended eight Packages of Interventions to be included in the SPOC. These are listed here and described in detail in the following pages. This details the **scope of the intervention** and summarises its **strategic benefits**.

Core Rail Package	Enhanced Rail Package	Mass Transit	Active Travel	Highways
S1 St Pancras International Domestic High Speed Platform Capacity	T1 High Speed East - Dollands Moor Connection	V1 Fastrack Expansion - Swanscombe Peninsula	W1 Medway Active Travel Enhancements	X1 M2 Junction 5 (RIS2)
S2 London Victoria Capacity Enhancements - Signalling and Digital Rail	T2 High Speed 1 / Marsh Link - Hastings, Bexhill and Eastbourne Upgrade	V2 Fastrack Expansion - Northfleet to Gravesend	W2 Medway Active Travel - Chatham to Medway City Estate River Crossing	X2 A2 Brenley Corner Enhancements (RIS3 Pipeline)
S3 Bakerloo Line Extension	U1 High Speed 1 - Link to Medway (Chatham)	V3 Fastrack Expansion - Medway	W3 Kent Urban Cycleways	X3 A2 Dover Access (Lydden - Whitfield Dualling) (RIS3 Pipeline)
S4 South Eastern Main Line - Chislehurst to Tonbridge Capacity Enhancements	U2 High Speed 1 - Additional Services to West Coast Main Line	V4 Medway Mass Transit	W4 Kent Inter-urban Cycleways	X4 A21 Safety Enhancements (RIS3 Pipeline, brought forward to RP2)
S5 London Victoria to Shortlands Capacity Enhancements		V5 Medway Mass Transit - Extension to Hoo Peninsula	W5 Faversham - Canterbury - Ashford - Hastings National Cycle Network Enhancements	X5 A229 Bluebell Hill Junction Upgrades (LLM)
S6 Hundred of Hoo Railway - Hoo Peninsula Passenger Rail Services		V6 Medway Mass Transit - Extension to Maidstone	W6 Tonbridge - Maidstone National Cycle Network Enhancements	X6 A28 Birchington, Acol and Westgate-on-Sea Relief Road (MRN)
S7 North Kent Line / Hundred of Hoo Railway - Rail Chord		V7 Medway Mass Transit - Chatham to Medway City Estate New Bridge	W7 Sevenoaks - Maidstone - Sittingbourne National Cycle Network Enhancements	X7 A228 Colts Hill Strategic Link (MRN Pipeline)
S8 Thameslink - Extension to Maidstone and Ashford		V8 Medway Mass Transit - Chatham to Medway City Estate Water Taxi	W8 Bromley - Sevenoaks - Royal Tunbridge Wells National Cycle Network Enhancements	X8 Digital Operations Stack and Brook
S9 North Kent Line - Service Enhancements		V9 Maidstone Bus Enhancements	W9 East Sussex Local Cycleways	X9 A20 Enhancements for Operations Stack & Brook
S10 North Kent Line / Chatham Main Line - Line Speed Enhancements		V10 Dover Bus Rapid Transit	W10 East Sussex Inter-urban Cycleways	X10 Kent Lorry Parks (Long Term Solution)
S11 Otterpool Park/Westenhanger Station Additional Platform		V11 Sittingbourne Bus Enhancements	W11 Royal Tunbridge Wells - Hastings National Cycle Network Enhancements	X11 Kent Freight Diversification
S12 Integrated Maidstone Stations		V12 Sevenoaks Bus Enhancements	W12 Canterbury Placemaking and Demand Management Measures	X12 Kent Freight Consolidation Centres
S13 Dartford Station Remodelling/Relocation		V13 Thanet Bus Enhancements	W13 Medway Placemaking and Demand Management Measures	X13 M2 Junction 4 - Junction 7 Smart Motorway (RIS3 Pipeline/SMP)
S14 Canterbury Interchange Rail Chord		V14 Folkestone Bus Enhancements	W14 Dover Placemaking and Demand Management Measures	X14 A2 Canterbury Junctions Enhancements
S15 New Station - Canterbury Interchange		V15 Ashford Bus Enhancements		X15 M20 Junction 3 - Junction 5 Smart Motorway
S16 New Strood Rail Interchange		V16 Royal Tunbridge Wells/Tonbridge Bus Enhancements		X16 M20 Junction 6 Sandling Interchange Enhancements
S17 Rail Freight Gauge Clearance Enhancements		V17 Thames Gateway/Gravesham Bus Enhancements		X17 M25 Junction 1a Enhancements
S18 Crossrail - Extension from Abbey Wood to Dartford		V18 Canterbury/Whitstable/Herne Bay Bus Enhancements		X18 M25 Junction 5 Enhancements
S19 High Speed 1 / Waterloo Connection Chord - Ebbsfleet Southern Rail Access		V19 Ferry Crossings - New Sheerness to Hoo Peninsula Service		X19 Herne Relief Road
S20 Ebbsfleet International (Northfleet Connection)		V20 Ferry Crossings - Sheerness to Chatham/Medway City Estate/Strood Enhancements		X20 Canterbury East Relief Road
S21 Ebbsfleet International (Swanscombe Connection)		V21 Ferry Crossings - Harty to Whitstable Enhancements		X21 New Maidstone South East Relief Road
S22 Gatwick - Kent Service Enhancements		V22 Ferry Crossings - Harty to Oare Enhancements		X22 A228 Medway Valley Enhancements
		V23 Ferry Crossings - Ebbsfleet - Tilbury Enhancements		X23 A228 Hoo Peninsula Enhancements
		V24 Inland Waterway Freight Enhancements		X24 Strood Riverside Highway Enhancement and Bus Lane
				X25 A259 Level Crossing Removals
				X26 A21 Kippings Cross to Lamberhurst Dualling and Firmwell and Hurst Green Bypasses
				X27 Hastings and Bexhill Distributor Roads
				Y1 Lower Thames Crossing (costings for Kent-side only)

Package S: Classic Rail Package

Overview

This package adds capacity to the classic rail network in the South East Area. It targets the areas of Kent that lie closest to London.

Areas further away from London will be served by High Speed interventions described in the following slide.

The package includes several interventions that add capacity through additional services (e.g. Crossrail to Ebbsfleet, Thameslink to Maidstone) as well as interventions that materially increase track and platform capacity (e.g. through capacity released by the Bakerloo Line extension).

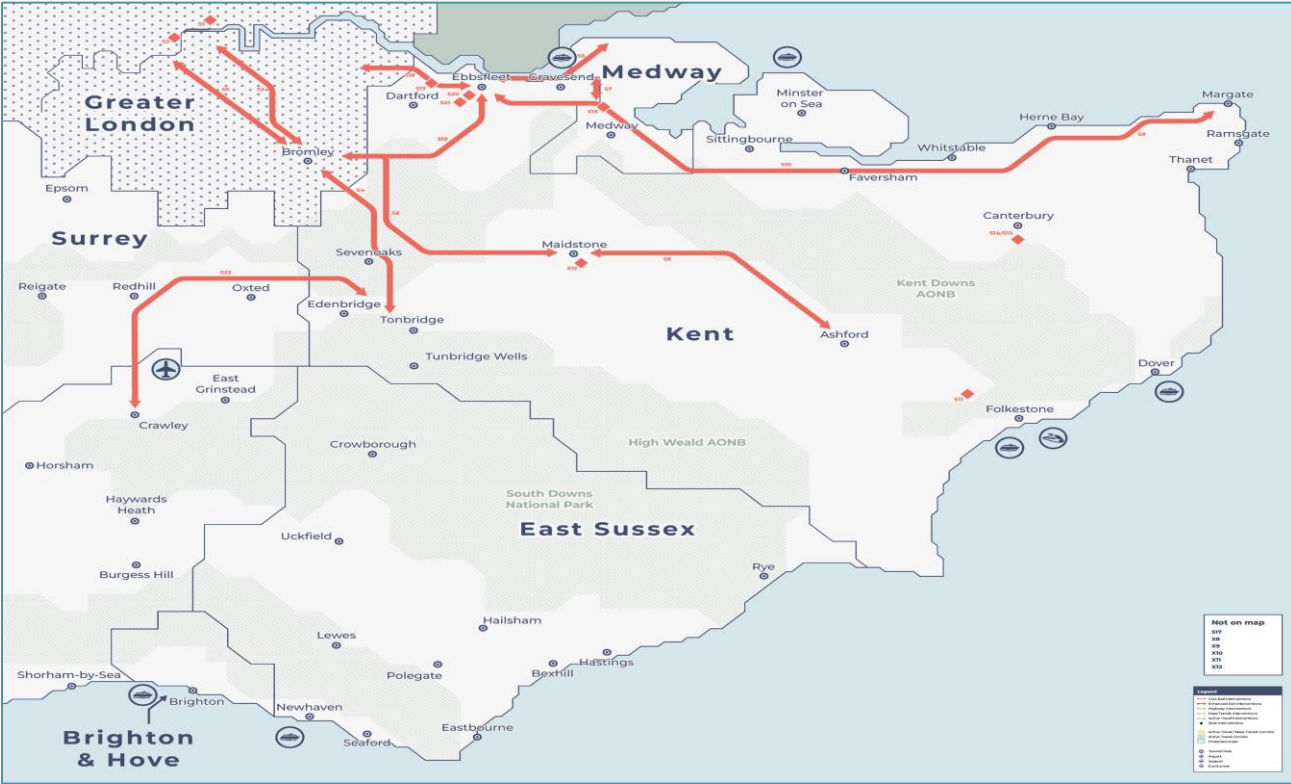
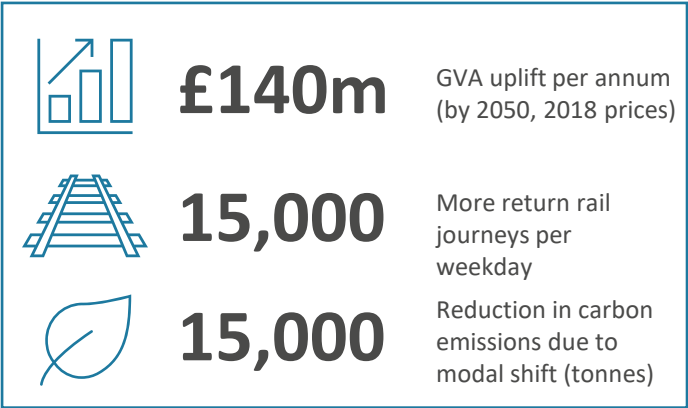
It also includes interventions that improve the integration of the rail system – notably at Ebbsfleet, Canterbury, Maidstone, and Strood – where several railway lines cross each other without providing easy interchange from one railway to another.

It also includes the introduction of passenger rail services on the Grain Branch and direct services between Gatwick Airport and Mid/East Kent.

Benefits

- **Capacity** enhancements at key bottlenecks on radial corridors
- Improvements in **service frequencies**, especially for urban metro services
- Better **interchange** between rail services and other modes
- Better rail access for new/growing areas
- Large **reduction in carbon emissions**

Modelling Results



Packages T & U: High Speed Rail Packages

Overview

These packages includes some of the more radical interventions in the long list for this study. They are based around expanding the domestic high speed service to deliver transformational improvements in journey times to Kent, Medway, and East Sussex.

The **East Package** would deliver direct High Speed services from London to Eastbourne via Ashford and Hastings, reducing journey times from Hastings/Bexhill to London by 20 minutes. It would also deliver faster journey times to Dover using a connection to HS1 at Dollands Moor, and an increase in the frequency of HS1 services to Ashford

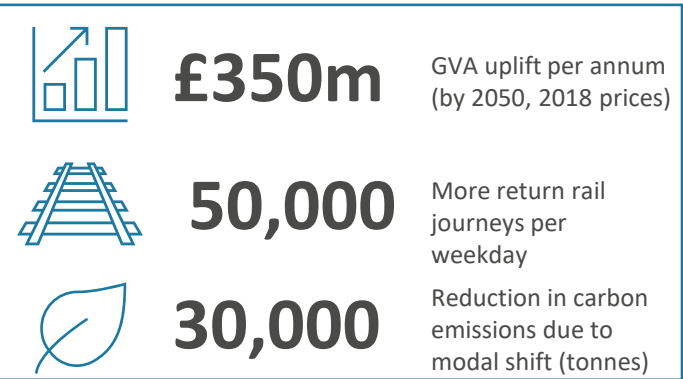
The **North Package** aims to deliver significant improvements in connectivity to North Kent to ensure coastal communities in Medway, Swale, Canterbury, and Thanet are as well served as other parts of Kent. Several high-level options have been considered, ranging from a new link between HS1 and Medway to improvements to the North Kent Line and Rochester Bridge. The modelling represented for this package reflects one of the more interventionalist options.

There are also opportunities to replace domestic service rolling stock on HS1 and expand the fleet to capitalise on network enhancements.

Benefits

- Transformational improvements in journey times between London (and the rest of the UK) and coastal Kent / Medway / East Sussex
- Potentially transformational improvements in capacity between London and coastal Kent/Medway/East Sussex, depending on which options are taken forward
- Large reduction in carbon emissions

Modelling Results (additional to core package)



Package V: Mass Transit Package

Overview

This package delivers improvements to bus services in Kent, Medway, and East Sussex.

The scope for improvements and expansion are particularly strong in the North Kent and Medway areas, where high levels of growth and regeneration are expected. A step change in infrastructure and service provision should be viable thanks to the underlying demographics in this area.

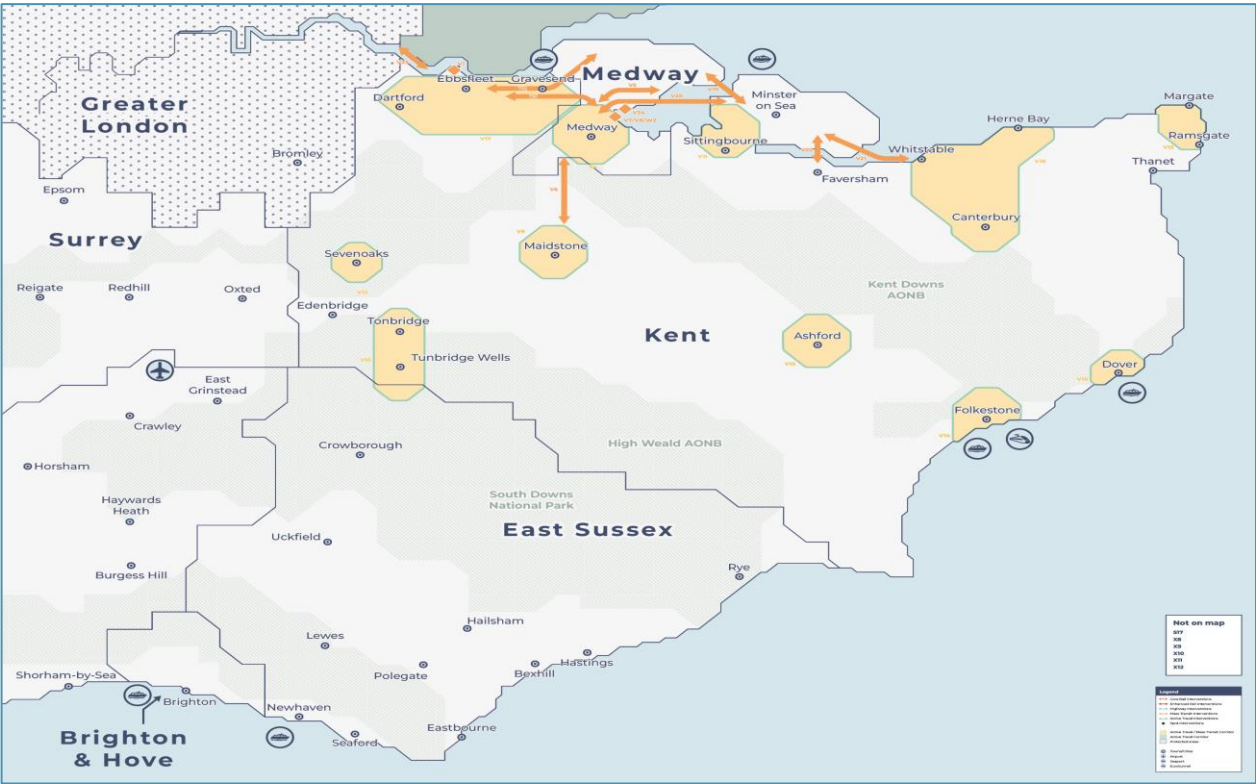
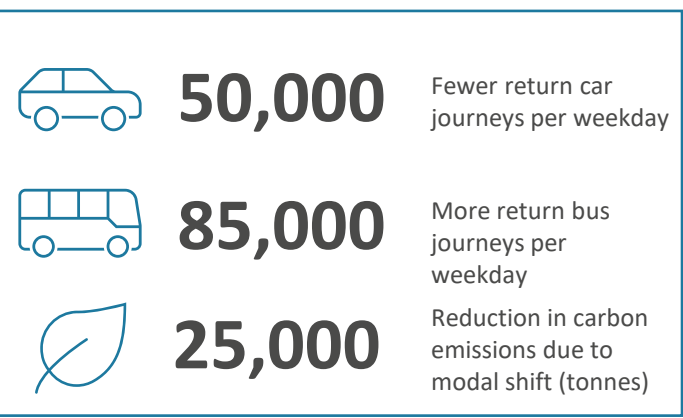
This package includes an opportunity to create a new Medway River Crossing to enable faster journeys between the north and south of this conurbation by bus/mass transit and active modes (e.g. walk, wheel, cycle and microtransit such as bike hire and e-scooters).

This intervention assumes all other conventional bus services in the Kent, Medway and East Sussex area experience general improvements in journey times, frequencies, and service quality.

Benefits

- Significant improvements in the quality, speed, and frequency of bus services in Kent, Medway, and East Sussex
- Better **interchange** between bus and rail
- Improvements in **connectivity** between **islands and peninsulas** in North Kent
- **Modal shift** from car to bus (and in some instances, ferries)

Modelling Results



Package W: Active Travel Package

Overview

This package delivers general uplift in the quality of walking and cycling infrastructure, particularly in urban areas.

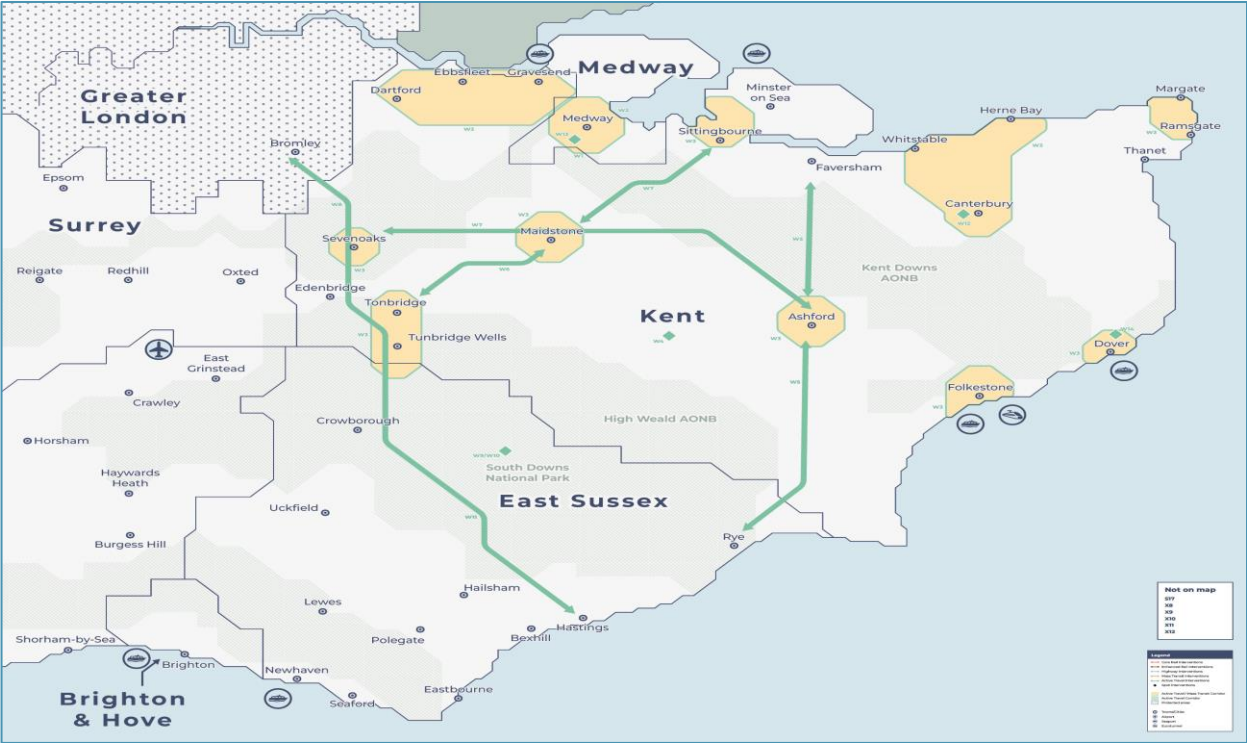
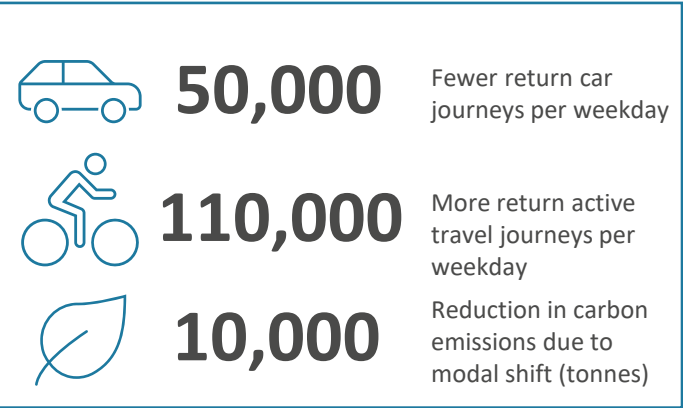
Kent County Council has identified inter-urban corridors on the cycling network and identified several gaps in national and regional cycle networks that many stakeholders wish to see addressed. Urban areas are identified with most need and potential for investment.

Similarly, East Sussex County Council has developed a Local Walking and Cycling Infrastructure Plan which provides details of network of routes for its main towns including Bexhill, Hastings, Battle and Rye.

Benefits

- Material improvements to the urban realm of urban areas, unlocking active travel and regeneration opportunities
- Improvements in **air quality** in Brighton and Hove
- Significant **mode shift** from car to active travel, with associated health benefits

Modelling Results



Packages X & Y: Highways Packages

Overview

The Kent, Medway and East Sussex highways package delivers the Kent Bifurcation strategy – which strengthens the resilience of Channel Port access corridors – and improved connectivity for coastal areas.

This package includes several interventions that aim to improve the resilience of the M2/A2 and M20/A20 corridors, improve the connectivity of Coastal East Sussex (via the A21 corridor), and relieve congestion in city and town centres.

Many of these interventions will enable housing growth and/or improve public transport and active travel facilities in urban areas. In this sense, highways should be viewed as multi-modal interventions.

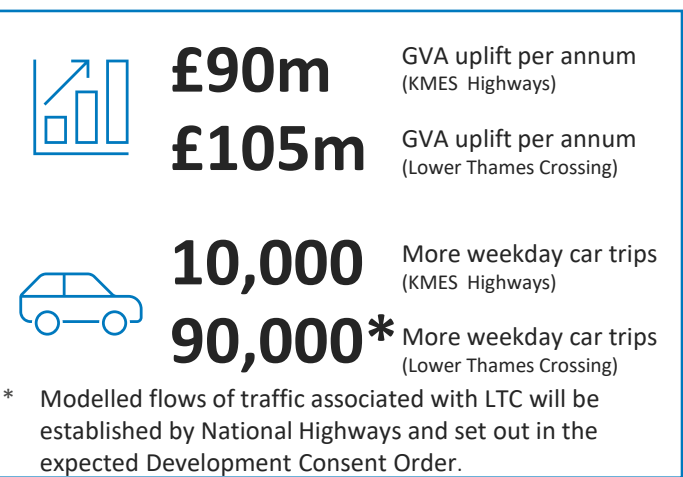
Any highway intervention on this corridor should be designed to de-conflict local and longer-distance traffic, safety and air quality. They should support (and be supported by) public transport improvements.

When modelled in isolation, these interventions are projected to increase carbon emissions. This effect will diminish if this package is combined with Global Policy and other mode interventions.

Benefits

- **More resilient** corridors serving the key Channel Ports
- **Safer highways**, notably in urban areas
- **Faster**, more **reliable highway journeys** between Brighton and South Hampshire
- **Improved air quality** in urban areas
- Scope to **reallocate road space to active travel and public transport**

Modelling Results



Global Policy Packages

Overview

In addition to the location specific interventions, the Area Studies also identified a list of policy interventions that, in general, would apply across a large area (if not all) of South East England. These are known as Global Policy Interventions.

The Global Policy Interventions have been assessed separately to the Area Specific interventions by using a consistent framework for the whole of the South East to reduce a long list of typologies to the short list of proposed interventions.

In total, 57 interventions were assessed by a:

- **Strategic Assessment:** Each intervention was assessed against the 15 Priorities included in TfSE's Transport Strategy for South East England. These priorities were grouped and are presented on the following page.
- **Economic Assessment:** Each intervention was against the 18 Criteria included in the DfT's Early Assessment and Sifting Tool (EAST).

The best performing interventions were grouped into typologies and are listed below.

Approach

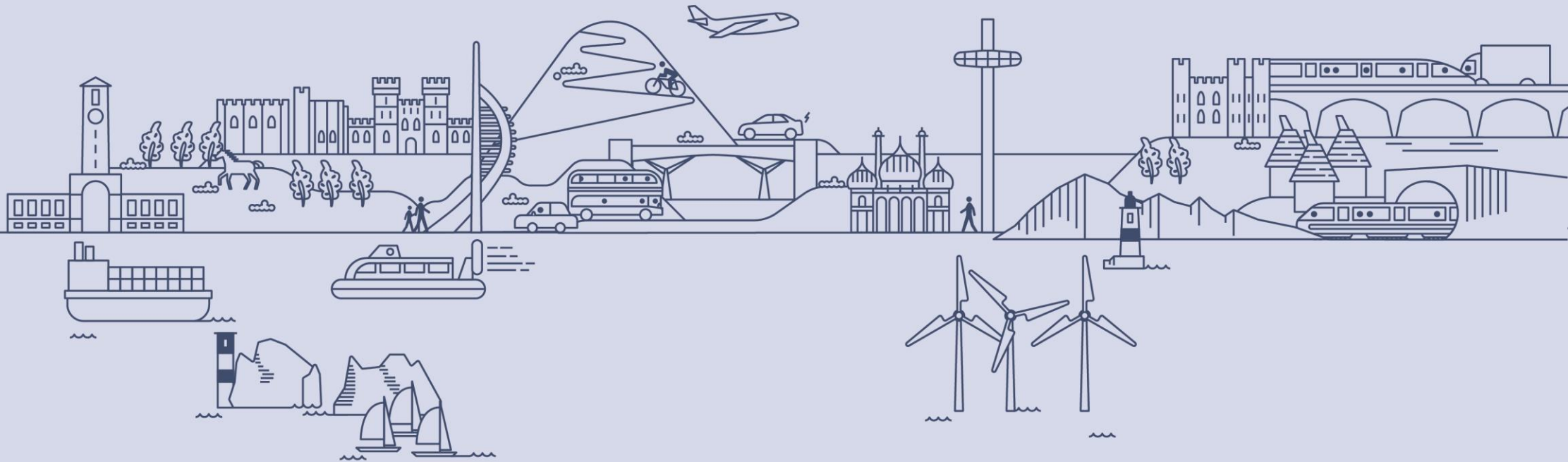
They were sourced from:

- **Area Study Working Groups** – the Steering Groups formed of representatives from Local Transport Authorities, infrastructure providers, and other key stakeholders.
- **Area Study Forums** – workshops attended by a much larger group of stakeholders representing operators, user groups, planning authorities, environmental groups, and others with an interest in each area.
- **TfSE's Future Mobility Study** – this work was commissioned in parallel with the earlier stages of the Area Study Programme and has produced a Draft Final Report and short list of recommended interventions.
- **TfSE's Freight and International Gateways Study** – which has also produced a short list of recommended interventions that cut across the whole of the South East.
- **Client and Project Teams** – capturing other relevant interventions

Short Listed Global Policy Interventions

The Global Policy Packages are:

1. **Decarbonisation:** This delivers a faster trajectory towards net-zero than current trends are expected to yield.
2. **Public Transport Fares:** This reverses the real terms increase in the cost of public transport compared to motoring.
3. **Road User Charging:** This assumes the UK government develops a national road user charging system to replace funding currently raised from fuel duty.
4. **New Mobility:** This reflects the potential for new mobility (e.g., electric bikes) to boost active travel.
5. **Virtual Living:** The pandemic has shown how virtual working can help reduce demand for transport services.
6. **Integration and Access:** This delivers improvements in transport integration, and accessibility across and between all modes of transport. It also supports better integration between transport and spatial planning.



Appendix B: Delivery Plan Summary Table

Summary Delivery Plan

Overview

This Appendix provides a summary of the delivery plan for the interventions contained with the Strategic Investment Plan.

The first table contains interventions that are in existing programmes are presented in the following order:

- National Highways led interventions on the Strategic Road Network
 - Road Investment Strategy 2: 2020 – 2025 schemes
 - Road Investment Plan 3 Pipeline schemes
 - Smart Motorways Programme
- Local Authority led interventions, with strategic prioritisation and programme management provided by TfSE
 - Large Local Major schemes
 - Large Local Major schemes pipeline
 - Major Road Network schemes
 - Major Road Network schemes pipeline
- Local Authority led interventions, supported by TfSE
 - Housing Infrastructure Fund schemes

The second table presents global package interventions. These are applicable across the whole region, led by multiple partners, or will require national delivery. As such, their costs are not known and require ongoing planning and delivery.

The third and final table presents the place-based packages of interventions. Interventions are grouped by TfSE sub-area and package.

Table information

Implementation timeframe

Interventions have been phased into one of three timeframes, indicating when the intervention will be live or complete:

- Short-Term: within the remaining years of the 2020s
- Medium-Term: the 2030s
- Long-Term: the 2040s

Costs

All costs are presented at a package level. The two numbers presented are:

- Capital costs of construction
- Annual capital costs for maintenance and renewals

They are estimates, often high-level, based on either published figures or comprising “bottom up” unit cost assumptions.

All costs are mid-price estimates in 2020 prices. All intervention costs will be subject to further assessment as and when interventions are brought forward for scheme and business case development. Assessment will need to be proportionate to the stage of scheme development and adhere to relevant guidance

Capital costs of construction are summed for interventions that are within the TfSE area and not yet being implemented.

Project stage

This refers to an intervention’s status or stage of development that it has reached and cleared. Typically, this aligns to the level of business case already developed. Stages include:

- Ongoing;
- Pre-Strategic Outline Business Case (Pre-SOBC): yet to develop a business case;
- Strategic Outline Business Case (SOBC);
- Outline Business Case (OBC);
- Full Business Case (FBC); and
- Implementation/Implemented: under delivery or recently completed.

Summary Delivery Plan

Next steps

This identifies the stage of development the intervention needs to enter or complete next in order to progress. Again, this typically refers to a relevant business case stage using similar terminology as for the project stage. It is recognised that different scheme promoters and funding bodies have different terminology, and hence it is noted that it might be an equivalent stage of business case. An intervention may be at such an early stage of development that a feasibility study is required; or conversely, very well developed and seeking planning and delivery powers or consent, or already being delivered. Next steps referred to in the tables include:

- Feasibility Study;
- SOBC (or equivalent);
- OBC (or equivalent);
- Planning Permission / Powers / Consents;
- FBC (or equivalent); and
- Ongoing / Delivery.

Scheme promoter

This refers to the single or potential multiple promoters of each intervention. Options identified, with the references used in each table, include:

- Network Rail (i) – for interventions on the rail network;
- National Highways (ii) – for interventions on the Strategic Road Network;
- Transport for the South East (iii) – reflecting a role that TfSE could hold to help accelerate the delivery of the programme and derive better outcomes; and
- Local Transport Authorities (iv) – for interventions on local highways networks and other public rights of way.

In practice it is recognised that there are other likely scheme promoters (e.g. High Speed 1 Ltd. for interventions on the High Speed 1 network; Sustrans for the National Cycle Network, Local Planning Authorities, and the private sector).

Delivery Partners

Similar to identifying the scheme promoter, there can be many delivery partners. The key partners have been identified and include parties who will be required to make or could make a material contribution to the planning,

funding, and delivery of an intervention. Options identified, with the references used in each table, include:

- Department for Transport (or other central government departments) (1);
- Network Rail (2);
- National Highways (3);
- Active Travel England (4);
- TfSE (5);
- Local authorities (6);
- Transport operators (7);
- Other private sector organisations (8); and
- Sustrans (9)

Potential TfSE role

Ways in which TfSE can lead aspects and support planning and delivery of the programme are identified. Options identified, with the references used in each table, include:

- Programme Management (A);
- Pre-feasibility Work & Funding (B);
- (Joint) Scheme Promoter (C);
- Business Case & Scheme Development & Funding (D);
- Use of Analytical Framework (E);
- Advocacy & Securing Funding (F);
- Procurement & Sourcing (G);
- Resource Capacity & Capability Funding (H)

Summary Delivery Plan

Table A.1: Existing and committed programmes

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
Road Investment Strategy 2 schemes (£690m / £55m p.a.)							
I1	M27 Junction 8	Short	Implementation	(Ongoing) Delivery	ii	1, 3, 6, 8	F
I2	A31 Ringwood	Short	Implementation	(Ongoing) Delivery	ii	1, 3, 6, 8	F
I5	A27 East of Lewes Package	Short	Implementation	(Ongoing) Delivery	ii	1, 3, 6, 8	F
R3	A404 Bisham Junction	Short	Implementation	(Ongoing) Delivery	ii	1, 3, 6, 8	F
I3	A27 Arundel Bypass	Short	OBC	Powers / Consents	ii	1, 3, 5, 6, 8	F
R1	M3 Junction 9	Short	OBC	Powers / Consents	ii	1, 3, 5, 6, 8	F
I4	A27 Worthing and Lancing Improvement	Short	SOBC	OBC	ii	1, 3, 5, 6, 8	F
X1	M2 Junction 5	Short	SOBC	FBC	ii	1, 3, 5, 6, 8	F
Road Investment Strategy 3 Pipeline schemes (£3,900m / £280m p.a.)							
Y1	Lower Thames Crossing (costings for Kent-side only)	Medium	OBC	Powers / Consents, FBC	ii	1, 3, 5, 6, 8	F
X13	M2 Junction 4 - Junction 7 Smart Motorway (RIS3 Pipeline / SMP)	Short	SOBC	Feasibility Study	ii	1, 3, 5, 6, 8	F
I6	Southampton Access (M27 Junction 2 and Junction 3)	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 5, 6, 8	B, F
I7	A27 Lewes - Polegate	Short	Pre-SOBC	SOBC	ii	1, 3, 5, 6, 8	B, F
I8	A27 Chichester Improvements	Medium	Pre-SOBC	SOBC	ii	1, 3, 5, 6, 8	B, F
R4	A3/A247 Ripley South	Short	Pre-SOBC	SOBC	ii	1, 3, 5, 6, 8	B, F

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
X2	A2 Brenley Corner Enhancements	Short	Pre-SOBC	SOBC	ii	1, 3, 5, 6, 8	B, F
X3	A2 Dover Access	Short	Pre-SOBC	Feasibility Study	ii	1, 3, 5, 6, 8	B, F
X4	A21 Safety Enhancements (being brought forward to RP2)	Short	Pre-SOBC	Feasibility Study	ii	1, 3, 5, 6, 8	B, F
Smart Motorways Programme (£350m / £30m p.a.)							
R2	M3 Junction 9 – Junction 14 Smart Motorway	Short	Implementation	Paused	ii	1, 3, 6, 8	F
R15	M4 Junction 3 - Junction 12 Smart Motorway	Short	Implementation	(Ongoing) Delivery	ii	1, 3, 6, 8	F
X15	M20 Junction 3 - Junction 5 Smart Motorway	Medium	Implemented	(Ongoing) Delivery	ii	1, 3, 6, 8	N/A
X13	M2 Junction 4 - Junction 7 Smart Motorway	Short	SOBC	Feasibility Study	ii	1, 3, 5, 6, 8	F
Major Road Network Schemes (£250m / £15m p.a.)							
I14	A259 Bognor Regis to Littlehampton Enhancement	Short	OBC	Powers / Consents, FBC	iv	1, 4, 5, 6, 8	A, D, F, H
X6	A28 Birchington, Acol and Westgate-on-Sea Relief Road	Short	OBC	Powers / Consents, FBC	iv	1, 4, 5, 6, 8	A, D, F, H
I17	A259 (King's Road) Seafront Highway Structures Renewal Programme	Short	OBC	Powers / Consents, FBC	iv	1, 4, 5, 6, 8	A, D, F, H
N3a	A22 Corridor Package	Short	OBC	Powers / Consents, FBC	iv	1, 4, 5, 6, 8	A, D, F, H
I12	Northam Rail Bridge Replacement and Enhancement	Short	SOBC	OBC	iv	1, 4, 5, 6, 8	A, D, F, H
I15	A259 South Coast Road Corridor - Eastbourne to Brighton	Short	SOBC	OBC	iv	1, 3, 4, 5, 6, 8, 9	A, D, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
Major Road Network Scheme Pipeline (£700m / £55m p.a.)							
N3b	A22 Corridor - Hailsham to Uckfield	Short	OBC	/ Powers / Consents, FBC	iv	1, 5, 6, 8	A, F
I16	A259 Chichester to Bognor Regis Enhancement	Short	Pre-SOBC	SOBC	iv	1, 2, 4, 5, 6, 7, 8	A, B, D, F, H
N2	A24/A243 Knoll Roundabout and M25 J9A	Medium	Pre-SOBC	SOBC	iv	1, 3, 5, 6, 8	A, B, D, F, H
N4	A2270/A2101 Corridor Movement and Access Package	Short	Pre-SOBC	SOBC	iv	1, 5, 6, 8	A, B, D, F, H
X7	A228 Colts Hill Strategic Link	Medium	Pre-SOBC	SOBC	iv	1, 5, 6, 8	A, B, D, F, H
Large Local Major Schemes (£800m / £60m p.a.)							
R5	A31 Farnham Corridor	Short	OBC	Powers / Consents, FBC	iv	1, 5, 6, 8	A, F
I11	Portsmouth City Centre Road	Short	SOBC	OBC	iv	1, 4, 5, 6, 8	A, D, F, H
I9	A326 Capacity Enhancements	Short	SOBC	OBC	iv	1, 5, 6, 8	A, D, F, H
X5	A229 Bluebell Hill Junction Upgrades	Short	SOBC	OBC	iv	1, 3, 5, 6, 8	A, D, F, H
I10	West Quay Realignment	Short	Pre-SOBC	SOBC	iv	1, 5, 6, 8	A, B, D, F, H
R6	New Thames Crossing East of Reading	Long	Pre-SOBC	SOBC	ii	1, 5, 6, 8	A, B, D, F, H
Large Local Major Scheme Pipeline (£100m / £5m p.a.)							
N1	A22 N Corridor (Tandridge) - South Godstone to East Grinstead Enhancements	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 5, 6, 8	A, B, D, F, H
Housing Infrastructure Fund Schemes (£250m / £15m p.a.)							

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
R7	A320 North Corridor (HIF)	Short	OBC	Powers / Consents, FBC	iv	1, 3, 6, 8	F
S6	Hundred of Hoo Railway - Hoo Peninsula Passenger Rail Services	Medium	OBC	Powers / Consents, FBC	i, iv	1, 2, 6, 7, 8	F
X22	A228 Medway Valley Enhancements	Medium	OBC	Powers / Consents, FBC	iv	1, 3, 6, 8	F

Summary Delivery Plan

Table A.2: Global package interventions

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
N/A	Decarbonisation – including faster adoption of zero emission vehicles	Ongoing	Ongoing	Ongoing	i, ii, iii, iv	1, 2, 3, 4, 5, 6, 7, 8	B, C, D, E, F, G, H
N/A	BSIP/Enhanced Partnership Plans and public transport fare reductions	Ongoing	Ongoing	Ongoing	i, iii, iv	1, 2, 5, 6, 7, 8	B, C, D, E, F, G, H
N/A	National and local road user charging	Ongoing	Ongoing	Ongoing	ii, iv	1, 3, 5, 6, 8	B, D, E, F, H
N/A	Active travel (including LCWIPs) and micromobility trends	Ongoing	Ongoing	Ongoing	i, ii, iv	1, 2, 3, 4, 5, 6, 8, 9	B, D, E, F, H
N/A	Digital Technology - faster adoption, including remote working and virtual access to services	Ongoing	Ongoing	Ongoing	i, ii, iv	1, 2, 3, 5, 6, 7, 8	B, D, F, H
N/A	Integration and Access - across and between modes and between spatial and transport planning	Ongoing	Ongoing	Ongoing	i, ii, iii, iv	1, 2, 3, 4, 5, 6, 7, 8	B, C, D, E, F, G, H

Summary Delivery Plan

Table A.3: Place-based packages of intervention

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
Solent and Sussex Coast							
South Hampshire Rail – Core (£600m / £25m p.a.)							
A1	Solent Connectivity Strategic Study	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
A1a	Botley Line Double Tracking	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
A1b	Netley Line Signalling and Rail Service Enhancements	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
A1c	Fareham Loop / Platform	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
A1d	Portsmouth Station Platforms	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
A1e	South West Main Line - Totton Level Crossing Removal	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
A1f	Southampton Central Station Upgrade and Timetabling	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
A1g	Eastleigh Station Platform and Approach Flyover Enhancement	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
A2	Waterside Branch Line - Reopening	Short	SOBC	OBC	i	1, 2, 5, 6, 7, 8	D, E, F
A3	West of England Service Enhancements	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
A4	Additional Rail Freight Paths to Southampton	Short	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	D, E, F
South Hampshire Rail – Enhanced (£3,700m / 95m p.a.)							
B1	Southampton Central Station - Woolston Crossing	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
B2	New Southampton Central Station	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
B3	New City Centre Station	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
B4	South West Main Line - Mount Pleasant Level Crossing Removal	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
B5	West Coastway Line - Fareham to Cosham Capacity Enhancements	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
B6	West Coastway Line - Cosham Station Relocation	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
B7	Eastleigh to Romsey Line - Electrification	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
B8	Havant Rail Freight Hub	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
B9	Fratton Rail Freight Hub	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
B10	Southampton Container Port Rail Freight Access and Loading Upgrades	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, F
B11	Southampton Automotive Port Rail Freight Access and Loading Upgrades	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, F
South Hampshire Mass Transit (£1,900m / £150m p.a.)							
C1	Southampton Mass Transit	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	F
C2	South East Hampshire Rapid Transit	Medium	Pre-SOBC	SOBC	iv	1, 2, 3, 5, 6, 7, 8	F
C3	New Southampton to Fawley Waterside Ferry Service	Medium	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
C4	Southampton Cruise Terminal Access for Mass Transit	Medium	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, F
C5	M271 Junction 1 Strategic Mobility Hub	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	B, D, F, H
C6	M27 Junction 5 / Southampton Airport Strategic Mobility Hub	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	B, D, F, H
C7	M27 Junction 7/8 Strategic Mobility Hub	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	B, D, F, H
C8	M27 Junction 9 Strategic Mobility Hub	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	B, D, F, H
C9	M275 Junction 1 Strategic Mobility Hub	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	B, D, F, H
C10	Clarence Pier Bus-Hovercraft Interchange	Short	Pre-SOBC	Feasibility Study	iii, iv	1, 3, 6, 8	B, D, F, G, H
C11	Improved Gosport – Portsmouth and Portsmouth – Hayling Island Ferries	Short	Pre-SOBC	Feasibility Study	iii, iv	1, 3, 6, 8	B, D, F, G, H
South Hampshire Active Travel (£20m / £2m p.a.)							
E1	Solent Active Travel (including LCWIPs)	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F
Isle of Wight Mass Transit and Connections (£250m / £15m p.a.)							
D1a	Bus Mass Transit - Newport to Yarmouth	Medium	Pre-SOBC	Feasibility Study	iv	1, 5, 6, 7, 8	B, D, F, H
D1b	Bus Mass Transit - Newport to Ryde	Medium	Pre-SOBC	Feasibility Study	iv	1, 5, 6, 7, 8	B, D, F, H
D1c	Bus Mass Transit - Newport to Cowes	Medium	Pre-SOBC	Feasibility Study	iv	1, 5, 6, 7, 8	B, D, F, H
D1d	Isle of Wight Railway Service Enhancements	Medium	Pre-SOBC	Feasibility Study	i, iv	1, 2, 5, 6, 7, 8	B, D, F, H
D1e	Isle of Wight Railway Extensions - Shanklin to Ventnor	Medium	Pre-SOBC	Feasibility Study	i, iv	1, 2, 5, 6, 7, 8	B, D, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
D1f	Isle of Wight Railway Extensions - Shanklin to Newport (or Mass Transit alternative)	Medium	Pre-SOBC	Feasibility Study	i, iv	1, 2, 5, 6, 7, 8	B, D, F, H
D2a	Operating Hours and Frequency Enhancements	Short	Pre-SOBC	Feasibility Study	iii, iv	1, 5, 6, 7, 8	B, D, F, H
D2b	New Summer Route - Ryde to Southampton	Short	Pre-SOBC	Feasibility Study	iii, iv	1, 5, 6, 7, 8	B, D, F, H
Sussex Coast Rail (£350m / £10m p.a.)							
F1	West Coastway Strategic Study	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	B, D, E, F
F2	West Worthing Level Crossing Removal	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	B, D, F
Sussex Coast Mass Transit Rail (£450m / £40m p.a.)							
G1	Shoreham Strategic Mobility Hub	Short	Pre-SOBC	H, Feasibility Study	iv	1, 3, 6, 8	B, D, E, F, H
G2	A27/A23 Patcham Interchange Strategic Mobility Hub	Short	Pre-SOBC	G, H, Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, F, G, H
G3	Falmer Strategic Mobility Hub	Short	Pre-SOBC	H, Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
G4	Eastbourne/Polegate Strategic Mobility Hub	Medium	Pre-SOBC	H, Feasibility Study	i, iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
G5	Sussex Coast Mass Rapid Transit	Medium	Pre-SOBC	G, H, Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
G6	Eastbourne/Wealden Mass Rapid Transit	Short	Pre-SOBC	H, Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
G7	Hastings/Bexhill Mass Rapid Transit	Medium	Pre-SOBC	H, Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
G8	A27 Falmer – Polegate Bus Stop and Layby Improvements	Medium	SOBC	H, OBC	ii	1, 2, 3, 5, 6, 7, 8	D, F, H
Sussex Coast Active Travel (£150m / £10m p.a.)							
H1	Sussex Coast Active Travel Enhancements (including LCWIPs)	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	F
Solent and Sussex Coast Highways (£2,400m / £190m p.a.)							
I13	New Horsea Bridge and Tipner Bridge	Short	Pre-SOBC	SOBC	iv	1, 3, 5, 6, 8	F
I18	A29 Realignment including combined Cycleway and Footway	Short	FBC	(Ongoing) Delivery	iv	1, 3, 6, 8	F
I19	M27/M271/M275 Smart Motorway(s)	Short	Pre-SOBC	SOBC	ii	1, 3, 4, 6, 8	F
I20	A27 Tangmere Junction Enhancements	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	B, D, E, F
I21	A27 Fontwell Junction Enhancements	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	B, D, E, F
I22	A27 Worthing (Long Term Solution)	Long	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	B, D, E, F
I23	A27 Hangleton Junction Enhancements	Medium	Pre-SOBC	SOBC	ii	1, 3, 6, 8	F
I24	A27 Devils Dyke Junction Enhancements	Medium	Pre-SOBC	SOBC	ii	1, 3, 6, 8	F
I25	A27 Falmer Junction Enhancements	Medium	Pre-SOBC	SOBC	ii	1, 3, 6, 8	F
I26	A27 Hollingbury Junction Enhancements	Medium	Pre-SOBC	SOBC	ii	1, 3, 6, 8	F
London to Sussex Coast							
London to Sussex Coast Rail – Resilience (£450m / £25m p.a.)							
J1	Croydon Area Remodelling Scheme	Medium	OBC	Powers / Consents	i	1, 2, 5, 6, 7, 8	F

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
J2	Brighton Main Line - 100mph Operation	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
J3	Brighton Station Additional Platform	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	B, D, E, F
J4	Reigate Station Upgrade	Short	OBC	FBC	i	1, 2, 5, 6, 7, 8	F
J5	Arun Valley Line - Faster Services	Short	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
J6	East Coastway Line - Faster Services	Short	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
J7	Brighton Main Line - Reinstate Cross Country Services	Short	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	F
J8	New Station to the North East of Horsham	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
J9	Newhaven Port Capacity and Rail Freight Interchange Upgrades	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, F
J10	Uckfield Branch Line - Hurst Green to Uckfield Electrification	Medium	SOBC	OBC	i	1, 2, 5, 6, 7, 8	B, D, E, F
J11	Redhill Aerodrome Chord	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
London to Sussex Coast – Reinstatements (£200m / £5m p.a.)							
K1	Uckfield - Lewes Wealden Line Reopening - Traction and Capacity Enhancements	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
K2	Uckfield - Lewes Wealden Line Reopening - Reconfiguration at Lewes	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
K3	Spa Valley Line Modern Operations Reopening - Eridge to Tunbridge Wells West to Tunbridge Wells	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
London to Sussex Coast Mass Transit (£450m / £55m p.a.)							

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
L1	Fastway Extension: Crawley - Horsham	Short	Pre-SOBC	G, H, Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
L2	Fastway Extension: Crawley - East Grinstead	Short	Pre-SOBC	G, H, Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
L3	Fastway Extension: Haywards Heath - Burgess Hill	Short	Pre-SOBC	G, H, Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
L4	Fastway Extension: Crawley - Redhill	Short	Pre-SOBC	G, H, Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
L5	A22 Corridor Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
L6	A23 Corridor Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
L7	A24 Corridor Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
L8	A26 Corridor Lewes - Royal Tunbridge Wells Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
L9	A26 Corridor Newhaven Area Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
L10	A272 Corridor Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
L11	A264 Corridor Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
L12	A29 Corridor Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
L13	A283 Corridor Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
L14	A281 Corridor Rural Bus Service Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
L15	Three Bridges Strategic Mobility Hub	Medium	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, F, H
London to Sussex Coast Active Travel (£800m / £75m p.a.)							
M1	Burgess Hill/Haywards Heath Local Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	F
M2	East Grinstead Local Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	F
M3	Eastbourne/Hailsham Local Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	F
M4	Gatwick/Crawley Local Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	F
M5	Horsham Local Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	F
M6	Lewes/Newhaven Local Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	F
M7	Reigate/Redhill Local Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	F
M8	East Sussex Inter-urban Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F, H
M9	Surrey Inter-urban Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8, 9	B, D, F, H
M10	West Sussex Inter-urban Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F, H
M11	New London - Brighton National Cycle Network Corridor	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F, H
M12	New Crawley - Chichester National Cycle Network Corridor	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
M13	London - Paris New "Avenue Verte"	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 5, 6, 8, 9	B, D, F, H
London to Sussex Coast Highways (£1,100m / £95m p.a.)							
N5	M23 Junction 8a New Junction and Link Road - Redhill	Long	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
N6	M23 Junction 9 Enhancements - Gatwick	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
N7	A23 Carriageway Improvements - Gatwick to Crawley	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
N8	A264 Horsham - Pease Pottage Carriageway Enhancements	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
N9	A264 Crawley - East Grinstead Dualling and Cycleway	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
N10	A272 Crawley Western Link Road and Cycleway	Long	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
N11	A24 Dorking Bypass	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
N12	A24 Dorking - Capel New Roundabout	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
N13	A24 Corridor Improvements Horsham to Capel (LLM Pipeline)	Long	Pre-SOBC	Feasibility Study	iv	1, 3, 5, 6, 8	F
N14	A23 Hickstead and Bolney Junction Enhancements	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
N15	A23/A27 Patcham Interchange Junction Enhancements	Short	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
N16	A26 Lewes - Newhaven Realignment and Junction Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
N17	A26 Lewes - Uckfield Enhancements	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
N18	A22 Uckfield Bypass Dualling	Short	Pre-SOBC	Feasibility Study	iv	1, 6, 8	F
N19	A22 Smart Road Trial Proposition Study	Short	OBC	Powers / Consents, FBC	iv	1, 3, 6, 8	F
Wessex Thames							
Wessex Thames Rail (£6,800m / £175m p.a.)							
O1	Western Rail Link to Heathrow	Medium	OBC	Powers / Consents, FBC	i	1, 2, 5, 6, 7, 8	B, E, F
O2	Southern Rail Link to Heathrow	Long	OBC	Powers / Consents, FBC	i	1, 2, 5, 6, 7, 8	B, E, F
O3	Reading to Basingstoke Electrification	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O4	North Downs Line - Electrification	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O5	North Downs Line - Level Crossing Removals	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O6	North Downs Line - Service Level and Capacity Enhancements	Short	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O7	Guildford Station Upgrade	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O8	Redhill Station Upgrade	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O9	Dorking Deepdene Station Upgrade	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O10	South West Main Line / Portsmouth Direct Line - Woking Enhancement Scheme	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
O11	South West Main Line / Basingstoke Branch Line - Basingstoke Enhancement Scheme	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O12	Cross Country Service Enhancements	Short	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O13	Portsmouth Direct Line - Line Speed Enhancements	Short	Pre-SOBC	(Ongoing) Delivery	i	1, 2, 5, 6, 7, 8	B, D, E, F
O14	Portsmouth Direct Line - Buriton Tunnel Upgrade	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O15	South West Main Line - Dynamic Signalling	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O16	Theale Strategic Rail Freight Terminal	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, F
O17	West of England Main Line - Electrification from Basingstoke to Salisbury	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
O18	Reading to Waterloo Service Enhancements	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F, H
Wessex Thames Mass Transit (£1,300m / £125m p.a.)							
P1	Basingstoke Mass Rapid Transit	Short	Pre-SOBC	SOBC	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P2	Blackwater Valley Mass Rapid Transit	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P3	Bracknell/Wokingham Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P4	Elmbridge Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P5	Epsom/Ewell Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
P6	Guildford Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P7	Slough/Windsor/Maidenhead Area Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P8	Newbury/Thatcham Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P9	Reading Mass Rapid Transit	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P10	Spelthorne Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P11	Woking Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P12	A4 Reading - Maidenhead - Slough - London Heathrow Airport Mass Rapid Transit	Short	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
P13	A329/B3408 Reading - Bracknell/Wokingham Mass Rapid Transit	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P14	Winchester Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P15	Andover Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P16	Runnymede Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
P17	London Heathrow Airport Bus Access Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
P18	Berkshire, Hampshire and Surrey Inter-urban Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F, H
Wessex Thames Active Travel (£400m / £30m p.a.)							
Q1	Berkshire, Hampshire and Surrey Urban and Inter-urban Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 4, 5, 6, 7, 8, 9	B, D, F, H
Wessex Thames Highways (£1,300m / £45m p.a.)							
R8	M4 Junction 10 Safety Enhancements	Short	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
R9	M3 Junction 6 - Junction 8 Safety Enhancements	Short	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
R10	A3 Guildford Local Traffic Segregation	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	B, D, E, F
R11	A3 Guildford Long Term Solution	Long	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	B, D, F
R12	A34 Junction and Safety Enhancements	Short	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	B, D, F
R13	A322 and A329(M) Smart Corridor	Short	FBC	(Ongoing) Delivery	iv	1, 3, 6, 8	F
R14	A339 Newbury to Basingstoke Safety Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	B, D, F
Kent, Medway, and East Sussex (KMES)							
KMES Rail – Classic (£3,600m / £120m p.a.)							
S1	St Pancras International Domestic High Speed Platform Capacity	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
S2	London Victoria Capacity Enhancements - Signalling and Digital Rail	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S3	Bakerloo Line Extension	Medium	SOBC	OBC	i, iv	1, 2, 6, 7, 8	E, F
S4	South Eastern Main Line - Chislehurst to Tonbridge Capacity Enhancements	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S5	London Victoria to Shortlands Capacity Enhancements	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S7	North Kent Line / Hundred of Hoo Railway - Rail Chord	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S8	Thameslink - Extension to Maidstone and Ashford	Short	FBC	(Ongoing) Delivery	i	1, 2, 5, 6, 7, 8	F
S9	North Kent Line - Service Enhancements	Short	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S10	North Kent Line / Chatham Main Line - Line Speed Enhancements	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S11	Otterpool Park/Westenhanger Station Additional Platform	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S12	Integrated Maidstone Stations	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S13	Dartford Station Remodelling/Relocation	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S14	Canterbury Interchange Rail Chord	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	B, D, E, F
S15	New Station - Canterbury Interchange	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	B, D, E, F
S16	New Strood Rail Interchange	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S17	Rail Freight Gauge Clearance Enhancements	Medium	Pre-SOBC	SOBC	i	1, 2, 5, 6, 7, 8	B, D, E, F

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
S18	Crossrail - Extension from Abbey Wood to Dartford / Ebbsfleet	Short	SOBC	OBC	i, iv	1, 2, 5, 6, 7, 8	D, E, F
S19	High Speed 1 / Waterloo Connection Chord - Ebbsfleet Southern Rail Access	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S20	Ebbsfleet International (Northfleet Connection)	Medium	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S21	Ebbsfleet International (Swanscombe Connection)	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
S22	Gatwick - Kent Service Enhancements	Short	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
KMES High Speed Rail East (£1,000m / £25m p.a.)							
T1	High Speed East - Dollands Moor Connection	Medium	SOBC	OBC	i	1, 2, 5, 6, 7, 8	B, D, E, F
T2	High Speed 1 / Marsh Link - Hastings, Bexhill and Eastbourne Upgrade	Medium	SOBC	OBC	i	1, 2, 5, 6, 7, 8	D, F
KMES High Speed Rail North (£7,300m / £185m p.a.)							
U1	High Speed 1 - Link to Medway (via Chatham)	Long	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
U2	High Speed 1 - Additional Services to West Coast Main Line	Short	Pre-SOBC	Feasibility Study	i	1, 2, 5, 6, 7, 8	B, D, E, F
KMES Mass Transit (£800m / £90m p.a.)							
V1	Fastrack Expansion - Swanscombe Peninsula	Short	Pre-SOBC	SOBC	iv	1, 2, 3, 5, 6, 7, 8	B, D, F, H
V2	Fastrack Expansion - Northfleet to Gravesend	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
V3	Fastrack Expansion - Medway	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, F, H
V4	Medway Mass Transit	Medium	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V5	Medway Mass Transit - Extension to Hoo Peninsula	Medium	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V6	Medway Mass Transit - Extension to Maidstone	Short	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V7	Medway Mass Transit - Chatham to Medway City Estate New Bridge	Medium	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V8	Medway Mass Transit - Chatham to Medway City Estate Water Taxi	Short	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V9	Maidstone Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 6, 7, 8	B, D, E, F, H
V10	Dover Bus Rapid Transit	Short	Implementation	Feasibility Study	iv	1, 2, 3, 6, 7, 8	F
V11	Sittingbourne Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 6, 7, 8	B, D, E, F, H
V12	Sevenoaks Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 6, 7, 8	B, D, E, F, H
V13	Thanet Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 6, 7, 8	B, D, E, F, H
V14	Folkestone Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 6, 7, 8	B, D, E, F, H
V15	Ashford Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 6, 7, 8	B, D, E, F, H
V16	Royal Tunbridge Wells/Tonbridge Bus Enhancements	Long	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 6, 7, 8	B, D, E, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
V17	Thames Gateway/Gravesham Bus Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 6, 7, 8	B, D, E, F, H
V18	Canterbury/Whitstable/Herne Bay Bus Enhancements	Long	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 6, 7, 8	B, D, E, F, H
V19	Ferry Crossings - New Sheerness to Hoo Peninsula Service	Medium	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V20	Ferry Crossings - Sheerness to Chatham/Medway City Estate/Strood Enhancements	Medium	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V21	Ferry Crossings - Harty to Whitstable Enhancements	Medium	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V22	Ferry Crossings - Harty to Oare Enhancements	Medium	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V23	Ferry Crossings - Ebbsfleet - Tilbury Enhancements	Medium	Pre-SOBC	Feasibility Study	iii, iv	1, 2, 3, 5, 6, 7, 8	A, B, C, D, E, F, G, H
V24	Inland Waterway Freight Enhancements	Medium	Pre-SOBC	Feasibility Study	iv	1, 2, 3, 5, 6, 7, 8	B, D, E, F
KMES Active Travel (£400m / £55m p.a.)							
W1	Medway Active Travel Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	F
W2	Medway Active Travel - Chatham to Medway City Estate River Crossing	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	B, D, F, H
W3	Kent Urban Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	F
W4	Kent Inter-urban Cycleways	Short	Pre-SOBC	SOBC	iv	1, 3, 4, 6, 8, 9	B, D, F, H

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
W5	Faversham - Canterbury - Ashford - Hastings National Cycle Network Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F, H
W6	Tonbridge - Maidstone National Cycle Network Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F, H
W7	Sevenoaks - Maidstone - Sittingbourne National Cycle Network Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F, H
W8	Bromley - Sevenoaks - Royal Tunbridge Wells National Cycle Network Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F, H
W9	East Sussex Local Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8	F
W10	East Sussex Inter-urban Cycleways	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F, H
W11	Royal Tunbridge Wells - Hastings National Cycle Network Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 4, 6, 8, 9	B, D, F
W12	Canterbury Placemaking and Demand Management Measures	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 7, 8	B, D, E, F, H
W13	Medway Placemaking and Demand Management Measures	Short	Pre-SOBC	Feasibility Study	iii, iv	1, 3, 6, 7, 8	A, B, C, D, E, F, G, H
W14	Dover Placemaking and Demand Management Measures	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 5, 6, 7, 8	B, D, E, F, H
KMES Highways (£3,100m / £235m p.a.)							
X8	Digital Operations Stack and Brock	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 7, 8	F
X9	A20 Enhancements for Operations Stack & Brock	Short	Pre-SOBC	Feasibility Study	ii, iv	1, 3, 6, 7, 8	F
X10	Kent Lorry Parks (Long Term Solution)	Short	Pre-SOBC	Feasibility Study	ii	1, 3, 5, 6, 7, 8	F

Summary Delivery Plan

Map Ref.	Intervention	Implementation Timeframe	Project stage	Next step(s)	Scheme promoters	Key delivery partners	Potential TfSE Role
X11	Dover Freight Diversification	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 5, 6, 8	B, D, F
X12	Kent Freight Consolidation Centres	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	B, D, F
X14	A2 Canterbury Junctions Enhancements	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
X16	M20 Junction 6 Sandling Interchange Enhancements	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
X17	M25 Junction 1a Enhancements	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
X18	M25 Junction 5 Enhancements	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
X19	Herne Relief Road	Short	Implementation	(Ongoing) Delivery	iv	1, 3, 6, 8	F
X20	Canterbury East Relief Road	Long	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
X21	New Maidstone South East Relief Road	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
X23	A228 Hoo Peninsula Enhancements	Short	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F
X24	Strood Riverside Highway Enhancement and Bus Lane	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 7, 8	B, D, F, H
X25	A259 Level Crossing Removals – east of Rye	Medium	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	B, D, F
X26	A21 Kippings Cross to Lamberhurst Dualling and Flimwell and Hurst Green Bypasses	Long	Pre-SOBC	Feasibility Study	ii	1, 3, 6, 8	F
X27	Hastings and Bexhill Distributor Roads	Medium	Pre-SOBC	Feasibility Study	iv	1, 3, 6, 8	F

For further information
please contact



Sarah Valentine

TfSE Client Project Manager

Sarah.Valentine@eastsussex.gov.uk

Steven Bishop

Technical Advisor Programme Director

Steven.Bishop@steergroup.com

Ali Goddard

Technical Advisor Project Manager

Ali.Goddard@steergroup.com

DISCLAIMER: This work may only be used within the context and scope of work for which Steer Davies & Gleave Ltd. trading as Steer was commissioned and may not be relied upon in part or whole by any third party or be used for any other purpose. Any person choosing to use any part of this work without the express and written permission of Steer shall be deemed to confirm their agreement to indemnify Steer for all loss or damage resulting therefrom.