TRANSPORTEAST

STRATEGIC INVESTMENT PROGRAMME February 2023



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1. Introduction

1.1. Overview

This document sets out our proposed approach to a Strategic Investment Programme to enable delivery of the <u>Transport Strategy</u>.

It is a supporting document for the Transport East Strategy, and the main document will be reviewed every three years or in response to emerging guidance and policy; the Appendices to this document will be updated annually.

1.2. The role of Transport East

Transport East is the Sub-National Transport Body that acts as one voice for the future of transport in Essex, Norfolk, Suffolk, Southend-on-Sea, and Thurrock.

OUR VISION

A thriving Eastern region with safe, efficient and net-zero transport networks advancing a future of inclusive and sustainable growth for decades to come.

As a partnership, we bring together local transport and planning authorities and business leaders with Government (including the Department for Transport, Network Rail, Great British Railways and National Highways) to speak with one voice and identify the transport investment needed to fully support our members' shared ambitions for economic growth, quality of life, development, and prosperity in the region.

We aim to do this through the broad activities set out in figure 1.1, with specific actions agreed annually in the Business Plan.



Figure 1.1: Transport East role - Core activities

Lead Strategic Thinking	Strategic Co-Ordinator	Elevate work of partners	Influencer	Intelligence
Strategic direction and thought leadership for the East Lead regionally wide studies and strategies People centric approach: Integrated Multi Modal Accessible Lead national and regional STB thinking on specific topics	Coordinate strategic investment pipeline Assessing and prioritising schemes/ projects Monitoring scheme/ projects delivery Challenging outcomes where necessary to deliver strategic outcomes Lead business case development for sub-national scale projects Coordinate partners on regional and national priority issues	Enable local partners to deliver at the local level Enable strategic bodies to deliver better strategic projects Accelerate outcomes by unblocking / speeding progress Adding capacity and capability to partners	Champion the East and Transport East Partnership Listening and understanding across local, sub-national and national partners Make the case for investment in the East Influence delivery bodies (Government, NH, NR) Single regional voice at a national level Collaborate to shift behavior across the region	Strategic transport expertise and capacity / capability Monitoring industry trends and innovation Lead a robust regional data, analysis, and monitoring function Sets standard and outcomes

1.3. Transport East Strategy

Transport East has been tasked by its' partners and Government to set a Transport Strategy for the region and advise the Secretary of State for Transport on the Eastern region's transport investment priorities.

Our Strategy recognises that good transport is a means to an end, and not an end itself. Improving transport will help reduce carbon emissions and lead to a better quality of life for people in the region, levelling up by providing better access to more opportunities for work, learning and leisure. It will support businesses and drive economic growth by reducing costs, increasing productivity, and providing access to more markets and workers. It will also enable new development and housing.



The Strategy for the region sets out four strategic priorities for transport in the Transport East area:

- **Decarbonisation to net-zero** working to achieve net zero carbon emissions from transport, building on our status as the UK's premier renewable energy region.
- Connecting growing towns and cities enhanced links between and within our fastest growing places and business clusters. Improving access for people to jobs, supplies, services, and learning; enabling the area to function as a coherent economy improving productivity and quality of life.
- Energising coastal and rural communities a reinvented sustainable coast for the 21st century which powers the UK through energy generation. Supporting our productive rural communities and attracting visitors all year round.
- Unlocking international gateways better connected ports and airports to help UK businesses thrive, boosting the nation's economy through better access to international markets and facilitating foreign direct investment.

The Strategy presents a delivery pathway for each of the four strategic priorities, which sets out the types of projects and schemes that are needed to achieve them.

1.4. The Strategic Investment Programme (SIP)

This document outlines the purpose of the Strategic Investment Programme, the process of how it was formed and will develop over time, and how its' performance will be monitored, and the programme updated.

Transport East will not deliver individual projects. The role of Transport East, within the context of the SIP, is to;

- manage the SIP;
- advise government on the regions' priorities; and
- develop and deliver a programme of technical work and business cases, in partnership with local and national partners, providing the evidence base to improve and maximise delivery of transport outcomes in the region.



2. Purpose of the Strategic Investment Programme

2.1. Overview

The Strategic Investment Programme (SIP) will enable the partnership to identify and prioritise the strategic projects we need to deliver the goals and priorities in the Strategy. The regional Strategy will support the Local Transport Authorities to align their Local Transport Plans to support delivery of these priorities for local projects in their programmes ensuring a consistent strategic approach for the region.

We propose that the SIP comprises a regional transport investment pipeline to assess and prioritise strategic transport projects in the Eastern region and supporting mechanisms to identify and help progress projects through the pipeline, from early ideas to business case development to delivery.

The proposed SIP approach builds on and expands our existing Investment Plan published in 2020(1), that primarily comprised our existing strategic road and rail projects, by identifying and accelerating new ideas to ensure the future investment pipeline continues to expand and evolve to deliver our vision.

With a focus on the four strategic priorities, the SIP identifies strategic pan-regional packages and projects that address regional issues, as well as projects within our six core strategic movement corridors (Figure 2.1). These corridors comprise growing urban areas, economic centres, ports and airports, and the road and rail connections between them and the rest of the UK. These corridors are critical to this strategy and further investment will be needed along them if the region is to reach its potential as a thriving, connected, multi-centred economy, whilst reducing carbon emissions.

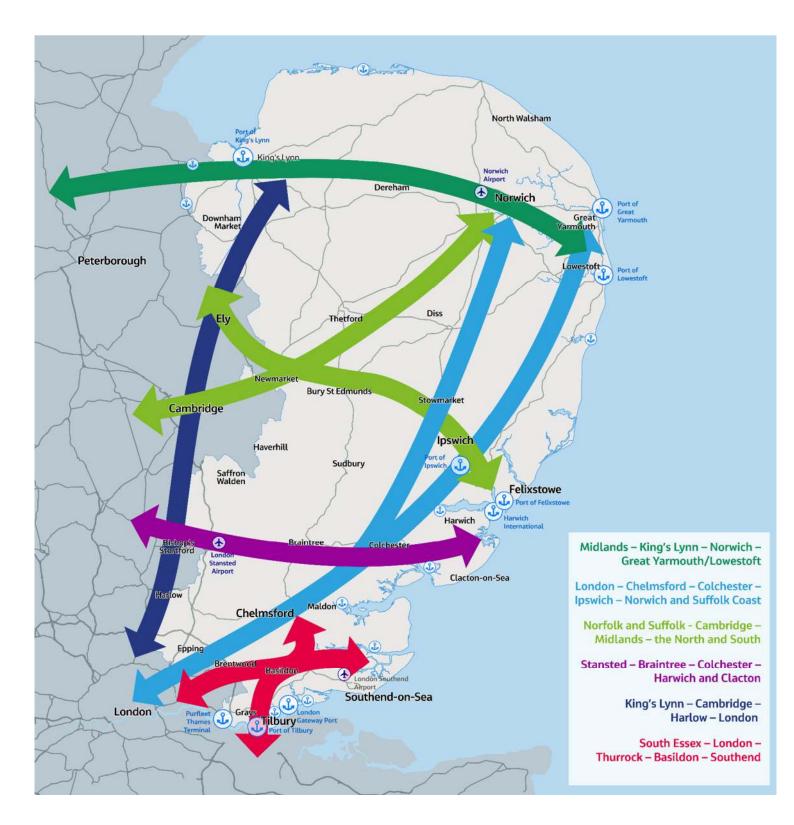
The SIP mechanism has been developed to be flexible to align with Government's established national programmes to deliver major road and rail investment in the Transport East region. It will also align to emerging national mechanisms to fund other types of projects, including active travel, passenger transport, freight and logistics, and electric vehicles. Projects coming through our pipeline will be designed to align with national and local funding sources by using a Strategic Assessment Framework.

The assessment process is set out in section 3. The Transport East technical work programme (Appendix G) will support scheme promoters to progress constituent projects through the pipeline and drive forward our strategy. The technical work programme is reliant on continued close working with partners, and the resourcing of our capacity, capability, data intelligence and expertise to perform this vital role.

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Figure 2.1 – Transport East core strategic corridors





3. Process

3.1. Overview

This section provides a high-level summary of the process undertaken to develop the Strategic Investment Programme.

This SIP builds upon an interim plan published in September 2020 by incorporating additional place-based and region-wide projects and programmes, in addition to road and rail projects on strategic corridors. All the proposals in the programme have been identified and prioritised with reference to the four strategic priorities that underpin the Strategy. The successful management, monitoring and delivery of the programme will be supported by contributions from the constituent members of Transport East and the annual Transport East Business Plan.

3.2. Alignment with policy and existing delivery mechanisms

The SIP and the longer-term Strategy have both been developed in line with existing national transport policy. In particular, the Government's target to deliver Net Zero by 2050, the ambition to 'Level Up' left-behind areas of the country, the Walking & Cycling Investment Strategy and 'Bus Back Better'. It has also been developed to align with Government programmes to deliver major road and rail investment in England, notably the Roads Investment Strategy (the five-year programme for improving the Strategic Road Network delivered by National Highways) and Network Rail's Rail Network Enhancement Programme (RNEP).

3.3. Engagement

The SIP approach has been developed following extensive pre-consultation engagement with hundreds of partners across the region and refinement through the Transport East Forum and Senior Officers Group. Partners have been engaged at every stage of the process from the identification of strategic priorities to the development and prioritisation of individual schemes and projects The approach and programme have been updated to reflect feedback from the 2021/2022 public consultation and following the Integrated Sustainability Appraisal (ISA).

3.4. Project identification

Following the definition of the vision and strategic priorities for the Transport Strategy, a long list of potential projects, programmes and actions was collated, informed by research and engagement with partners. These were strategic scale projects, or packages of smaller interventions that collectively became strategic in scale. This process did not replicate or include more local projects that would be considered and funded as part of the Local Transport Authorities' Local Transport Plans.

Individual projects on the long list are naturally at different stages of development and the assessment was therefore based on varying levels of information. Each individual project was categorised based on its stage of development, using a similar approach to that adopted by National



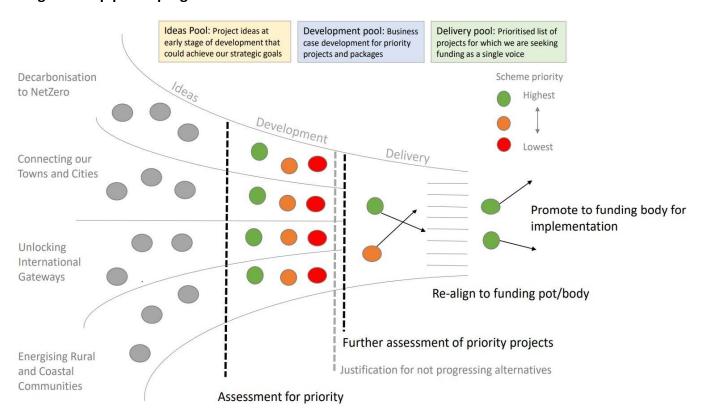
Highways and the DfT to develop the Roads Investment Strategy.

The categories used in this case are as follows:

- 'Ideas pool' projects that could deliver identified strategic priorities but are not yet sufficiently advanced. These will include concepts, early feasibility studies and pre-Strategic Outline Business Cases. Although these will have considered options and alternatives, they will not have been subject to any in-depth assessment.
- 'Development pool' projects that are in development and have already been subject to a feasibility study or are currently developing or have completed a Strategic Outline Business Case that compares a short-list of alternative options for delivering the project.
- 'Delivery pool' projects where the development of a business case has achieved programme entry for delivery funding; acknowledging that planning consent may still be required. For these projects a preferred option has already been identified.

These categories collectively comprise the proposed Transport East Pipeline (summarised in figure 3.1), which will be adopted as our programme management approach to help promoters progress projects from ideas to delivery, and ensure they maximise their contribution to the Transport East strategic priorities.

Figure 3.1: pipeline progression



The programme will continuously evolve and develop, based both on the work undertaken by our



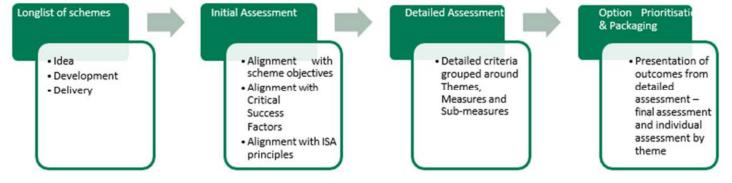
partners and a technical programme that will develop both an evidence-base to support projects in the programme and identify new projects to be developed and delivered. This programme of work is covered in more detail in Appendix G.

3.5. Option assessment

The long list of projects was assessed using a bespoke multi-criteria assessment framework, which was designed in line with Government guidance and our strategic priorities. The assessment framework enables the performance of each project to be assessed against the four strategic priorities and a wide range of additional criteria.

This was undertaken in several stages using a holistic approach to ensure that a range of high-value projects are brought forward for delivery. The process is summarised in Figure 3.2., recognising that new ideas from Transport East and its partners will continue to be added to the long list, which will then be assessed as part of the annual SIP management and review.

Figure 3.2: Summary of the Assessment Framework process



3.5.1. Initial Assessment

The initial assessment considered the extent to which projects:

- Could deliver Transport East Strategic Priorities.
- Performed against Department for Transport, (DfT), Critical Success Factors (cost, fit with Government objectives, supplier capacity/capability, and technical feasibility); and,
- Performed against a sustainability assessment, i.e. ISA principles.

A full list of the assessment criteria can be found in Appendix A

The sustainability assessment is an approach based on Integrated Sustainability Appraisal (ISA) principles. It considers the downstream requirements for Strategic Environmental Assessment (SEA), Habitats Regulations Assessment (HAS), and the assessment of impacts on health, equality and community safety. This process led to the identification of modifications to the long list that were needed to improve alignment with the Strategy and Government requirements.



3.5.2. Detailed assessment

The Detailed Assessment then assessed projects based on their expected impact (both beneficial and adverse) on the Strategic Priorities, Critical Success Factors and sustainability criteria, breaking each area of assessment down into more detailed components. Project assessment was undertaken in line with the DfT's Transport Analysis Guidance (TAG) and Early Assessment and Sifting Tool (EAST) Guidance. The effectiveness of a measure to deliver against the goals within each strategic priority was provided by the application of a weighting factor. Details can be found in Appendix B.

The overall purpose of the Assessment Framework was to assess projects in a consistent and transparent way, using a methodology in line with Government guidance and recognisable to key agencies such as the DfT, National Highways, Great British Railways and Network Rail. The process provides clarity to Government regarding the region's priorities and assurance that those priorities have been identified in a robust manner. This method created a dashboard through which projects could be compared based on the information available. A summary of the assessment results can be found in Appendix C.

3.5.3. Integrated Sustainability Appraisal

Transport East is committed to improving environmental, social, and economic wellbeing of the region as indicated in the wider outcomes. As part of this commitment Transport East has undertaken an Integrated Sustainability Appraisal (ISA) to inform the development of the Transport Strategy.

An ISA is a process for assessing the social, economic, and environmental impacts of a plan in a systematic and transparent way with the aim that sustainable development principles underpin the strategy.

The ISA is based around the strategic environmental assessment (SEA) process and has five key stages (Figure 3.3), including an initial scoping stage providing context and focus for the assessment, and iterative assessment of the developing plan, followed by consultation on the assessment and draft strategy documents.



Figure 3.3: Key stages in the ISA process

Scoping the Assessment Assessment of the developing draft Strategy Reporting: Draft Transport Strategy and ISA report

Consultation

Finalisation of Transport Strategy, ISA Statement & Monitoring Plan implementation

The monitoring plan(2) employs a number of targets and indicators to help identify any significant effects that could arise through the implementation of the strategy, the responsibility for monitoring and reporting against these targets would sit with different organisations and scheme developers. This will inform the development of the SIP monitoring and evaluation plan.

3.6. Current pipeline programme

The identification and assessment processes identified priority projects that should be progressed as part of this SIP as a first step towards delivering Transport East's vision and strategic priorities. When identifying pipeline projects, it is recognised that some projects will score well across all criteria and others will score strongly in one area, reflecting both the nature of the project and the stage of development. Projects in the ideas pool with significant potential to support our objectives will be prioritised for accelerated business case development. The assessment process will also assist in identifying where projects, as they develop through the business case and design process, need to be enhanced to optimise their performance in delivering against the strategic goals, prioritising opportunities for sustainable transport, mode shift and decarbonisation of transport. The future management of the pipeline will ensure that the combination of measures in the Programme will collectively deliver all our strategic outcomes.

The current pipeline list of projects can be found in Appendix D and a map showing the location of projects in Appendix E. These projects have been grouped in the following categories:

- Committed projects these are projects that have already been identified to be in the
 delivery stage. They are well developed and already have some delivery funding certainty and
 commitment from national government within funding programmes.
- Projects to be delivered in neighbouring authorities the transport network extends beyond the Transport East region; this section identifies those projects that are important to and affect transport in the East but will be delivered by others. Working closely with neighbouring authorities and Sub-national Transport Bodies, we can strengthen the evidence for joint priorities, develop solutions that work for all our communities, provide better value for the taxpayer and ensure initiatives being progressed in a neighbouring region do not unduly impact the East.
- Regional strategic packages This category contains a mix of projects to be progressed by Transport East, the Local Transport Authorities / Local Government or other delivery bodies. These packages highlight priority areas of work, where Transport East can;



- support the case for investment;
- make the case for long-term funding certainty to enable ambitious programmes for active travel and urban sustainable programmes; and,
- add to the technical programme to develop an evidence base to support future Local Government decisions, for example the road user demand management measures. It is important to have a section in the SIP that can identify how ideas need to be supported and developed.
- Strategic corridors This category identifies projects that sit along the six core strategic corridors, which will either individually or in combination deliver the strategic priorities. These are a mix of road, rail and sustainable transport measures that are either at the idea or development stage. Progression of these projects will be dependent upon the development of a satisfactory business case that will recognise the government's changing emphasis for projects to demonstrate significant contributions to decarbonisation and sustainable transport.
- Multi-modal connectivity studies will be undertaken to understand the future needs of the strategic corridor routes and identify any interdependence between current and future projects ensuring an integrated approach to development and delivery.

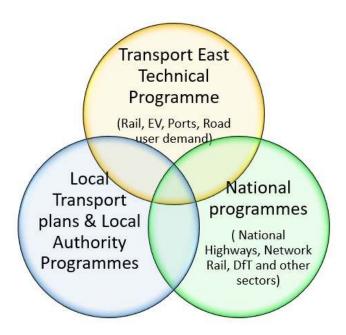
The SIP process is focused on strategic-scale projects and has not considered more localised projects and initiatives typically included within the Local Transport Authority's Local Transport Plans (LTP's). It should be noted however that most LTP's will also refer to strategic-scale projects of importance to that Local Transport Authority.

3.7. Technical programme

The Transport East technical programme will deliver outputs that build evidence and expertise in areas of work to support the capacity and capability of its partners to evidence, identify and progress proposals. The scope and detail of this work will be informed by the gaps highlighted by the assessment process. We aim to ensure alignment with the activity of partners to enhance delivery of transport projects within and affecting the region.



Figure 3.4 An integrated approach to strategy and project development



The technical programme is identified within the annual Transport East Business Plan and in response to new funding opportunities. These projects will inform new projects and support existing projects in the SIP ensuring a balanced portfolio. The current areas of work being progressed can be seen in Appendix G

3.8. Funding

Transport funding and the relative priority of projects is complex and often linked to external decisions on delivering infrastructure. One of the crucial elements to delivering the strategy is the availability of greater levels of funding to local authorities and other bodies responsible for infrastructure in the Eastern region.

The Local Authorities in the region are fully committed to the SIP and already make a substantial contribution from existing budgets. However, significant support will be required from Government to deliver and continue to develop the SIP.

Many of the major road and rail projects will need funding to be provided by government through National Highways (via the Roads Investment Strategy) and Network Rail / Great British Railways (via Control Period settlements). Many initiatives led by local authorities will also need to be funded through a range of existing and future funding streams, in addition to the current annual capital allocations to local government, for example the Levelling Up Fund, the National Home Building Fund, and the Shared Prosperity Fund. The delivery of many transport projects requires local authorities to bid into a national competition for time-limited funding.

It is also important to value what we have. We will work with Local Transport Authorities and infrastructure bodies to promote the effective maintenance and management of the transport



network, to ensure the strategic, major and local networks provide reliable and safe journeys.

Current and future Government national funding streams are likely to play a role in delivering the SIP. Each funding stream has different application criteria. Therefore, multiple funding applications to different sources will be required to support the delivery of the full Programme. Multi-year settlements for the region, like those currently in place for National Highways and Network Rail, could create the potential for significant funding efficiencies, especially if these funds are linked to the delivery of outcomes rather than being specific to modes of transport. In addition, the provision of multi- year revenue funding would enable the development of ambitious programmes in advance of funding, opportunities and provide greater certainty for local authorities to enable them to fully commit to long- term transport planning and maintenance.

In addition to government funding, Transport East will work with partners to identify appropriate funding streams and private sector investment to support the funding for our projects. Figure 3.5 shows the range of current alternative funding streams available to local authorities, these funding sources are supplementary to central government funding.

Further work is needed to develop and refine cost estimates for many of the projects and programmes. Many projects in the 'ideas pool' have not been subject to detailed feasibility studies. An indicative cost range estimate for the region's programme of projects in the 'development' and 'delivery' pools is between £4.6bn and £6.3bn. Due to the evolving nature of project development and delivery costs managed by the project promoter, details of individual project costs are not included in the SIP tables.

Transport East will support our partners to accelerate business case development to get our projects funded and delivered more quickly

Figure 3.5: Potential third-party funding routes for the SIP

Borrowing	Financing
Public Work Loan Body Municipal Bonds Agency UK Infrastructure Bank	Tax Increment Financing Direct Private Financing
User Charges	Other levies
Workplace Parking Levy	Business Rates Supplement
Road User Charging	Council Tax Levy
1	Public Work Loan Body Municipal Bonds Agency UK Infrastructure Bank User Charges Workplace Parking Levy Road Tolling



3.9. Governance

Transport East is governed by the Transport East Forum, our principal decision-making board. The Forum will provide regional oversight of the Strategic Investment Programme and will endorse Transport East advice on investment priorities coming through the pipeline to the Secretary of State for Transport. It will oversee the regional work programme to help accelerate projects and initiatives through the pipeline process, including business case development.

The Transport East Senior Officers Group will provide operational oversight of the SIP and manage resource to ensure its efficient operation. Existing mechanisms will be utilised and enhanced to ensure wider partners are able to input and submit proposals into the annual review of the SIP.

The SIP approach provides support for project promoters to identify and develop new ideas, ensure they are aligned with the regional strategy through the strategic assessment framework, and support with business case development. Individual project business cases will continue to be the responsibility of the project promo



4. Performance

4.1 Monitoring and evaluation

To deliver the outcomes identified by the Strategy, it is important to measure and evaluate performance of the SIP to inform the evolution of the programme and future SIPs and support better delivery.

It is important that we can measure the success of interventions against the aims of the Strategy. Transport East will develop and implement a SIP Monitoring and Evaluation plan.

Twelve transport goals have been identified in the strategy linked to the four strategic priorities. These are set out in Figure 4.1 and will form the basis of our outcome monitoring.

Figure 4.1: Strategic Priorities and Transport Goals

Strategic Priority	Transport Goal
	1. Reduce Demand for carbon intensive transport trips through local living. Making it easier for people to access services locally or by digital means
Decarbonisation to	2. Shift modes by supporting people to switch from private car to active, shared and passenger transport, and goods to more sustainable modes like rail
net-zero	3. Switch fuels with all private, passenger transport, fleet and freight vehicles switching to net zero carbon fuels at the earliest opportunity
	4. Zero Carbon Growth by supporting authorities and developers to plan, locate and design new development that reduces the need for people to make carbon intensive trips in the future
	5. Improve connectivity and accessibility within our towns and cities for walking, cycling and passenger transport to support sustainable access to services, education, training, employment and leisure
Connecting our Growing Towns and Cities	6. Deliver faster and more reliable transport connections between our growing towns, cities and economic corridors, and to the rest of the UK, to support business growth, skills development and employment
Cities	7. Fully integrate transport networks, services and operations across the Transport East region, through customer focussed approach enabling seamless and safe end-to-end journeys by sustainable modes that are attractive to all people
Energising our Coastal and Rural	8. Increase accessibility to education, training, services and employment for rural communities
Communities	9. Improve connectivity along our 500 miles of coastline
Unlocking	10. Improve connectivity, journey time and reliability for freight, passengers and employees to ports and airports
International	11. Move goods and people sustainably to ports and airports by shifting modes
Gateways	12. Increase the use of alternative fuels for both ports and airports

To assess the progress against these goals a baseline will be established for the Key Performance



Indicators, (KPI's). The KPI's will be monitored and reported on at regular intervals throughout the life of the strategy, a monitoring schedule will be developed to support this. Where appropriate, targets will be established that will enable impartial, measurable reflections on intervention performance.

Recognising the importance of the Decarbonisation to Net Zero strategic priority at local, regional and national levels; work will be undertaken to develop a carbon budget for the region. Together with the development of carbon reduction trajectories to deliver net zero, this work will also then set carbon reduction targets for the region. Ahead of any guidance or policy from Government relating to Whole Life Carbon impacts, the focus of this work will be "at the tail-pipe".

Current KPIs are set out in Appendix F.

4.2 Technical work programme

To support the future performance of the SIP, we will develop the "next generation" strategic analytical capability, accelerate the delivery of the East's transport priorities and proactively manage the programme.

We will work with partners, both regionally and nationally to identify areas of work that will support the delivery of the Strategy through the evolution of projects within the pipeline and funding for delivery.

4.3 Better Delivery

The role of Transport East is to bring together local authorities within the region to speak with a single voice on strategic transport issues, co-ordinate investment, and support better delivery.

To support the introduction of the SIP, the Transport East partnership has identified the following strategic delivery challenges that will need to be tackled through its wider work programme:

- The need for greater capacity and capability in Transport East region for strategic transport planning, commensurate to that which is employed in other regions of similar size.
- The need for greater local accountability/influence for local and democratically elected strategic decision makers
- Better strategic integration and removal of silo-thinking in planning transport solutions
- To understand, and then achieve, the shift required to get to Net Zero, including influencing public opinion and attitudes on decarbonisation
- Better funding mechanisms, to ensure more funding certainty and reduce complexity for our



local authorities and partners, to improve strategic project development

- Better strategic coordination with other sectors to deliver transport benefits
- Ensuring understanding and co-ordinating the range of challenges and ambitions across our diverse partners and geography
- Communicating our priorities clearly to government, in a challenging funding environment
- Closer partnership with national delivery agencies and alignment with the strategic transport plans of neighbouring regions
- Supporting DfT's work with other government departments to co-ordinate our transport strategy with wider government delivery in the East

4.3.1 Multi-year funding certainty

Transport East secured a multi-year funding settlement for the East through the 2021 Spending Review. Multi-year funding provides a more stable income stream that can be used to launch a long-term programme of works, allowing for the longer-term planning and development of projects and schemes, which supports the more efficient delivery of investment projects and in turn greater value for money.

4.3.2 Innovation

Transport East is committed to supporting research and development across the transport sector as part of delivering this Strategy. We will work with both public and private sector-led initiatives and collaborate with local authorities and other Sub-national Transport Bodies to pilot new initiatives and make sure that the region is at the cutting edge of technological innovation for transport.

We will also act as an advocate for research and development projects, working in partnership with government, academia and the private sector to increase funding for trials to test new technologies.

4.3.3 Data and intelligence

Transport East will aim to develop data and modelling capabilities to enable an evidence-led approach to business case, programme and strategy development, ensuring the region has the capability and capacity to proactively capitalise on opportunities as they arise.

4.3.4 Delivery for everyone

People do not experience the transport network and services equally, and we are committed through our strategy and SIP to implementing changes across the region to make accessing and using our networks more equitable. Transport is not an end, but a means to access employment, education, services and



experiences.

4.4 Updating the SIP

The Appendices to the SIP has been designed as a 'live' mechanism that will be reviewed annually and updated, with the status of investment priorities in the programme published and regularly updated on the Transport East website.

We have established a framework for engagement with our partners, including Local Authorities, to support them with submitting new proposals into the pipeline, and accelerating existing projects.

All new regionally strategic proposals generated by our partners will be added to the 'ideas pool' and assessed during the annual review of the SIP. We will then work with our partners to process these ideas through the assessment framework to generate an updated priority project list to better deliver our regional vision and strategic priorities.

Appendix A – Summary of Assessment Criteria

To what extent of					
De-carbonisation To what extent to	oes the option help to de-carbonise existing Embodied Carbon				
trips? For examp	le through electrification Operational Carbon				
Modal shift to active travel To what extent of	oes the option potentially increase modal shift to active travel?				
	oes the option increase modal shift from private car to passenger transport?				
Aggregation of services / Reducing the impacts of travel To what extent of location of services.	oes the option reduce the need to travel? E.G. through better 'at home' provisions or co-				
<u> </u>	oes the option benefit air quality in the vicinity?				
· · · · · · · · · · · · · · · · · · ·	portunities for net environmental gain?				
Connecting our growing towns and cities To what extent of	oes the option connect growing towns and cities faster and more frequently?				
Supporting homes & jobs (urban) To what extent of	ould the option support homes and jobs? Directly supports				
Connecting Growing Towns To what extent of	oes the option impact any existing pinch points on the network where congestion or				
I IPINCH POINTS	connectivty is poor				
· · ·	oes the option offer the potential for mode shift away from the private car by providing a				
	better connect people living in urban areas to Education/Skills				
services essential social	· · · · · · · · · · · · · · · · · · ·				
Energised rural and coastal communities To what extent of	oes the option connect people, businesses and freight in coastal or rural areas?				
	Directly supports				
Supporting homes & jobs (rural and coastal) To what extent of	ould the option support homes and jobs? Indirectly supports				
Accessibility and Connects people in coastal / rural areas to jobs (in any area) Connectivity for Rural and	oes the option improve people living in rural or coastal areas access to jobs (in any area)				
Coastal Communities Connects tourism hotspots and transport To what extent of	oes the option connect rural and coastal tourism spots to regional transport hubs				
hubs (including via ac	tive travel); encouraging tourism in the region?				
Connecting people to essential social Could the option	better connect people living in rural and coastal Education/Skills				
services areas to essentia	al social services (in any area)?				
	From within the region				
I Global Gateways	oes the option improve connectivity (for both				
passengers and	reight) to global gateways?				
Unlocking International	From towns and cities within region				
IReliability (corridor)	What are the scale of benefits expected from improvements to reliability to and from international				
To what extent of	gateways (for both passengers and freight)? To what extent does the option improve freight capacity at (and on links to and from) key gateways? EG				
Increases treight capacity	by removing pinch points				

Theme	Measure	Detail	Sub-Measure		
			Through increased exercise		
	Health	Is the scheme likely to impact health and particularly heatlh	Through improved air quality		
	Treatur	equality outcomes?	Mentally, through improved wellbeing		
	Affordability	Is the scheme likely to be affordable to all (Equality)? Will differe available? Is there a cost to using the option?	ent ticketing options and discounts be		
	Safety	How likely is the option to reduce collision/incident rates on the	network?		
	Urban Realm	To what extent does the option improve placemaking or the urba	n realm?		
Wider benefits	Personal Security	How likely is the option to improve personal security and equality through either the reduction of opportunities for crime or through improvements to perceptions of security (where this perception would otherwise prevent potential users from travelling)? Consider both Staff and Travellers (including groups which may be disproportionately impacted including women, ethnic minority communities and LGBTQ+			
	Trip Purposes	Does the option serve a range of trip purposes for a range of people (equality assessment)? For example local education or care trips, commuting trips and shopping trips?			
	Journey Quality Cleanliness/information/crowding/rest-rooms				
	Accessibility	Is the scheme accessible to a range of people (equalities assesment) including people with (mphysical) disabilities and/or those travelling encumbered with small children/bags?			
	Political Support	What level of stakeholder support is the scheme likely to see?	Political Public		
	Buildability	Are there any constraints which preclude construction?	•		
	Planning/CPO	Does the scheme require statutory planning permissions or proce granted?	esses? How likely are these to be		
	Engineering/technology	Are there any major engineering or technological constraints?			
	Supplier Capability/Capacity	What is the risk that suppliers will be unable to meet the needs of the scheme (e.g. production capability/resources/skilled labour)			
Critical Success Factors	Opportunities to support the Local Supply Chain				
	Strategic Fit with Govt. priorities	How well does the option fit with wider national strategic priorities?			
	Construction Costs	How much does the option cost? State level of confidence in notes section			
	Operational Costs	Is the scheme likely to generate revenue, or will it require funds notes section	to operate? State level of confidence in		
	Funding Availibility	Is funding likely to be forthcoming?			

Theme	Measure	Detail	Sub-Measure		
	Modal shift to active travel	To what extent does the option potentially increase modal shift to	active travel?		
	Modal shift to PT	To what extent does the option increase modal shift from private	car to passenger transport?		
			Productivity, Unemployment and Skills		
	Levelling Up Agenda	To what extent does the option benefit areas identified within the levelling up agenda in line with the levelling up index critera?	Journey times to employment centres (noting that car journeys are weighted more heavily than PT or cycling journeys)		
Strategic Fit			Better utilisation of existing empty employment sites and homes		
	Aggregation of services / Reducing the impacts of travel				
	Reliability	What are the scale of benefits expected from improvements to reliability?			
	Journey Times	What are the scale of benefits expected from improvements to journey times?			
	Trip Purposes	Does the option serve a range of trip purposes? For example local education or care trips, commutrips and shopping trips? Are people transported radially into city centres or circular in more local patterns?			

Appendix B – Weighting & Scoring

The criteria were weighted against their impact / influence to deliver the strategic goals. Neither the Strategic Fit nor the Wider Benefits have weighting applied.

The scoring to establish the weighting was:

0 = no/minimal impact;

1 = potential for a beneficial impact;

2 = the potential for significant beneficial impact.

'Decarbonisation to Net Zero' Weighting:

Criteria	Sub-Criteria	Goal 1 - Reduce demand	Goal 2 - Shift mode	Goal 3 - Switch fuel	Goal 4 - Zero Carbon growth	Score	Weight (out of 100)
De-carbonisation	Embodied carbon - construction	1	1	1	0	3	9
	Operational carbon	2	2	2	2	8	25
Modal shift to active travel	N/A	1	2	0	2	5	15
Modal shift to PT	N/A	1	2	1	2	6	18
Aggregation of services / Reducing the impacts of travel	N/A	1	1	0	1	3	9
Air Quality	N/A	1	2	1	1	5	15
Net Environmental Gain	N/A	0	1	0	2	3	9

'Connecting Growing Towns and Cities' Weighting:

Criteria	Sub-Criteria	Goal 5 – connectivity within towns and cities	Goal 6 – connectivity between towns and cities	Goal 7 – Integration and safety	Score	Weight (out of 100)
Improved, faster more frequent connectivity	N/A	0	2	2	4	13
Supporting homes	Direct	0	1	1	2	7
and jobs	Indirect	1	2	1	4	13
Improved connectivity reduce congestion/ pinch points	N/A	2	2	2	6	20
Viable alternative to the private car	N/A	2	1	2	5	17
	Education skills	2	2	1	5	17
services	Health	2	1	1	4	13

'Energising Rural and Coastal Communities' Weighting:

Criteria	Sub-Criteria	8A more sustainable rural trips	8B Reduce need to travel	8C Substitute trips with digital connectivity	Goal 9 Improve coastal connectivity	Score	Weight (out of 100)
	Connect people, business, freight	2	2	1	2	7	21
	Directly supports	1	2	1	1	5	14.5
	Indirectly supports - not needed for development but address accumulative impacts	1	1	1	1	4	11.5
Connects people in coastal / rural areas to jobs (in any area)	N/A	1	1	1	1	4	11.5
Connects tourism hotspots and transport hubs	N/A	1	0	0	2	3	9
essential social	Education/skills	2	2	1	1	6	18
	Health	1	2	1	1	5	14.5

'Unlocking International Gateways' Weighting:

Criteria	Sub-Criteria	Goal 10 - Connectivity and journey time to gateways	Goal 11 - Mode shift of freight and passengers	Goal 12 - Support increased alternative fuels	Score	Weight (out of 100)
Clabal Cata	From within the region	2	1	2	5	22
Global Gateways From outside the region	2	2	2	6	26	
	From cities and towns in region	2	2	1	5	22
Reliability (corridor)	N/A	1	1	1	3	13
Increases freight capacity	N/A	1	2	1	4	17

The schemes were then scored individually in accordance with the following:

Scoring Criteria							
Major Beneficial	Moderate Beneficial	Minor Beneficial		Minor Adverse	Moderate Adverse	Major Adverse	
Very Low Risk	Low Risk	Low/Medium Risk	Neutral or N/A	Medium to High Risk	High Risk	Show stopper	
Score 3	Score 2	Score 1	Score 0 if neutral or N/A	Score -1	Score -2	Score -3	

The outcome of the scoring with the weighting are then presented using the following banding:

Theme	Minimum Weighted Score	Maximum Weighted Score	Major Adverse	Moderate Adverse	Minor Adverse	Neutral	Minor Beneficial	Moderate Beneficial	Major Beneficial
Rural and Coastal	-42.9	42.9	-42.9 to -30.64	-30.64 to -18.39	-18.39 to -6.13	-6.13 to 6.13	6.13 to 18.39	18.39 to 30.64	30.64 to 42.9
Decarbonisation	-42.9	42.9	-42.9 to -30.64	-30.64 to -18.39	-18.39 to -6.13	-6.13 to 6.13	6.13 to 18.39	18.39 to 30.64	30.64 to 42.9
Connecting Towns and Cities	-42.9	42.9	-42.9 to -30.64	-30.64 to -18.39	-18.39 to -6.13	-6.13 to 6.13	6.13 to 18.39	18.39 to 30.64	30.64 to 42.9
Unlocking International Gateways	-60	60	-60 to -42.86	-42.86 to -25.71	-25.71 to -8.57	-8.57 to 8.57	8.57 to 25.71	25.71 to 42.86	42.86 to 60
Other Categories	-3 (not weighted)	3 (not weighted)	-3 to -2.14	-2.14 to -1.29	-1.29 to -0.43	-0.43 to 0.43	0.43 to 1.29	1.29 to 2.14	2.14 to 3

Appendix C: Summary of Assessment Results

Option	Pool	Strategic Aims	Connecting Towns & Cities	Decarbonisation	Global Gateways	Wider Impacts	Rural & Coastal	Critical Success Factors
Reopen rail lines in rural/coastal areas (see <u>Long</u> list for potential lines)	Idea							
Widespread roll-out of EV charging infrastructure (including HGVs)	Idea							
Implement SMART ticketing across the region	Idea							
Braintree branch line improvements	Idea							
A47 Tilney to East Winch dualling	Development							
East - west rail package	Development							
South Essex bus metro	Development							
A14 Package	Development							

Option	Pool	Strategic Aims	Connecting Towns & Cities	Decarbonisation	Global Gateways	Wider Impacts	Rural & Coastal	Critical Success Factors
A120 Braintree to Marks Tey dualling	Delivery							
A12 Strategic Package North	Development							
Army & Navy Sustainable Transport Package	Development							
Urban Active Travel Package	Idea							
Inter-urban Active Travel Package	Idea							
Rural Active Travel Package	Idea							
Ports Access Package	Idea							
Coastal Access Package	Idea							
Norwich Western Link Road	Development							

Option	Pool	Strategic Aims	Connecting Towns & Cities	Decarbonisation	Global Gateways	Wider Impacts	Rural & Coastal	Critical Success Factors
Widespread roll out of road user demand management measures across the region.	Idea							
A10 West Winch Housing Access Road	Development							
A12 Strategic Package South (M25 - A14)	Development							
Southend Airport Sustainable Access Package	Idea							
Stansted Airport Sustainable Access Package	Idea							
Acle Straight Dualling	Development							
A47/A17 Pullover Junction, King's Lynn	Development							
Clacton Town Centre Action Plan	Development							
GEML strategic package	Development							

Option	Pool	Strategic Aims	Connecting Towns & Cities	Decarbonisation	Global Gateways	Wider Impacts	Rural & Coastal	Critical Success Factors
Rapid transit links from Cambridge to Uttlesford (formerly CAM).	Idea							
Improved Access to Canvey	Idea							
A12 northern section (A1152 to Lowestoft) upgrade	Development							
North Essex Rapid Transit – phase 2	Idea							
A11 Fiveways	Development							
A133 Frating to Clacton enhancements	Idea							
Southend Rapid Transit	Idea							
Widespread roll out of fibre broadband and 5G	Idea							
Essex Thameside rail network study	Development							

Option	Pool	Strategic Aims	Connecting Towns & Cities	Decarbonisation	Global Gateways	Wider Impacts	Rural & Coastal	Critical Success Factors
A127 Outer Relief Road Southend and Essex	Idea							
A127 Northern Relief Road Southend and Rochford	Idea							
A1306 improvements and bus priority	Development							
A127 strategic package	Development							
Southend Congestion Relief Package	Development							
A140 / A1120 MRN	Idea							
Upgrade Wickford to Southminster line	Idea							
GEML Rail link to London Gateway	Idea							
M11 J8 Long Term Scheme	Idea							

Option	Pool	Strategic Aims	Connecting Towns & Cities	Decarbonisation	Global Gateways	Wider Impacts	Rural & Coastal	Critical Success Factors
West Anglia Mainline package	Development							
Urban Sustainable Transport Package	Idea							
Rail improvements across Suffolk 1. Linespeeds 2.Increased track capacity for more services 3. Electrification/ decarbonisation	Idea							
Infill electrification associated with Felixstowe and Thameside	Idea							
Felixstowe Port to the Midlands and the north 1. decarbonisation 2. Capacity	Development							
Haughley Rail Junction - double track (freight capacity)	Development							
Level crossing improvements not covered by the Ely/Felixstowe scheme	Idea							
Trowse Bridge and Trowse lower junction double tracking	Idea							
Felixstowe branch line - doubling	Idea							

Option	Pool	Strategic Aims	Connecting Towns & Cities	Decarbonisation	Global Gateways	Wider Impacts	Rural & Coastal	Critical Success Factors
Harp House Roundabout Improvements	Development							
M25 junction 30 capacity enhancements	Idea							
A13 / A126 East facing slips	Development							
Rural/coastal - Inter urban sustainable package	Idea							
A146 Active Travel link Beccles to Lowestoft	Idea							
A14/A12 Copdock interchange	Development							
A11 Thetford	ldea							
Tilbury Link Road	Development							

Appendix D: Current Strategic Investment Programme

This set of tables summarise the projects in the following categories

- CP = Committed projects. These have been identified to be at the delivery stage. They are well developed and already has some delivery funding certainty and commitment from national government
- O = Projects to be delivered in neighbouring authorities. The transport network extends beyond the Transport East region, this section identifies those projects that are important to and affect transport in the East but will be delivered by others.
- **A = Regional packages.** This category contains a mix of projects to be progressed by Transport East, the Local Transport Authorities / Local Government, or other delivery bodies. Appendix G provides further details of the technical programme to progress these packages.
- B, C, D, E, F & G = Strategic Corridors. This category identifies projects that sit along the core strategic corridors, (see Figure 2.1), that will either individually or in combination deliver the strategic priorities.

Committed Projects (CP)

Projects		Stage	Timescale (years)	Brief Description
CP1	Beaulieu Park Station	Delivery	0 - 5	New station on the Great Eastern Mainline to serve the growing communities in Northeast Chelmsford and South Braintree.
CP2	A120 Millennium Way slips	Delivery	0 - 5	Improved access by providing slip roads to the A120 in Braintree. Provides congestion relief by improving access and capacity to facilitate traffic movements and BDC Local Plan growth.
CP3	A127 Fairglen junction short term improvements	Delivery	0 - 5	Revised layout for Fairglen Junction on the Essex/Southend boarder. Required in an area of major growth and increased traffic movements.
CP4	Lower Thames Crossing	Delivery	0 - 5	New north/south link to provide additional capacity to the existing Dartford crossing - a nationally significant scheme
CP5	Great Yarmouth Third Crossing	Delivery	0-5	Additional river crossing to improve traffic flow through the town
CP6	Gull Wing Crossing - Lowestoft	Delivery	0-5	Construction of a third river crossing in Lowestoft, with an opening section to enable navigation
CP7	Long Stratton Bypass	Delivery	0-5	
CP8	Stanford-Le-Hope station	Delivery	0-5	Final approvals, funding and construction
CP9	A13 widening (including A13/A1014 junction)	Delivery	0 - 5	
CP10	North Essex Rapid Transit	Delivery	0 - 5	Dedicated transit system to serve growing communities in Colchester and Tendring.
CP11	M11 junction improvements at J7, J8 including new J7a	Delivery	0 - 5	7A is a new Junction and J8 is revised layout. Both required to support growth in the Harlow/Stansted area.
CP12	Harlow and Gilston Sustainable Transport	Delivery	0 - 5	Revised prioritisation of carriageway to promote active travel and improve capacity on the network.

Projects to be delivered in neighbouring authorities (O)

Regional/ Corridor	Projects	Stage	(years)	Brief Description
01	A47 Wisbech to Peterborough dualling	Development	5 - 10	
02	A414 corridor upgrades connecting with A10 and accessing Hertfordshire	Idea	5 - 10	
О3	A1307 Haverhill to Cambridge bus link	Idea	5 - 10	Sustainable link between Haverhill and Cambridge to address heavy travel demand between centres. Reopening the historic railway link is challenging as much of the land has been redeveloped.
04	A14/A11 junction works Idea		10+	Provision of an eastern link from the A14 to/from the A11
05	Ely area rail capacity improvements	Development	5 - 10	Capacity improvements between Ipswich and Ely, with capacity improvements through Ely station for passenger and freight service
O6	Stratford Station redevelopment	Idea	5 - 10	Improved safety and interchange at Stratford station. Includes short term proposals in development and longer-term proposals being put forward by a third party
07	Doubling track through Soham	Idea	5 - 10	Providing further benefits for the Ely Junction improvements
O8	Cambridge South Station	Development	0 - 5	Provision of a new station at Cambridge
O9	9 East West Rail (west section)		0 - 5	Provision of a railway between Bletchley and Cambridge to provide East/West Connectivity between Oxford and Cambridge

Regional Packages (A)

Region all Corrido	Projects	Stage	imescale (year:	s Brief Description
A1	Re-open rail lines in rural / coastal areas	Idea	5 - 10	To look at the potential for reinstating lines and improving rural connectivity for rail
A2	Videspread roll-out of EY charging infrastructure to increase EY take up (incl HGY's)	Idea	0 - 5	Charging infrastructure readily available to cater for and increase the demand for all electric vehicles including HGVs. Where possible, the electricity would be renewable andpowered by the Transport East region's own energy coast source
А3	Implement SMART ticketing across the region	ldea	0 - 5	Greater integration of fares, ticketing, customer service and service planning for strategic and local passenger transport
A4	Urban Active Travel Package	Development	0 - 5	Building on existing Local Walking and Cycling Implementation Plans, a step-change in the investment in active travel measures to be implemented in urban areas across the region, in line with the recommendations from the Transport East Sustrans Report (e. Strategic traffic-free routes; 20-min neighbourhoods; Removed rat-running traffic from residential areas; Safe routes to schools; Clean air zones in urban centres; First-mile, last-mile integration with public transport).
A5	Inter-urban Active Travel Package	Idea	0 - 5	Building on existing Local Walking and Cycling Implementation Plans and the Sustrans National Cycle Network (NCN) Route Strategy, an upgrade of NCN between urban areas and implementation of new links (Strategic traffic-free routes; Integration with public transport hubs)
A6	Rural Active Travel Package	ldea	0 - 5	Building on existing Local Walking and Cycling Implementation Plans, this would comprise NCN upgrades in rural areas; implementation of river, road and rail crossings at key gaps in network; improved links in and between rural villages (Network of low-traffic walking and cycling routes between settlements and key attractors and transport hubs; Year- round accessibility, achieved by regular/seasonal maintenance; Integration with public transport; Biodiversity enhancement, for example natural corridors)
A7	Develop an ambitious programme of traffic demand management measures across the region	ldea	0 - 5	A review of strategic measures to identify those most appropriate to support the reduction of traffic demand as set out in the Government's Transport Decarbonisation Plan, which could include options such as re-allocation of road space; innovation in transport sharing; fiscal measures; parking management; increased relative attractiveness of alternative modes.
A8	Ports Access Package	ldea	0 - 5	A strategic package of measures to support Freeports and expansion of other ports in the East. Measures to include addressing pinch points on road network and providing sustainable transport links to ports for workers in particular. N.B. Assumed to includ King's Lynn port road access upgrade; Tilbury link road; A13/A1014 junction improvements; electrification of London Gateway; GEML rail link to London Gateway; rail freight capacity enhancements to north London lines; and access and North Tendring Access Package.
A9	Coastal Access Package	ldea	0 - 5	A strategic package of measures to address pinch points on key access routes to coast; implement / improve sustainable transport links to key coastal towns; implement / improve active travel links within key coastal towns. Could also include broader ideas such as a ferry link between Harwich and Felixstowe.
A10	Urban Sustainable Transport Package	ldea	0 - 5	A step-change in strategic investment and delivery of sustainable transport in our 75 towns and cities, to deliver goal 4 in the draft Transport Strategy.
A11	Rural/coastal - Inter urban sustainable package	Idea	0 - 5	A strategic package of measures to improve connectivity from rural and coastal communities. To consider new links, sustainable transport options and isolation
A12	Infill electrification of rail associated with Felizstowe and Thameside	ldea	5 – 10	To benefit intermodal freight traffic, some "infills" are outside the Anglia region, where improvements would allow electric rather than diesel operation of freight to and from East Anglia
A13	Videspread roll out of fibre broadband and 5G	ldea	0 - 5	To enable greater level of home working and remote access to services, reducing the need to travel. Including expanding provision into rural areas

Strategic Corridor (B): Connecting Our Energised Coastal Communities

Regional/ Corridor	Projects	Stage	mescale (year	Brief Description
B1	A47 Tilney to East Winch dualling	Idea	5 - 10	Reduce congestion, reduced delay, more reliable journeys, improved connectivity, improved road safety, removes traffic from settlements. Supporting housing and job growth. Improved pedestrian and cycling facilities
B2	Norwich Western Link	Development	0-5	Improving connectivity, accessibility and journey times on key routes in Greater Norwich while reducing existing traffic impacts in western Norwich and improving conditions for walking and cycling.
В3	Acle Straight Dualling	Development	5 – 10	The Acle Straight forms part of a strategic corridor between the two key growth areas of Norwich and Great Yarmouth. It is a single carriageway road approximately 11.5km in length which passes through the Broads National Park. The aim of the proposed scheme is to reduce overall journey times, congestion and delay along this section of the A47. It is also expected to also improve the resilience of the local road network, improve journey time reliability to and from Great Yarmouth, and reduce numbers of road accident casualties on the road.
B4	A47/A17 Pullover Junction, Kings Lynn	Idea	0-5	The A17/ A47/ Clenchwarton Road roundabout, known as the "Pullover Roundabout" is a large roundabout located to the south-west of Kin Lynn. The idea is to provide a grade separated junction with a bridge/flyover and slip roads to ease congestion and improve reliability.

Strategic Corridor (C): Connecting the Heart of Anglia

Regional/ Corridor	Projects	Stage	Timescale (years)	Brief Description	
C1	GEML strategic rail package (Improvements in London, Essex, Suffolk and Norfolk)	Development	0 - 5	Improving frequency and journey time of passenger rail services between Norwich and London (outside of region also includes Bow Junction (Stratford) remodelling and facilitate better use of lines and platforms at Liverpool St to give improved services on Anglia services. To include improved access at stations (improvements identified in GEML study)	
	A12 strategic package South			Broken into the following sections; M25 – Chelmsford, Chelmsford bypass, Marks Tey to Colchester, Colchester to A14, the overall aim of the scheme is to improve capacity on the A12 between London and Ipswich, removing / reducing congestion to improve journey times and journey	
C2	M25 to the A14, including a bypass of Chelmsford	Idea	5 - 10	time reliability. M25 J27 linked to E4	
	J19 - J25 (Chelmsford to Marks Tey)	Development	0 - 5	M25 J28 linked to RIS programme A12 package to consider local connectivity issues to A12	
СЗ	Army and Navy Sustainable Transport Package	Development	0 - 5	Junction improvement, new P&R and expanded P&R, improved walking, cycling and passenger transport facilities	
C4	A12 strategic package North (A14 to A1152)	Development	0 - 5	Opens up opportunities for growth around Ipswich and on the corridor. Provides mitigation for the significant energy projects on the Suffolk Coast, including Sizewell C. Comprises a number of schemes from A12 junction with A14 to A1152	
C5	A12 northern section (A1152 to Lowestoft) improvements	Idea	5 - 10	A1152 – Lowestoft. To identify solutions to current constraints along this section of the A12. There are currently plans associated with the Sizewell C proposal to provide a two-village bypass from Stratford St Andrew to the A12/A1094 Friday St Junction	
C6	A140/A1120 MRN	Development	0 - 5	New bypass local to Earl Stonham, to address congestion and safety issues at this junction. This will support future local planned growth in the district.	
C7	A146 Active Travel link Beccles to Lowestoft	Idea	5 - 10	This is a potential scheme to link into the previous MRN scheme which is not being progressed as it doesn't meet MRN objectives. At an early stage of considering possible options. Local Plan growth in Beccles and Lowestoft, would link the two largest towns in the former WDC area.	

Strategic Corridor (D): Cross County Connectivity

Regional/ Corridor	Projects	Stage	Timescale (years)	Brief Description
D1	East-West (Eastern section) rail package (enhanced Norwich and Ipswich connectivity and capacity to Cambridge as Eastern section of national East-West Rail project)	Development	5 – 10	To deliver benefits of improving the Eastern Section to deliver a direct rail service from Oxford to Ipswich and Norwich. Additional freight route direct to Southwest England Additional platforms needed at Cambridge station to tenable East-West services
D2	Felixstowe Port to the Midlands and the north rail freight improvements	Development	5-10	Network Rail Decarbonisation strategy and Felixstowe to Nuneaton rail study, including the electrification of the Felixstowe branch line and a wider package of schemes to boost freight service capacity to be developed/delivered in a phased approach.
D3	Haughley Rail Junction – double track (freight capacity)	Development	0-5	Creation of a full two track junction to facilitate increased numbers of freight and passenger services along with improving efficiency of the junction.
D4	Other Rail level crossing improvements not covered by the Ely / Felixstowe scheme	Idea	5 - 10	Replacement of remaining level crossings not covered by Ely / Felixstowe scheme with bridges to enable increased rail paths to increase freight and passenger services along with faster services.
D5	Trowse Rail Bridge and Trowse lower junction double tracking	Idea	5 - 10	Replacement of the existing single track swing bridge with a double track bridge and remodelling of the Trowse lower junction. This will improve capacity and journey times to / from Norwich and unlock housing growth.
D6	Felixstowe rail branch line - doubling	Idea	10+	Improve capacity to accommodate increased freight services and support decarbonisation
D7	A11 Fiveways	Development	5 - 10	Upgrading the A11 fiveways junction, a roundabout where the A11 meets the A1065 and the A1101 near Barton Mills in Suffolk. To address capacity and safety issues. Potential RIS3 scheme
	A14 package - junctions 37 A14/A412 (Newmarket), 43 and 44 (Bury St Edmunds), A14 to Expressway standard and	Idea	5 - 10	Improvements to junctions 37 A14/A412 (Newmarket), 43 and 44 (Bury St Edmunds) to provide more capacity, upgrade of the A14 to Expressway standard improving journey times and reliability and improved interchange at Copdock to help facilitate freight movements to Felixstowe.
D9	Rail improvements across Suffolk	Idea	5 - 10	East Suffolk and Newmarket line speed improvements. Re-signalling to reduce headways in the Bury St Edmunds area to accommodate proposed service increases. Electrification of sections including between Haughley Junction and Peterborough. Network Rail is leading on a Suffolk Connectivity Study, due for completion 2022
D10	A14/A12 Copdock interchange	Development	0 - 5	RIS3 Improve reliability and capacity to reduce congestion and improve access to the West and the Port of Felixstowe
D11	A11 Thetford	Idea	5 - 10	A11 improvements, to consider potential expressway also junction improvements at Thetford to accommodate significant local growth

Strategic Corridor (E): South Essex Corridor

Regional/ Corridor	Projects	Stage	Timescale (years)	Brief Description	
E1	A1306 improvements and bus priority	Development	0-5	Reducing congestion and rat-running on local roads. Providing bus priority and walking and cycling infrastructure	
E2	M25 junction 30 capacity enhancements	Idea	5 - 10	Major capacity enhancements at J30, potentially a grade separated link from the A13 to the M25 north, to address current congestion and enable future growth in Thurrock, South Essex and the Thames Estuary areas.	
E3	Essex Thameside improvements (identified in Essex Thameside study)	Idea	5 - 10	A number of passenger and freight improvements were identified in the Essex Thameside Study. These include signalling enhancements, train lengthening, increased standing density on trains through fleet reconfiguration, improvements to stations and electrical power and capacity upgrades for freight services	
E4	A127 strategic package	Development	5 - 10	Capacity and safety improvements including sustainable options and potential re- trunking of the A127 and schemes to address local pinch points linked to the delivery of growth along the corridor.	
E5	A127 Outer Relief Road - Southend and Essex	Idea	5 - 10	New link from Southend Airport to Rettendon Turnpike.	
E6	A127 Northern Relief Road - Southend and Rochford	Idea	5 - 10	New and upgraded A127 between A127 / B1013 Tesco junction towards Shoeburyness.	
E7	Southend Congestion Relief Package	Development	0-5	Reduce congestion on local roads thereby improving journey times on key routes in Southend and to London Southend Airport	
E8	South Essex bus metro - rapid transit	Idea	5 - 10	Rapid transit linking existing settlements and destinations alongside providing flexibility to extend to new areas being planned in the sub- region. Picking up Havering, Thurrock, Brentwood, Basildon, Southend and Chelmsford.	
E9	Upgrade Wickford to Southminster Idea		5 - 10	Provision of passing loops and/or twin tracking to enable increased frequency of services to two trains per hour between Wickford and Southminster encouraging modal shift.	
E10	GEML Rail Link to London Gateway	Idea	10+	Long term proposal to remove rail freight from London.	
E11	Southend Airport Access Package	Idea	0-5	Integrated package to support access to Southend Airport – could be linked into local growth proposals. Potential to develop airport as a transport hub.	
E12	Harp House roundabout improvements	Development	0-5	Pinch point Scheme to improve congestion and access to Southend Airport. Delivery timescale March 2024	
E13	Improved access to Canvey	Idea	0-5	Improved or new access to Canvey Island including improved sustainable transport links.	
E14	Southend Rapid Transit	Idea	5 - 10	Tram network linking to Rochford, Rayleigh, Shoeburyness and Hadleigh.	
E15	A13/A126 east facing slips	Development	0-5	The scheme aims to achieve a step-change in connectivity, improve the operation of the highway network by reducing congestion, achieve environmental improvement for local communities and to provide capacity for planned growth. The scheme seeks to address the lack of a direct east facing connection from the strategic A13 towards the major Lakeside Basin commercial and retail area in West Thurrock. Access is currently along congested local roads, or by using the west facing access at the A13/A126 interchange and U-turning at M25 Junction 30, increasing congestion at that location.	

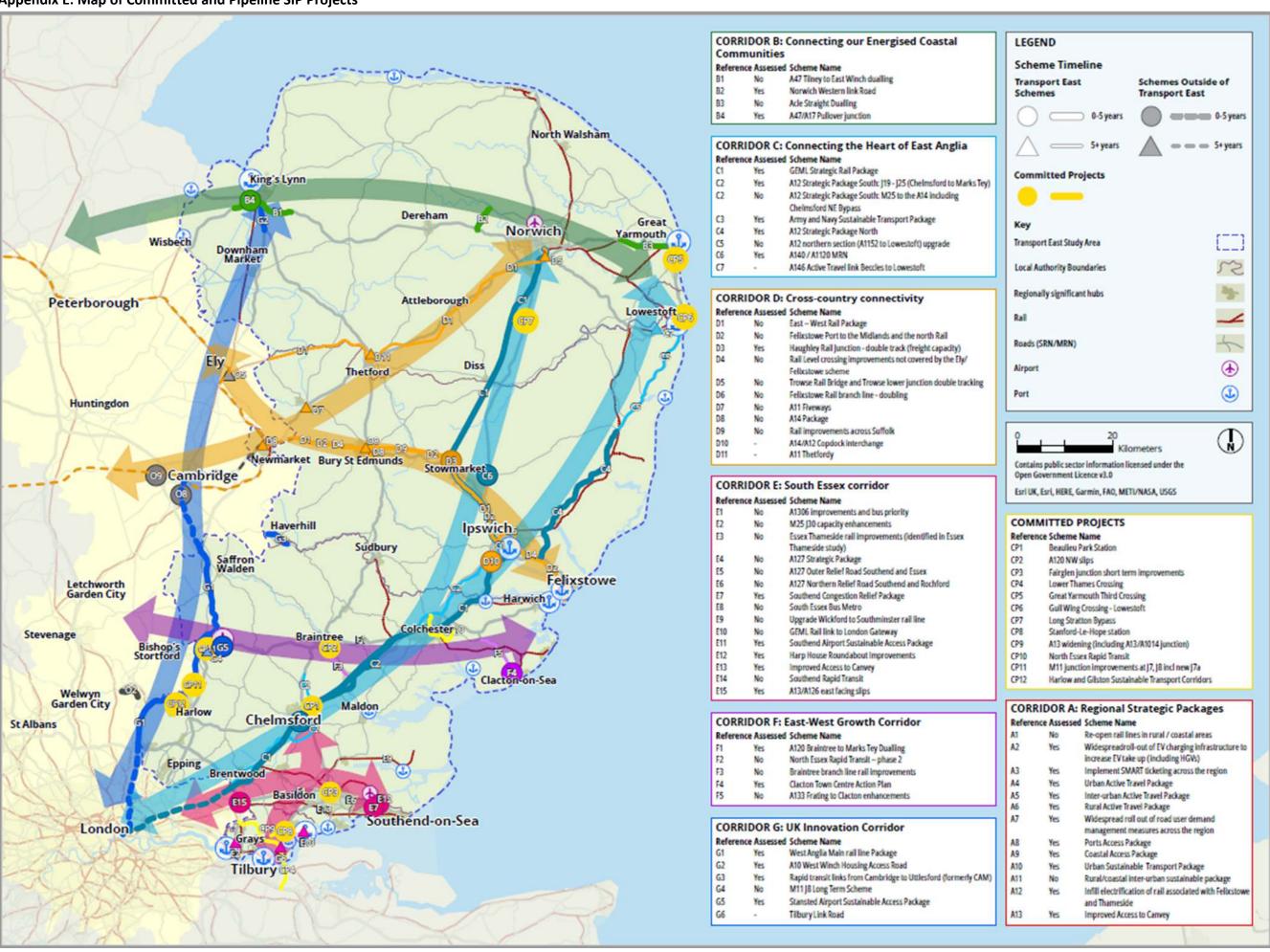
Strategic Corridor (F): East-West Growth Corridor

Regional/ Corridor	Projects	Stage	Timescale (years)	Brief Description
G1	Dualling the A120 between Braintree and the A12	Delivery	0 - 5	The section of the A120 between Braintree and the A12 is stifling economic growth. Unreliable journey times, congestion-related delays and safety issues affect tens of millions of journeys every year. These existing issues will only worsen over time if left unaddressed as the demand for travel on the A120 corridor grows. The scheme is likely to have a positive impact on the RIS Performance Specification key performance indicators set out by Highways England. These include making the network safer, supporting the smooth flow of traffic and encouraging economic growth.
G2	North Essex Rapid Transit – phase 2	Idea	5 - 10	Additional to HIF funded scheme - Expansion of RTS beyond initial urban corridor to QBP & routes (including operations) further across Colchester Urban Area and expanding out to Clacton, Braintree and Stansted.
G3	Braintree Rail Branch Line improvements	Idea	5 - 10	Provision of a passing loop on Braintree branch line to increase service frequency from 1 train per hour to 2 trains per hour encouraging moda shift and reducing rail heading to Witham and potentially Beaulieu Park Station in future.
G4	Clacton Town Centre Action Plan	Development	0-5	Scope includes parking, access and travel, streetscape and public realm, digital technology and date
G5	A133 Frating to Clacton enhancements	Idea	5 - 10	Longer term corridor improvement of A133 to dual carriageway standard for multi modal use.
G6	Tilbury Link Road	Development	5 - 10	National Highways are developing a scheme to improve port connectivity, this is in the RIS3 pipeline

Strategic Corridor (G): UK Innovation Corridor

Regional/ Corridor	Projects	Stage	Timescale (years)	Brief Description
F1	West Anglia main line rail package	Development	0-5	Stansted Line capacity works, journey time improvements, station and local access improvements, and improvements to customer experience There is an expectation for the delivery of Crossrail 2.
F2	A10 West Winch housing access road	Development	0 - 5	An effective bypass of West Winch relieving congestion and delay for strategic A10 traffic and providing environmental and community relief to the village
F3	Rapid Transit - Cambridge to Uttlesford	Idea	0-5	Linking growth locations in North Uttlesford with employment opportunities in Cambridge
F4	M11 J8 Long Term Scheme	Idea	5 - 10	Junction improvements to provide capacity, resilience and improve journey times and reliability to support airport growth and new homes.
F5	Stansted Airport Sustainable Access Package	Idea	0-5	Package of investment to support sustainable access to Stansted. Development of Stanstead as a transport hub, to take into consideration wider area growth

Appendix E: Map of Committed and Pipeline SIP Projects



Appendix F: Monitoring and Evaluation Key Performance Indicators (KPIs)

To develop an effective monitoring and evaluation plan, Key Performance Indicators, (KPI's) need to be identified and baseline data for these established. This appendix sets out the proposed KPIs for the Transport Strategy goals. During the next 12 months, the data sources for these KPI's will be identified, and baseline levels established.

Work will be undertaken to develop a Sustainable Travel Accessibility Metric, (STAL) that will enable authorities to reference a consistent approach to understanding the sustainable potential of new developments in addition to enabling changes in accessibility to be monitored across the region.

Where appropriate targets will be developed to annually measure KPI performance, for some indicators these targets may be qualitative indicating direction of change. Current workstreams will establish Decarbonisation to Net Zero trajectories that will inform the development of a regional, at the tailpipe, Carbon Reduction Target.

The tables below set out the strategic priority, transport goal and associated KPI.

Strategic Priority	Transport Goal	Key Performance Indicators
	General	Reduction in tail-pipe carbon emissions from transport Reduce the number of AQMA's where transport is identified as the primary source
	Reduce Demand for carbon intensive transport trips through local living. Making it easier for people to access services locally or by digital means	Increase in % population with access to superfast broadband as an indicator for the ability to reduce trips Increase in accessibility to local services by different modes reducing the need to travel
Decarbonisation to net- zero	2. Shift modes by supporting people to switch from private car to active, shared and passenger transport, and goods to more sustainable modes like rail	Increase % passenger trips by bus and rail Increase in active travel infrastructure and measures
net-zero	3. Switch fuels with all private, passenger transport, fleet and freight vehicles switching to net zero carbon fuels at the earliest opportunity	Increase % electric vehicles registered as a proportion of total vehicles Reduction in % of carbon fuel consumption Increase % of our own transport network and vehicles to be powered by energy from the Transport East region's own renewable energy sources
	4. Zero Carbon Growth by supporting authorities and developers to plan, locate and design new development that reduces the need for people to make carbon intensive transport trips in the future	Increase the % of new developments where actual mode share meets the level that it is assessed to be able to reach using sustainable travel modes (STAL)

Strategic Priority	Transport Goal	Key Performance Indicators
	5. Within our towns and cities Improve connectivity and accessibility for walking, cycling and passenger transport to support sustainable access to services, education, training,	Increase mode share of sustainable modes for trips to and within urban centres particularly for shorter journeys (2 miles for walking and 5 miles for cycling)
	employment and leisure	Increase patronage and mode share for passenger transport modes including rail and bus
Connecting our Growing Towns and	6. Deliver faster and more reliable transport connections between our growing towns, cities and economic corridors, and to the rest of the UK, to support business growth, skills development and	Improved journey time reliability for inter-urban journeys within the region and to other parts of the UK, reflecting reduced congestion and improved reliability
Cities	employment	Improved journey time for established matrix of trips
	7. Fully integrate transport networks, services and operations	Reduce the number of people killed or seriously injured on the transport system
	across the Transport East region, through customer focussed approach enabling seamless and safe end-to-end journeys by	Increase in access to jobs and services within 30 minute travel time, by mode
	sustainable modes that are attractive to all people	Reduction in people experiencing threats to their personal security on our transport network
	8. Increase accessibility to education, training, services and	Reduction in percentage of areas classified as a "transport desert", (without an hourly or better bus or train service)
Energising our Rural and Coastal	employment for rural communities	Increase in access to jobs and services within 30 minute travel time, by mode
Communities	9. Improve connectivity along our 500 miles of coastline and connect our coastal towns and communities to the rest of the region and the UK, to support levelling-up and boost our coastal industries, including Energy, Shipping and Tourism	Improved journey time for established matrix of trips

Strategic Priority	Transport Goal	Key Performance Indicators
	10.Improve connectivity, journey time and reliability for freight,	Improved journey time reliability on key corridors accessing ports
	passengers and employees to ports and airports	Improved journey time reliability on key corridors accessing airports
		Increase % freight to / from ports by rail
Unlocking	11. Move goods and people sustainably to ports and airports by shifting modes	Increase % passengers using sustainable modes
international Gateways		Increase % employees using sustainable modes
-		Increase % use of alternative fuel within port sites
	12. Increase the use of alternative fuels for both ports and airports	Increase % use of alternative fuel airside at airports
		Increase % use of alternative fuels landside at airports

Appendix G – Technical work programme

This table sets out the technical work programme set out in our Business Plan 2022/23 to progress the SIP regional ideas and packages to development and delivery phase.

Transport East Technical Project	SIP Projects supported (Appendix D):	Project Description	Estimated Completion date						
A. Next Generation	A. Next Generation Strategic Analytical Capability								
1. Data Discovery	A1 – A13	To enable Transport East to develop a technical evidence base to support future investment in the region for all partners and monitor the progress of the strategy, we need to understand the data we have and develop the capability to model policy, strategy and scenarios. This work will identify opportunities to take advantage of economies of scale, align procurement and encourage consistency across authorities. It is the first phase in setting up a long tern data strategy for TE.	July 2022						
2. Agent Based Model for the East	A1-A13	A new people-focussed approach to regional transport modelling. This will identify how and why people travel rather than the traditional vehicle-focussed modelling approach. It enables the complexity of peoples' lives to be considered. This modelling approach can test how people change their travel mode or behaviour in response to policy and network changes, informing the development of transport strategy at a local and regional level.	August 2022						
3. Travel and behaviour survey	A1-A13	This work will establish a statistically robust approach to data collection to understand current and future travel behaviour and needs and attitudes to changing travel mode. This will ensure that the data is robust at Local Transport Authority and regional level.	March 2023						
4. Decarbonisation Analysis Toolkit	A1-A13	Standardisation of carbon baselines across the three Sub-national Transport Body (STB) geographies (Transport East, England's Economic Heartland and Transport for the South East). It will set an agreed standardised baseline and approach to understanding transport carbon emissions based on work already commissioned by the three STBs to determine where and how much carbon is being emitted from the transport network across the three STBs and the required trajectories achieve net zero in line with UK national policy. This will include an "accelerated CCC pathway" to reflect TE and EEH 2040 net Zero ambition. This programme will also explore the potential for development of a carbon budget for transport in the Eastern region.	March 2023						

B. Connectivity Stud	B. Connectivity Studies					
5. Connectivity studies for our core corridors (x 6)	A1-A13	A connectivity study will be completed for each of our six core corridors. Aligned to neighbouring regions, these will identify the next generation of investment needed on our strategic corridors. They will be multi-modal, focusing on people and goods movement, and connectivity. The first study will be initiated in 2022/23 and we propose all are completed within the three-year programme.	First study initiated by March 2023.			
C. Strategic Plans fo	r next generation o	f transport investment				
6. Strategic Rail Phase 1	A1, A3, A8, A9, A10, A11, A12	To produce a State of Rail report for the TE region, to understand current constraints and opportunities on the network that will impact the TE region, with a focus on the region's ports and airports. It will identify gaps in evidence and review best practice from other STB rail plans and develop the scope for the TE rail plan (see below)	August 2022			
7. Strategic Rail and Mass Transit Plan (Rail Phase 2)	A1, A3, A8, A9, A10, A11, A12	Creation of an integrated Rail and Mass Transit Plan for the East, based on the Strategic Rail Phase 1 report and the outputs of the Agent Based Model. It will set investment priorities and ideas for further development by Transport East and its partners.	2023/24			
8. Electric Vehicle Demand Assessment	A1-A13	To identify and address the significant regional challenges related to the co-ordination and delivery of EV infrastructure across the Transport East and England's Economic Heartland regions and to accelerate delivery supporting the regions' 2040 net zero ambitions and the UK's EV infrastructure Strategy.	March 2023			
9. Alternative Fuels for Freight - Phase 1	A2, A8, A12	To undertake a study to identify potential locations of refuelling/ recharging stations based of the predicted regional uptake of alternative fuels by 2040. This will consider the Strategic and Major Road Networks, and A-road network in the region. This work is also being undertaken across EEH and TfSE to ensure cross boundary needs are addressed and is in line with work undertaken by Midlands Connect STB in 2019/20	September 2022			
10. Alternative Fuel for Freight - Phase 2	A2, A8, A12	A joint STB project to be led by Midlands Connect. This will use the output from Phase 1 to develop a tool that will enable the longlist of potential refuelling and recharging locations to be shortlisted for further consideration	March 2023			
11. Future of Freight Plan - for the East	A2, A4, A5, A6, A7, A8, A9, A10, A11, A12	Work with national, regional and local partners to deliver a Future of Freight Plan for the East, identifying how the national Future of Freight plan can be delivered on the ground in the Eastern region.	Initiate by March 2023			

13. Active Travel Phase 2	A4, A5, A6, A10	This work will progress the most important of the 11 recommendations from Sustrans TE Active Travel report published in 2021 (phase 1), working with our local authorities and other partners.	March 2023
13. Support for Local Authority Bus Service Improvement Plans	A3, A8-A11	A programme to help improve delivery of BSIPs and Enhanced Partnerships, and support to local transport authorities who have not received Government funding in the current round. This will include enhanced evidence base, knowledge sharing and targeted technical support. Partnership approach with Transport for the South East and England Economic Heartland STBs.	March 2023
14. Rural Case for Investment	A6, A11	To develop and summarise the case for investment in rural and coastal communities across England. This document will enable discussions with DfT, MPs, Local Transport Authorities and other organisations about the challenges found in these areas and the need for investment. Completed in partnership with Peninsula and Western Gateway STBs.	March 2023
D. Lead regional thinking and action on new policy and innovation			
15. Rural Mobility Centre of Excellence	A1, A3, A6, A9, A11,	Through the recruitment of a dedicated resource, identify new models of transport in rural areas, adapt best practice, provide better data and analysis, and entice the private sector to roll out innovation – ultimately delivering better outcomes for our rural communities.	March 2023
16. Strategy Hub	A1-A13	Through the new Transport East 'Strategy Hub' and work programme, initiate expert-led inquiries on priority topics, from shortlist including Rural Transport, future use of roads in the East, paying for transport, and social inclusion.	Initiate Autumn 2022