



A12 Suffolk Energy Gateway

Suffolk County Council

A12 Suffolk Energy Gateway - Strategic Case

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Executive Summary

The Scheme

The A12 is the main corridor for movement within, to and from “Suffolk’s Energy Coast”. It links two of the county’s main settlements, Ipswich and Lowestoft, and the array of communities, businesses, energy assets and visitor attractions in their hinterland with the Strategic Road Network, international gateways (ports at Felixstowe, Ipswich and Lowestoft) and each other. Alongside the East Suffolk Rail Line, it forms the basis of East Suffolk’s future prosperity. The location of the study area is shown below.



The A12 Suffolk’s Energy Gateway scheme (hereafter referred to as SEGway) comprises an improvement to the 4.5 mile (7 km) section between the B1078 at Wickham Market and the A1094 at Saxmundham in East Suffolk. The preferred option:

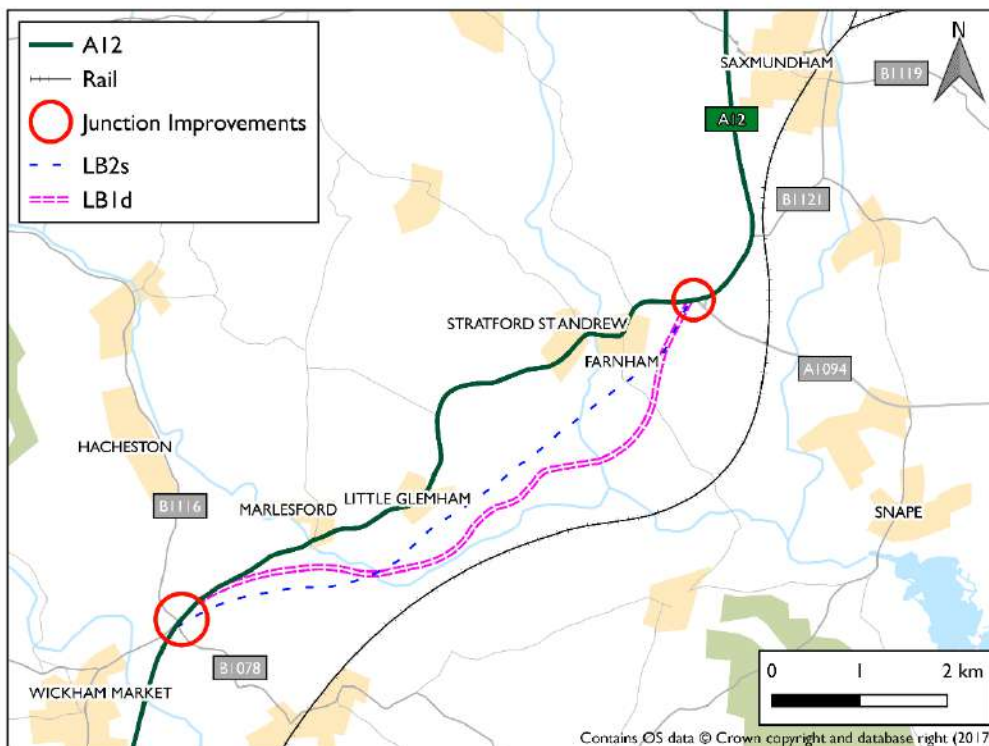
- Joins two sections of existing dual carriageway through a new 70mph dual carriageway segregated from local roads.
- Bypasses the four communities of Marlesford, Little Glemham, Stratford St. Andrew and Farnham currently subject to all the adverse impacts of traffic. It does this to the south and east of these communities.
- Incorporates upgrades to sub-standard junction layouts at both the B1078 and A1094 intersections including:
 - an expanded roundabout at the junction of the B1078 and B1116 to cater for a realigned on-slip road to the northbound A12 and a new connection to the old A12 toward Marlesford;
 - a new roundabout junction for the B1078, southbound A12 off-slip, southbound A12 on-slip and the unclassified Station Road to improve the current substandard staggered cross-roads to the east of the existing A12 overbridge; and
 - a replacement of the existing dual carriageway priority junction with central reserve at the A12 and A1094 with a new roundabout also incorporating a connection to the old A12 to Farnham.

- Incorporates viaduct structures over the River Ore and Alde floodplains.
- Incorporates provision for existing roads and public rights of way to cross the A12 via overbridge or underbridge structures either in their current location or through short diversions to amalgamate crossing points.
- Incorporates appropriate environmental mitigation measures.

It would be subject to preliminary design and further consultation in 2018 with a view to submitting a planning application for determination in early 2019. It then would be built between April 2021 and April 2023, opening to the public in April 2023.

It represents the first phase of improvements to the A12 corridor between Ipswich and Lowestoft considered necessary by amongst others, the hosting authorities of Suffolk County Council, Suffolk Coastal District Council and Waveney District Council.

The location of the scheme within the study area is shown below:



Why?

The Strategic Case sets out the need for improvement of the A12 and how funding can benefit the New Anglia Local Enterprise Partnership (LEP) region and in particular Suffolk in terms of quality of life, homes, jobs and a more resilient and productive economy. It highlights the strong support the case for investment has amongst local stakeholders. Norfolk and Suffolk contribute £35 billion to UK plc¹ and when there is investment in this region it delivers further growth. This is all founded on numerous assets and growth sectors, including the following five sectors of particular relevance to East Suffolk:

- **Energy** – This sector adds £1 billion GVA to Norfolk’s and Suffolk’s economy each year². Major features of the sector include:
 - EDF Energy’s Sizewell B nuclear power station, their planned investment in Sizewell C nuclear power station and the 25,000 job roles associated with it. Sizewell was identified in 2011 by the Government’s *National Policy Statement for Nuclear Power Generation*³ as a potentially suitable site for a new nuclear power station because of its proximity to an existing power station (Sizewell B), the North Sea and its relatively isolated location.
 - The East Anglia Array, Greater Gabbard and Galloper off-shore wind turbine fields serviced from the Port of Lowestoft, its Centre for Offshore Renewable Engineering, and clusters of manufacturing firms centred within Lowestoft’s successful Enterprise Zone. Scottish Power is planning to invest in a further 3,000 job roles associated with East Anglia ONE offshore wind.
 - This recent and future investment in the nuclear and renewable energy industry is vital to the achievement of the UK Government’s Clean Growth Strategy (October 2017).
- **Information and Communications Technology (ICT), Tech and Digital Creative** - Adastral Business Park at Martlesham Heath, home to BT’s Global Research and Development Headquarters, and Innovation Martlesham – an established (and growing) cluster of around 100 high-tech ICT firms.
- **Advanced Agriculture, Food and Drink** - The region supplies significant amount of food and drink to the country’s supermarkets and the region’s artisan products are a draw for visitors. Major firms include Adnams, Birds Eye alongside smaller firms such as Stokes Sauces and a wide range of restaurants, shops and markets all promoted by the East Suffolk Food and Drink Trails, a collaborative initiative by Defra, Suffolk Coastal District Council and Waveney District Council. Furthermore, the Centre for Environment, Fisheries and Aquaculture (Cefas) works across multiple sectors from its basis as a world leader in innovation and research in marine science. This has been strengthened with a recent £16 million Government investment in new and refurbished facilities at its Lowestoft Headquarters, with these due to open in 2019.
- **Visitor Economy, Tourism, Heritage and Culture** - In 2013 there were over 10 million visits made to East Suffolk with a total direct visitor spend of £462 million⁴. The total value of tourism to East Suffolk’s economy and well-being is important, contributing £590 million and over 12,500 jobs. Suffolk’s Energy Coast is supported by a strong cultural offer through festivals such as Aldeburgh and Latitude, alongside popular resorts such as Southwold, and things to do and visit such as nature reserves including The Broads National Park, historic buildings and castles, wildlife parks, restaurants and artisan shops all accessed by the A12.
- **Transport, Freight and Logistics** – is worth £1.3 billion to New Anglia and employs over 23,500 people. Ipswich is the country’s largest port for grain export; Great Yarmouth and Lowestoft serve the North Sea energy sector; and Felixstowe is the country’s busiest container port, responsible for over 40% of UK container traffic with further investment and expansion underway.

This is all underpinned by **new homes**. Suffolk Coastal District Council and Waveney District Councils are both taking their Local Plans through a review. Suffolk Coastal District Council is looking to consult further on preferred options in 2018 with this subject to Examination in 2019. Waveney District Council is currently working towards submitting a final version of the Local Plan for Examination in late spring of 2018, with adoption

¹ New Anglia LEP et al., Norfolk and Suffolk Economic Strategy – A Strategy for Growth and Opportunity Executive Summary, p.5., November 2017

² New Anglia LEP et al., Economic Evidence Report (Updated), p. 126, December 2017 - <https://newanglia.co.uk/wp-content/uploads/2017/12/2017-12-05-FINAL-Economic-Evidence-Report-single-pages-HighRes.pdf>, accessed 8 December 2017

³ Department for Energy and Climate Change, National Policy Statement for Nuclear Power Generation, July 2011

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47859/2009-nps-for-nuclear-volume1.pdf, accessed 10 December 2017

⁴ Economic Impact of Tourism Reports for Suffolk Coastal and Waveney, 2015, referenced in the East Suffolk Tourism Strategy 2017 to 2022

scheduled for the end of 2018. These Local Plan reviews provide options for the location and scale of housing growth along the A12 and elsewhere in the districts up to 2036, both to cater for housing need and realise further potential employment growth. The ability to realise the full potential is likely to be at least partly linked to the delivery of new infrastructure, such as the SEGway scheme.

Despite this potential only the south of Suffolk's Energy Coast performs on a par with the rest of England. More needs to be done to close that productivity gap and exploit the potential that the region can offer to rebalance the UK economy and achieve wider Government aims associated with trade, industry, decarbonisation of the power grid and tourism. The Economic Strategy for Norfolk and Suffolk has identified the Norfolk and Suffolk Energy Coast including Bacton, Great Yarmouth, Lowestoft and Sizewell with its assets on and offshore as one of its priority places for continued growth.⁵

New Anglia LEP, Suffolk County Council, Suffolk Coastal District Council and Waveney District Council have set out a balanced yet ambitious approach to delivering growth. This matches investment in skills and infrastructure and support for business to ensure that the region is a well-connected place, with an economy that is inclusive, high performing, productive and international facing, including the centre for the UK's clean energy sector with this all staffed by a highly skilled workforce. Their view is that the A12 - and specifically the section between Wickham Market (B1078) and Saxmundham (A1094) - represents the most pressing need for initial investment to help realise these ambitions in East Suffolk, with future spending on other sections of the A12 and East Suffolk Rail Line to follow.

The single carriageway, sub-standard section of the A12 between Wickham Market and Saxmundham is most in need of critical improvement. Key issues are:

- Congestion pinch-points – the narrow, single carriageway section of the A12 experiences unpredictable traffic congestion, particularly at the 'Farnham bend', where two HGVs cannot pass safely.
- Long, unreliable journeys caused by the standard of road and the unpredictable impacts of seasonal agricultural and tourism traffic. This pushes up the cost of doing business, reducing productivity and making it less attractive for investment and a barrier to employing skilled staff or those seeking work.
- High traffic flows on summer Fridays and weekends, demonstrating the vital role that the A12 plays in bringing people to the region to enjoy the visitor economy.
- Poor resilience of the corridor – there is little alternative.
- Road safety including sub-standard junctions.
- Community severance limiting local residents' access to services and social networks, and an air quality management area in Stratford St. Andrew village.
- Perception of the area from inward investors and leisure visitors as a result of all of these factors.
- Expected increase in traffic flows on the A12 corridor as a result of growth in housing, employment, Sizewell C construction and the tourist industry. This would exacerbate all of the above problems for businesses, visitors and residents alike.

Based on the analysis undertaken across the five constituent parts of the Outline Business Case, the view of the Project Delivery Team is that LB1d (Dual Carriageway) is best able to meet the aim of the project, offers the best value for money and has the greatest support of public, business and political stakeholders. Advantages of the dual carriageway option and the resulting benefits include:

- Value for money:
 - ✓ Reduced travel costs for businesses, commuters and visitors through improved connectivity to other major centres and the Strategic Road Network.
 - ✓ Increased road safety benefits by providing safer opportunities for overtaking slow moving vehicles.
 - ✓ Achievement of local noise and air quality benefits.
- Strategic fit with scheme objectives, central government, LEP and local government policy aims:

⁵ New Anglia LEP et al., Norfolk and Suffolk Economic Strategy – A Strategy for Growth and Opportunity Executive Summary, p.7., November 2017

- ✓ It is strongly aligned to the UK Government's Clean Growth Strategy and Industrial Strategy through its support to the delivery of £50 billion of investment in the highly productive energy sector in the next two decades, including 25,000 different job roles associated with Sizewell C and up to 3,000 jobs for Scottish Power's East Anglia ONE offshore wind investment. We forecast that SEGway could contribute £30 million to £115 million of Gross Value Add to the economy over the 60-year appraisal period through its role in facilitating Sizewell C (other infrastructure is of course also important).
- ✓ It supports sustained growth in the region's tourism offer, responsible for 10,000+ jobs and 10 million annual visits, with SEGway forecast to result in £42.6 million of Gross Value Add benefits to the economy over the 60-year appraisal period through an increase in tourism visits and spending.
- ✓ Provides essential infrastructure to support potential new homes, with the scale and location of growth to be confirmed in the reviews of each district's Local Plan, with Waveney district's subject to consultation and Examination in Public in 2018, and Suffolk Coastal district's subject to consultation in 2018 and Examination in Public in 2019.
- Future proofs the function of the A12 as part of Suffolk County Council's emerging Major Route Network. It helps provides all road users with a largely consistent and high quality level of service (dual carriageway) for journeys between Ipswich, the A14 (and thereby London, Essex, the Southeast and Midlands) and the A1094 where travel demand splits between the A12 (Saxmundham, Southwold, Lowestoft and Great Yarmouth) and A1094 (Aldeburgh, Leiston and Sizewell). This helps portray the A12 in a positive image as a marketable gateway to a region that is quicker and easier to do business in, live in and visit thereby:
 - ✓ retaining companies and workers,
 - ✓ encouraging repeat visits, and
 - ✓ attracting new businesses, skilled workers, families, and visitors.
- It helps to provide the headroom for East Suffolk's energy and tourism industries and settlements to grow at the pace they want, rather than be dictated by transport network constraints.
- It provides East Suffolk's only major north-south road and its economy with the resilience to cater for significant seasonal variation in travel demand caused by visitors to East Suffolk's wide range of tourist destinations and slow moving agricultural traffic. It will help improve the reliability of travel for East Suffolk's businesses and hauliers to and from the ports of Felixstowe, Ipswich and Lowestoft and the Strategic Road Network. It also caters for the increase in traffic demand caused by ten years of Sizewell C construction and subsequent periodic maintenance outages of both Sizewell B and C power stations.
- Strength of support from the public, business, MPs, district, town and parish councils.

Suffolk County Council are also promoting major investment in transport improvements in Ipswich (Upper Orwell Crossing) and Lowestoft (Lake Lothing Third Crossing), as fast track schemes through the Large Local Major Schemes process. These schemes in addition to SEGway would promote better connectivity within and between Suffolk's two major settlements, and two of its three key ports.

The two remaining sections of A12 single carriageway south of the scheme (close to Woodbridge) are in Suffolk County Council's view more easily solved through lower cost, largely online improvements utilising a wide range of current and future public and private funding options.

This represents a once in a lifetime opportunity to forward fund the further development of SEGway through the design, consultation, planning, scheme orders and procurement phases. This approach helps provide the best opportunity to capture developer funding to deliver SEGway in advance of Sizewell C's peak construction.

1. Introduction

The Strategic Case determines whether or not an investment is needed, either now or in the future. It demonstrates the case for change - that is, a clear rationale for making the investment; and strategic fit - how an investment will further the aims and objectives of Government, Suffolk County Council, Suffolk Coastal District Council, Waveney District Council and the New Anglia Local Enterprise Partnership (LEP).

More specifically, the Strategic Case should:

- Specify the business need for a project;
- Set the context and identify a series of investment aims;
- Assess the investment aims against what Suffolk County Council (and Government) wants to achieve as a whole;
- Determine the case for change and strategic fit. This should be an iterative process as the business case develops, and always supported by robust evidence, such as identifying key risks and constraints; and
- Include responses from consultation with main stakeholder groups.

The Strategic Case is discussed in detail under the following sub-headings. These include specific headings requested as part of the Large Local Major Schemes Bid Checklist as well as typical headings expected within a Strategic Case:

- Existing Situation (Chapter 2)
- Future Situation (Chapter 3)
- Need for Investment (Chapter 4)
- Scheme Objectives (Chapter 5)
- Proposals and Option Assessment (Chapter 6)
- Strategic Fit (Chapter 7)
- Impact of the Scheme on national strategic priorities - Strategic Road Network, HS2, International Gateways, housing, job creation (Chapter 8)
- Planning Position, Stakeholder and Political Support (Chapter 9)
- Other interfaces (Chapter 10)
- Conclusion (Chapter 11).

Further information can be found in supporting Business Case annexes:

1. *Economic Appraisal Report*
2. *Environmental Report*
3. *Forecasting Report*
4. *Option Assessment Report*
5. *SEGway Consultation Report*
6. *Strategic Outline Business Case and its appendices*
7. *2006 Four Villages Study (The Landscape Partnership / Faber Maunsell)*
8. *2013 Four Villages Study (AECOM)*
9. *2014/2015 Four Villages Study (AECOM)*
10. *SCTM Local Model Validation Report (WSP)*
11. *SEGway Local Model Validation Report (WSP)*
12. *SCTM Traffic Data Collection Report (WSP)*
13. *Demand Model Report (WSP)*
14. *SEGway Model Specification Report (WSP).*

Reference should also be made to the Outline Business Case's *Economic Case* to understand the value for money criteria and analysis undertaken for choosing the preferred option.