ENGLAND'S ECONOMIC HEARTLAND

# Connecting economies:

## Cambridgeshire and Peterborough

### Unlocking economic potential through improved connectivity

Including consideration of links to neighbouring areas

# // SUMMARY

## Cambridgeshire and Peterborough is an area of contrasts.

Cambridge is the world's most innovative city, home to an extraordinary number of globally-important science and technology clusters – it is attracting significant national interest regarding its vital role for the future of the UK economy.

But the ceremonial county also includes a large share of the UK's most important agricultural land. It boasts the beauty of the Fens and the historic cathedral city of Ely. The manufacturing and logistics hub of Peterborough is the focus of ambitious regeneration plans. Yet for all these significant economic assets and an economy worth nearly £30 billion, Cambridgeshire and Peterborough is also home to significant levels of deprivation – both rural and urban.

New research by Cambridge Econometrics demonstrates how improved connectivity can further unlock Cambridgeshire and Peterborough's vast economic potential, while also reducing inequalities, protecting the environment and supercharging the wider region.

With regards to the latter, if you include the main settlements which immediately surround Cambridgeshire and Peterborough, including parts of Central Bedfordshire, Bedford, North Northamptonshire, Lincolnshire, Norfolk, Suffolk, Essex and Hertfordshire (see map, right), you will find an economy worth a staggering £64bn.

Cambridge Econometrics has identified strong economic synergies between Cambridgeshire and Peterborough and this wider region, which can be further exploited through improved connectivity:

- Spreading expertise in science and technology innovation
- Boosting productivity
- Unlocking affordable commercial floorspace
- Reducing regional disparities
- Increasing access to affordable housing

While the Cambridge 2050 commission is looking at infrastructure needs and potential growth over the next three decades it is important to note that the ceremonial county is already undergoing very significant economic and housing growth. This brochure outlines the connectivity priorities which are needed in Cambridgeshire and Peterborough to both support this current growth and lay the foundations for future prosperity.

### About this brochure

This brochure provides a compendium of both evidence and asks to government, which England's Economic Heartland, its local and combined authority partners, MPs, private sector and others can use to make the case for improved connectivity and infrastructure investment in our region. It provides the high-level economic narrative for improving connectivity in the corridor, based on expert analysis by Cambridge Econometrics. It then details the flagship transport improvements which England's Economic Heartland's evidence base suggests would significantly contribute towards economic growth. EEH is producing seven 'Connecting Economies' brochures in total. Of specific relevance to this area are the brochures outlining the economic narrative and priority interventions for the following corridors:

- Peterborough-Northampton-Oxford
- EEH South (which includes Hertfordshire and southern Bedfordshire)
- Luton-Bedford-Corby (to be published autumn 2024)

## PRIORITY INTERVENTIONS

The interventions right represent investments that are essential for our region's – and our country's – economic prosperity. They all have strong strategic value, including their benefits to local and regional connectivity and economic growth – and they have strong political support from our local and combined authority partners. They form a compendium of our ask to government, MPs and wider stakeholders. These schemes must be supported, progressed and delivered at the earliest opportunity for the benefit of the region and the UK as a whole.

A Ely area capacity enhancements. See page 20

B March-Wisbech-Peterborough public transport improvements. See page 27

C Peterborough Station Quarter. See page 23

D A1 connectivity: Huntingdon to Biggleswade. See page 28

E Improvements to the A10 corridor between Cambridge and Ely. See page 31

## CONTENTS

F Delivery of Greater Cambridge partnership's four corridor schemes . See page 32

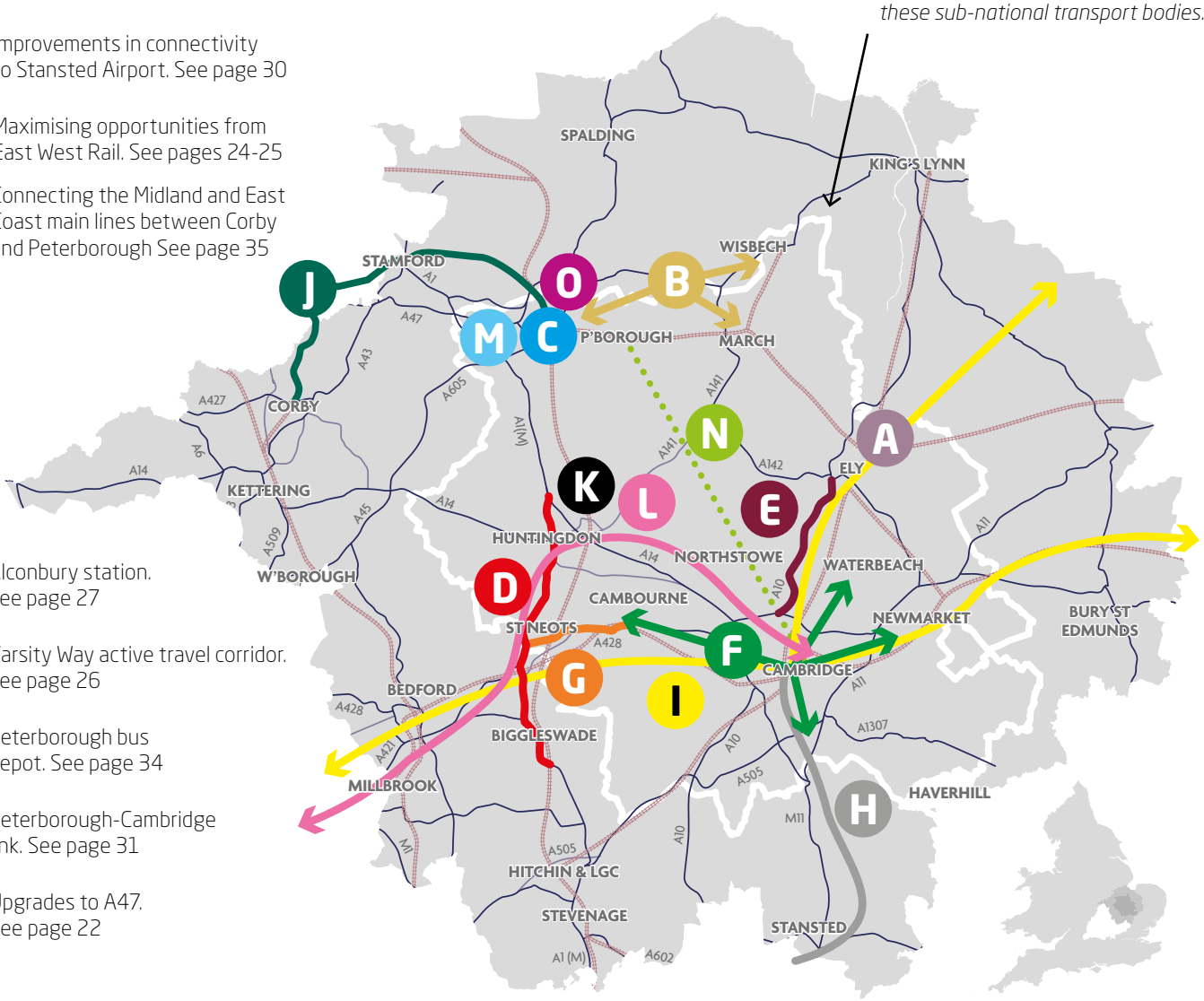
G A sustainable transport corridor along the 'de-trunked' A428. See page 27

H Improvements in connectivity to Stansted Airport. See page 30

I Maximising opportunities from East West Rail. See pages 24-25

J Connecting the Midland and East Coast main lines between Corby and Peterborough See page 35

*The white line shows the boundary of the Cambridgeshire and Peterborough area (the core area). The 'wider area' surrounding it has also been considered in this brochure. The area to the west (including parts of North Northamptonshire, Central Bedfordshire, Bedford and Hertfordshire) is covered by EEH; to the east and south by Transport East, and to the north, Midlands Connect. EEH enjoys strong working relationships with these sub-national transport bodies.*




K Alconbury station. See page 27

L Varsity Way active travel corridor. See page 26

M Peterborough bus depot. See page 34

N Peterborough-Cambridge link. See page 31

O Upgrades to A47. See page 22

## GVA:

**Cambridgeshire and Peterborough:** £28.6 billion (2021), an increase of £4.3 billion (or 15%) over 2011-19.

**Including wider area:** £63.9 billion (2021), an increase of £9.2bn (18%) over 2011-19.

## POPULATION

**Cambridgeshire and Peterborough:** 894,600 (2021), an increase of 99,700 (or 11%) over 2011-21.

**Including wider area:** 2.34 million (2021), an increase of 254,600 (or 12%) over 2011-21.

## PRODUCTIVITY

**Cambridgeshire and Peterborough:** While greater Cambridge's productivity matches the national average, the ceremonial county overall has a productivity gap of -6% (2021).

**Including wider area:** 11% below the national average.

## JOBS

**Cambridgeshire and Peterborough:** 456,200 (2022), an increase of 83,300 (or 18%) over 2011-19.

**Including wider area:** 1.08 million (2022), an increase of 171,900 (or 19%) over 2011-19.

## INEQUALITIES

The Fenland District Council area, which includes March and Wisbech, is the most deprived area of EEH based on the overall English indices of deprivation (2019). It is ranked as 51st most deprived local authority area out of 317 and the third most deprived in the country for education, skills and training. Peterborough is 65th most overall deprived (and 31st for education, skills and training; 32nd for crime; and 42nd for barriers to housing and services). Both Peterborough and Fenland have neighbourhoods amongst the 10% most deprived in the country. East Cambridgeshire (which includes Ely) is the 46th most deprived in terms of barriers to housing and services. Notably, Cambridge is ranked 51st for its 'living environment' which factors in air quality and road accidents – a symptom of it being the most congested place in EEH and the 81st most impacted by congestion in the world (Inrix).

# // ENGLAND'S ECONOMIC HEARTLAND

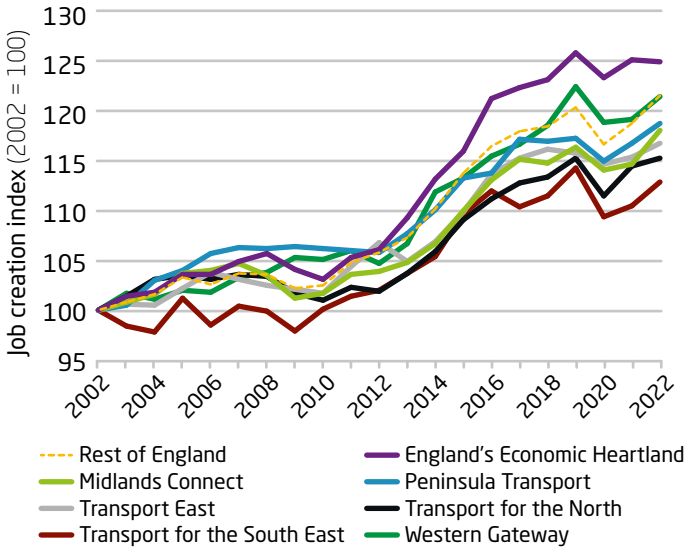
There's a reason why we're called England's Economic Heartland. Stretching from Swindon and Oxfordshire in the west through to Cambridgeshire and Hertfordshire in the east, our region is unrivalled in the country for the number of economic specialisms and clusters existing within it. Its success brings benefits and opportunities for the whole of the UK.

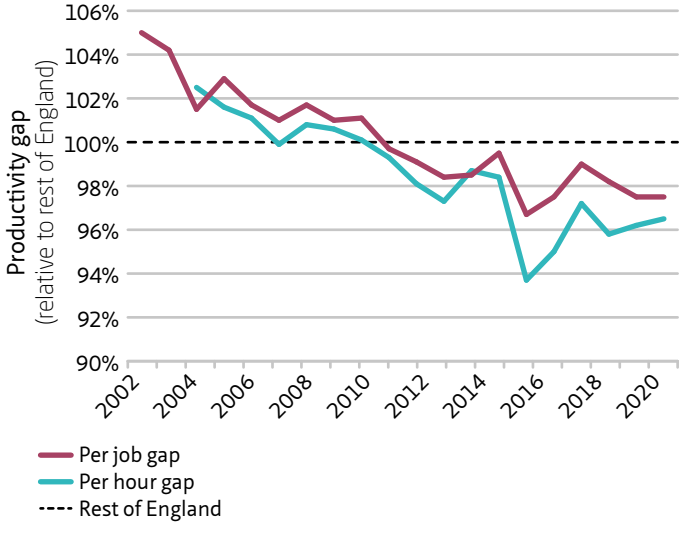
## ECONOMY

For methodology see our website and p38-39

**GVA:** £172bn (2021) **JOBS:** 2.68m (2022) **FIRMS:** 275,400 (2023)

- **Jobs:** The region contains 10% of all jobs in England. Of the seven sub-national transport body (STB) regions which cover England outside of London, none has created more jobs than EEH over the past 20 years
- **Growth:** Economic growth (2.4% p.a. real terms) was also faster than the rest of England (2.2%), making EEH the fastest-growing STB region
- **Fast growth cities:** The EEH region hosts five of the six fast growth cities in the UK (Centre for Cities study): Cambridge, Milton Keynes, Oxford, Peterborough and Swindon
- **Exporting:** EEH has the highest exporting intensity of any STB region with total exports £56bn in 2021 (up 22% on 2016)
- **Foreign investment:** EEH also hosts significant foreign direct investment, with 7.3% of firms foreign owned (rest of England 6.4%) – only London has a higher share
- **Firm enterprise and survival:** EEH has the second highest firm enterprise rates of the STB regions and business survival rates are above average. 85% of firms are micro-sized
- **Commercial floorspace:** 55.3bn $m^2$ of commercial floorspace, with floorspace delivery rates 6x the average across the rest of England, 2013-23
- **Productivity:** Slow productivity growth (only 0.2% p.a) means EEH is now 3% less productive (per job) than the rest of England (20-years ago, it was more productive)




***No STB region has created more jobs than EEH over the past 20 years. However, productivity growth has stalled, reversing EEHs historic productivity premium.***

## POPULATION

5.37 million (2021), 9% of the population of England

- **Growth:** Population growth (1.2% p.a.) was almost double the average across the rest of England (0.7%) between 2011-21, and fastest of any STB region
- **Housing:** 233,800 additional homes delivered over the past decade (2012-22), with housing delivery rates 1.4x higher than across the rest of England. Housing is 11% less affordable than the rest of England, with prices 10.4x household incomes
- **Rural:** 35% of EEH's population reside in rural areas and market towns

## ENVIRONMENT

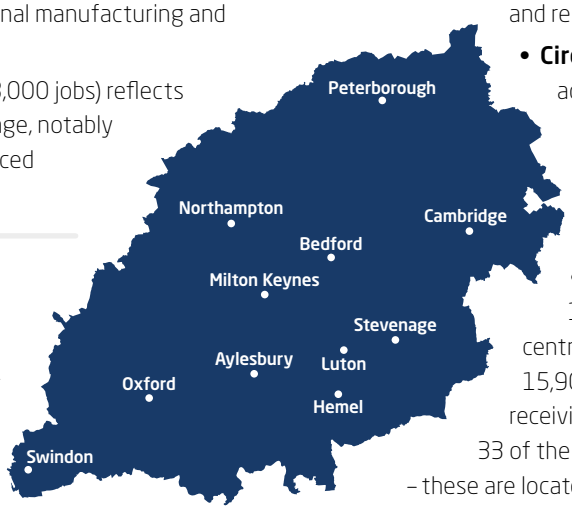
- **Total emissions:** Per capita $CO_2$ emissions were 4% higher than in the rest of England in 2021, & have declined at a slower rate (-24% 2005-21, rest of England -27%)
- **Transport emissions:** Transport accounts for 37% of total EEH emissions (rest of England 31%), and decreased more slowly (-8% 2005-21, rest of England -12%)
- **Agriculture:** 965,000 hectares of land in EEH is actively farmed, with 85% arable or mixed use. 50% of UK Grade 1 agricultural land is found in The Fens

## PRIME SECTORS

The EEH area is home to several sectors of national importance, many of which produce knowledge, ideas and innovations that then flow across the entire national innovation ecosystem, benefiting firms across a far wider geography than the region itself. This cannot be overstated in the context of national strategic economic priorities.

Cambridge Econometric's analysis found the following sectors are 'prime' capabilities across EEH: highly-concentrated sectors that typically exhibit above average productivity, export and R&D/ innovation intensity, and pan-regional representation. These are:

- **Life Sciences** (79,400 jobs across EEH - that's 25% of all life science jobs in England!) includes the region's historic, research-based strengths related to pharma, medicinal manufacturing and bioscience
- **Advanced Physics & Engineering** (253,000 jobs) reflects diverse engineering specialisms and heritage, notably automotive, electronics, machinery, advanced materials, and related consulting
- **Logistics & Freight** (140,700 jobs) capitalising on the region's central geographic location and connectivity assets, this includes freight and goods storage, handling and transport across road, rail and air
- **Digital & Creative** (139,300 jobs) includes a wide range of digital-based activities, including software publishing, IT services and consulting, film, TV and media, and telecoms
- **Higher Education** (97,800 jobs) captures the many leading universities and higher education institutions across the region, and associated teaching, research, and support activities
- **Agri-food** (71,100 jobs) reflecting the rural and agricultural heritage of the region, this includes farm-based agriculture and support services, food and drink production and processing, and related wholesale
- **Circular Economy** (22,600 jobs) vital to addressing the region's environmental pressures, includes activities related to water and waste



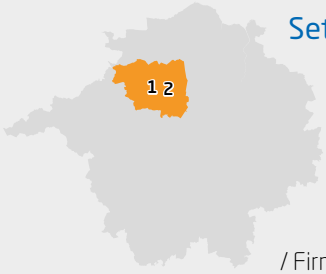

## INNOVATION

- **Research and development:** Almost 1 in 10 jobs (240,000 total) in EEH are R&D-intensive, the highest share of any STB region and also London. Almost a third (28%) of EEH firms report undertaking R&D, more than any other STB region, whilst a quarter (24%) are innovation active, introducing new methods of work
- **Patents:** The World Intellectual Property Organization ranks Cambridge as the most intense scientific & technology cluster globally, with Oxford 5th. Collectively they account for 2 in 10 UK patents. EEH generated 20,700 patent filings (2010-2015; most up to date complete data) more than any other STB region and London equivalent to 46 patents per 10,000 residents
- **Innovation clusters:** There are 183 established innovation clusters centred on the EEH region, hosting 15,900+ knowledge-intensive firms & receiving £855m of public research funding. 33 of the clusters have a UK top-10 ranking – these are located in Cambridgeshire, Oxfordshire, Milton Keynes and Hertfordshire. See next page for more information on innovation clusters.
- **Universities:** University of Oxford tops The Times' global university rankings with Cambridge fifth. EEH universities employ 6,100 dedicated research staff, whilst there are 2,900 central government research staff based in the region
- **Innovate UK:** Almost 2 in 10 Innovate UK funding projects are awarded to research projects in the EEH region, more than any other STB region and London

## ENGLAND'S ECONOMIC HEARTLAND SUB-NATIONAL TRANSPORT BODY

England's Economic Heartland (EEH) is one of seven sub-national transport bodies (STBs) which cover the entirety of England outside of London. It is overseen by the leaders of our 13 transport and combined authority partners, allowing us to speak with a single, powerful voice. EEH works closely with partners including Department for Transport, national infrastructure agencies such as National Highways, East West Railway Company and Network Rail, Science Supercluster Board, Arc Universities Group, Oxford to Cambridge pan-Regional Partnership and neighbouring STBs, ensuring work is joined-up across the wider region. A core role is to advise the Secretary of State on the improvements to our transport system which will realise economic growth while lowering emissions. To do this we have produced multimodal connectivity studies across several important corridors, alongside many other modally-specific studies. All our studies are aligned to the principles set out in our overarching transport strategy for the region, published in 2021.

# // WHERE'S WHERE IN THE CORRIDOR




## Settlements include: 1. Peterborough and 2. Whittlesey

GVA: £7.5bn (up 16%) / Population: 251,300 (up 17%) / Jobs: 125,700 (up 19%) / Firms: 11,400 (up 42%)

**Sectors:** Logistics & Freight (11,100 jobs, 8% of EEH total) / Circular Economy (1,700, 8%) / Advanced Physics & Engineering (12,900, 5%) / Agri-food (4,000, 5%) / Business Support Services (14,900)

**Knowledge clusters:** EdTech / Food Tech / Cyber / Electronics Manufacturing / Agency Market

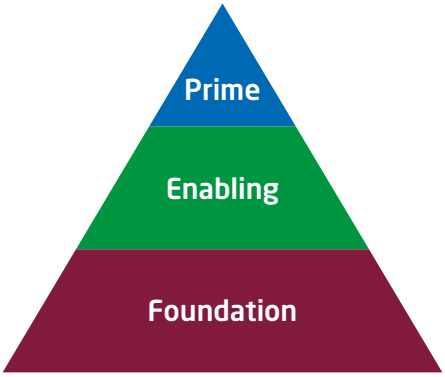
**Economic assets include:**

- ARU Peterborough, a new, purpose-built university offering a range of higher education and professional development
- Gateway Peterborough, a 240-acre manufacturing and distribution park hosting global brands
- Peterborough railway station, a major interchange serving both intercity north-south and east-west connections

**Insights:**

- 30% of jobs are in EEH 'prime' sectors, the seventh highest share among EEH areas, whilst 53% are in 'foundational' sectors, the fourth highest share
- Productivity gap with the national average is -10%
- Housing delivery rates 1.4x the national average, with housing 22% more affordable than the national average
- It has the third lowest old age dependency ratio in EEH, with 85% of residents young or working age (national average 81%)
- Average commercial floorspace costs 30% below national average
- 11,000 jobs are R&D-intensive, which as a share of total jobs (9%) is above the national (7.4%)
- 32% of neighbourhoods are among the most deprived in the country – the highest share of the 18 EEH areas. Relative poverty rates (22%) are the second highest
- 33% of residents have received a higher education, the lowest share among EEH areas

## SECTORS AND INNOVATION CLUSTERS




For the purposes of its analysis, Cambridge Econometrics has split the sectors within the EEH economy into three (colour-coded) layers:

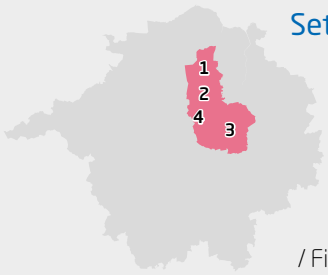
- **'Prime' sectors:** these are specialist, innovative, export-focused sectors, such as advanced engineering and scientific R&D (see page 5)
- **'Enabling' sectors:** these are established, high-productivity, high-wage sectors with a largely domestic focus, such as business management support and financial services
- **'Foundational' sectors:** these are the critical sectors without which the economy would not function. They employ the majority of workers. This includes activities like food and drink, retail, education, health, leisure and social services. They have a critical role in determining the wellbeing and quality of life for residents in the region and improving productivity

The EEH website contains a full breakdown of the EEH economy, sector by sector – see page 39 for more details.

**Innovation Clusters:** Sectors include all firms that do a particular activity, whether they are 'innovative' or not. That's why the Department for Science, Innovation and Technology's innovation cluster data is also used. These are spatially concentrated groups of firms, research capabilities, skills, and support structures in related industries that benefit from spillovers associated with agglomeration. The clusters includes firms – regardless of sector – that are: 'Research, Development and Innovation' active; spatially co-located; engaged in related activities; actively engaged in collaboration on public funded R&D projects.

Real Time Industrial Classifications (RTICs) are used to classify innovation clusters. Many firms in EEH's prime sectors are part of, will interact with, and indeed benefit from, its innovation clusters.

**The visitor economy:** With its rich history, stunning countryside and modern leisure hubs, travel and tourism plays an important role in the region's economy. During 2024/25 EEH will undertake study on how our transport system supports the region's visitor economy.




## Settlements include: 1. Wisbech, 2. March, 3. Ely and 4. Chatteris

GVA: £3.3bn (up 12%) / Population: 152,500 (up 8%) / Jobs: 57,700 (up 24%) / Firms: 6,900 (up 19%)

**Sectors:** Agri-food (4,100 jobs, 6% of EEH total) / Circular Economy (800, 4%) / Logistics & Freight (3,500, 3%) / Advanced Physics & Engineering (8,300, 3%) / Wood Products (2,200) / Chemicals & Materials (1,300) / Textile Products (800) / Business Support Services (7,300)

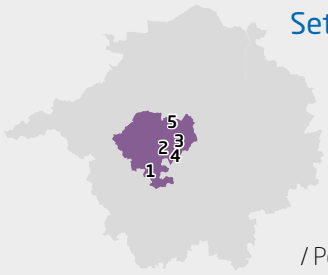
**Innovation clusters:** Net zero (7th largest in UK)

**Economic assets include:**

- The Fens, a major arable agricultural region for grains and vegetables and accounting for 50% of UK Grade 1 agricultural land
- Port of Wisbech, the only port in EEH and mainly used for cargo and industrial purposes, handling approximately 800,000 tonnes per year
- Ely, a famous cathedral city and tourism hotspot, while its railway station is a major interchange hub and the nearby 'junction' pivotal for the UK's rail freight industry

**Insights:**

- Pre-pandemic (2011-19), rates of job creation (2.8% p.a.) exceeded the national average (1.7%), and were the fifth highest among EEH areas. Economic growth (in real terms) was however slower (1.4% p.a.) than the national average (2.2%), and the fifth slowest growing among EEH areas
- Has a productivity gap of -16%
- 1.7bn $m^2$ of commercial floorspace, with average costs 48% below national average – the most affordable in the EEH region
- 52% of jobs are in 'foundational' sectors (sixth highest share among EEH areas) whilst 28% and 20% are in 'prime' and 'enabler' sectors respectively
- It has the highest old age dependency ratio in the EEH (21% of residents, national average 19%), and saw the fourth largest increase in EEH 2011-21
- 16% of neighbourhoods are among the most deprived in the country. Poverty rates (20.7%) are the third highest of EEH areas
- 33% of residents have received a higher education, below the national average (45%) and the lowest of any EEH area




## Settlements include: 1. St Neots, 2. Huntingdon, 3. St Ives, 4. Godmanchester and 5. Ramsey

GVA: £4.5bn (up 20%) / Population: 164,000 (up 9%) / Jobs: 72,600 (up 11%) / Firms: 8,100 (up 19%)

**Sectors:** Circular Economy (2,100 jobs, 9% of EEH total) / Agri-food (3,200, 5%) / Chemical & Materials (2,800) / Wood Products (2,400) / Public Administration (5,100)

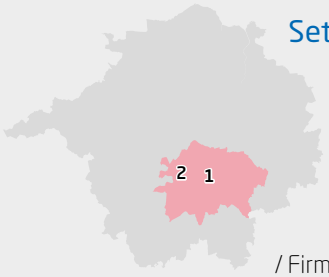
**Innovation clusters:** Geospatial Economy / Software Development / Electronics Manufacturing / Research & Consulting (Physical Sciences & Engineering)

**Economic assets include:**

- Alconbury Weald, a strategic site for new homes, jobs, education, enterprise and community, with Enterprise Zone status
- Wintringham Park, 3,000 new homes and 63,000 sq m of employment space, district & local centres, a school and open space

**Insights:**

- Productivity growth (1% p.a. in real terms) exceeds the national average (0.6%), although a small (-6%) productivity gap still exists
- Average commercial floorspace costs 31% below the national average (and the fourth lowest in EEH)
- 22% of jobs are in 'enabling' sectors, the sixth highest share in EEH, and 50% of jobs are in 'foundational' sectors (ninth largest share)
- 7,500 jobs are R&D-intensive, which as a share of total jobs (10%) is the sixth highest share among EEH areas
- 7,300 additional homes were delivered over the past decade (2012-22), with housing delivery rates 28% above the national average
- Housing is 6% more affordable than the national average and house prices have grown (2.7% p.a. 2013-23) the seventh slowest in the EEH area
- Only 35% of residents have received a higher education, below the national average (45%)




## Settlements include:
## 1. Cambridge and
## 2. Cambourne

GVA: £13.4bn (up 22%) / Population: 326, 800 (up 13%) / Jobs: 200,200 (up 28%) / Firms: 15,000 (up 21%)

**Sectors:** Life Sciences (20,500 jobs, 26% of EEH total) / Higher Education (20,600, 21%) / Digital & Creative (17,700, 13%) / Advanced Physics & Engineering (19,800, 8%) / Management & Social Science (9,700) / Healthcare (20,100)

**Innovation Clusters:** Life Sciences (2nd largest in UK) / Omics (2nd) / Artificial Intelligence (3rd) / Photonics (3rd) / AgriTech (4th) / MedTech (4th) / Quantum Economy (4th) / Pharma (5th)

**Economic assets include:**

- University of Cambridge, ranked as the fifth best university in the world, a global leader in science and technology research and worth £29.8bn to UK plc. It is one of the top producers of high-growth tech spinouts. Recent examples of promising firms originating from the university include semiconductor developer Cambridge GaN Devices, graphene firm Paragraf and biotech company Constructive Bio
- Anglia Ruskin University, a progressive university, consistently top-350 in the world, which also has a campus in Peterborough
- Scores of globally-leading science parks including: Cambridge Biomedical Campus, home to Asta Zeneca and Europe's largest site for health research & medical science; Cambridge Science Park, a 150-acre campus of high-technology & laboratory space; Granta Park, covering 120 acres and including Pfizer and Cancer Research UK; Wellcome Genome Campus, a leading hub of genomic science in Europe; the Babraham Research Campus, considered to be one of the UK's leading campuses to support early-stage bioscience enterprise; and Cambourne Park Science & Technology Campus, a 50 acre site, which includes companies at the forefront of medical research and engineering

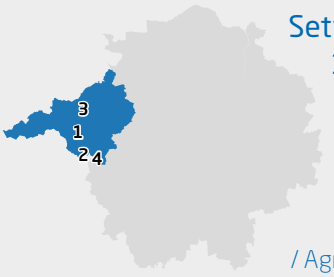
**Insights:**

- 37 established innovation clusters centred locally, 18 top-10 UK-ranking (more than any other EEH area), hosting 4,300+ knowledge-intensive firms & £245m of public research funding (second only to Oxford in EEH)
- Pre-pandemic (2011-19), rates of job creation (2.7% p.a.) more than doubled the national average (1.7%) and Cambridge had the highest jobs creation growth of any city nationally
- Its economy also grew faster (2.5% p.a., in real terms) than the national average (2.2%) pre-pandemic, and was the fifth fastest-growing EEH area
- Productivity matches the national average, and is 3% above the EEH average, but productivity growth fourth slowest of EEH areas pre-pandemic
- 43% of jobs are in EEH 'prime' sectors, the highest share of EEH areas. 40,000 (2 in 10) jobs are R&D-intensive, the second highest share in EEH
- WIPO ranks Cambridge as the leading scientific and technology cluster globally, generating more patents than any other UK city outside London
- Average commercial floorspace costs are 55% above national average
- The area accounts for 6% of EEH's population, and saw population growth (1.3% p.a.) almost double the national average (0.7%) between 2011-21 – Cambridge saw the fastest growth of any city nationally
- Housing is 24% less affordable than the national average, whilst house prices continue to grow (2.9% p.a. 2013-23) faster (national average 2.3%)
- The two biggest housing developments in EEH are located to the north of Cambridge at Waterbeach and Northstowe, with 11,000 and 10,186 homes planned respectively
- The area has the fourth lowest old age dependency ratio in EEH, with 84% of residents young or working age (national average 81%)

**Key**

**GVA:** up = growth between 2011-19 / **Population:** up = growth between 2011-21 / **Jobs:** up = growth between 2011-19) / **Firms:** up = growth between 2011-21 / **National average**: England / **Productivity:** Per job.

Comparison to other areas: For the Connecting Economies project (which considers a total of seven corridors / areas) Cambridge Econometrics defined 18 'sub-areas' across the EEH region, using workplace density and commuter zone analysis from Economic and Social Research Council-commissioned research. The areas are separate from administrative boundaries, using middle layer super output area (MSOA) geographies. Where an area is 'ranked' in comparison to other EEH areas, it is therefore out of a total of 18 areas within EEH. See our website and page 39 for further notes.




## Settlements include: 1. Kettering, 2. Wellingborough, 3. Corby and 4. Rushden

**Sectors:** Logistics & Freight (14,200 jobs, 10% of EEH total) / Agri-food (9,300, 13%) / Advanced Physics & Engineering (15,000, 6%) / Wood Products (4,400) / Chemicals & Materials (3,800) / Textiles Products (1,600)

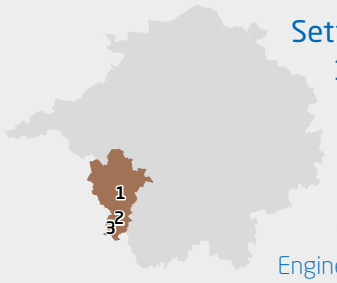
**Innovation clusters:** Food Tech / E-Commerce / Electronics Manufacturing

**Economic assets include:**

- Midlands Logistics Park, one of the biggest logistics opportunities in the UK; Chelveston Renewable Energy Park, the largest facility of its kind in the UK, generating wind and solar power, with on-site storage; Kettering Energy Park offers one of the best opportunities in the UK for businesses to benefit from on-site renewable energy

**Insights:**

- Commercial floorspace costs are 47% below national average (and second lowest in EEH)
- Has EEH's largest productivity gap relative to national average (-27%)




## Settlements include: 1. Bedford, 2. Ampthill and 3. Flitwick

**Sectors:** Logistics & Freight (5,800, 4% of EEH total) / Advanced Physics & Engineering (10,100, 4%) / Real Estate (2,700) / Electricity (400) / Construction (6,300) / Accommodation (2,800 jobs)

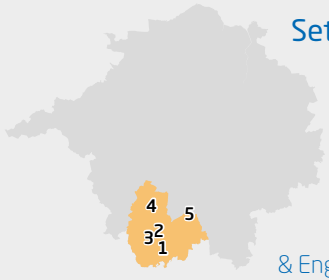
**Innovation clusters:** Food Tech / Autonomy & Robotics / Geospatial Economy / Electronics Manufacturing / Research & Consulting (Physical Sciences & Engineering)

**Economic assets include:**

- Millbrook Proving Ground (UTAC) one of the largest vehicle testing centres in Europe; Cardington Studios, host to many blockbuster movies and one of the largest indoor film spaces in Europe; Aircraft Research Association, an aerodynamics research institute with the largest transonic wind tunnel in the UK

**Insights:**

- Economic growth (in real terms) was faster (3.1% p.a.) than the national average (2.2%) pre-pandemic, and the fourth fastest of EEH areas
- 40% of jobs are in EEH 'prime' sectors, the third highest share of EEH areas. 22,000 (1 in 10) jobs are R&D-intensive, the fourth highest share




## Settlements include: 1. Stevenage, 2. Letchworth, 3. Hitchin, 4. Biggleswade and 5. Royston

**Sectors:** Advanced Physics & Engineering (15,200 jobs, 6% of EEH total) / Life Sciences (4,800, 6%) / Construction (12,300) / Metal Products (4,700) / Chemicals Materials (3,300) / Wood Products (2,300)

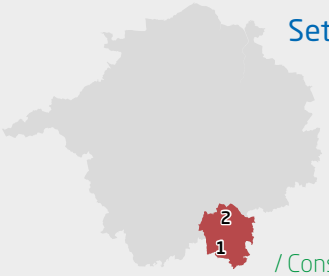
**Innovation clusters:** Pharma / Computer Hardware / In-Orbit Space Manufacturing / Telecommunications / Electronics Manufacturing

**Economic assets include:**

- The Bio Science Catalyst in Stevenage, where GSK is developing one of the largest life science campuses in Europe; Airbus Defence & Space MBDA UK Ltd, a £35 million UK space and defence headquarters in Stevenage; Johnson Matthey (JM), a global leader in sustainable technologies, is building a £80 million gigafactory in Royston

**Insights:**

- 14,500 jobs here are R&D-intensive, which as a share of total jobs (11%) is the fifth highest share among EEH areas, while the area also boasts the highest proportion of jobs in 'enabling' sectors of all EEH areas
- The area is the seventh most productive in EEH, with levels similar to national average. Productivity growth was sixth fastest in EEH pre-pandemic




## Settlements include: 1. Stansted and 2. Saffron Walden

**Sectors:** Logistics & Freight (4,600 jobs) / Advanced Physics & Engineering (3,300) / Construction (2,500) / Transport Services (5,600 jobs) / Hospitality (3,800)

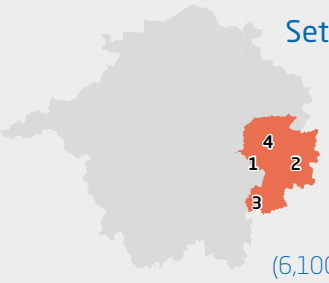
**Innovation clusters:** Pharma / Computer Hardware / In-Orbit Space Manufacturing / Telecommunications / Electronics Manufacturing

**Economic assets include:**

- London Stansted Airport, the fourth largest airport in the UK, serving over 27m passengers annually

**Insights:**

- Productivity is 32% down on the national average
- 3,000 (8% of total) jobs are R&D-intensive, above the national average (7%)




## Settlements include: 1. Newmarket, 2. Bury St Edmunds, 3. Haverhill and 4. Mildenhall

**Sectors:** Agri-food (3,900) / Advanced Physics & Engineering (6,100) / Wood Products (2,300) / Chemicals & Materials (1,900) / Business Support Services (20,400 jobs) / Accommodation (2,600)

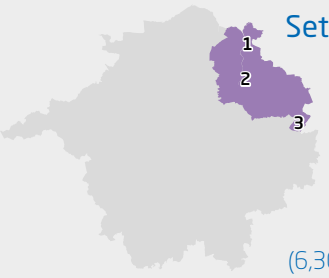
**Innovation Clusters:** Omics / Research & Consulting (Physical Sciences & Engineering)

**Economic assets include:**

- Haverhill Research Park, offering various sized offices and shared laboratory space / Newmarket Equine Cluster, the global centre of thoroughbred horse racing and equine health / Suffolk Park, a major allocated employment site with capacity for up to 200,000 sq
- RAF Mildenhall and Lakenheath two of the largest military air bases in the UK

**Insights:**

- 64% of jobs in this area are in foundational sectors




## Settlements include: 1. King's Lynn, 2. Downham Market and 3. Thetford

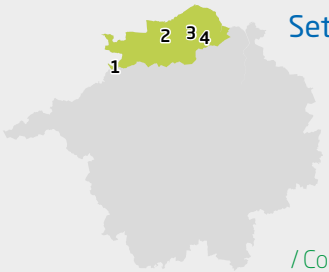
**Sectors:** Advanced Physics & Engineering (6,300 jobs) / Agri-food (4,200) / Chemicals & Materials (2,400 ) / Wood Products (1,700)

**Economic assets include:**

- King's Lynn Innovation Centre, a 2,000m² Enterprise & Innovation Centre located on the Nar Ouse Enterprise Zone
- Thetford Urban Extension, a major mixed-use development site, totalling 55 acres and a planned 5,000 home development

**Insights:**

- Average commercial floorspace costs are 30% lower than national average




Settlements include:
1. Stamford, 2. Spalding, 3. Holbeach and 4. Long Sutton

**Sectors:** Agri-food (12,400 jobs) / Logistics & Freight (2,700) / Construction (3,600) / Wood Products (1,100) / Business Support Services (7,300)

**Economic assets include:**

- South Lincolnshire Food Enterprise Zone which provides bespoke business space for companies in the agri-tech and food manufacturing sectors; the National Centre for Food Manufacturing, an internationally recognised provider of education, research & technical business support for the food industry

**Insights:**

- Commercial floorspace costs are 45% lower than national average

*The Wellcome Genome Campus located into Hinxton to the south of Cambridge*

# // UNLOCKING ECONOMIC GROWTH THROUGH IMPROVED CONNECTIVITY

Cambridge Econometrics has identified several ways in which improved connectivity could unlock opportunities for further economic growth in Cambridgeshire and Peterborough, and the wider area.

## Spreading expertise in science and technology innovation

As host to the leading scientific and technology cluster in the world, Cambridge is the economic centre of gravity for the sub-region.

Remarkably, the Cambridge-Cambourne area accounts for 26% of all life science jobs in EEH (and 7% of all life science jobs in England). World Intellectual Property Organisation (WIPO) ranks Cambridge as the global leading scientific and technology cluster. The area hosts 18 UK top-10 ranked innovation clusters including those in life Sciences, omics, artificial intelligence, photonics, medtech, and quantum economy.

It is notable how the areas which neighbour Cambridge have similar innovation clusters and sector capabilities. Indeed, northern Cambridgeshire (Wisbech-March-Chatteris-Ely) is home to the seventh largest net zero innovation cluster in the UK, while western Cambridgeshire (St Neots-Huntingdon-St Ives), Peterborough, Bedford and Stevenage-Royston-Biggleswade areas are also each host to emerging high-tech clusters that align with those in Cambridge.

Life sciences has a formidable presence in the Cambridge area and extends to western Cambridgeshire as well as to the east in areas around Kings Lynn-Thetford-Downham, Saffron Walden-Stansted, and Bury St Edmunds-Newmarket-Haverhill. Life science activity in West Norfolk and Suffolk is closely linked to the pioneering John Innes Centre at Norwich Research Park. Cambridge is home to Europe's largest centre for health research and medical science and leading genomics hub of Wellcome Genome. Simultaneously, Lifearc Innovation campus and Bio Catalyst in Stevenage are at the forefront of developing novel drugs and therapeutics in the region.

The advanced physics and engineering sector is a dominant presence in the Cambridge area. There are corresponding spillovers in western Cambridgeshire, as well as in the areas which neighbour the county, particularly along the A11 and A14 corridors to Norwich and Ipswich. Significant engineering assets exist in places in and around Stevenage, where the Airbus Defence and Space is headquartered, and Bedford, where the Aircraft Research Association and one of Europe's largest vehicle testing centre is located. Eastern Northamptonshire (Corby-Wellingborough-Kettering-Rushden) area also as a sizable engineering and manufacturing base.

Improving the connectivity between these promising cluster centres and the established industries in Cambridge may realise synergies that both catalyse their growth and sustain the expansion of Cambridge's own clusters. It also has the potential to spread R&D capacity, capital, and expertise from Cambridge throughout the sub-region and support the growth of nascent innovation clusters in the areas it neighbours.

## Boosting productivity

The Cambridge area has the potential to be a transformational economic engine for the broader economic region. Its economy grew faster in real terms than the pre-pandemic national average and was the fifth fastest growing amongst the 18 EEH areas.

Productivity in and around Cambridge is above the EEH average and in line with the national average (although productivity growth has slowed in recent years). With the exception of the Stevenage-Biggleswade area, these figures are starkly absent from rest of the areas under consideration, which are facing productivity deficits compared to the national average.

Agglomeration effects, emerging from increased interactions, collaboration and competition between businesses, are an important potential driver of productivity growth. There is a significant opportunity to catalyse agglomeration by improving transport connectivity between the considerable and innovative local economies in and around Cambridge and the surrounding areas. Investments in transport infrastructure can increase labour mobility, enabling firms to hire from a larger skilled labour pool, and allow the expertise and capital of established industries in Cambridge to radiate throughout the corridor.

For a simple guide to the relationship between connectivity, productivity and economic growth turn to page 38.

## Unlocking affordable floorspace

Commercial floorspace costs in the Cambridge area are 55% above the national average. While delivery rates in Cambridge are four times the national average, firms in the area may be constrained, and potential new market entrants deterred, by the high costs of commercial floorspace. Investments in transport infrastructure would connect these businesses to the abundance of affordable commercial floorspace across the rest of the sub-region with all other areas exhibiting average costs below the national average. The sub-region has the space, at low costs, for new and growing businesses to expand into. Improved transport infrastructure would increase the accessibility of local economic centres and work to address the productivity imbalances described above.

## Reducing regional disparities

There is considerable disparity in the skills profile of residents across Cambridgeshire and the wider area. In the Cambridge area, 62% of residents are high skilled (the second highest proportion among UK cities after Oxford) and 70% of the labour force is engaged in skilled work. Other places with highly skilled residents include the Stevenage-Biggleswade and Saffron Walden-Stansted areas. In contrast, just over a third of the residents have a higher education degree in places like Peterborough, eastern Northamptonshire, and northern Cambridgeshire – which at 33%, has the lowest share among all EEH areas.

This north-south divide is reflected in levels of deprivation as well, which increase as one moves further northwards. It is notable that deprivation is found in both urban and rural environments.

The regional disparities could be reduced by expanding and upgrading existing transport infrastructure to connect more rural areas with the urban communities. This facilitates greater access to education, resources and employment opportunities for workers. It also enables firms to reach a wider market and talent pool, allowing them to specialise and reap the benefits of agglomeration. Improving transport connectivity thus can help increase productivity and standards of living of the population in the region.

## Increasing access to affordable housing

Housing is relatively affordable on average in the area. However, the exceptions are the Cambridge area, Stevenage-Biggleswade and Saffron Walden-Stansted, where house prices are 24%, 11% and 25% respectively less affordable than the national average. Apart from these areas, house prices are either in line with or below the national average rate. Furthermore, build out rates have been high over the past decade throughout the area, which is favourable to ensuring housing affordability and accessibility in the future. However, having efficient and reliable transport networks is necessary to sustainably meet housing demand. By providing a wider set of residential location choice to people working in the region, transport can also help balance demand for services and amenities.

*Life sciences is a prominent sector in Cambridge*

## HEADLINE CONCLUSIONS

The Cambridgeshire and Peterborough area has been an economic success story, with the ability and ambition to play a leading role in driving the EEH - and wider UK economy - forward over the long term, as well as being at the global forefront in solving numerous social and environmental issues.

However, there are a number of challenges that need to be overcome to fully realise this ambition, which require accompanying solutions to accelerate sustainable and equitable growth in the area, among which better regional coordination on transport and infrastructure related issues is key.

For instance, one of the county's biggest challenges, is that several areas – especially in and around Cambridge – face challenges regarding provision of housing and employment space that is affordable to the majority, while other areas struggle to attract and keep residents and businesses. These are compounded by social and environmental constraints, which vary across the geography but often include poor educational attainment and skills, high-flood risk, pockets of high deprivation, high car-dependency, and unemployment and worklessness.

Improvement and expansion of the regional transport network, especially close to and between its fast-growing employment centres, is crucial in alleviating the pressure in the high-demand areas, while also helping boost productivity and enhancing knowledge exchange and strategic connections both within Cambridgeshire and Peterborough, and beyond – which notably, through East West Rail, includes Oxford and Milton Keynes to the west, and (with delivery of East West Rail's eastern section) Ipswich and Norwich to the east.

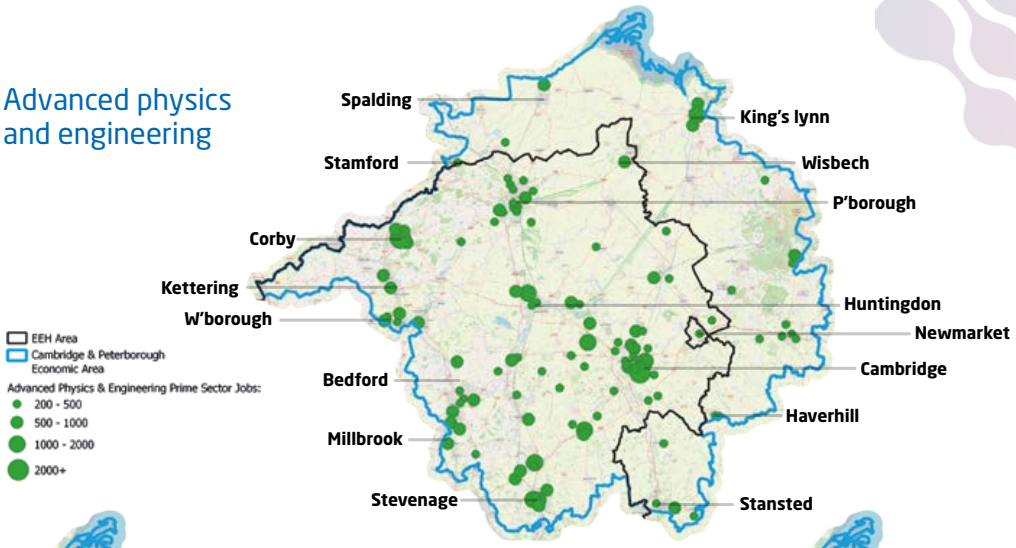
Transport infrastructure improvements would also help the more peripheral areas in the geography – particularly to the north, around the Fens, and east around West Norfolk and Suffolk – to improve their offer to potential new residents and businesses, overcome social and environmental constraints, and unlock new spaces for commercial and housing development, which can help alleviate housing and development pressures elsewhere (notably around Cambridge).

Another important, and linked intervention from such transport interventions would be to facilitate the diffusion of knowledge and employment opportunities within the area, as there are large disparities between urban and rural areas, and between some of the different urban centres as well. Even though the sub-region, notably Cambridge – the leading scientific and technology cluster globally - is at the forefront of technological progress, not all firms in the area have taken advantage of this, and better connectivity would see better use made of Cambridge's considerable knowledge assets.

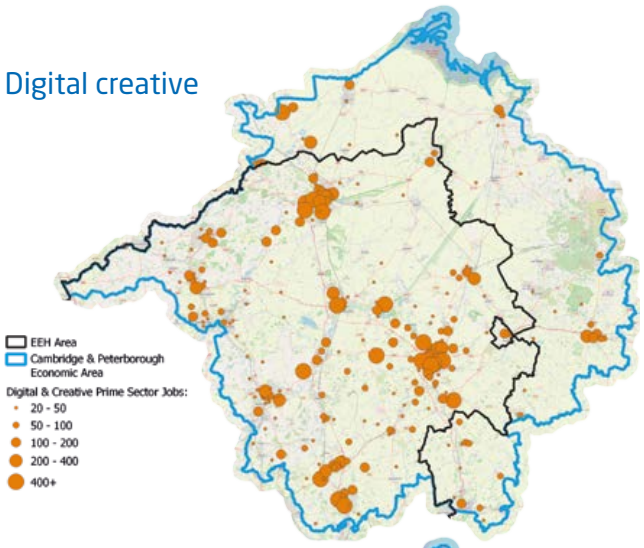
# PRIME SECTORS

*See page 5 for prime sector definitions.*
*The black line on the maps represents the EEH boundary.*

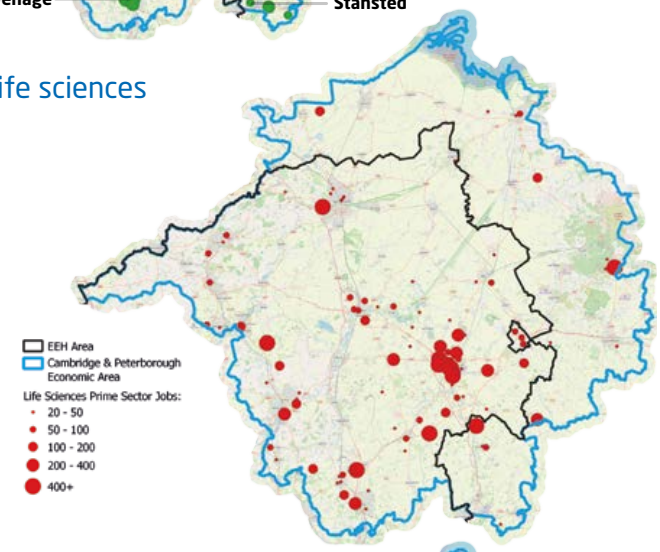
## Advanced physics and engineering



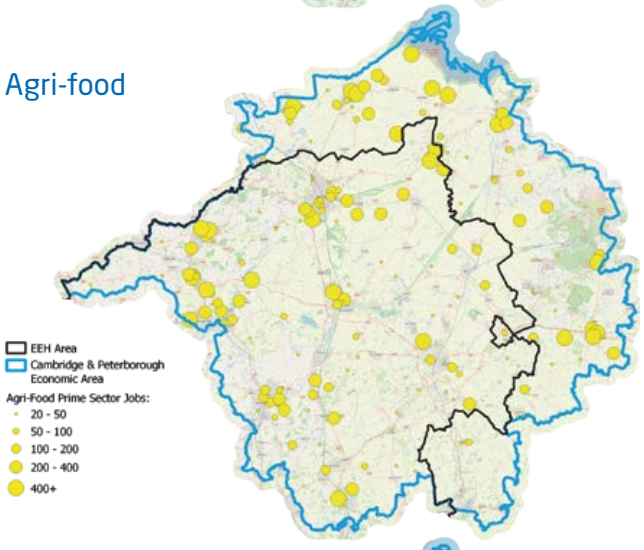

## Digital creative



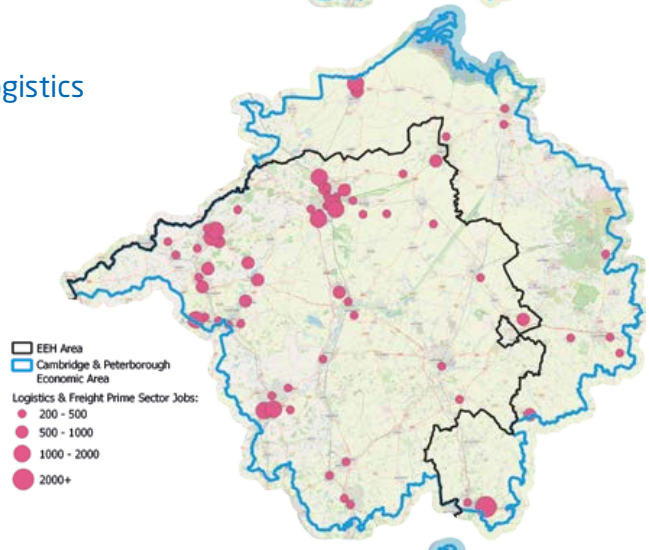

## Life sciences



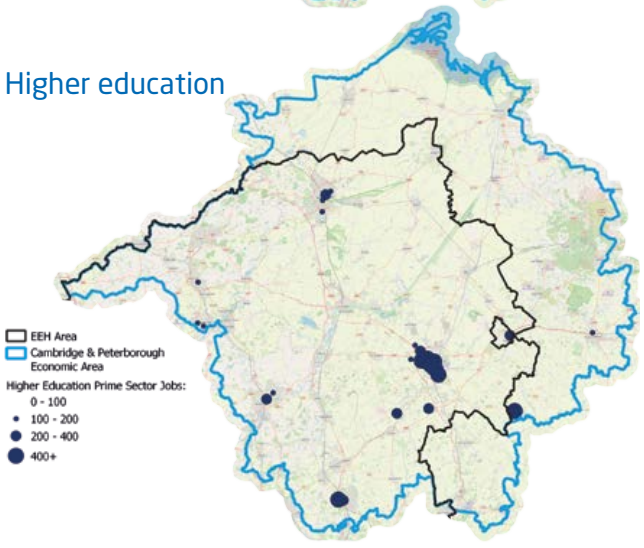

## Agri-food



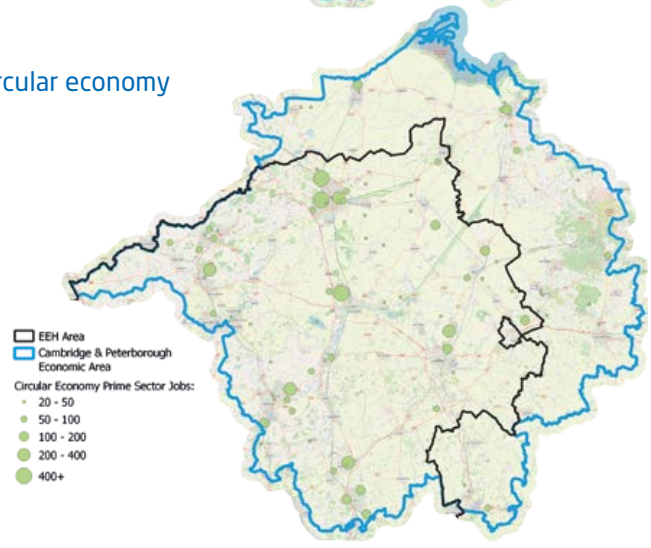

## Logistics




## Higher education




## Circular economy

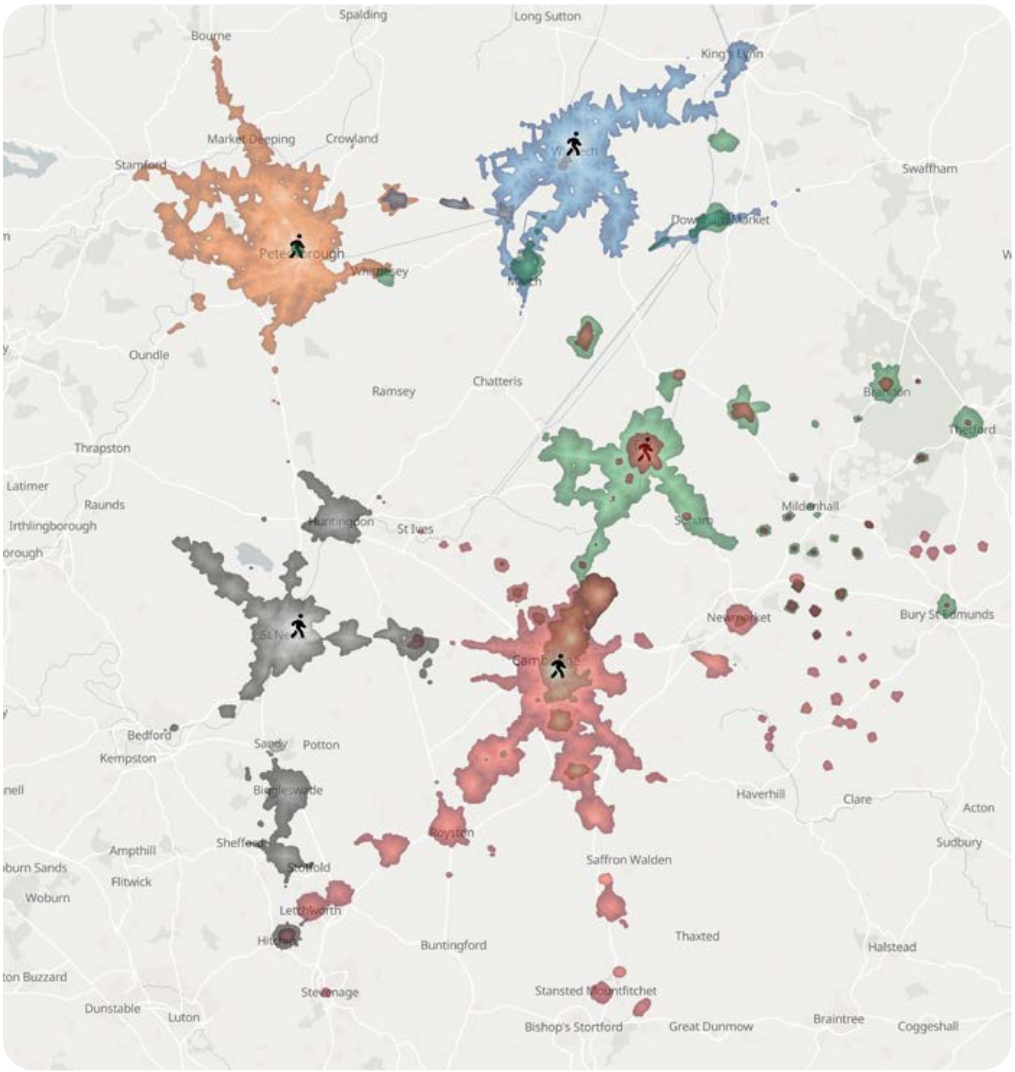


# // CONNECTIVITY IN CONTEXT

This section contains a selection of maps, graphics, tables and stats which help build a snapshot of the corridor's transport system. It is by no means exhaustive – for a comprehensive range of evidence and data please see EEH's website.

## PUBLIC TRANSPORT

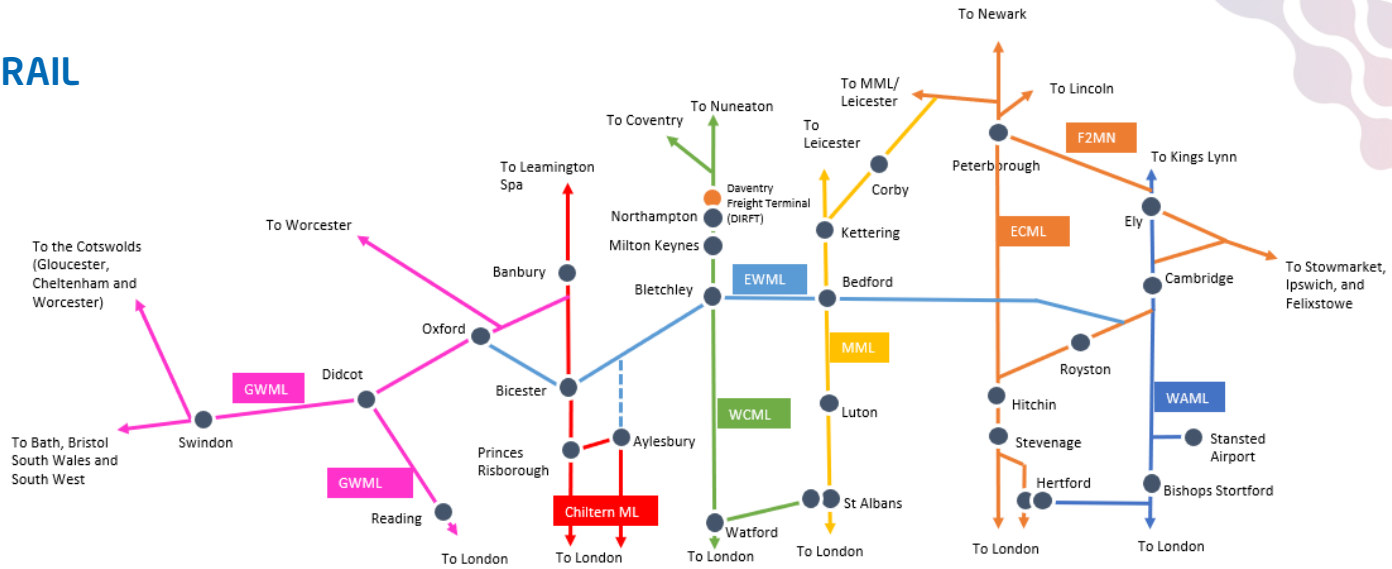
This map factors in average journey times and service frequencies to give a balanced indication of places which can be travelled to within 60 minutes on a weekday morning from a journey starting on foot and using bus and rail. The journeys are from outside the main rail stations in Cambridge (red); Peterborough (orange); St Neots (grey); Wisbech (blue); and Ely (green). For methodology and assumptions see p38-39. The map visually demonstrates the challenges of connectivity by public transport across Cambridgeshire and Peterborough, particularly to more rural areas. East West Rail to Bedford and Oxford will significantly improve connectivity westwards.




## BUS

The local bus network comprises a range of different types of service, including interurban, city, park and ride and local provision, as well as demand responsive transport. 'Turn up and go' and 5-15 minute frequency services operate in Cambridge and Peterborough, with the latter also found along the Cambridge to Huntingdon corridor. However, many of the links from the two cities to the surrounding market towns, and links between the market towns, have a frequency of over 30 minutes. Cambridgeshire and Peterborough does include some sections of bus lane, most notably the 25km of guideway on the Cambridgeshire Busway (the longest in the world), which opened in 2011, connecting Cambridge, St Ives and (via an on-road section) Huntingdon and around 6km of busway and bus gates in and around Peterborough. However, traffic congestion, particularly in Cambridge, is problematic for buses, causing unreliability. Vehicle tracking data from December 2019 indicated that on routes serving Cambridge city centre, only 79% of buses departed from their origin stop on time.

# RAIL




The diagram above shows the main lines within the EEH region (including the expected East West Rail link between from Cambridge to Bedford and onto Oxford). Connectivity between the West Anglian Main Line and the East Coast Main Line is provided by the Ely to Peterborough line (used extensively for freight), and the Cambridge Line (linking Cambridge to Hitchin), while East West Rail is planned to provide another connection via Tempsford. There is currently directly hourly services from Cambridge to Ipswich and Norwich. According to Network Rail, these journeys have a generalised journey time (which factors in frequency and interchange penalties) of 121 and 115 minutes respectively.

## Station usage

| Station | 2022-23 | Interchanges 2022-23 |
|---|---|---|
| Cambridge | 9,341,600 | 481,342 |
| Peterborough | 4,519,016 | 773,281 |
| Ely | 1,894,014 | 344,826 |
| Huntingdon | 1,302,160 | 9 |
| Cambridge North | 1,074,602 | 936 |
| St Neots | 886,088 | None recorded |

*Source: LENNON (Latest Earnings Networked Nationally OverNight) and local ticketing data. Estimated total number of entries and exits made at the station and Estimated total of interchanges made at the station. Table shows all stations with more than a million users pre-Covid.*

Cambridge is the busiest station in the EEH region. Peterborough is also within the top 10 busiest stations in EEH, and a very significant interchange, with a notably lower drop in post-Covid patronage than many other places. Cambridge North's patronage has increased post-Covid (the station first opened in 2017).

## Station locations

*This map shows the locations of stations in the region, and in black the entire network of rail track. Some track may currently be heritage rail or freight only, for example, the line heading northwards from Aylesbury.*

## CONGESTION

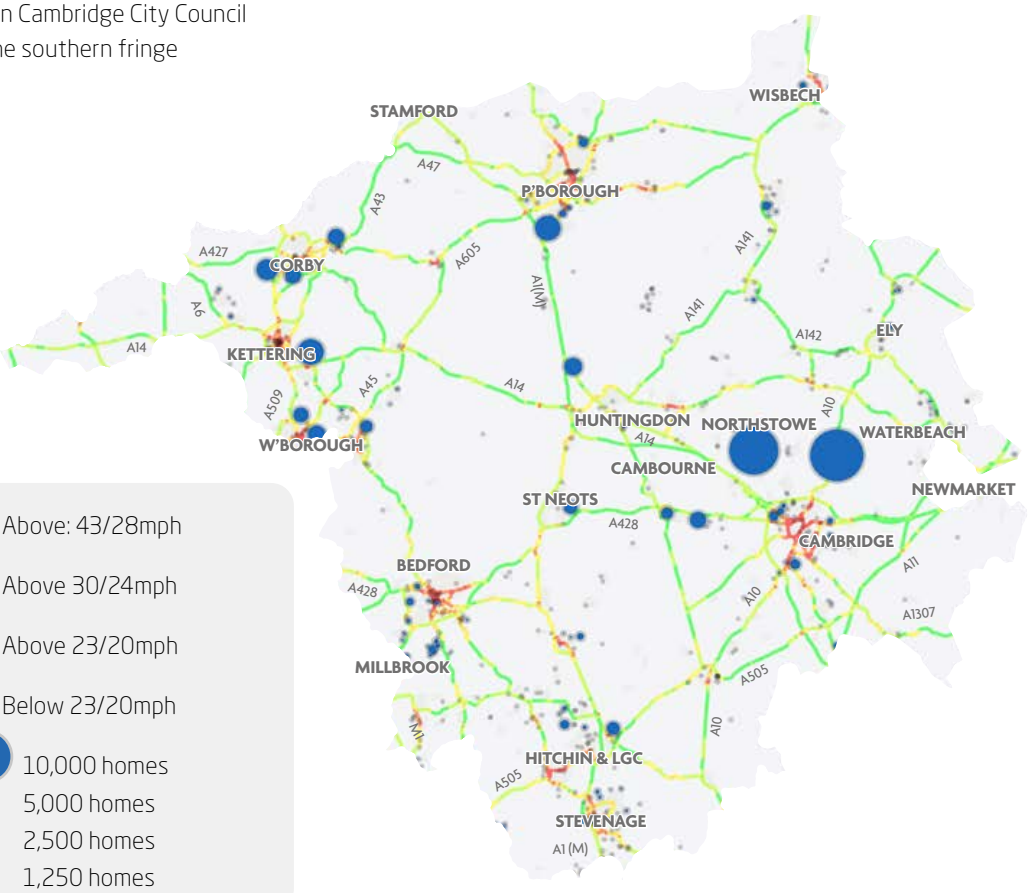
The map below scores sections of road based on how their average speed during the morning peak compares to the morning peak average across the entirety of EEH network for that road type (see definitions section on p38-39 for methodology and assumptions, including full list of expected speeds based on road type). The roads in and around Cambridge are some of the most congested in the EEH region, while Peterborough also suffers significant drops in performance. St Ives and March are other urban areas which suffer from significant congestion. The performance of the A1 (M), particularly south of Huntingdon is notably poor.

## HOUSING

There are more than 95,000 homes allocated in the current local plans of Cambridgeshire's district councils and Peterborough City Council, equating to 3,772 new homes per year.

Significant sites for housing include:

- 11,000 new homes at Waterbeach on the A10 north of Cambridge, the single biggest development site in EEH.
- 10,186 new homes at Northstowe near the A14, north of Cambridge, the second biggest development site in EEH.
- 14,000 homes at various sites within Cambridge City Council area, including including 3,900 on the southern fringe of Cambridge.
- Three sites along the A428 west of Cambridge (Bourn Airfield, Cambourne West, St Neots East Loves Farm), each with more than 2,500 homes.
- 19,440 homes in the Peterborough City Council area, including 5,350 at Great Haddon and 3,000 at Norwood on the A47/ A15.
- 5,000 homes at Alconbury, north of Huntingdon, on the A1/A1307.
- Developments in eastern Cambridgeshire, including at Ely, Wisbech, March and Chatteris.




**Legend:**

Congestion score morning peak hour

- The average speed on this section is above 66mph for a dual carriageway/ motorway and 46mph for a single carriageway
- Above 59/36mph
- Above: 43/28mph
- Above 30/24mph
- Above 23/20mph
- Below 23/20mph
- 10,000 homes
- 5,000 homes
- 2,500 homes
- 1,250 homes

## SMART JUNCTIONS

A study by City Science for EEH, due to be published shortly, identifies initial opportunities for smart junction technology for existing signalised junctions on key strategic corridors and urban areas in EEH. Smart junctions are emerging as a key way in which road capacity can be optimised, easing traffic flow or supporting journeys by public transport or active travel. This is based on vehicular demand, including for HGVs, congestion, key bus routes and collisions.

Due to its high number of signalised junctions (214), collisions involving pedestrians and cyclists, and the presence of an air quality management area (AQMA), the study identified Cambridge as the clearest example in the region of an urban area which could immediately benefit from smart junction technologies.

## DIGITAL CONNECTIVITY

**A Settlements include: Peterborough and Whitlesey**

- 84% of homes are covered by ultrafast broadband, above national average (69%)
- 68% of firms are covered by ultrafast broadband, above national average (43%) and highest in EEH, whilst average download speeds are 23% faster

**B Settlements include: Wisbech, March, Ely and Chatteris**

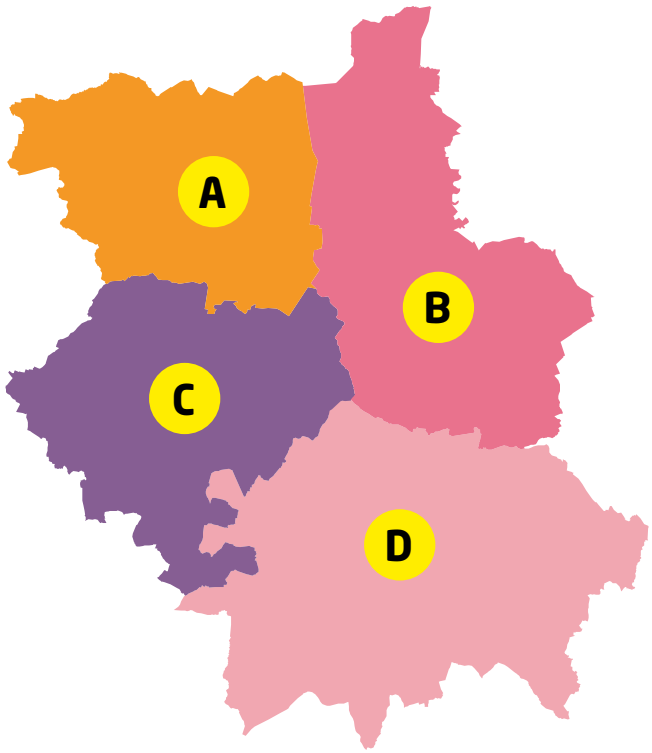
- 59% of homes covered by ultrafast broadband, below the national average (69%)
- 39% of firms are covered by ultrafast broadband, below the national average (43%), whilst average download speeds are 22% slower

**C Settlements include: St Neots, Huntingdon, St Ives and Godmanchester**

- 55% of homes are covered by ultrafast broadband, below national average (69%)
- 35% of firms are covered by ultrafast broadband, below national average (43%), whilst download speeds are marginally (-2%) slower

**D Settlements include: Cambridge and Cambourne**

- 74% of homes are covered by ultrafast broadband, above national average (69%)
- 50% of firms are covered by ultrafast broadband, above national average (43%), whilst average download speeds are 20% faster




**Key**

Ofcom Connected Nations 2023. First bullet relates to home premises only, second is for commercial premises only.

## IMPORTANCE OF DIGITAL INFRASTRUCTURE

Digital infrastructure is crucial to a high-performing, greener transport system and the wider economy. This includes through removing the need to travel in the first place, unlocking new technologies to enhance business productivity, and improving physical movements via intelligent transport systems and smart journey planning. Its transformative potential is particularly strong in rural areas, where digital services have traditionally been poor, yet where there is often a high reliance on journeys by private car.

## CONNECTING CAMBRIDGESHIRE AND ENGLAND'S CONNECTED HEARTLAND

Connecting Cambridgeshire is a partnership improving Cambridgeshire and Peterborough's digital infrastructure – including broadband, mobile and public access Wifi coverage – to drive economic growth, help businesses and communities to thrive and make it easier to access public services. It is currently leading a project trialling 'open' 5G networks in Cambridge, and is also part of the England's Connected Heartland (ECH) 5G 'Innovation Region' also encompassing Oxfordshire, Buckinghamshire, Central Bedfordshire, and Berkshire. EEH supported ECH's successful grant application to Department for Science, Innovation and Technology and works closely with its project team.

# // PRIORITY INTERVENTIONS

Having outlined the economic rationale for improved connectivity along the corridor, the following section forms a compendium of our investment requirements: the specific improvements which our evidence base demonstrates are key investments for our country's economic prosperity. They all have strong strategic value, including their benefits to local and regional connectivity and economic growth – and they have strong political support from our local and combined authority partners. Our ask to government, MPs and wider stakeholders over the coming months is to work with us, to ensure our highest priority schemes are supported, progressed and delivered at the earliest opportunity.

## ELY AREA CAPACITY ENHANCEMENTS

### Reasons why investment in Ely is crucial for the UK

1. It boosts economic growth in the Midlands, North and East
2. It has a remarkably high benefit-cost ratio
3. It cuts emissions and congestion
4. Rail Freight is a national priority
5. It unlocks better passenger services
6. It has an unprecedented level of support from across the UK
7. It supports the government's Freeport East initiative
8. The time is now

When you think of Ely, images of its impressive cathedral may spring to mind. But perhaps what is less well known about the ninth smallest city in the UK is the crucial role it plays in the moving of goods (and people) around Britain and to the rest of the world.

This is because Ely sits on the cross-country route of the 'Felixstowe to the Midlands and the North' (F2MN) freight corridor, which is the most intensively used and nationally important intermodal rail freight corridor on the network, connecting Felixstowe – the UK's busiest container port – and key destinations across the Midlands and the North.

However, a mixture of single-track sections, restricted speeds, signalling limitations and level crossings in the Ely area act as a barrier to meeting increased demand for freight paths on the routes to and from the UK's industrial heartlands.

It means goods are needlessly transported long distances to the Midlands and the North by road. Moving goods by rail offers many advantages including reliability, speed, and cost effectiveness, while also relieving congestion and cutting emissions.

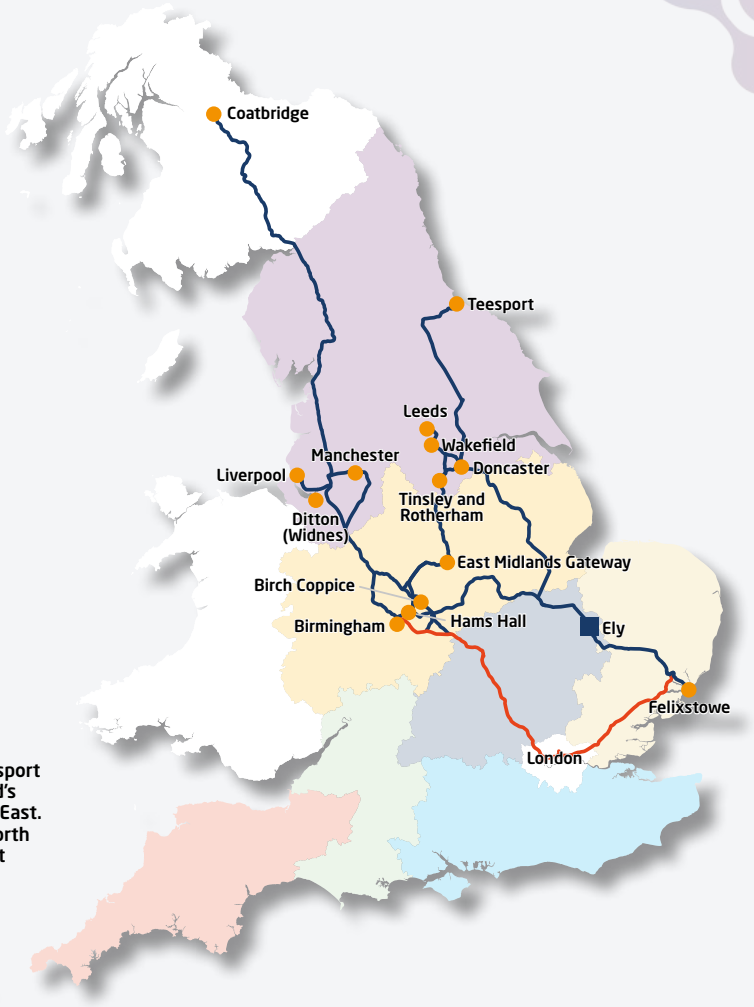
The Ely Area Capacity Enhancement scheme supports economic growth across the country's regions by increasing access to global markets to and from the Midlands and north, where 70% of containers from Felixstowe are destined.

According to Network Rail, 2,900 extra freight services would be able to operate to and from Felixstowe per annum, removing 98,000 lorry journeys off the road every year, reducing congestion by 5.6 million hours, and cutting carbon emissions by 1.7 million tonnes over 60 years. By allowing extra passenger services between Ipswich and Peterborough and King's Cross-Ely-King's Lynn, the scheme would also stimulate 277,000 extra rail passenger journeys. Ely is fundamental to helping address the disparity in provision between the north and south of Cambridgeshire: passenger service enhancements at Whittlesea, March and Manea cannot happen without these improvements.

The scheme has a very high benefit-cost ratio – returning over £4.89 of benefits to the UK for every £1 invested.

The strategies of four sub-national transport bodies – Transport for the North, Midlands Connect, England's Economic Heartland and Transport East – all reference the benefits of upgrading Ely for their regions.

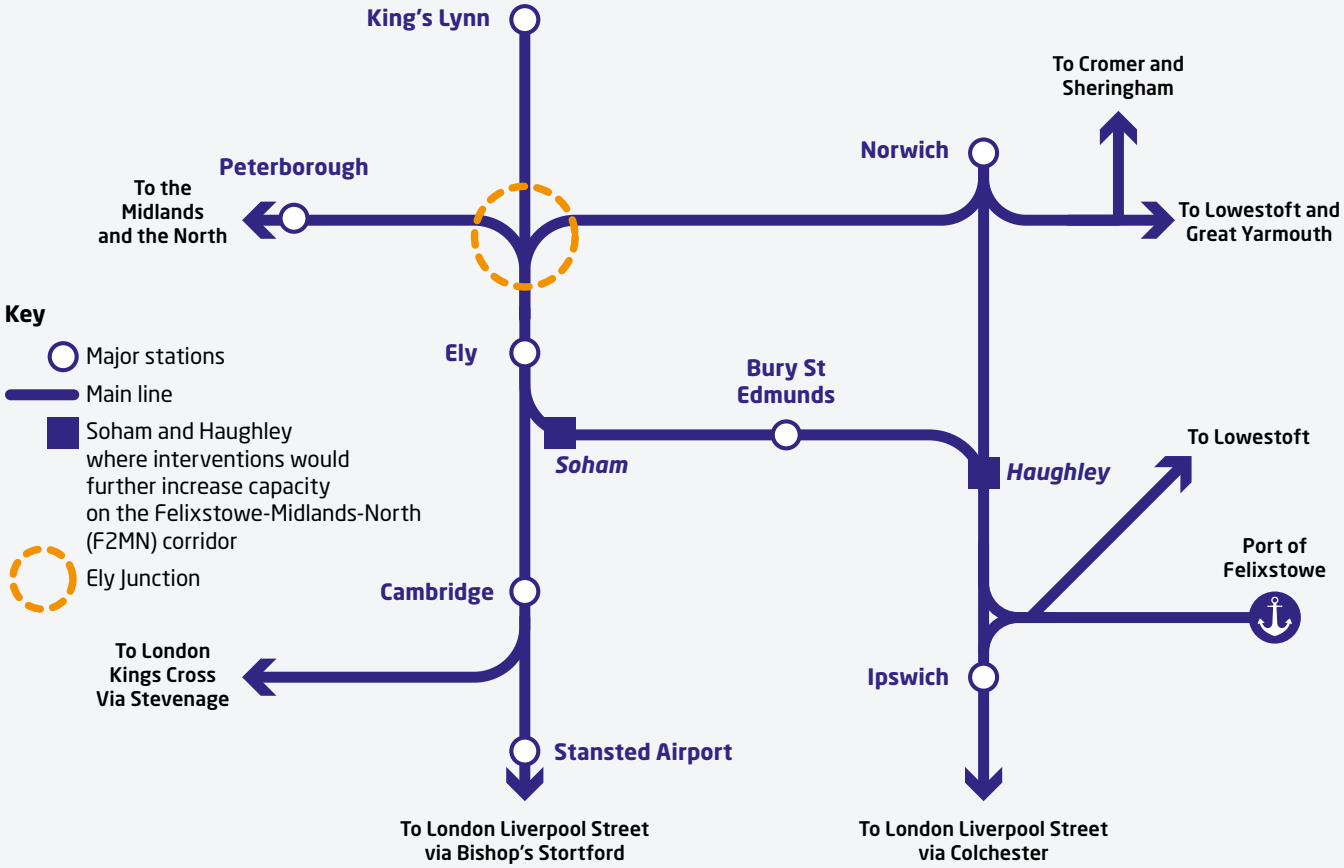
***Next steps:*** In October 2023, the government confirmed funding would be made available to deliver the Ely Junction improvements. We ask that funding is now released to Great British Railways so that detailed planning for the scheme's delivery can commence, and that they are supported as a priority through to their delivery.




**Key:**

- Felixstowe to Midlands and North route (F2MN)
- Routes via London
- Rail freight terminals

The map shows the boundaries of sub-national transport bodies throughout England. Ely is located in England's Economic Heartland. Felixstowe in within Transport East. The terminals served by the Felixstowe-Midlands-North route are within the Midlands Connect and Transport for the North regions and Scotland.



*The new ARU Peterborough Campus*

## A1139 MRN IMPROVEMENTS, PETERBOROUGH

### The Embankment area, where the stunning new £80 million ARU Peterborough university campus opened in 2022, has been earmarked as a key area for the city's economic development.

It is served by the A1139 Fletton Parkway / Frank Perkins Parkway, which enables traffic to move strategically around Peterborough. This is a key commercial corridor linking Norfolk, and multiple regional and local businesses, with the strategic road network. In addition, Junction 5 provides one of the key access points to Fengate, a large employment area within Peterborough.

Performance issues with the A1139 were identified in National Highways' Oxford to Cambridge roads study, with a solution being regarded as one the most important to be taken forward for further development within the region.

Improvements to transport capacity in this area would enable growth and improve current peak hour congestion and delay at Junction 5. The provision of additional capacity at or close to Junction 5, will ease congestion, improve journey time reliability, and improve the network resilience of the A1139 Frank Perkins Parkway and major road network, as well as the surrounding local road network . As part of the project, consideration will be given to upgrading public transport infrastructure to support and promote bus use. A number of significant walking and cycling improvements are also planned to be delivered as part of the scheme, reducing severance, and providing safe facilities.

In doing so, improving the A1139 will unlock economic development opportunities and increase the attractiveness for potential investors within Fengate and to the east of Peterborough City Centre, including the Embankment.

***Next steps:*** Cambridgeshire and Peterborough Combined Authority is producing the outline business case.

Following the publication of its Local Transport and Connectivity Plan, the Cambridgeshire and Peterborough Combined Authority are undertaking a number of strategies including working with Peterborough City Council to develop a transport vision for the city and wider area to help realise the growth ambitions of Peterborough. The strategy will be mindful of the ambitions for buses, active travel, and the redevelopment of the station quarter.

## UPGRADES TO A47

### East-west connectivity plays a crucial role in driving regional economic growth, enhancing accessibility, and ensuring the efficient movement of goods and people.

Recognising this, the CPCA is actively collaborating with National Highways to evaluate the feasibility of significant upgrades to the A47. These improvements are aimed at substantially enhancing east-west travel, thereby unlocking numerous economic and social benefits for the region.

***Next steps:*** Alongside collaboration with National Highways, the Combined Authority is working closely with England's Economic Heartland to examine the complexities of transportation flows within the Oxford-Northampton-Peterborough corridor. This partnership seeks to identify and promote key infrastructure projects that emerge from comprehensive studies, ensuring that proposed schemes are well-informed and strategically beneficial. The aim of these concerted efforts is to bolster regional connectivity, drive economic prosperity, and improve the overall quality of life for residents.

*An artist's impression of how the Gateway would look*

## PETERBOROUGH STATION QUARTER

### Peterborough Station is a nationally important rail interchange on the East Coast Main Line, offering a commute to London Kings Cross in less than 50 minutes and direct connections to the North and Scotland.

Passenger usage of the station has almost returned to pre-pandemic levels of an annual throughput of five million passengers, including almost one million passengers who use Peterborough as an interchange for services to other destinations.

The Peterborough Station Quarter will be a new district in this ambitious and transforming city. It will create a welcoming series of new public spaces supported by a mix of homes, employment space, hotels, and leisure use, conveniently connected by high quality rail and bus links and safe and attractive walking and cycling options – a super connected gateway to the city and the wider region.

### Peterborough Station Quarter Phase 1 – transforming the station into a high-quality gateway

The Levelling Up Fund allocation of £48m (alongside £1.5m of Towns Fund money and £15m from Network Rail) will improve customer experience, accessibility, and capacity of the station, enhancing the station as a gateway to the city. Surface car parking will be consolidated to unlock land for development as part of a multi-phased masterplan for development.

The project will:

- Catalyse a new city quarter;
- Connect the station to the city; and
- Create an interchange fit for the future.

The phase involves creating a new western entrance to the station with a car park – to create a double-sided station. Green areas with biodiversity, community spaces and better step-free connections to the bus station and city centre will improve accessibility and make it safer and more attractive for pedestrians and cyclists. It will also improve rail passenger journeys and encourage more rail travel, which will have a positive economic impact on the city and regionally. In addition, it will support Peterborough in attracting more knowledge-intensive and high-level employers through its transport links.

### Future Phases of the Station Quarter Masterplan

The first phase £48m phase of the Peterborough Station Quarter programme and the consolidation of Network Rail's Maintenance Delivery Unit (for which Network Rail have committed £15m) will be a catalyst for future phases. The land unlocked will support future private investment for the delivery of a wider mixed-use masterplan seeking to deliver around 150,000m$^2$ of new commercial and residential developments, alongside further improvements to active travel infrastructure and local public transport connectivity.

***Next steps:*** The full business case will be submitted to Department for Transport for £48m levelling-up funding in early 2025, with construction of phase one anticipated in 2025/26. Future phases will be developed from 2026 onwards.

## MAXIMISING OPPORTUNITIES FROM EAST WEST RAIL


### Government's investment in East West Rail from Oxford to Cambridge is transforming connectivity across the EEH region.

The link between Oxford and Milton Keynes is opening in 2025, and (subject to funding) the sections to Bedford and Cambridge will follow by around the turn of the decade. The route into Cambridge Station is planned via new stations at Tempsford (in Central Bedfordshire), Cambourne and the Cambridge South station at the Cambridge Biomedical Campus, which is due to open in 2025.

East West Rail will fuel economic growth and innovation; connect businesses to a significantly larger labour pool; and boost global investment in the UK.

As Mike Archer, UK Corporate Government Affairs Director, AstraZeneca (Cambridge) told us: "There's a wealth of opportunity in the science and technology sector, from energy and sustainability to space and emerging technologies. But the UK needs critical assets like East West Rail to join up innovation hubs in the region and create a globally leading zone that can rival London for global investment. This should be an absolute top priority for government."

Maximising the benefits of the scheme for residents, businesses and leisure is crucial.

For Cambridgeshire, key to this is the delivery of:

*Eastern Section to Ipswich and Norwich:* Delivery of the line between Oxford and Cambridge must be accompanied by improved connectivity eastwards to Ipswich (via Newmarket and Bury St Edmunds) and Norwich (via Ely). Ultimately, there is an opportunity for an East West Main Line running from Suffolk and Norfolk through to Bristol and Cardiff, creating a coast-to-coast connected corridor of cities and towns with specialisms in science and technology innovation.

Currently, only hourly passenger services operate between Cambridge and Ipswich and Cambridge and Norwich, but there is significant scope and demand for more frequent services and better rail connectivity. Despite significant growth from the introduction of hourly services in the last 20 years on both the Ipswich to Cambridge and on Norwich and Cambridge routes, additional growth is constrained by train capacity and infrastructure limitations. To realise the full potential of the lines requires increased frequency which is dependent on infrastructure upgrades and additional trains.

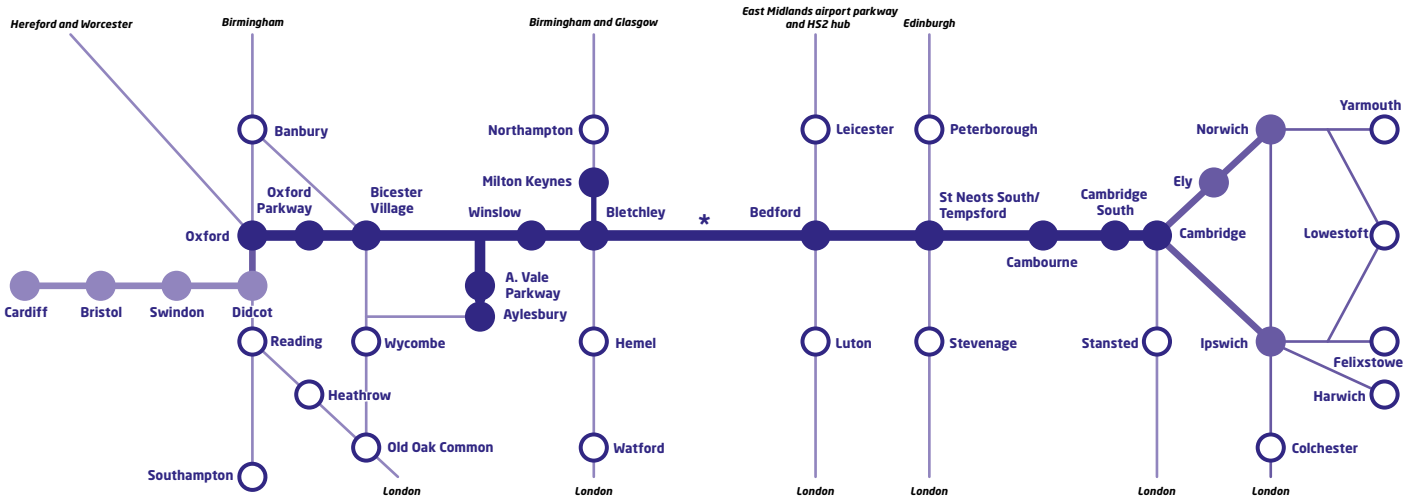
The East West Main Line would link key areas of housing, jobs, and economic growth. Indeed, it would connect five out of the six of the UK's 'fast growth cities': Norwich, Cambridge, Milton Keynes, Oxford, and Swindon (with the sixth, Peterborough, a short interchange away).

*Door-to-door connectivity:* It is essential that the line is supported by superb door-to-door connectivity, enabling the maximum amount of people to access services as possible. EEH and its partners are engaging with East West Railway Company on its door-to-door strategy. Given the significant role that local and combined authorities have in enabling integration, it is essential they are co-creators of the strategy – and that there is appropriate levels of additional funding to enable the words in the strategy to be realised on the ground. The East West Railway Company has given an undertaking to closely consider the first mile last mile and onward connectivity for all of its proposed railway stations.

This will continue to be monitored by all the authorities along the route and EEH. In addition, every effort must be made to avoid severance of active travel routes by the railway line.

*Net zero:* It is disappointing that East West Rail between Oxford and Milton Keynes will open using diesel traction. It is vital that in the longer-term, East West Rail contributes fully to the UK's decarbonisation ambitions and operates as a net zero railway.

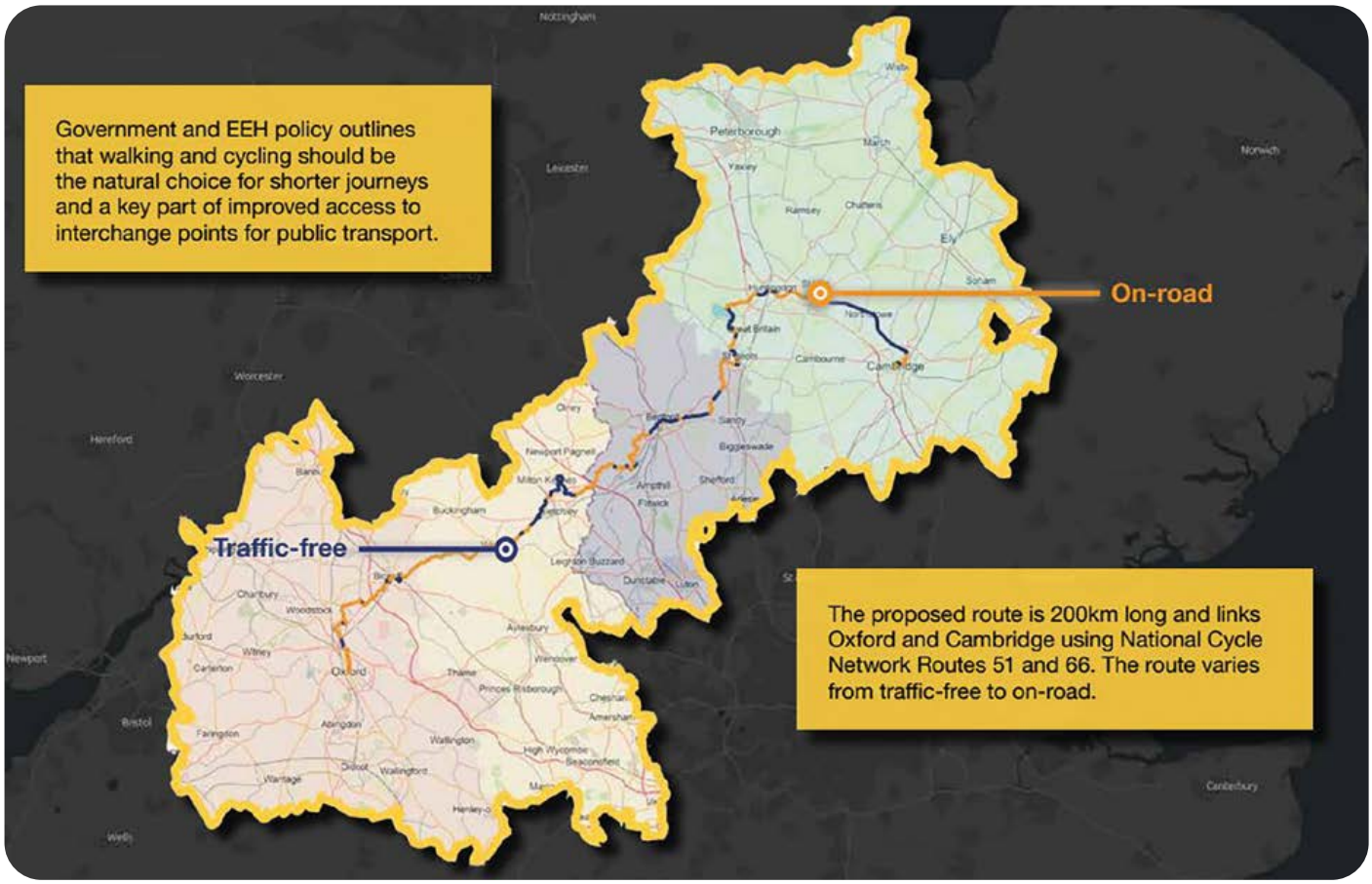
***Next steps:*** East West Railway Company will publish its latest position on the scheme for statutory consultation in 2024, providing an important channel for representations. A study into opportunities around Cambourne, as part of the £15 million allocated by the Chancellor for local opportunity planning, is currently underway. EEH and the East West Main Line Partnership will continue to gather evidence and press the case for the main line (for which delivery of Ely is crucial, see page 20) and net zero.




[*] The configuration of stations between Bletchley and Bedford is to be confirmed by East West Railway Company following a public consultation.

***East West Main Line Partnership's vision for a coast-to-coast East West Main Line***

## VARSITY WAY ACTIVE TRAVEL CORRIDOR




### EEH's flagship Varsity Way project would see an east west active travel route linking Oxford to Cambridge.

It provides the opportunity for a 'green spine' across the Heartland; one that can act as a focal point for developing a region wide network of greenways – and attract tourists and leisure riders from across the country.

The existing route is part of the national cycle network (NCN). However, the condition of the route is varied, meaning there are opportunities where improving the route will encourage more active travel. Working with the sustainable travel charity Sustrans, partners and stakeholders EEH undertook a high-level options assessment of the route spanning from Oxford to Cambridge.

The assessment identified improvements which could be made to ensure the route is of good standard across the region to provide a high-quality link from Oxford to Cambridge. Currently 48% of the route is traffic free, with 157,236m of route considered 'good' or 'very good' and 133,317m considered 'poor' or 'very poor'. The report identified opportunities for improvements for network coherence, safety, comfort, attractiveness, and convenience in the form of interventions such as resurfacing, path widening, quiet-way treatment, traffic calming and signage improvements, amongst others.

The options assessment has laid the groundwork for collaboration with partners to unlock the full potential of the Varsity Way as a vital east-west active travel route. This initiative aims to facilitate walking and cycling, fostering seamless movement within and across the area. It also presents an opportunity to cultivate a comprehensive network of active travel routes, leaving a lasting legacy aligned with the East West Rail project.

Beyond Varsity Way, it is crucial that there is continued investment in active travel in all areas of EEH which provides greater accessibility and sustainable alternatives to the car, especially within our more rural areas.

***Next steps:*** Detailed feasibility and costings, collaborating with local partners, alongside a specific project relating to alignment of the route in the Marston Vale in Milton Keynes/ Bedfordshire.

## A SUSTAINABLE TRANSPORT CORRIDOR ALONG THE DE-TRUNKED A428

Delivery of the A428 Black Cat to Caxton Gibbet scheme is a strategic priority for England's Economic Heartland, improving journeys between Milton Keynes, Bedford and Cambridge. It will see the creation of a new 10-mile dual carriageway linking the A1 and A421 Black Cat roundabout (just south of St Neots) to the A428 Caxton Gibbet roundabout (just west of Cambourne). Both existing roundabouts will be upgraded into modern, free-flowing junctions with a new junction added at Cambridge Road, improving access to St Neots and its train station. The road is currently under construction and expected to open in 2027.

Once the new alignment is open, the 'old' A428 will only have about 15% of current traffic levels, consisting predominately of local traffic and very few trucks. It will be reclassified to B1428 and responsibility handed over from National Highways to Cambridgeshire County Council. This will provide the opportunity to improve active travel and public transport facilities between St Neots and Cambourne, better connecting the settlements along the corridor via improved walking, cycling and bus delivering numerous transformative benefits. These include enhanced cycling, wheeling and pedestrian networks, promoting healthier lifestyles and reducing carbon emissions. Additionally, the detrunked A428 could integrate innovative public transport solutions. By transforming it into a modern, multimodal transport corridor, connectivity will be improved, reducing congestion, and creating a more resilient and environmentally friendly infrastructure. This project stands to not only enhance the mobility and quality of life for residents but also to set a precedent for future sustainable transport initiatives across the region. Huntingdonshire and South Cambridgeshire district councils' local plans show a number of housing sites along this corridor, lending further support for the need of an active travel and public transport route.

***Next steps:*** Around a third of the route for walkers and cyclists will be provided as part of the A428 scheme, and Cambridgeshire County Council is working with National Highways, and other stakeholders, to demonstrate feasibility and identify procurement and funding routes to complete the St Neots to Cambourne cycleway.

## MARCH-WISBECH-PETERBOROUGH PUBLIC TRANSPORT IMPROVEMENTS

Cambridgeshire and Peterborough Combined Authority and Fenland District Council continue to explore the most cost-efficient ways to improve public transport between Peterborough, March and Wisbech(connectivity to Cambridge is also a key consideration). As part of this they are seeking ways to integrate bus services at rail stations across the Fens.

CPCA and Network Rail are also considering opportunities to introduce a shuttle passenger service between March and Wisbech to improve transport connectivity and access to the commuting markets nearby to support job opportunities and the economic regeneration of the region. The objective of these enhancements is to facilitate:

- A balanced modal appraisal of all rail options to facilitate a passenger service between March and Wisbech based on a shuttle service; and
- Transport options to be considered include conventional rail, tram-train, [very] light rail, and other innovative solutions.

***Next steps:*** Network Rail continue to work on their engineering options appraisal report alongside the economic analysis work that will sit alongside. Agreement on the next steps of the project to improve the connectivity between March and Wisbech will assess the relative merits of the various options including innovative forms of transport that will incorporate the developments in technology.

## ALCONBURY WEALD RAILWAY STATION

The new settlement of Alconbury Weald lies to the north-west of the town of Huntingdon and has planning permissions for around 4,000 homes. The site, which was previously part of RAF Alconbury, has been the home of Cambridgeshire County Council since 2021.

A new Alconbury Weald Railway Station will be considered as part of one of many integrated transport solutions to support the delivery of further growth and development . A station would sit on the East Coast Main Line, providing access to Peterborough, Huntingdon, and (via interchange onto the future East West Rail line at Tempsford), Cambridge, Bedford and beyond.

***Next steps:*** The CPCA will continue to work with stakeholders to develop a robust, thorough and clear case for investment in a station at Alconbury Weald as part of an overarching sustainable transport package.

The A141 and St Ives Improvements Study seeks to improve connectivity and the way people travel in the area by identifying issues, assessing potential transport solutions across the network and providing a transport network that shapes the way that future populations travel without harming our environment. It aims to deliver an improved transport network around Huntingdon and St Ives to alleviate current challenges and to accommodate significant housing and employment growth sustainably within the study area.

## M11 JUNCTION 13

### The A1303 Madingley Road is a major route connecting M11 Junction 13 with central Cambridge.

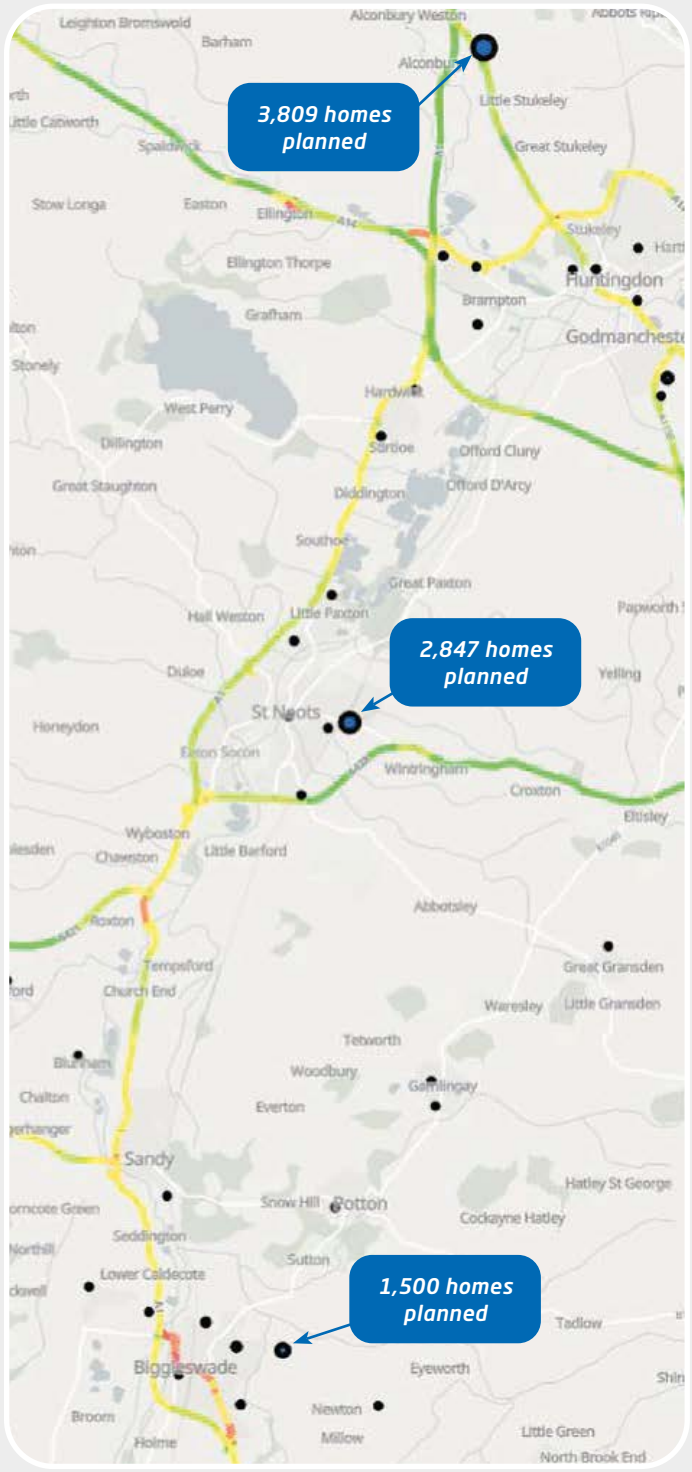
It also enables movements to and from the A428 west of Cambridge and the M11 south of J13, as these movements are not possible at the M11 Junction 14 Girton Interchange. The A1303, which contains a large park and ride site, is a single-carriageway road.

There has been a significant increase in traffic on the A1303 in the past decade, creating congestion at peak periods, particularly at M11 Junction 13, which is expected to worsen as Cambridge grows.

National Highways had therefore conducted various technical assessments and looked at potential options for reducing the queuing and congestion experienced on the slip road at Junction 13. However, in 2023 National Highways paused their work on the project.

***Next steps:*** The junction and A1303 remains an important consideration for Cambridgeshire and Peterborough particularly for accessibility and connectivity. The Greater Cambridge Partnership is proposing public transport and non motorised alternatives to reduce pressure on the junction whilst the CPCA continues to champion the corridor's importance to National Highways.

## A1 CONNECTIVITY: HUNTINGDON TO BIGGLESWADE




***The performance of the A1 between Biggleswade and Huntingdon, with local plan housing sites also shown by the blue circles (size relative to number of homes - the number of homes included within three of the largest sites have been given as examples).***

## The A1 and A1(M) serves as a nationally significant artery, running through the East of England, linking the north with London and the south-east.

Stretching 350 miles from Stirling Corner junction in London to Berwick in Northumberland, it is one of the longest roads in England and forms part of the strategic highway network that is managed by National Highways. It is an important north-south route that provides an alternative to the M1 corridor and is critical to the country's logistics networks, providing access to freight distribution hubs in the Midlands and the north, and ports in the east (via the A14 and A428), and south (via the M25).

However, the A1 is one of the poorest performing roads in the EEH region, in particular on the A-road standard section between Huntingdon and Stevenage. This section currently includes five roundabouts in the short stretch between Buckden in Cambridgeshire and Biggleswade in Central Bedfordshire that create significant pinch-points in the network. While the Black Cat roundabout is being removed by the creation of a grade separated junction as part of the A428 upgrade, it will still have four roundabouts, each of which suffer from significant congestion, air quality and environmental issues and impact the quality of life of nearby residents in Buckden, Sandy and Biggleswade. These roundabouts are the only remaining roundabouts on the whole 350 mile route.

The poor performance of the A1 not only impacts on the reliability of a vital economic artery, but also contributes to air pollution, safety and severance issues. National Highways' Oxford to Cambridge roads study highlighted that the problems between Sandy and Biggleswade in particular are one of the most pressing issues for the EEH region.

There is planned growth along or in proximity to this poorly performing stretch of the A1, with significant housing sites in Alconbury Weald, St Neots and Biggleswade (whilst the proposed Universal Studios development would be likely to add further pressure). Therefore a long-term approach to managing transport demand in the area, including tackling challenges on the A1, alongside delivery of other infrastructure such as a new East West Rail station planned at Tempsford (between St Neots and Sandy) is required.

***Next steps:*** Further work is required to identify and deliver the most appropriate solution for addressing the challenges on the A1 from Huntingdon to Biggleswade (National Highways is conducting a study in the area). EEH continues to press the urgency for a solution to the A1.

**Legend:**

Congestion score morning peak hour.

See page 39 for methodology and assumptions.

- The average speed on this section is above 66mph for a dual carriageway/motorway and 46mph for a single carriageway
- Above 59/36mph
- Above: 43/28mph
- Above 30/24mph
- Above 23/20mph
- Below 23/20mph

Improvements on the A1 just north of Peterborough at Wittering are also required to improve safety and community amenity.

The map shows the locations of collisions recorded as serious or fatal between 2010-2020.

In addition the only alternative route to bypass the junction for local residents to reach Huntingdon or St Neots is via Offord D'arcy/Offord Cluny, which is problematic in itself as a result of significant waiting times to cross the East Coast Main Line. There is potential opportunity to improve connectivity if this issue is remedied.


## IMPROVEMENTS IN CONNECTIVITY TO STANSTED AIRPORT

### Stansted Airport in Essex is the closest international airport to Cambridge and provides a global gateway to key business and leisure destinations in Europe and the rest of the world.

It is the UK's fourth busiest airport, with annual patronage in 2019 being 28 million passengers per annum (mppa) and permission to grow to 43 mppa. It is well placed to offer flights linking Cambridge's science and technology cluster to similar international business destinations.

The cities of Cambridge and Peterborough are connected to Stansted via Cross Country services on the West Anglia Main Line. EEH was pleased when the full Stansted Express service to and from London was returned in late 2023.

However, with the growth of Cambridgeshire and Peterborough's economy and population, alongside the growth of the airport, it is important that sustainable surface access to Stansted continues to be enhanced.

This may include a series of interventions along the line (including junction improvements, line speed improvements, dynamic passing loops and four tracking) which would unlock long-term capacity for faster and more frequent services between London, Broxbourne, Hertford, Stansted Airport and Cambridge. There is also an opportunity for Stansted services to call at the new Cambridge South station.

***Next steps:*** EEH's Main Line Priorities Study, due to be completed in summer 2024, will examine how service improvements can be developed which help enable improved connectivity from Cambridgeshire and Hertfordshire to Stansted Airport.


## IMPROVEMENTS TO THE A10 CORRIDOR BETWEEN CAMBRIDGE AND ELY

### The A10 is the key route between Ely and Cambridge, as well as part of the longer route between London, Cambridge, and King's Lynn.

It is a strategic route for regional freight, a key link between local communities and agriculture centres, and a heavily used commuter route; more than 18,000 vehicles use this section of the A10 every day. It is severely congested, leading to heavy emissions and long journey delays, and the safety record is troubling.

The corridor between Ely and Cambridge is currently being examined by Cambridgeshire and Peterborough Combined Authority and partners. This study focuses on movement along the corridor between Ely and Cambridge and explores opportunities to address existing and future challenges around capacity and road safety.

The study area covers the A10 between the A10/A142 roundabout to the south of Ely and ending at the Milton Interchange and also considers the impacts of improvements on the surrounding area. Currently, users of the A10 face congestion caused by a high volume of traffic, including heavy goods vehicles (HGVs) and agricultural vehicles, as well as frequent traffic incidents, particularly near junctions. The lack of dedicated facilities makes the route unappealing for non-motorised and active travel users.

These ongoing challenges not only hinder the economic performance of the region but also have adverse effects on the health, social well-being, and environment of the local area. If sustainable transport infrastructure is not implemented, these issues could worsen with the planned significant growth in the corridor and region.

The improvements to the corridor will complement the improvements being delivered by Waterbeach New Town and will need to align with the necessary improvements at the A10/A14 Junction, Milton Interchange. The expected improvements at the Waterbeach New Town development will include a relocated rail station, Waterbeach to Cambridge busway and a number of active travel routes.

***Next steps:*** The Combined Authority with partners is reviewing and validating the Strategic Outline Business Case (SOBC) that was completed previously, to make sure that recent changes in national and localised policies, standards, guidelines, and data are considered. This will ensure that the project continues to meet the requirements of grant funding from the Department for Transport (DfT). With the overarching aim to consult on options within 2024/25 to enable the Combined Authority to reflect on the feedback in the development of the next phase of the project – thereby informing the formation of the full business case. Consideration will be given to the Greater Cambridge Partnership's Waterbeach to Cambridge scheme, as well as the planned improvements in the new town along this corridor. A collaborative effort involving all stakeholders is essential to ensure the successful integration of these projects.

### A new era for transport in Cambridgeshire and Peterborough

Cambridgeshire and Peterborough Combined Authority's Local Transport and Connectivity Plan (LTCP) is the long-term strategy to make transport in Cambridgeshire and Peterborough better faster, greener, and more accessible for everyone.

The LTCP was approved on 29 November 2023. It marks a new era for transport in the region. It sets out a vision and goals for how transport supports a better future and describes the projects needed to make that new future possible. This includes things like better buses, more train services, less pollution and carbon emissions, and helping more people to cycle and walk.

## PETERBOROUGH-CAMBRIDGE LINK

A high-speed, sustainable transport link between Peterborough and Cambridge would connect and invigorate the regional economy. This forward-thinking initiative would not only significantly reduce travel times but also promote environmental sustainability by providing a greener alternative to car travel. By facilitating faster and more efficient movement of people and goods between these key cities, we can unlock new economic opportunities, attract investment, and foster innovation across the region. Additionally, such a link would enhance access to education, employment, and essential services, thereby improving the quality of life for residents.

***Next steps:*** EEH, CPCA and its partners will advocate for this project, ensuring it becomes a priority in regional and national transport planning.

# DELIVERY OF GREATER CAMBRIDGE PARTNERSHIP'S FOUR CORRIDOR SCHEMES

The GCP's four corridor schemes – Cambourne to Cambridge, Waterbeach to Cambridge, Cambridge Eastern Access and Cambridge South East Transport, are offering new public transport and active travel routes, which are essential for linking growing communities to the north, south east, east and west of the city.

## Cambourne to Cambridge

There are plans for thousands of extra homes and employment opportunities between Cambourne and Cambridge, including 2,350 houses at Cambourne West; 3,500 houses at Bourn Airfield; and 383,300 square metres of employment land at West Cambridge. Without intervention, these developments will increase congestion along the A1303, causing growing pollution, delays and tailbacks at peak times.

Cambourne to Cambridge will be a new sustainable travel route. It includes:

- a new, mostly dedicated off road bus route between Cambourne and Cambridge, via the new Bourn Airfield development, Hardwick and the West Cambridge site.
- a new 'travel hub' at Scotland Farm, Dry Drayton.
- a new path for walkers, cyclists and, where appropriate, horse riders alongside the whole route.

The scheme will provide a reliable, turn up and go service with buses every 10 minutes from Cambourne to Cambridge city centre. The buses will be electric or to the highest standards.

***Next steps:*** A Transport and Works Order is due to be submitted shortly, with construction to begin in 2026, subject to approval.

## Cambridge Eastern Access

The Cambridge Eastern Access corridor provides the main access into the city from the east and consists of the A1134/A1303 Newmarket Road between Quy Interchange and Elizabeth Way. It connects with the strategic road network at A14 Junction 35. Newmarket Road Park & Ride is located approximately 500m west of the junction with Airport Way and is accessed off the A1303.

The route suffers considerably from congestion during peak times, particularly closer to the city. As communities continue to grow in line with the area's local plan, sustainable transport options will be vital to access work, study and other opportunities the city has to offer – whether using public transport, cycling or walking.

The Cambridge Eastern Access proposals includes transformational changes to Newmarket Road to provide high-quality footways, crossings, segregated cycle tracks, bus lanes and junction improvements. The proposals include relocating and expanding the Newmarket Road Park & Ride site.

The scheme will support the delivery of sustainable planned developments including Marleigh, Springstead Village and Cambridge East (Cambridge Airport), while encouraging people to walk, cycle and use public transport rather than driving.

***Next steps:*** The construction of improvements to Newmarket Road are currently programmed for 2025/2026. The planning application for the new Park and Ride site is due to be submitted in 2025.

## Cambridge South East Transport Scheme

The Cambridge South East Transport scheme offers better and safer walking, cycling and bus routes for the A1307 and A1301 area, making it easier, greener and safer to get to work, education and leisure.

The project is made up of two phases.

Phase 1 focused on road safety, walking, cycling and bus priority along the A1307 between Haverhill and Cambridge. GCP has delivered many elements of phase 1.

Phase 2 (CSET2) holds potential to encourage investment and sustained economic growth, supporting ongoing growth on the Cambridge Biomedical Campus, Granta Park and Babraham Research Campus.

It includes a new, dedicated bus route providing faster and more reliable journeys between a new travel hub at the A11 to the Cambridge Biomedical Campus and on to the city. The travel hub will be located between the A11 and Babraham.

CSET 2 will also connect to Cambridge South rail station, due to open in 2025.

The scheme will provide a reliable, turn up and go service with buses every 10 minutes to and from Cambridge city centre. The buses will be electric or to the highest standards.

***Next steps:*** At the Spring Budget 2024, the government provided £7.2 million to progress CSET2 to the next stage. This will allow GCP to submit the Transport and Works Act Order later in 2024. Further funding will need to be secured to deliver the full scheme.

## Waterbeach to Cambridge

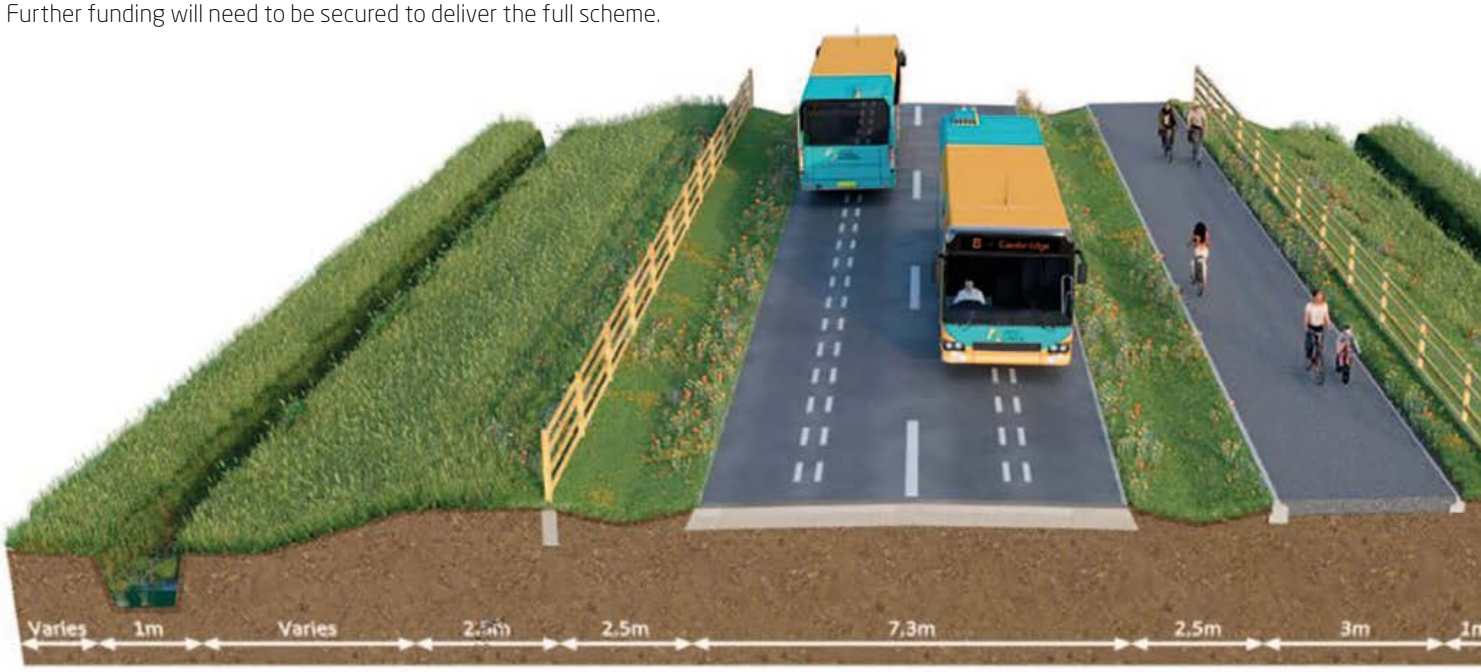
The Waterbeach to Cambridge corridor is the key route into Cambridge from the north.

The A10 road is already heavily congested during peak times, particularly at the Cambridge end. The railway between Waterbeach and Cambridge also suffers overcrowding at peak times.

There are plans for up to 11,000 new homes at Waterbeach New Town, 20,000 new jobs in North East Cambridge and more employment space at the Cambridge Research Park off the A10. This will add more pressure on the existing network.

The scheme seeks to deliver a new high quality, segregated busway between Waterbeach New Town and Cambridge via Cambridge Science Park and the proposed development at north east Cambridge. The new route will be served by modern, electric vehicles to limit air pollution and noise and will be complemented by a new Park and Ride to encourage sustainable journeys and end-to-end space for active travel options like walking and cycling.

***Next steps:*** The project has a preferred alignment and is working towards submission of a Transport and Works Act Order in 2025.



# PETERBOROUGH BUS DEPOT


## Cambridgeshire and Peterborough Combined Authority has received £4million to relocate Peterborough bus depot.

The current Lincoln Road bus depot in Peterborough is approximately 100 years old. It is surrounded on three sides by the back gardens of neighbouring residential properties, and on the fourth side it fronts on to a busy retail area. This makes expansion impossible.

Crucially, the new bus depot will be able to support the Combined Authority's commitment to electric buses, which will require a depot with more floor space, because each charger needs barriers to protect it from parking accidents. By providing a new depot that can support electric buses, it will be able to continue working towards its goal of ensuring all buses and taxis operating within the county are zero emissions by 2030.

The new depot will be multi-operator, with capacity to expand at a later date to meet any future market needs. It will also provide additional overnight parking capacity and maintenance facilities for buses and create a level playing field for bus operators who are bidding to operate bus services around the city.

This project will strategically support the Peterborough city public transport core network, improve air quality, and allow the allocation and operation of an expanded bus fleet. It also allows a mechanism to avoid charges of the Authority supporting one bus operator disproportionately by allowing successful bidders for service bus contracts to rent space withing the new depot at a standard rate applicable to all bus service providers.

Depending upon the location and configuration of the successful site, the project will also consider the possibility of charging electric vehicles (cars, coaches, vans, HGVs) in the daytime to make best use of the installed capacity.

***Next steps:*** A number of potential sites are now being considered for the relocation, and the Combined Authority will be working closely with Peterborough City Council to drive the project forward. In addition, ongoing study is required to find appropriate bus depot sites to install the forecast electric vehicle charging requirements throughout the Cambridgeshire and Peterborough Combined Authority area.

## CONNECTING THE MIDLAND AND EAST COAST MAIN LINES BETWEEN CORBY AND PETERBOROUGH

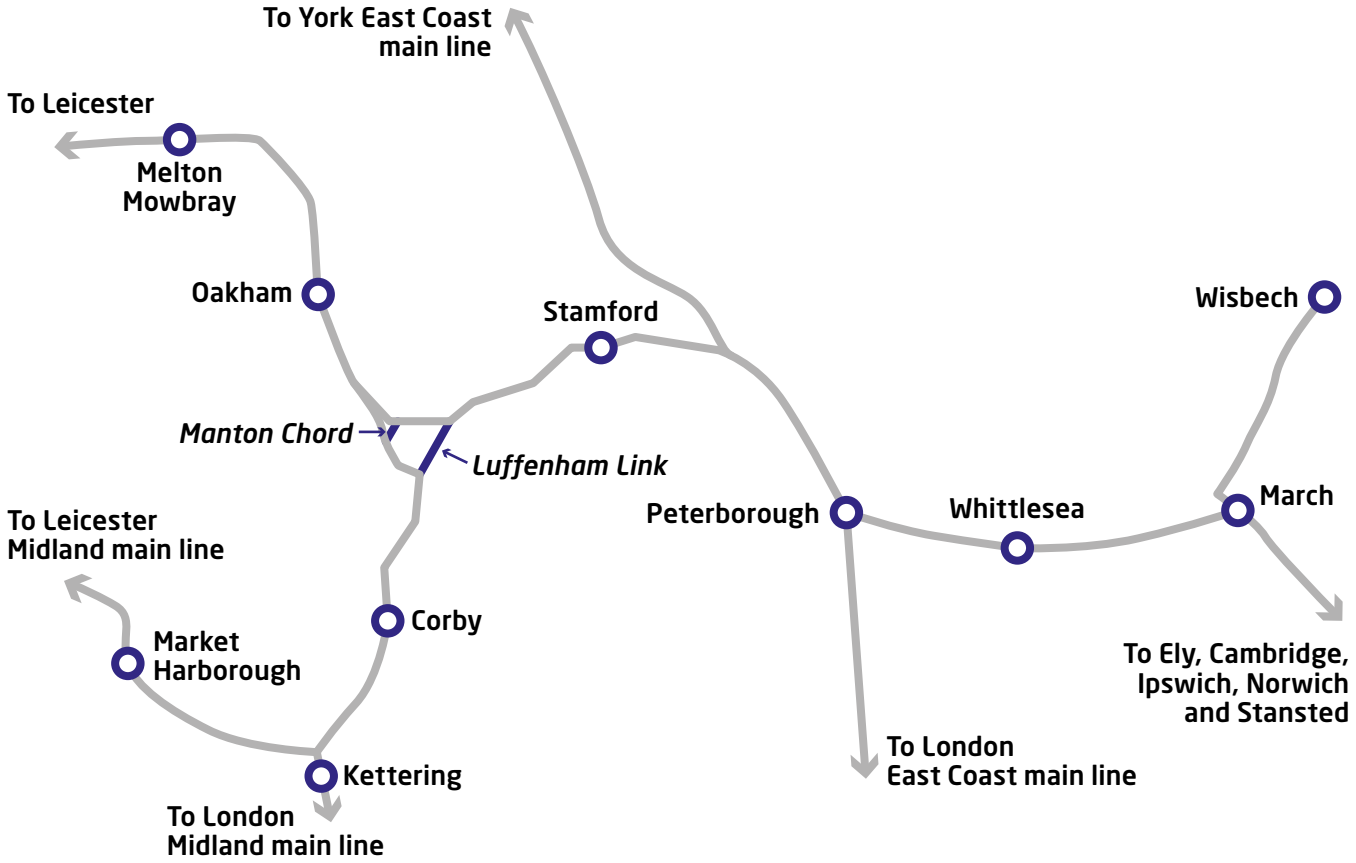
There is an opportunity to transform east-west rail connectivity along the corridor, by providing a link between Corby on the Midland Main Line and Peterborough on the East Coast Main Line.

Crucially, most of the infrastructure is already in place. However, currently, trains heading north of Corby can only turn westwards towards Oakham onto the cross-country route between Peterborough and the Midlands (used extensively for freight), rather than eastwards towards Stamford and Peterborough.

A solution requires construction of the Luffenham link and/or Manton chord, which sit just outside of EEH in Rutland. The former is a more complex, longer 3.5 mile solution, the latter a shorter, cheaper option but which would result in slower journey times.

Either way, services could be unlocked, for example, between Kettering, Corby, Stamford, Peterborough and March. According to the Welland Valley Rail campaign, utilising a Luffenham link could lead to journey times of 30 minutes between Corby and Peterborough and 40 minutes between Kettering-and Peterborough, competing with car journeys.

Next steps: England's Economic Heartland is currently progressing a detailed study of opportunities to improve rail journeys in the region, which will be published later this year.



# // PRINCIPLES FOR SUCCESS

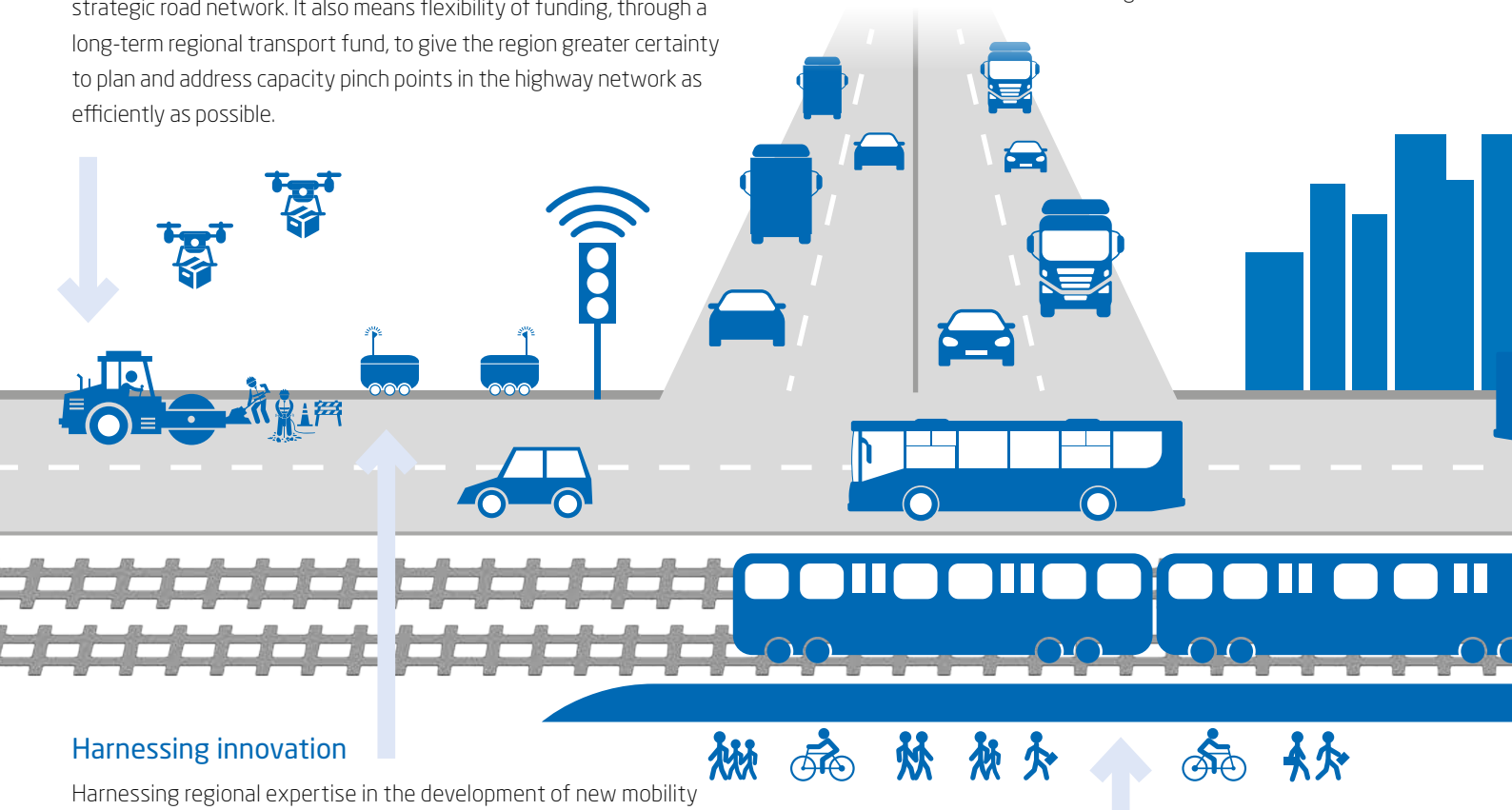
This brochure details the priority infrastructure – some major, others comparatively minor investments – which are required to improve connectivity across its geography. However, it is not just securing funding for new infrastructure that is important, we must be able to make the most of our existing infrastructure and maximise the benefits that we can extract out of new infrastructure- stretching the benefits to as many of our communities and businesses as possible.

## Well-functioning roads

The region's existing road capacity must be well maintained and managed so the maximum amount of benefit can be leveraged for all road users, in line with local place-based ambitions. For local authorities this means receiving appropriate levels of roads maintenance funding which take account of the impact of climate change and also that of traffic which has been generated by the strategic road network. It also means flexibility of funding, through a long-term regional transport fund, to give the region greater certainty to plan and address capacity pinch points in the highway network as efficiently as possible.

## Addressing issues on strategically important roads

During 2023, National Highways, in partnership with EEH and the Department for Transport completed the Oxford-Cambridge Connectivity: Roads Study. The work identified areas on the region's major road network (MRN) and strategic road network (SRN) which performed most poorly against expected service levels. The study identified a series of priority areas on the Heartland's road network that must be either addressed or investigated further.



## Harnessing innovation

Harnessing regional expertise in the development of new mobility solutions will not only benefit the region, but also provides the UK with a competitive edge, unlocking benefits well beyond transport. It is a key part of the transition to net zero. The work underway in and around Oxfordshire, Cambridgeshire, Hertfordshire and Milton Keynes provides the region with access to experience on which it can build. But for innovation to be scalable, it must be supported by the right funding and supportive business models. EEH, through its innovation board champion and innovation working group is playing a key role in several regional projects: helping to ensure funding is in place; regulatory reform is supported where necessary; and by raising the profile of opportunities as they emerge.

## A leading role in rail reform

Legislation to create Great British Railways must enable the role of sub-national transport bodies, as locally-formed partnerships of elected leaders and mayors, to be identified explicitly as partner organisations to the integrated rail body. EEH, Transport East and Transport for South East have created the Wider South East Rail Partnership. It can guide the way the rail industry, STBs and Transport for London are working together to maximise the potential of the rail network in the wider south east of England: a critical part of the UK's rail network in terms of patronage, through-journeys (by both passenger and freight) and revenue.

## Collective responsibility for the success of infrastructure

Our local and combined authorities, and national government and its agencies, have signalled the importance they attach to the work of sub-national transport bodies. Our work extends far beyond advising on our region's priorities. We are working to maximise the value of infrastructure throughout its lifecycle, from concept and planning (including providing our local and combined authorities with capacity and capability, and addressing the skills pipeline), to construction and operation (including door-to-door connectivity and integration). A multi-year funding settlement from DfT would help EEH and its partners leverage the benefits that come from organisational certainty and allow our region to take collective responsibility in delivering the benefits of infrastructure investment.

## Bus funding and models

In our role supporting members in our region to realise their ambitions for public transport, EEH is working with partners to ensure cross-boundary opportunities for bus are fully realised. In the context of local government funding pressures and a region with relatively small cities, market towns and large rural populations, our local authorities need to fully understand the viability of of franchising, the opportunity involved and whether there will be access to additional funding to cover this. Flexibility of approach is crucial. Government must learn the lessons of the past, including the uneven BSIP funding, and avoid creating a two-tier system between authorities which franchise and those which opt not to to.

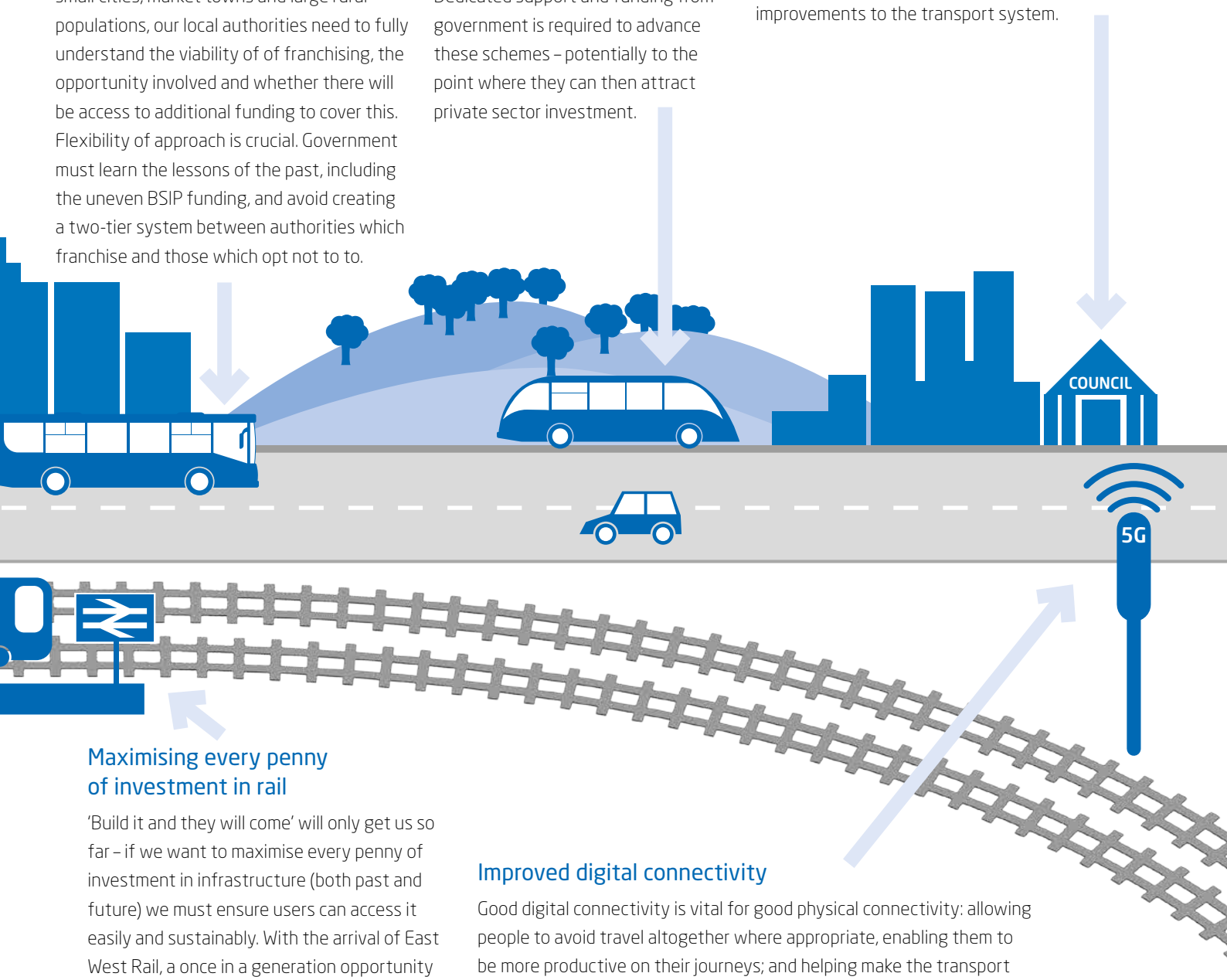
## Mind the gap on MRT funding

Several of our local authority partners are developing ambitious mass rapid transit schemes for their places. However, funding to progress MRT falls 'through the gap' due to it not being covered by roads or rail funding. Dedicated support and funding from government is required to advance these schemes – potentially to the point where they can then attract private sector investment.

## Long-term local transport funding

It is vital that the long term funding which benefits the strategic road network and our railways is matched by long term settlements for local transport.

Long-term funding should be available everywhere in the country: empowering local leaders to plan and deliver tailored place-based and people-focused improvements to the transport system.




## Maximising every penny of investment in rail

'Build it and they will come' will only get us so far – if we want to maximise every penny of investment in infrastructure (both past and future) we must ensure users can access it easily and sustainably. With the arrival of East West Rail, a once in a generation opportunity will be squandered if the region is unable to provide high quality door to door connectivity to stations, and avoid community severance wherever possible.

## Improved digital connectivity

Good digital connectivity is vital for good physical connectivity: allowing people to avoid travel altogether where appropriate, enabling them to be more productive on their journeys; and helping make the transport system itself smarter and more efficient. In a region world renowned for its science and technology innovation, it cannot be right that a quarter of all our homes and more than half of our firms lack access to ultrafast broadband, with coverage particularly poor in many rural areas.

# // NOTES AND METHODOLOGY

## CONNECTIVITY: THE THEORY

Connectivity is critical to enabling economic expansion and cluster development, to ensure accessibility to key centres and enabling and attracting labour supply growth, and the sustainability of existing and new communities.

Broadly, there are two ways in which improved connectivity can unlock economic growth.

*Static impacts are those which capture the various direct effects on existing firms and residents:*

**For firms:**

- Reduction in costs of shipping and freight movements
- Reduction in costs of business travel
- Access to a larger labour pool, as previously unattractive commuting movements become more viable
- Access to a larger pool of customers in physical attendance at premises

**For residents:**

- Interventions that improve speed, safety and reliability of local transport networks and reduce congestion and pollution
- Improvements in inter-regional or inter-national connectivity provides local residents with better access to tourism and recreation opportunities
- Increases in access to employment opportunities, providing residents with a greater choice and selection of jobs
- Increased access to education and training opportunities

*Dynamic impacts are the subsequent impacts of new economic activity entering a local market as a result of better transport connectivity. Their long-term effects can significantly outweigh the scale of the initial static effects:*

- Firm-worker proximity benefits: Positive feedback between the presence of workers with specific skills, and firms that require said skills
- Firm-firm proximity benefits: The co-evolution of sector value chains, with the presence of downstream actors attracting upstream suppliers, and vice versa, or firms in similar sectors co-locating/clustering
- Agglomeration-growth cycle: whereby the productivity and competitiveness benefits of co-location allows firms to win greater market share and expand operations (see right)
- Some of the other induced effects of dynamic impacts include an increase in property prices (often seen as a negative) and an increased amount of money spent locally by better-paid workers (generally seen as a positive)

### Productivity and agglomeration

A key theme for the EEH region is improving productivity: the ways in which individual workers are able to produce more, or higher quality, output, as measured by the revenues the firm is able to capture less the direct costs of the inputs. Some obvious reasons for productivity growth might be: more skilled workers, better equipment, and smarter processes. Some less obvious, but equally important, reasons might be lower costs of inputs and higher prices of outputs, both of which may be a result of local economic conditions, or the firm's increased market power.

One of the most important ways in which transport systems help drive productivity growth is through agglomeration. Agglomeration benefits are the benefits that firms experience from being connected to, and interacting with, a wide number of other economic actors. This brings two benefits: efficiency, and innovation.

Agglomeration drives efficiencies through economies of scale and matching benefits. Firms that are able to access and serve larger markets, and have greater choice of suppliers and workers are often able to run their businesses more efficiently than those with smaller markets and more limited choices. This boosts revenue, decreases costs, and helps productivity grow.

Agglomeration also helps firms innovate, through expanding the network of contacts with which they are able to interact. This helps them access the knowledge and ideas that they can use to improve their business. Innovation is a major driver of productivity; in fact, many of the most beneficial ways we conceive of productivity growing, be it through better equipment, a more efficient workflow, or a better end-product, are forms of innovation. Helping firms invest and innovate, either directly or by creating the right incentives and conditions, is probably the main way of driving productivity growth in the long-run.

For Cambridge Econometrics' full methodology,
including data sources, SIC codes and MSOAs used, see our website
www.englandseconomicheartland.com/connecting-economies

**Datasets:** Datasets used were the most recent available during spring 2024. Cambridge Econometrics used middle layer super output area (MSOA) level data, rather than local authority-level data. This was necessary as the corridors and areas within these brochures do not necessarily conform to local authority boundaries. However, MSOA data is not updated by ONS as regularly or as quickly as local authority-level data – hence why in some cases it may appear there is more recent data available, but this would be at a local authority rather than MSOA level.

**Use of pre-Covid data:** Throughout the brochure Cambridge Econometrics has used a mixture of pre-and-post Covid data. Pre-Covid data is used to assess the longer term trends and performance of an area, avoiding the significant distortion of the pandemic on the data.

**Definition of sub-areas**: Cambridge Econometrics defined 18 'sub-areas' across the EEH region, using workplace density and commuter zone analysis from ESRC-commissioned research. The areas are separate from administrative boundaries, using MSOA geographies. Where an area is 'ranked' in comparison to other EEH areas, it is therefore out of a total of 18 areas within EEH. The full list of MSOA areas which make up each sub-area is available on the EEH website.

**Definition of sectors:** Cambridge Econometrics has identified sectors using standard industrial classification (SIC) codes, held by the Office for National Statistics (ONS). Businesses self-report the most appropriate SIC code for their area of focus. There are hundreds of SIC codes, each representing a specialism, and Cambridge Econometrics has grouped these together to form sectors. By its nature, this requires a degree of judgement on the part of Cambridge Econometrics as what specific activities form a sector: classifying sectors, particularly those involved in science and technology innovation, is as much an art as it is a science. The full list of SIC codes which make up a given sector is available on the EEH website.

# CONNECTIVITY SECTION DEFINITIONS

## Definitions and sources for Connectivity Today section

### Congestion map: Full definition

To produce the map, City Science first analysed INRIX data to provide an indication of average road speeds by car for various road types (eg dual carriage, single carriageway) across the entirety of the EEH motorway, A and B road network between on a weekday morning. Individual sections of road were then given a rating reflecting how their average speed compared to the EEH average for that road type. Analysis conducted uses the weekday morning peak period (i.e. 0700-1000) in June 2022. The vehicle type "car" was analysed as a proxy for understanding network performance. The full list of speeds (in mph) and scores is in the table below.

| Road Type | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Single Carriageway | >46 | >36 | >28 | >24 | >20 | <20 |
| Dual Carriageway / Motorway | >66 | >59 | >43 | >30 | >23 | <23 |
| Traffic Island Link | >41 | >32 | >26 | >23 | >20 | <20 |
| Roundabout | >38 | >33 | >29 | >26 | >23 | <23 |
| Traffic Island Link at Junction | >36 | >31 | >26 | >22 | >19 | <19 |
| Slip Road | >53 | >45 | >39 | >33 | >24 | <24 |

## Public Transport Catchment map:

The map, by City Science, makes a number of assumptions. Walking speed is 3mph as standard, though this can vary depending on incline. For calculating journeys by rail and bus, the period 7am-10am (weekday) has been divided by the number of services within that period to give a 'headway'. The average wait time is half the value of the headway (ie, the time you'd wait if you arrived exactly halfway between two train/ bus services). The travel time is the average across all services between 7am and 10am (ie, if there is a mixture of fast and slow services to a destination, it is an average of these). These assumptions ensure the map gives a balanced view of journey times, however it may not reflect the fastest possible time it would take to get to a destination. Example:

There are 12 services between Place A and Place B from 7am to 10am, equating to one service every 15 minutes. The average wait time is therefore 7.5 minutes. Half of the services are 'express' and take 30 minutes to get to Place B, the other half are 'stoppers' and take one hour. Therefore, the average journey time is calculated as 45 minutes. In this scenario, the total 'journey' would be 52.5 minutes, plus the time it would take to walk to a station/ stop from the starting / finishing position. The bus and rail timetable information comes from the Bus Open Data Service (BODS) and Rail Delivery Group respectively.

## Get in touch

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