Connectivity Analysis Report

Greater Cambridge Transport Strategy

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Executive Summary

Purpose of the Report

This report presents the connectivity analysis undertaken to support the Greater Cambridge Transport Strategy (GCTS). The GCTS will form a spatial sub-strategy to the Cambridgeshire and Peterborough Combined Authority's Local Transport and Connectivity Plan and will form part of the transport evidence to support the emerging Greater Cambridge Local Plan, future investment decisions and the longer-term growth ambitions for the sub-region. The analysis provides an evidence-based understanding of how effectively existing settlements and emerging strategic growth locations are connected to employment, education, healthcare, services and transport opportunities, and how this connectivity could change through future transport investment.

Connectivity has been considered as an outcome-based measure of the opportunities available to people, rather than as a forecast of future trip-making. This supports a vision-led approach to transport planning by identifying where existing transport and land-use conditions already provide a choice of travel options, where planned schemes strengthen that choice, and where additional intervention may be required. The analysis is intended to inform the development and refinement of the GCTS and to provide a transparent basis for considering the relationship between transport connectivity, the spatial strategy, infrastructure phasing and future growth.

Approach to the Assessment

The assessment uses two complementary tools:

- The Department for Transport Connectivity Tool provides a consistent, policy-aligned assessment of baseline connectivity by walking and wheeling, cycling and public transport. It also enables selected individual public transport interventions to be tested. Driving connectivity is reported by the tool but is not included in its calculated overall connectivity score.

- The Stantec Transport Planning Evaluation Platform (STEP) provides a more detailed and spatially granular assessment of public transport accessibility, including walking and wheeling access to the network. STEP enables the cumulative effects of multiple interventions to be assessed across different journey-time bands and destination types.

The DfT Connectivity Tool is used primarily to establish the baseline position and benchmark locations against comparable rural and urban classifications. In line with the updated DfT guidance, its scores have not been treated as absolute indicators of whether a location is well connected or suitable for development. They have instead been interpreted according to transport mode, destination type, rural-urban classification, local evidence and professional judgement. STEP provides the principal assessment of how integrated packages of transport interventions could influence future connectivity.

Four main scenarios have been considered:

1. Baseline, representing present-day conditions within the DfT Connectivity Tool.

2. Reference Case, including recently opened or committed schemes assessed through STEP.

3. Do Minimum, incorporating planned transport schemes progressed through existing studies.

4. Do Something, incorporating the wider package of interventions identified through the GCTS.

East West Rail has also been considered as a sensitivity scenario, alongside additional tests relating to service frequency, walking and cycling access, new public transport stops, express services and rural mobility measures.

The STEP analysis assesses accessibility during the AM and PM peak periods using public transport services and the pedestrian network available when the analysis was undertaken. It considers access

to a consistent set of strategic employment, education, healthcare and transport destinations within journey times of up to 60 minutes. Settlement-specific connectivity targets have also been applied to reflect the different roles and reasonable accessibility expectations of Cambridge, towns, rural centres and villages.

Baseline Connectivity

The baseline assessment demonstrates that connectivity varies significantly across Greater Cambridge according to location, proximity to services, access to high-quality public transport and the availability of convenient walking, wheeling and cycling connections. Locations within or adjoining the Cambridge urban area generally achieve the strongest absolute connectivity scores. Eddington, Cambridge East and Cambridge Biomedical Campus benefit from their proximity to higher-order services, major employment areas and established transport corridors.

Higher absolute scores are not, however, limited to central Cambridge. Some settlements and strategic sites outside the urban area perform strongly when compared with places of a similar character. This is particularly evident where locations benefit from rail access, frequent public transport or proximity to established centres. Conversely, a relatively high raw score does not mean that every aspect of a location's connectivity performs strongly. Some urban locations retain specific gaps in access to healthcare, employment or public transport, while some rural locations achieve comparatively strong public transport percentiles despite having lower overall scores.

The baseline findings therefore reinforce the importance of contextual interpretation. The strongest connectivity outcomes arise where several factors operate together:

- proximity to employment, services and everyday facilities;
- access to rail or frequent, high-quality public transport;
- more than one viable travel option;
- direct walking, wheeling and cycling connections to stops, stations and local centres;
- integration between transport infrastructure and land use; and
- timely delivery of services and infrastructure alongside development.

A recurring finding is that the presence of a public transport corridor does not, by itself, guarantee effective accessibility. At several locations, the ability to use existing or proposed services is influenced by the first and last part of the journey. Indirect walking routes, distances to stops or stations, limited site permeability and interchange requirements can materially reduce the destinations that can be reached within the assessed journey-time threshold. This is particularly relevant to large strategic sites where internal layout and the phasing of local services will influence the travel choices realistically available to early residents and employees.

Reference Case and Do Minimum Findings

The STEP Reference Case and Do Minimum analysis confirms that sites within or closely integrated with Cambridge generally provide the widest destination choice and shortest journey times. Sites located further from Cambridge tend to exhibit a more corridor-based pattern, with good accessibility along specific radial routes but more limited cross-corridor and orbital connectivity. These locations may provide effective access to selected destinations while offering fewer practical choices for journeys elsewhere in the sub-region.

The Do Minimum schemes generally reinforce existing patterns rather than fundamentally changing them. Improvements are typically expressed through shorter journey times, an expanded catchment or access to a small number of additional destinations. This means that committed and planned interventions provide an important foundation, but do not in isolation address all of the accessibility gaps identified across the strategic sites and existing settlements.

The assessment also illustrates that different locations perform different functions. Urban and rail-served sites generally provide broad access across several destination types, while some peripheral employment campuses and settlements have strong relationships with particular corridors or nearby centres. Accordingly, connectivity should not be judged solely according to access to Cambridge city centre. Access to local employment, education, healthcare, transport interchanges and neighbouring settlements is also important in determining whether a location provides an appropriate range of opportunities and travel choices.

Benefits of the Greater Cambridge Transport Strategy

The Do Something assessment demonstrates that the GCTS would deliver a clear improvement in connectivity compared with the Reference Case and Do Minimum scenarios. The intervention package strengthens radial routes, introduces or enhances cross-corridor and orbital connections, improves access to transport interchanges and broadens the range of destinations that can be reached from many of the strategic growth locations.

Across the strategic sites assessed, the total number of connections available within 60 minutes increases as follows:

- Employment destinations: from 59 in the Reference Case and 61 in the Do Minimum to 89 in the Do Something and 96 with East West Rail.
- Transport hubs: from 115 in the Reference Case and 128 in the Do Minimum to 173 in the Do Something and 193 with East West Rail.
- Education destinations: from 123 in the Reference Case and 132 in the Do Minimum to 166 in the Do Something and 190 with East West Rail.
- Healthcare destinations: from 69 in the Reference Case and 72 in the Do Minimum to 87 in the Do Something and 97 with East West Rail.

The greatest overall gains are associated with access to transport and education destinations. Substantial improvements are also achieved in access to employment opportunities, while healthcare benefits are more moderate because the assessment focuses on a smaller number of higher-order health destinations and some sites already have relatively strong baseline access.

The GCTS produces particularly notable improvements at locations where baseline accessibility is more dependent on a single corridor or where existing links to public transport are weaker. For example, the report identifies significant gains for Babraham Research Campus, Grange Farm, Slate Hall Farm, Northstowe and Wellcome Genome Campus following the introduction of the Do Something interventions and the associated sensitivity measures. At locations that already perform strongly, such as Cambridge Biomedical Campus, the measured uplift is smaller because a substantial range of destinations is already accessible in the Reference Case. A smaller quantified change at these locations should not therefore be interpreted as a lack of benefit or poor performance.

East West Rail provides an additional step change for selected locations, particularly Cambourne, Cambourne North and Tempsford (noting that this lies outside Greater Cambridge). At Cambourne North, for example, the number of accessible transport destinations increases from three in the Do Something scenario to twelve with East West Rail, while accessible education destinations increase from two to eleven. At Cambourne, East West Rail further increases access to employment, transport, education and healthcare opportunities beyond the benefits delivered by the core GCTS interventions.

Population and Employment Accessibility Benefits

The population catchment analysis demonstrates that the GCTS substantially increases the number of people able to reach the assessed major employment destinations within 60 minutes. In the AM peak, the aggregate population catchment increases from 1,441,671 in the Do Minimum scenario to 1,886,790 in the Do Something scenario, an increase of 445,119. In the PM peak, the corresponding increase is from 1,436,889 to 1,904,286, an uplift of 467,397.

With East West Rail added to the Do Something scenario, the aggregate increase relative to the Do Minimum reaches 511,545 in the AM peak and 532,760 in the PM peak. Under the indicative enhanced rail-frequency sensitivity test, the corresponding increases reach 767,258 and 796,690. These totals represent aggregate catchments across the assessed employment destinations and therefore demonstrate the change in the combined reach of those destinations rather than a count of unique individuals.

The largest accessibility gains are evident at employment locations that have more limited catchments in the Do Minimum scenario. In the AM peak, the population able to reach Granta Park increases from 30,382 under Do Minimum to 214,586 under Do Something. Babraham Research Campus increases from 131,498 to 231,615, while Wellcome Genome Campus increases from 323 to 27,989. These results indicate that the GCTS can materially broaden the labour market catchments of strategic employment locations and improve the range of jobs accessible to existing and future communities.

The analysis also identifies a small number of localised reductions caused by timetable interactions, interchange timing or service diversions. These do not outweigh the overall benefits and are capable of being considered through subsequent service planning and timetable refinement. They do, however, demonstrate the importance of treating the public transport network as an integrated system and coordinating services so that faster individual routes do not inadvertently weaken onward connections.

Sensitivity Testing and Targeted Intervention

The sensitivity tests demonstrate that several apparent connectivity constraints are associated with specific local access or service assumptions rather than unavoidable structural barriers. Targeted measures produce material improvements at Slate Hall Farm, and Cambridge East. These include more accessible bus services, direct walking and cycling connections, local shuttle or demand-responsive services, higher service frequencies and limited-stop express services.

At Slate Hall Farm, the tested direct public transport or demand-responsive service increases accessible destinations from two in the Reference Case to 21 in the Do Something scenario and 25 with East West Rail.

The tests for Cambridge East show that more direct walking routes to Cambridge East Station and nearby public transport could reduce access and interchange time, meaning the headline results are likely to provide a conservative indication of the site’s future connectivity potential.

For existing rural settlements, the assessment shows that demand-responsive transport, rural mobility hubs and targeted active travel improvements can provide effective connections to rail stations, public transport corridors and larger centres. These measures are particularly relevant where dispersed demand may make a conventional frequent fixed-route service difficult to sustain. Most minor rural centres already achieve access to key destinations within 60 minutes, with targeted interventions enabling Bassingbourn and Gamlingay to meet the applicable assessment target.

Strategic Implications and Conclusions

The analysis demonstrates that connectivity constraints are generally capable of being addressed through an appropriate combination of strategic and local interventions. The GCTS provides the framework, based on a vision-led approach, for strengthening existing high-quality corridors, improving orbital and cross-corridor movements, integrating rail and bus services, addressing first and last mile access and supporting rural mobility.

The results support the following strategic conclusions:

- development and transport infrastructure should be planned and phased together so that a genuine choice of travel options is available as early as practicable;
- accessibility should be considered relative to the role and context of each settlement, rather than through a single universal score or journey-time expectation;

- rail and high-quality public transport can provide substantial benefits, but these rely on effective local access, interchange, service frequency and integration with land use;
- strategic interventions should be supported by targeted walking, wheeling and cycling improvements, local public transport access and rural mobility measures;
- the quality and coordination of services are as important as the presence of infrastructure, particularly where journeys require interchange; and
- connectivity evidence should continue to be considered alongside wider transport, planning, deliverability, capacity and behavioural evidence.

Overall, the Do Something scenario represents a clear improvement over the Do Minimum. It increases access to employment, education, healthcare and transport opportunities, broadens travel choice and strengthens the relationship between strategic growth locations and the wider Greater Cambridge network. The sensitivity testing provides further confidence that remaining gaps can be addressed through targeted and proportionate measures. This provides a strong basis for refining the GCTS intervention package and aligning future transport investment with the emerging spatial strategy and the longer-term growth ambitions for Greater Cambridge.

1 Introduction

1.1 Background and Project Context

1.1.1 The Greater Cambridge Transport Strategy (GCTS) will seek to provide a local transport strategy cascading from the Greater Cambridge and Peterborough Combined Authority's (CPCA) Local Transport and Connectivity Plan (LCTP)[1] aligning with new mayoral priorities, a transport evidence base underpinning a robust, compliant, vison-led joint Local Plan, and a transport decision-making framework to support the CPCA's Local Growth Plan and the ambitions of the Government's Greter Cambridge Development Corporation.

1.1.2 This Report provides analysis supporting the GCTS. To do so, it is important to understand the connectivity that emerging strategic sites identified in the emerging Greater Cambridge Local Plan afford in the current situation, how connectivity is impacted by the inclusion of committed schemes, and what gaps in connectivity remain. The latter will then inform potential future transport interventions necessary to improve connectivity and enable well connected future growth.

1.1.3 The transport connectivity analysis has been undertaken to provide a clear, outcome-focused assessment of how effectively the transport network enables access to jobs, services, and opportunities across Greater Cambridge, now and in the future. Connectivity is used as a key metric to support a vision-led approach to transport planning, consistent with national planning policy and emerging best practice, moving beyond traditional 'predict and provide' methods.

1.1.4 The analysis establishes a quantified baseline of access by different modes and identifies gaps in multi-modal connectivity that could constrain growth or inhibit travel choice. This provides an evidence-led basis for testing the emerging Local Plan and a platform for longer term growth as envisaged in the CPCA's Local Growth Plan, helping to demonstrate that development is located in areas that are, or can be, well served by a range of travel choice. In doing so, it supports the NPPF tests of soundness, particularly positive preparation, and justification.

1.1.5 Connectivity analysis is integrated with the wider Greater Cambridge Transport Strategy, informing the need for intervention, option generation and refinement, and the proportionate use of strategic modelling. It is positioned upstream of detailed modelling to help focus subsequent assessment on the most appropriate and policy-aligned transport packages.

1.2 Project Aims and Objectives

1.2.1 The primary objective of the overarching project is to develop the GCTS, which will serve as a spatial sub-strategy under the approved LCTP. This Technical Report presents the Connectivity assessment for the strategic sites proposed in the emerging Greater Cambridge Local Plan to key destinations, as well as evaluate the impact of 'committed' transport schemes and the GCTS proposals on site connectivity. The assessment is undertaken in three phases as follows:

- Baseline – which represents the current situation
- Do Minimum – which includes 'committed' transport interventions
- Do Something – which includes interventions that are contained within the GCTS

[1] CPCA-LTCP-Strategic-Document.pdf

1.2.2 The connectivity analysis has been completed in alignment with the project objectives to:

- Provide a robust, and guidance compliant, transport strategy to accompany the emerging Local Plan for Greater Cambridge to 2045, and to sit alongside other transport evidence prepared by the County Council and the Greater Cambridge Shared Planning Service .
- Act as a Greater Cambridge-focused sub-strategy to the CPCA's LTCP to also provide transport context for future investment decisions. This should include a high-level forward capital/delivery programme for the authorities in the area including for other transport proposals not directly related to the emerging Local Plan, and set out policies, as well as evidence, and
- Be developed cognisant of the Government's longer term growth aspirations for the sub-region such that the Strategy is appropriately future proofed to reflect mayoral aspirations for growth set out in the CPCA's Local Growth Plan and the evolving work of the Greater Cambridge Development Corporation.

1.3 Purpose and Scope of this report

1.3.1 The purpose of this report is to establish an evidence-based understanding of connectivity across Greater Cambridge and to assess how connectivity may change under future development and transport investment scenarios.

1.3.2 The assessment draws upon both the DfT Connectivity Tool and the Stantec Sustainable Transport Evaluation Platform (STEP) to understand how different transport interventions influence access to employment, education, healthcare, retail, leisure and residential destinations, and to identify the relative connectivity performance of strategic growth locations under future scenarios.

1.3.3 The report first identifies existing patterns of connectivity between strategic growth locations, settlements and key destinations, providing a baseline understanding of current accessibility. Building on this baseline, the report then assesses the extent to which connectivity is enhanced through the delivery of committed and planned transport interventions within the Do Minimum scenario, before evaluating the potential benefits arising from transport measures proposed as part of the GCTS (the Do Something).

1.4 Geographic coverage of Study

1.4.1 The study area focuses on Greater Cambridge and the wider travel-to-work area, encompassing Cambridge and a range of existing settlements, strategic growth locations and employment destinations. The assessment includes both strategic growth locations identified through the emerging Greater Cambridge emerging Local Plan and comparator settlements that provide context for interpreting connectivity performance across different settlement types and spatial contexts.

1.5 Summary of the tools, and scenarios tested

Tools

1.5.1 The connectivity analysis has been undertaken utilising the following tools:

- The Department for Transport (DfT) Connectivity Tool[2] has been used to profile baseline accessibility conditions at each strategic site, providing a consistent, policy-aligned overview of access to jobs and services. This establishes a high-level understanding of relative connectivity across the study area. The DfT Connectivity Tool does have limitations in terms of testing future transport strategies as it cannot currently be coded

[2] Connectivity Tool - GOV.UK

with more than one intervention at any one time but is useful in providing some context as to how a scheme can improve connectivity.

- To supplement this, Stantec's Sustainable Transport Evaluation Platform (STEP), a bespoke, Conveyal software[3] based tool, has been applied to undertake a more detailed assessment of walking, cycling, and public transport connectivity given the above limitations of the Connectivity Tool. STEP has been used to test both the baseline and Do Minimum scenario, incorporating committed transport schemes, enabling a realistic assessment of how connectivity is expected to change without additional interventions. STEP has also been used to test a comprehensive Do Something scenario to overcome the limitations of the DfT Connectivity Tool.

1.5.2 The approach taken is directly in line with NPPF (August 2026) which notes that the Connectivity Tool should be used alongside other relevant quantitative or qualitative evidence in assessing the connectivity of particular locations proposed for development.

1.5.3 **Section 2.2** provides a more detailed overview of the DfT Connectivity Tool and its limitations, and how the connectivity analysis overcomes this with the use of the STEP Tool.

Scenarios

1.5.4 The analysis has been undertaken for the following scenarios:

- **Baseline** – This is the transport situation today. This scenario is only undertaken within the DfT Connectivity Tool Analysis detailed in Section 2.
- **Reference Case** – This includes five committed or recently opened schemes – undertaken using the STEP tool only. These include:
  - Cambridge South Station (now open)
  - New Station for Waterbeach New Town
  - A1134 Cycle Plus
  - Hills Road Pedestrian Priority
  - Chisholm Trail – A mostly off-road and traffic free route between Cambridge railway station and Cambridge North railway station, with links to the business and science parks in the north and to Addenbrooke's Hospital and the Biomedical Campus in the south.
- **Do Minimum** – This includes longer term planned schemes which have been progressed through other studies. These are only included within the STEP Tool assessment:
  - Cambourne to Cambridge High-Quality Public Transport Corridor
  - Initial Cambridge South East Transport (CSET) High-Quality Public Transport Corridor between Cambridge Biomedical Campus and the A11 Travel Hub
  - Waterbeach to Cambridge High-Quality Public Transport Corridor
  - Cambridge Eastern Access
  - Papworth Everard to Cambourne public transport improvements

[3] Evaluate changes to your public transportation system

- Waterbeach Loop public transport

- **Do Something** – This includes transport interventions included within the GCTS – a full test of schemes has only been undertaken using the STEP tool. Tests of some individual schemes have been included within the DfT Connectivity analysis as detailed within Section 2.11. The Do Something schemes are discussed further in Section 6.

- **Sensitivity Tests** – A number of sensitivity tests have been undertaken to support the analysis. This includes testing of East West Rail, which has been included within a sensitivity test using the DfT Connectivity Tool, as well as the STEP tool. Other sensitivity tests have been undertaken using the STEP tool only and these are detailed further in Section 6.

1.5.5 The scenario testing includes a progressive package of coded public transport, rail, demand responsive transport, active travel and service priority interventions. The Reference Case and Do Minimum scenarios include committed or baseline network changes only as detailed above, while the Do Something scenarios introduce additional strategic public transport, orbital and express services, station access links, demand responsive transport connections and speed / frequency improvements. The East West Rail scenario includes rail connectivity assumptions associated with EWR, with the final sensitivity tests (See **Section 6.2 – 6.4)** applying additional interventions to help enhance site connectivity benefits and testing enhanced EWR and other rail service frequencies to selected interventions coded as 1+ in the scenario workbook**.** A table (AP-D1) is provided in **Appendix A** detailing the interventions and which scenarios they are included within**.**

1.6 Report Structure

1.6.1 This report is structured to progressively build an evidence-based understanding of how connectivity varies across Greater Cambridge, and how this should inform spatial strategy and transport investment choices within the emerging Local Plan and beyond. As noted elsewhere this analysis, and the GCTS more widely, is not the only transport evidence accompanying the draft Plan. This also includes the County Council's Transport Evidence Review, and the Greater Cambridge Shared Planning Service's strategic site transport pro-formas and Infrastructure Delivery Plan.

- Section 2 establishes a strategic baseline of connectivity across existing settlements and proposed allocations using the DfT Connectivity Tool. This helps answer the question of "which places are inherently well-connected today, and which are not?" Section 2 then goes onto testing the impact of selected interventions within the tool.

- Section 3 introduces the STEP tool and explains why a more detailed assessment is required to understand corridors effects, journey time thresholds, and gaps in connectivity.

- Section 4 applies the STEP tool analysis to strategic sites and destinations, focusing on what can and cannot be accessed within reasonable travel times (up to 60 minutes) known as the Reference Case, and how this changes, or does not change, with committed schemes known as the Do Minimum.

- Section 5 draws out the implications for the emerging Local Plan and longer term growth, identifying where growth aligns with connectivity principles, where intervention is required, and where there is a risk of being unable to provide a choice of transport modes.

- Section 6 tests a series of interventions, known as the Do Something scenario, using the STEP tool and provides analysis of any changes in connectivity compared to the Do Minimum Scenario testing in Section 4. This section also provides details of the quantifiable benefits the GCTS delivers.

1.6.2 Read together, the analysis provides a transparent, policy-aligned basis for assessing spatial development strategies, supporting site suitability assessments, informing infrastructure phasing, and demonstrating soundness under the NPPF.

2 Baseline Connectivity Profiling

2.1 Introduction to the Strategic Allocations

2.1.1 This section introduces the strategic site allocations assessed as part of the baseline connectivity profiling. The purpose of this analysis is to understand how well these locations are currently connected to key destinations across Greater Cambridge, and how this compares with existing settlements of similar scale and typology within the emerging Local Plan hierarchy. A high-level analysis of potential interventions is also undertaken.

2.1.2 A similar approach is undertaken for existing settlements, based on settlement hierarchy or typologies.

2.1.3 What this section does:

- Profiles baseline connectivity for each strategic site allocation using a consistent, policy-aligned method.
- Enables comparison between proposed sites and existing settlements within the emerging Local Plan settlement hierarchy.
- Identifies which sites are already well-positioned to support travel choice and which are not.
- Establishes realistic benchmarks for what “good” connectivity looks like in the Greater Cambridge context.
- Provides a high-level assessment using the DfT Connectivity tool, to understand how some of the interventions identified through the Strategy impact site connectivity.

2.1.4 What this section does not do:

- It does not assess future land-use layouts or masterplans
- It does not assume delivery of additional transport infrastructure
- It does not determine acceptability of sites in isolation.

2.2 DfT Connectivity Tool – Overview

2.2.1 The DfT Connectivity Tool measures the ability of an individual to reach employment, services, and social engagements, weighted by people’s overall proclivity to take those options. It uses a connectivity metric which evaluates the value of destinations, and how reachable they are by various modes of transport. The method captures that most value is located near urban centres. The model shows that while active travel and public transport connectivity have clear hot spots located near centres, travel using private vehicles can be seen as an equaliser, by connecting rural areas.

2.2.2 The default metric measures connectivity by walking/wheeling, cycling, and public transport. Driving connectivity is also measured within the Tool but not factored into the overall score. The overall score is weighted 40% (walk/wheel), 8% (cycling) and 52% (public transport) respectively by mode.

2.2.3 The purposes of travel which are considered are:

- Employment
- Visiting friends at home (residential)
- Education
- Retail (shopping)
- Leisure and community
- Healthcare

2.2.4 Data is combined for destinations, network infrastructure between locations and willingness to travel. A variety of sources are used, which is considered the best source for quality assurance and exploratory analysis.

2.2.5 However, it does not show how many people take different routes, only their opportunity to do so. It is also not a transport model, with no trip assignment or convergence processes. The model assumes timetables are adhered to and does not consider congestion or the cost of travel. Due to limited data, Park & Ride options are also not included.

2.2.6 Updated guidance[4] was provided by the DfT on 3 July 2026 detailing how to interpret the connectivity score against a connectivity matrix based on site location.

2.2.7 The updated Connectivity Tool guidance introduces a new Connectivity Matrix to support the interpretation of connectivity scores. The guidance emphasises that Connectivity Tool scores are relative measures and should not be treated as absolute indicators of accessibility or development suitability. Instead, scores should be assessed in the context of the relevant destination type, transport modes, and rural-urban classification.

2.2.8 By benchmarking locations against similar settlements, the connectivity matrix provides a more meaningful assessment of relative connectivity, helping users understand whether a location performs strongly or weakly in comparison with comparable places. The guidance also reinforces the need to use the tool alongside local evidence, professional judgement and wider planning considerations.

2.2.9 The DfT Tool is useful in providing a baseline reference to a site's connectivity. Whilst it can also test interventions to see how these influence connectivity scores, there are limitations with using the tool in this way. These limitations include:

- The tool only tests the impact of public transport interventions, and cannot test the impact of active travel, impact of new amenities or changing of existing land use.
- Only one public transport intervention can be tested for a site at any one time.

2.2.10 As a result, it is only possible to test targeted interventions. This has been reported in **Section 2.12** to provide a broad understanding of the impacts that schemes could have on connectivity scoring.

2.2.11 The interventions tested are a mix of committed or Do Minimum schemes and aspirational schemes or Do Something schemes. Due to this limitation, this section of the report does not distinguish between Do Minimum and Do Something schemes but aims to provide an indication of how transport interventions overall, could impact connectivity, compared to the baseline.

[4] GOV.UK - The best place to find government services and information

2.2.12 However, to test the overall impact of the GCTS in a more holistic way, the STEP Tool has been used to undertake this exercise and provide analysis of the Do Minimum and Do Something scenarios.

2.3 DfT Connectivity Tool Baseline – Existing Settlements

2.3.1 Existing settlements are assessed first, aligned to the emerging Local Plan settlement hierarchy, to establish realistic benchmarks for connectivity performance across different place types.

2.3.2 A map of the settlement hierarchy is shown in **Figure 2-1**. This reflects that the emerging Local Plan, and the GCTS more widely, is concerned not only with new development, but with how people currently live, work and travel across Greater Cambridge and beyond.

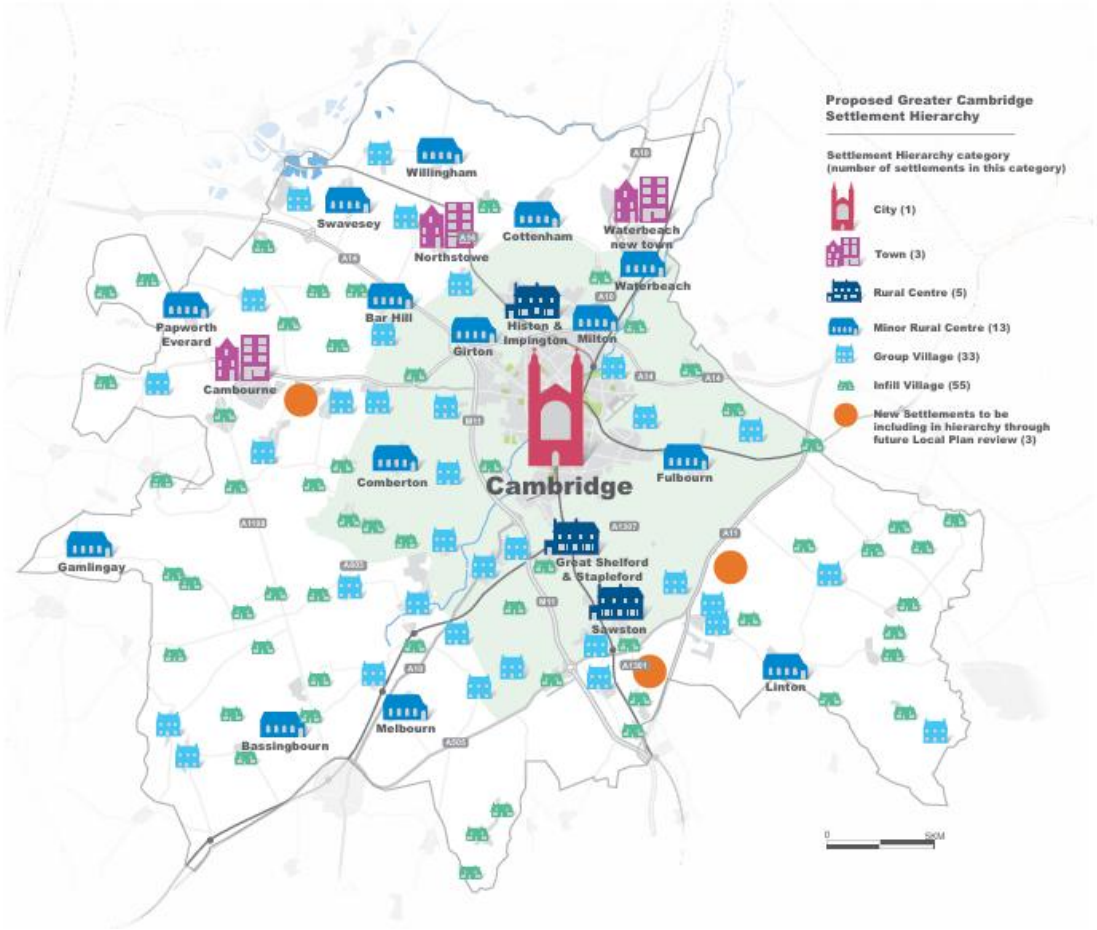
2.3.3 A map of the settlements chosen for assessment, using the DfT Connectivity Tool, is provided in **Figure 2-2**.

2.3.4 Two additional categories have been added:

- Suburbs of Cambridge. One score for Cambridge does not meaningfully cover the suburbs located further from the city centre.
- Major Employment Centres.

2.3.5 These settlement-based benchmarks are then used deliberately as reference points for strategic site allocations in **Section 2.4,** allowing proposed sites to be assessed against places with similar roles, scale, and function.

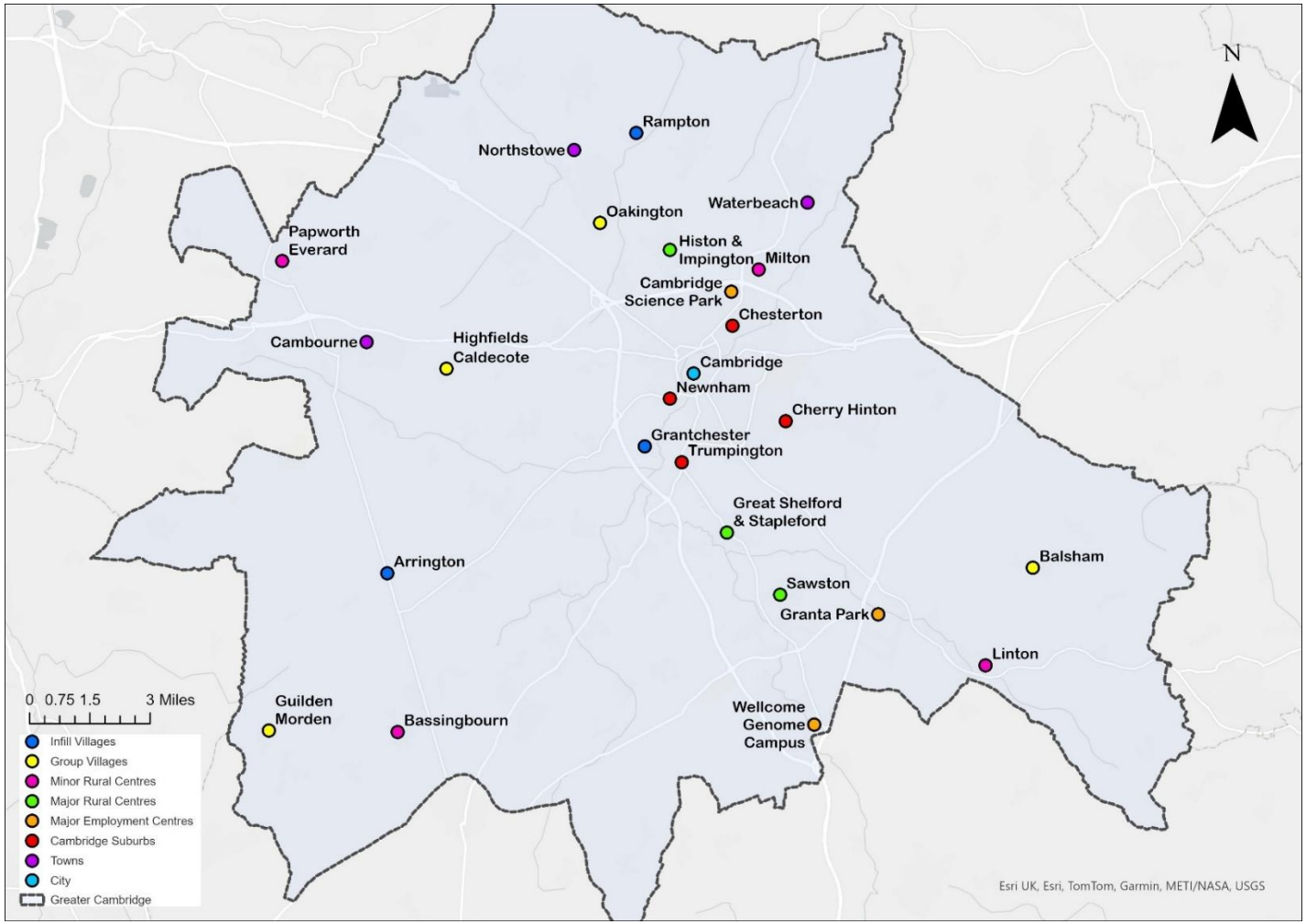
Figure 2-1: Emerging Greater Cambridge Local Plan Settlement Hierarchy



Source: Greater Cambridge emerging Local Plan Settlement Hierarchy Study Update 2025[5]

[5] TPGCLPDGCLPSTPA18Nov25.pdf (Page 30)

Figure 2-2: Map of Assessed Existing Settlements



Source: Stantec

Baseline Scoring (representing present day)

2.3.6 For each settlement a high and a low score has been provided. The high score reflects a location within the particular settlement that has the greatest level of connectivity. This is likely to be located near main corridors with good public transport links and / or good active travel connectivity. The lowest scores reflect locations which are further from the main corridors, and the key public transport and / or active travel corridors.

2.3.7 For each settlement type commentary is provided as to how the score relates to national scoring for a particular urban-rural classification. This indicates whether the settlements are deemed to be well connected or not.

Cambridge (City Centre)

2.3.8 **Table 2-1** shows the highest and lowest connectivity scores for Cambridge city centre. The city centre is defined as the area within the ring road formed of the A1134, A603 and A1303.

Table 2-1: Connectivity Scores – City Settlements

Place	Highest Score	Lowest Score
Cambridge city centre (within Ring Road)	85	68

2.3.9 As can be expected for a city centre, connectivity scores in this category are high, primarily driven by the close proximity of several leisure, health, employment, retail, and education amenities. Also, multiple destinations can be reached by various modes meaning journey times are shorter overall.

2.3.10 For locations playing a similar role within the settlement hierarchy, the range represents a reasonable long-term target outcome, recognising that these levels of connectivity are achieved incrementally as infrastructure and land-use mature.

2.3.11 In terms of the DfT Connectivity Tool Connectivity Matrix, Cambridge city centre can be considered as an 'Urban City and Town' classification and the overall score of 85 places the city in the 90th percentile which indicates that overall, the city centre is well-connected when compared to similar settlements. All tested transportation modes and most destination types fall within the 80th and 90th percentiles. 'Workplaces' falls slightly below in the 70th percentile so has potential for improvement.

2.3.12 **Table 2-2** shows the highest and lowest connectivity scores for Towns.

Table 2-2: Connectivity Scores – Towns

Place	Highest Score	Lowest Score
Cambourne	56	25
Northstowe	52	39
Waterbeach	55	38

2.3.13 All the listed towns have similar connectivity scores. This only considers what is currently built out. Towns have their own retail, leisure, education, and health facilities. Cambourne and Waterbeach have employment facilities whilst Northstowe is situated on a high-quality public transport corridor with access to employment in the northern parts of Cambridge.

2.3.14 Cambourne's lowest score comes from the Lunar Park development which is currently disconnected from the rest of the town. In time, further infill development will improve this connectivity score.

2.3.15 The completion of the A428/A421 scheme, which will deliver a 10-mile dual carriageway between Blackcat Roundabout and Caxton Gibbet, and the proposed construction of the Bedford-Cambridge section of the wider East West Rail scheme, with a new station at Cambourne, will improve the scores for Cambourne. In Waterbeach, the relocation and upgrade of the town's railway station will also improve scores here.

2.3.16 In terms of the DfT Connectivity Tool Connectivity Matrix, these three towns can be regarded as Rural Town and Fringe classification with overall scores falling in the 60th and 70th percentiles. Public transport and active travel modes perform above average in these settlements. In Northstowe, Education is in the 90th percentile which is a much higher compared to the other towns, whilst Health is in the 10th percentile. This suggests a lack of health facilities in close proximity or a lack of connectivity to health facilities.

Cambridge Suburbs

2.3.17 **Table 2-3** shows the highest and lowest connectivity scores for Cambridge Suburbs.

Table 2-3: Connectivity Scores – Selected Cambridge Suburbs

Place	Highest Score	Lowest Score
Chesterton	80	60
King's Hedges	77	64
Newnham	77	51
Cherry Hinton	73	52
Trumpington	68	56

2.3.18 Cambridge suburbs have overall stronger connectivity scores due to their proximity to Cambridge city centre which has several leisure, education, retail, health, and employment facilities. Regular bus services connect these suburbs to the city centre for onward journeys.

2.3.19 Chesterton has the strongest connectivity score thanks to its proximity to Cambridge North station, with King's Hedges second due to its proximity to the Guided Busway and bus services on Arbury Road. Cherry Hinton has a higher score than Trumpington, which is notable given the presence of the guided busway for the latter, and the distance from the city centre for the former.

2.3.20 Cambridge South railway station was not open at the time of the baseline assessment; however, it has since opened and is expected to substantially improve Trumpington's connectivity to destinations further afield. Similar benefits could be realised at Cherry Hinton if a proposed new railway station at Cambridge East is progressed.

2.3.21 In terms of the DfT Connectivity Tool Connectivity Matrix, these settlements can be regarded as Urban City and Town classification with overall scores falling above the 60th percentile with Chesterton in the 80th percentile. The tested public transport and active travel transport modes in most of these areas also fall in higher percentiles, except for Trumpington which has public transport in the 50th percentile for example. Health also falls slightly below average for Trumpington whilst Leisure in Newnham is amongst the highest, in the 90th percentile.

Major Employment Centres

2.3.22 **Table 2-4** shows the highest and lowest connectivity scores for Major Employment Centres.

Table 2-4: Connectivity Scores – Selected Major Employment Centres

Place	Highest Score	Lowest Score
Cambridge Science Park	69	51

Place	Highest Score	Lowest Score
Granta Park	41	32
Wellcome Genome Campus	31	20

2.3.23 Cambridge Science Park is located in the Cambridge urban area so naturally scores higher in connectivity compared to the relatively rural Granta Park and Wellcome Genome Campus sites. Both sites are close to the A11 road, which connects to the M11 and wider network.

2.3.24 All the above sites are located on significant local road/bus corridors. Whilst the Wellcome Genome Campus is located close to the West Anglia Main Line, the two nearby stations are beyond normally assumed walking distances for the majority of users. These are baseline scores and do not include any Do Minimum or Do Something, with-GCTS interventions.

2.3.25 In the future, both Granta Park and the Wellcome Genome Campus will benefit from mass rapid transit services along the CSET 'extended corridor' linking Cambridge South/Cambridge Biomedical Campus to the A11, Grange Farm, Granta Park, the Wellcome Genome Campus, Whittlesford Parkway and Duxford, alongside other public transport and active travel improvements to address the first/last mile connectivity to both sites.

2.3.26 The improvements in connectivity scores at other locations would depend on the development of other transport initiatives to enhance travel choice.

Major Rural Centres

2.3.27 **Table 2-5** shows the highest and lowest connectivity scores for major rural centres.

Table 2-5: Connectivity Scores –Major Rural Centres

Place	Highest Score	Lowest Score
Histon & Impington	65	46
Great Shelford & Stapleford	62	44
Sawston	60	46

2.3.28 Major rural centres have good overall connectivity scores. All these major rural centres have scores higher than town settlements shown in table 2.2. This is due to them being closer to Cambridge.

2.3.29 These settlements have education facilities and a smaller range of leisure and retail facilities. They have access to bus services and are located on significant local road/bus corridors. The combined area covering Great Shelford and Stapleford has access to rail services whilst the combined area covering Histon and Impington is situated on the Cambridgeshire Guided Busway segregated public transport corridor.

2.3.30 The improvements in connectivity scores at these specific locations would depend on the development of further transport initiatives.

2.3.31 In terms of the DfT Connectivity Tool Connectivity Matrix, these settlements can be regarded as Rural Town and Fringe classification with overall scores falling in the 90th percentile for all the above examples suggesting good connectivity. This is also mostly true for public transport and cycling modes with walking modes all above the 70th percentile. The weakest facility type is leisure in Sawston but still sits in the 70th percentile.

Minor Rural Centres

2.3.32 **Table 2-6** shows the highest and lowest connectivity scores for Minor Rural Centres.

Table 2-6: Connectivity Scores – Selected Minor Rural Centres

Place	Highest Score	Lowest Score
Milton	59	47
Linton	54	43
Papworth Everard	41	28
Bassingbourn	40	34

2.3.33 Minor rural centres have scores ranging between 28 and 59. Minor rural centres are mostly residential but may have some education and health facilities and a limited number of retail and leisure. Other facilities and most employment are located in larger settlements.

2.3.34 Some minor rural centres such as Milton and Linton, have similar connectivity scores to towns such as Cambourne and Waterbeach. Linton's connectivity score can be attributed to its location on the Cambridge-Haverhill bus corridor whilst Milton is closer to Cambridge and the built-up area. This shows the importance of proximity over size in determining the connectivity score.

2.3.35 Other minor rural centres such as Bassingbourn and Papworth Everard have lower connectivity scores which reflects their distance from Cambridge and relative distance from major road/bus corridors.

2.3.36 Due to the relative isolation of some of these minor rural centres relative to Cambridge, it would be difficult to substantially improve connectivity scores without significant intervention.

2.3.37 In terms of the DfT Connectivity Tool Connectivity Matrix, most of these settlements can be regarded as 'Rural Village' classification with overall scores falling above the 80th percentile suggesting remarkably strong connectivity. This is also mostly true for public transport and walking modes, which is at the 70th percentile. Education in Papworth Everard falls into the median percentile suggesting poorer connectivity.

2.3.38 Milton, despite being classified as a Minor Rural Centre, falls more appropriately into the 'Rural Town and Fringe' category. All facility types fall above the 70th percentile except Education which falls in the 10th percentile.

Group Villages

2.3.39 **Table 2-7** shows the highest and lowest connectivity scores for selected group villages.

Table 2-7: Connectivity Scores – Selected Group Villages

Place	Highest Score	Lowest Score
Oakington	54	45
Highfields Caldecote	44	29
Balsham	29	24
Guilden Morden	25	21

2.3.40 Group villages have varied connectivity scores, some similar to Cambourne and Waterbeach towns, others similar to minor rural centres. Again, proximity to Cambridge and transport corridors appears to be the biggest factor affecting connectivity scores. Group villages, other than residential, tend to have limited additional facilities. This may include a school and a limited number of shops.

2.3.41 Oakington has higher connectivity scores thanks to its proximity to Cambridge, the Cambridgeshire Guided Busway and nearby Northstowe and Histon.

2.3.42 Highfields Caldecote likewise has proximity to Cambourne, which has most facilities, so has a better score. The other two examples, Balsham and Guilden Morden, are more remote and relatively distant from major transport corridors.

2.3.43 Due to the relative isolation of some of these group villages relative to Cambridge and some towns, it would be difficult to substantially improve scores without significant intervention.

2.3.44 In terms of the DfT Connectivity Tool Connectivity Matrix, these settlements can be regarded as 'Rural Village' classification with villages closer to other settlements (Oakington, Highfields Caldecote) having overall scores in the 90th percentile whilst more remote settlements (Guilden Morden, Balsham) having overall scores between the 30th and median percentiles.

2.3.45 Guilden Morden and Balsham have poor percentile scores for nearly all facilities. with the exception being that Balsham has a strong connectivity to leisure facilities, falling in the 70th percentile. Public transport for Guilden Morden falls in the 20th percentile which is poor suggesting a lack of bus services to this location. Health for both Guilden Morden and Balsham falls in the 10th percentile.

Infill Villages

2.3.46 **Table 2-8** shows the highest and lowest connectivity scores for Infill villages.

Table 2-8: Connectivity Scores – Infill Villages

Place	Highest Score	Lowest Score
Rampton	29	23
Arrington	13	12
Grantchester	52	40

2.3.47 Infill villages have a range of connectivity scores. The three assessed infill villages score range from 12 to 52. Infill villages have little to no facilities. To access facilities, travel is required to nearby villages, towns, or Cambridge.

2.3.48 Grantchester, despite its size and categorisation, benefits from higher connectivity scores. This is not necessarily due to distance from Cambridge alone, but the greater range of transport and travel choice opportunities that potentially as a result of proximity to Cambridge can provide. In contrast, more rural settlements, and the number of transport modes available. such as Arrington can have lower scores despite being located relatively close to Royston, reflecting fewer travel choices and more limited access to major transport corridors.

2.3.49 In terms of the DfT Connectivity Tool Connectivity Matrix, these settlements can be regarded as 'Rural Villages'. In terms of overall score, Arrington falls into the 0 percentile, which suggests connectivity is poor. Rampton falls in the median percentile whilst Grantchester is in the 90th percentile. This profile is similar for public transport, active travel and all facility types.

2.4 DfT Connectivity Tool Baseline – Strategic Site Allocations

Introduction

2.4.1 In total, 12 strategic sites have been assessed comprising those proposed in the most recent draft of the emerging Greater Cambridge Local Plan. The development quantum for each site is summarised in **Table 2-10**, with the corresponding connectivity scores presented in **Table 2-10**. Section 2.4 provides further analysis in accordance with the DfT Connectivity Tool guidance issued on 3 July 2026, including consideration of each site's performance against the connectivity matrix percentiles.

Table 2-9: Description of Strategic Sites

Site	Type	Description
S/ED Eddington (North West Cambridge)	Site allocation in the emerging Local Plan	5,500 new homes and 100,000 m² of employment floorspace. Continued intensification through to 2045 with early local access measures and later strategic corridor improvements.
S/CE Cambridge East	Site allocation in the emerging Local Plan	8,000 new homes; significant commercial floorspace. Long-term phased delivery to 2045 and beyond tied to major transport and infrastructure provision.
S/BRC Babraham Research Campus	Site allocation in the emerging Local Plan	80 new homes and 48,000 m² of employment floorspace. Incremental intensification through to 2045 focused on employment/research uses with phased access and public transport improvements.
S/CBC Cambridge Biomedical Campus	Site allocation in the emerging Local Plan	1,000 new homes; 687,000 m² commercial floorspace. Continuing growth to 2045 and beyond dependent on early and longer-term transport improvements.
S/GF Land Adjacent to A11 and A1307 at Grange Farm Site	Site allocation in the emerging Local Plan	4,500 new homes; 35,000 m² commercial floorspace. Phased to 2045 and beyond with later stages dependent on safeguarded public transport infrastructure.
S/SHF Land north of A1307, Bar Hill (Slate Hall Farm)	Site allocation in the emerging Local Plan	220,000 m² commercial floorspace. Shorter- to medium-term delivery aligned with market demand and strategic access improvements.
S/CBN Cambourne North	Site allocation in the emerging Local Plan	13,000 new homes; 108,000 m² commercial floorspace. Multiple phases through to 2045 and beyond linked to wider Cambourne expansion.
S/WGC Wellcome Genome Campus	Site allocation in the emerging Local Plan	1,500 new homes; 150,000 m² commercial floorspace. Incremental campus-led delivery through to 2045.
S/NST Northstowe New Town	Site allocation in the emerging Local Plan	10,200 new homes.
S/WNT Waterbeach New Town	Site allocation in the emerging Local Plan	11,000 homes, 39,800 m² of employment floorspace. Multiple phases to 2045 and beyond with local jobs and services continuing to come forward.

Site	Type	Description
S/BA Bourn Airfield New Village	Site allocation in the emerging Local Plan	3,500 homes and 1,400 m² of employment floorspace. Long build-out to 2045 with jobs, services and community infrastructure alongside development.
S/CB Cambourne	Site allocation in the emerging Local Plan	2,350 new homes, 30,600 m² of employment floorspace. Progressive delivery through to 2045 linked to wider Cambourne expansion.

Baseline Results

2.4.2 **Table 2-10** presents the baseline connectivity scores for each strategic site, broken down by overall score, travel mode and journey purpose. The scores provide a comparative indication of how well each site is currently connected to key destinations before the inclusion of committed or proposed transport interventions. Higher scores indicate stronger connectivity and a greater range of travel opportunities, while lower scores highlight locations where access is more constrained. The colour shading provides a visual guide to relative performance across the sites, with greener cells indicating higher scores and orange or red cells indicating lower scores.

Table 2-10: Summary of Strategic Sites connectivity scores (existing/baseline)

		North West Cambridge	Cambridge East	Babraham Research Campus	Cambridge Biomedical Campus	Land Adjacent to A11/A1307 at Grange Farm	Slate Hall Farm, Junction 25, A14	Cambourne North	Wellcome Genome Campus	Northstowe	Waterbeach	Bourn Airfield	Cambourne
OVERALL	Overall	69	69	42	73	45	53	46	30	53	50	46	56
	PT	70	68	52	74	49	53	49	30	62	50	50	59
	Walking	67	67	26	70	37	51	41	26	40	47	38	50
	Cycling	76	78	51	78	51	56	54	47	53	58	54	56
	Driving	87	87	81	86	81	81	82	79	75	81	78	83
EDUCATION	Overall	65	64	49	78	47	44	44	17	62	41	47	56
	PT	74	73	60	85	53	48	53	20	71	39	59	66
	Walking	56	54	40	71	40	41	34	14	54	41	35	46
	Cycling	79	83	54	89	54	50	58	25	61	47	58	66
	Driving	76	83	77	86	75	70	72	69	69	68	62	75
LEISURE	Overall	73	70	35	71	41	51	37	34	48	50	36	46
	PT	75	69	48	75	47	52	42	33	60	49	42	53
	Walking	69	67	18	63	34	49	29	33	33	48	26	36
	Cycling	86	84	41	83	47	48	49	51	50	63	50	53
	Driving	92	90	81	87	82	78	77	81	71	83	72	77
HEALTH	Overall	52	57	29	79	21	52	42	8	35	52	35	52
	PT	57	60	45	81	36	51	45	11	54	51	41	55
	Walking	44	49	8	74	2	52	37	2	11	52	26	46
	Cycling	62	78	32	85	19	51	46	23	31	53	43	52
	Driving	74	84	76	88	71	75	74	65	63	74	67	75
RETAIL	Overall	74	75	27	72	40	59	49	27	45	49	47	63
	PT	75	74	42	77	43	57	49	26	58	49	49	64
	Walking	72	74	9	64	36	61	47	25	29	47	42	60
	Cycling	83	88	33	80	49	68	60	46	46	61	59	68
	Driving	93	94	78	88	80	86	89	76	75	86	84	90
RESIDENTIAL	Overall	68	69	45	70	44	51	51	36	57	53	52	56
	PT	61	60	53	64	50	52	50	34	60	53	50	55
	Walking	73	76	35	75	36	48	51	34	54	52	54	55
	Cycling	73	75	59	74	53	60	56	53	59	60	58	56
	Driving	83	81	85	82	84	84	84	86	81	80	83	84
WORKPLACES	Overall	63	62	52	66	50	50	48	40	54	52	46	51
	PT	63	62	56	66	54	53	50	39	61	56	49	55
	Walking	57	58	36	63	38	39	38	36	35	39	34	40
	Cycling	69	70	58	70	52	55	50	51	52	57	51	49
	Driving	77	76	78	76	77	78	78	78	74	75	77	77

Summary by strategic site allocation and other key development sites

2.4.3 The following section summarises connectivity performance for each strategic site using a consistent format. Results are presented as a range across 100m grid squares to reflect internal variation within sites, rather than a single point score. For each site, the commentary focuses on:

- What drives the highest and lowest scores in real-world terms.
- The role of existing public transport and proximity to destinations.
- How the site compares to similar places today and what may improve individual sites connectivity scores.

2.4.4 For each strategic site allocation, the range has been identified for each grid square ($100m^2$), including determinants of high and low scores based on access to key services, by mode, and spatial 'on the ground' determinants (e.g. proximity or distance to stations, high frequency bus routes, destinations).

2.4.5 Please note that while North East Cambridge is not a strategic site allocation, analysis of it has also been included as a key destination (Cambridge Science Park).

North East Cambridge

2.4.6 **Overall connectivity score range:** 35-70. The strongest key service connectivity score is for Retail (78), and weakest is for Health (57). Modally, cycling has the strongest non-car connectivity score (75), followed by public transport (73), and walking the weakest (66).

2.4.7 In terms of the DfT Connectivity Tool Connectivity Matrix the site is regarded as an Urban City Town classification, in accordance with ONS Output Area (2011) data and the score of 73 places the site within the 80th percentile for public transport connectivity to all destinations, which is a reasonably high score with potential for improvement. However, in terms of health access the site is within the 30th percentile which is relatively poor but is likely to be as a result of a lack of facilities nearby rather than transport provision.

2.4.8 Higher scores for the site can be attributed to the relative proximity to Cambridge city centre. Not only this, but the site is located on the edge of the Cambridge built up area, close to employment at Cambridge Science Park. It is adjacent to Cambridge North railway station and segregated public transport corridors. It is also close to the A10 and A14 primary routes. The lower scores include isolated areas of the sewage works area of the overall site.

2.4.9 Nearby Chesterton and King's Hedges have connectivity scores of 70-80. The provision of a local centre, schools and employment land at North East Cambridge will strengthen these scores, particularly for retail, education, leisure, and employment. The site also benefits from access to existing and planned public transport links.

S/ED – Eddington (North West Cambridge)

2.4.10 **Overall connectivity score range:** 34-69. The strongest key service connectivity score is for Retail (74), and weakest is for Health (52). Modally, cycling has the strongest non-car connectivity score (76), followed by public transport (70), and walking the weakest (67).

2.4.11 In terms of the connectivity matrix, the site can be regarded as Urban City and Town in terms of the rural-urban classification. When reviewing the matrices the site is within the 70th percentile for public transport and 80th percentile for cycling. The site exhibits good transport connectivity but has some room for improvement for public transport. The connectivity to facilities demonstrates an 80th percentile for workplace access but falls within the 20th percentile for health facility access. This is likely due to a lack of facilities nearby rather than a lack of transport provision.

2.4.12 Higher scores for the site can be attributed to the relative proximity to Cambridge city centre. There is also a Park & Ride site (Madingley Road), and the site is located between two major road/bus corridors. The lower scoring areas are currently fields towards the north of the site close to the junction with the A14.

2.4.13 Nearby Newnham, as well as King's Hedges another suburb of Cambridge, have a connectivity score of 65-75. The score is lower than North East Cambridge due to the distance from a railway station. Through improved access to enhanced public transport, , scores for retail, education, leisure, and employment connectivity for Eddington are expected to increase.

S/CE - Cambridge East

2.4.14 **Overall connectivity score range:** 33-69. The strongest key service connectivity score is for Retail (75), and weakest is for Health (57). Modally, cycling has the strongest non-car connectivity score (78), followed by public transport (68) and walking the weakest (67).

2.4.15 This site is also regarded as Urban City and Town in terms of the Output Area Rural-Urban classification. When reviewing the DfT Connectivity Tool matrices the site records average / median scores for public transport connectivity, but it is within the 90th percentile for cycling connectivity. Whilst there is room for improvement in terms of public transport, there is more limited room for improvement in cycling as connectivity is already good in terms of what highway links can support cycling. The site falls within the 30th percentile for connectivity to health facilities which suggests a lack of facility rather than lack of connectivity infrastructure.

2.4.16 Higher scores for the site can be attributed to the relative proximity to Cambridge. The lower scores are the isolated areas in the middle of the former runway which would be redeveloped.

2.4.17 Nearby Cherry Hinton has a connectivity score of 50-75. The overall score for Cambridge East is lower than North East Cambridge due to the distance from a railway station.

2.4.18 Should proposals for the Cambridge East railway station and Mass Rapid Transit come forward, this would increase the connectivity score. The provision of a centre, schools and significant multi-use employment land would further strengthen scores particularly for retail, education, leisure, and employment.

S/BRC - Babraham Research Campus

2.4.19 **Overall connectivity score range:** 30-42. The strongest key service connectivity score is for Workplaces (52), and weakest is for Retail (27). Modally, public transport has the strongest non-car connectivity score (52), followed by cycling (51) and walking the weakest (26).

2.4.20 The DfT Connectivity Tool suggests that the rural-urban classification for this site is Rural Village. Public Transport connectivity with a score of 52 places the site within the 90th percentile, which is very good connectivity for the relatively rural location. In regard to cycling connectivity the site is within the 30th percentile which could lend opportunities for improvement. In regard to health facility connectivity the site falls within the 90th percentile, which is very good for its rural location, however the average score for connectivity to retail is relatively low.

2.4.21 The scores for this site reflect the location of the campus and its further distance from Cambridge. However, it is located on a key road/bus corridor and is close to the A11 (Norwich to London) trunk road. Also, this is currently primarily an employment site, there is little to no residential and education facilities for example.

2.4.22 Linton, which is located on the same road/bus corridor has a connectivity score of 40-55.

2.4.23 The planned residential development and limited retail provision are expected to result in a modest increase in the connectivity score. More significantly, proposed transport interventions, including a segregated high-quality public transport corridor and on-site mobility hubs, are expected to enhance connectivity to Cambridge. This could improve the site's connectivity

score to a level comparable with other sites benefitting from proximity to rail or other high-quality public transport routes.

S/CBC - Cambridge Biomedical Campus

2.4.24 **Overall connectivity score range is:** 48-73. The strongest key service connectivity score is for Health (79), and weakest is for Workplaces (66). Modally, cycling has the strongest non-car connectivity score (78), followed by public transport (74) and walking the weakest (70).

2.4.25 The DfT Connectivity Tool Matrices have been reviewed with the site having an Urban City and Town classification. From a transport perspective the site is well connected, falling within the 80th percentile for public transport and 90th percentile for cycling. There may be some room for connectivity improvements in public transport, however cycling connectivity is already very strong and further interventions may not result in any significant uplift in values, but this is not a negative. For workplaces, although a score of 66 does not look significant in isolation, in accordance with the matrices it places this site in the 90th percentile.

2.4.26 The higher scores for this site reflect the proximity to Cambridge and the frequent segregated bus services which serve Addenbrooke's hospital via the Cambridgeshire Guided Busway. The site is situated on a major road/bus corridor and there is also Babraham Road Park & Ride site in close proximity. The lower scores are the fields to the southern edge of the site which are planned to be developed.

2.4.27 The recent opening of Cambridge South, and proposed provision of a western access, would further improve connectivity scores for the site, although the existing scores are already high.

S/GF - Land Adjacent to A11 and A1307 at Grange Farm Site

2.4.28 **Overall connectivity score range is:** 7-45. The strongest key service connectivity score is for Workplaces (50), and weakest is for Health (45). Modally, cycling has the strongest non-car connectivity score (51) followed by public transport (49) and walking the weakest (37).

2.4.29 In regard to the Output Area Rural-Urban classifications this site would currently be regarded as Rural Village, similar to Babraham. Public transport scores very well compared to other rural village locations with a score of 49 falling in the 90th percentile. A health connectivity score of 45 falls within the 60th percentile, so demonstrates above average connectivity.

2.4.30 The scores for this site reflect the current relative isolation from Cambridge and other settlements. However, the site is situated on a major road/bus corridor and is next to the A11 trunk road. The lower scores are for those parts of the site more remote from the existing transport corridors. Linton, which is in relatively close proximity and has access to similar levels of public transport, has a score range of 55-65. An intervention in the proposed A11 to Biomedical Campus corridor could enhance connectivity to Cambridge and improve the score for Grange Farm.

S/SHF - Land North of A1307, Bar Hill (Slate Hall Farm)

2.4.31 **Overall connectivity score range is:** 21-53. The strongest key service connectivity score is for Retail (59), and weakest is for Education (44). Modally, cycling has the strongest non-car connectivity score (56) followed by public transport (53) and walking the weakest (51).

2.4.32 Bar Hill exhibits characteristics of a Rural Town and Fringe given its separation from Cambridge. The public transport connectivity score in accordance with the matrices returns a 60% percentile level of connectivity. In regard to accessing facilities such as education the connectivity is average (50%) in accordance with the matrices. The connectivity scores could be improved and, when compared to other locations assessed, the site is relatively less connected.

2.4.33 The scores for this site reflect the relative isolation to Cambridge. Whilst it is located close to Bar Hill, other larger settlements are more distant. There are bus services to nearby Bar Hill and to Northstowe to connect with the segregated public transport corridor.

2.4.34 Bar Hill has a connectivity score range of 45-60 and can be expected as a reasonable target for this development.

S/CBN - Cambourne North

2.4.35 **Overall connectivity score range is:** 14-46. The strongest key service connectivity score is Residential (51), and weakest is for Leisure (37). Modally, cycling has the strongest non-car connectivity score (54) followed by public transport (49) and walking the weakest (41).

2.4.36 In terms of the DfT Connectivity Tool matrices, Cambourne North has a Rural Town and Fringe classification. The public transport score equates to the 40th percentile. Health connectivity is also within the 40th percentile whilst connectivity to leisure falls within the 30th percentile.

2.4.37 The scores for this site reflect the current relative isolation to Cambridge. However, it is located close to Cambourne which has developed as a town with several amenities across all typologies. The lower scores reflect those parts of the site which are currently agricultural land and so currently lack any meaningful transport facilities.

2.4.38 Cambourne (existing town) has a connectivity score range of 25-60. The provision of a centre, schools and employment land as part of the Cambourne North proposals will strengthen scores particularly for retail, education, leisure, and employment, as will the completion of the A428/A421 upgrade, and the proposed Cambourne station (EWR-promoted).

S/WGC - Wellcome Genome Campus, Hinxton

2.4.39 **Overall connectivity score range is:** 11-30. The strongest key service connectivity score is Workplaces (40), and weakest is for Health (8). Modally, cycling has the strongest non-car connectivity score (47), followed by public transport (30), and walking the weakest (26).

2.4.40 The Wellcome Genome Campus falls within the Rural Village classification set out in the Connectivity Tool. The connectivity scores when analysed against the matrices show that connectivity is within the median percentile. However, access to education falls within the 20th percentile, health in the 30th percentile and retail within the 60th percentile.

2.4.41 The scores for this site reflect the location of the campus and its distance from Cambridge. However, it is located on a key road/bus corridor (A1307/A505) and is close to the A11 trunk road with connections on to the M11 motorway. It is also close to the West Anglia Main Line, although the local stations at Whittlesford Parkway and Great Chesterford are not easily accessible by foot. Also, as this is currently primarily an employment site, there is little to no residential and education facilities for example. The lower scores reflect the currently undeveloped areas of the site which lack significant transport connectivity at this time. Again, this is a baseline (snapshot of ‘today’, without intervention) score range.

S/NST - Northstowe New Town

2.4.42 **Overall connectivity score range is:** 13-53. The strongest key service connectivity score is Education (62), and weakest in Health (35). Modally, public transport has the strongest non-car connectivity score (62), followed by cycling (53), and walking the weakest (40).

2.4.43 The higher scores for this site align with the existing settlement of Northstowe. The lower scores reflect the currently unserved, and undeveloped, areas of the site. Northstowe is situated on the Cambridgeshire Guided Busway public transport corridor with access to employment in the northern parts of Cambridge.

2.4.44 Northstowe has a connectivity score range of 50-70 and when reviewed against the DfT Connectivity Tool matrices is placed between the 60th and 70th percentiles for a Rural Town and Fringe location for overall connectivity. For public transport connectivity to all destinations Northstowe receives a score of 62 placing it within the 90th percentile.

S/WNT – Waterbeach New Town

2.4.45 **Overall connectivity score range is:** 8-50. The strongest key service connectivity score is Residential (53) and weakest in Education (41). Modally, cycling has the strongest non-car connectivity score (58), followed by public transport (50) and walking the weakest (47).

2.4.46 Waterbeach is also regarded as a Rural Town and Fringe when reviewing the rural-urban classification definitions within the DfT Connectivity Tool. The site returns an average (50th percentile) for public transport connectivity, with cycling falling within the 70th percentile. Walking also falls within the average median when compared to similar sites. Access to education via all modes is within the 40th percentile. This demonstrates that Waterbeach has reasonable connectivity levels, but there is scope for improvement.

2.4.47 The higher scores for this site align with the existing settlement of Waterbeach. The lower scores reflect the currently undeveloped areas of the site. Waterbeach has existing employment facilities and has rail access to Cambridge and beyond towards London.

2.4.48 The existing Waterbeach settlement has a score range of 50-70. The provision of facilities across all typologies will strengthen scores, this includes a significant local centre. This score could be strengthened further with the re-sited Waterbeach railway station and potential Park & Ride location coming forward.

S/BA - Bourn Airfield New Village

2.4.49 **Overall connectivity score range is:** 19-46. The strongest key service connectivity score is Residential (52) and weakest in Health (35). Modally, cycling has the strongest non-car connectivity score (54), followed by public transport (50) and walking the weakest (38).

2.4.50 Bourn Airfield New Village is aligned with the Rural Town and Fringe classification and, when reviewing the public transport connectivity against the DfT Connectivity Tool matrices, it places the site within the Median percentile along with cycling. Walking connectivity aligns with the 20th percentile which suggests that access to key facilities by foot is constrained despite wider reasonable transport connectivity. Access to health facilities by all modes results in the site aligning with the 20th percentile, which could suggest a lack of facilities present in the proximity. There is scope to improve connectivity from this site.

2.4.51 The higher scores for this site reflect the proximity to the town of Cambourne which has facilities across all typologies. There are regular bus services between Cambourne and Cambridge giving good connectivity. It is also situated next to the A421/A428 trunk road.

2.4.52 Nearby Cambourne has a connectivity score range of 30-65, Further leisure, retail, and employment will be provided on this site, complimenting that provided in Cambourne. In addition, the delivery of the proposed Cambourne railway station and upgrade to the A421/A428 road will provide higher connectivity scores.

S/CB - Cambourne

2.4.53 **Overall connectivity score range is:** 21-56. The strongest key service connectivity score is Retail (63) and weakest in Leisure (46). Modally, public transport has the strongest non-car connectivity score (59), followed by cycling (56), and walking the weakest (50).

2.4.54 Cambourne is also regarded as a Rural Town and Fringe site and, when public transport is reviewed against the DfT Connectivity Tool matrices it is placed within the 80th percentile demonstrating good levels of connectivity. Cycling on the other hand falls within the 60th

percentile along with walking, suggesting some improvements could be required to improve those scores compared to similar sites. Connectivity to health facilities places the site in the 80th percentile, however the weakest destination type is leisure which is within the 40th percentile. This suggests connectivity to leisure and nature could be improved.

2.4.55 The scores for this site reflect the existing site in Cambourne as assessed in the 'Existing Settlements' section. The lower scores are for those areas of the site that are currently undeveloped and relatively unconnected with the main town's facilities.

2.4.56 The existing Cambourne settlement has a connectivity score range of 25-60 which might form a reasonable target in the Do Minimum. The score could be strengthened further with the proposed Cambourne railway station, the upgrade to the A421/A428 road and bus service improvements between Cambridge and Cambourne.

2.5 Summary of Baseline Profiling

2.5.1 The DfT Connectivity Tool analysis demonstrates that strategic site connectivity should be interpreted in context, rather than as a simple comparison of raw scores. The updated DfT guidance confirms that Connectivity Tool scores are relative measures and should be assessed against the relevant destination type, transport mode and rural-urban classification. On this basis, the baseline analysis indicates that sites embedded within, or immediately adjacent to, the Cambridge urban area generally perform strongly in absolute terms, while some more peripheral sites perform better than their headline score might suggest when compared with similar rural or rural town/fringe locations.

2.5.2 The strongest-performing locations are those with a combination of proximity to existing jobs and services, access to high-quality public transport corridors, and strong walking, wheeling and cycling connections. Urban and edge-of-city sites such as Eddington, Cambridge East and Cambridge Biomedical Campus perform well across a range of modes and trip purposes, reflecting their proximity to Cambridge and existing transport infrastructure.

2.5.3 However, the updated matrix-based interpretation also shows that lower absolute scores do not automatically indicate poor performance. For example, sites such as Babraham Research Campus and Grange Farm achieve strong public transport percentile performance when assessed as rural village locations, although their overall accessibility remains constrained by the currently limited local facilities, weaker walking performance and dependence on specific corridors. This reinforces the need to interpret scores alongside local evidence, site role and professional judgement.

2.5.4 A recurring issue across the strategic sites is the relationship between public transport availability and first/last-mile accessibility. Sites may score comparatively well for public transport in matrix terms but still experience practical constraints where walking access to stops stations, local centres or facilities is weak. This is particularly relevant for larger or more peripheral allocations, where internal site layout, active travel permeability and the early delivery of local services will materially affect whether travel choices are realistic.

2.5.5 Car-based connectivity is generally strong across the assessed sites, but this should be treated as contextual information only, as driving is not included in the DfT-calculated overall connectivity score. However, where sites are heavily car-dependent, the coordinated delivery of a range of modal interventions through the site development process can be particularly important in terms of providing a genuine choice for future residents.

2.6 Summary of Baselining – Key Emerging Themes

2.6.1 From the baseline profiling the following key themes emerge and can be used as a basis to inform the requirements of the transport strategy. These themes are summarised in **Table 2-11**.

Table 2-11: Baseline analysis key themes

Theme	Summary
Contextual interpretation is essential	Connectivity scores should not be interpreted as absolute measures of 'good' or 'bad' connectivity. The updated DfT Connectivity Tool Matrix guidance requires scores to be understood in relation to rural-urban classification, destination type and transport mode. This means a score that appears modest in national terms may represent strong performance for a rural village or rural town/fringe location while a higher score in an urban context may still indicate relative weakness.
Proximity to Cambridge and Major Transport corridors remain important	The highest absolute scores are generally achieved by sites close to Cambridge, existing rail stations, high-quality public transport corridors or major employment / service clusters. These locations benefit from shorter trip lengths, greater destination choice, and more than one viable alternative mode.
First/last mile access shapes practical connectivity	The analysis shows that public transport availability alone is not sufficient. Walking, wheeling and cycling access to stops, stations, local centres and services is critical, particularly for large or peripheral allocations where internal layout and permeability will influence whether a choice of modes is genuinely available.
Rail and high-quality public transport can be transformational, but only where integrated	Rail stations, rapid transit and segregated public transport corridors can deliver significant connectivity benefits. However, their effectiveness depends on early delivery, service quality, local interchange, first/last-mile connections and complementary land-use planning.

2.6.2 The analysis demonstrates that strong connectivity is not limited to Cambridge itself, some sites away from Cambridge achieve good overall performance where they benefit from rail access or strong public transport connections.

2.6.3 This suggests that connectivity-driven interventions need to be integrated into the land use planning process so that new and expanded sites can benefit from a choice of transport modes.

2.7 Summary of Baselining – "What does Good look like?"

2.7.1 In the context of the emerging Local Plan, "good" connectivity should be defined by a combination of strong absolute accessibility and strong relative performance against comparable places. The updated DfT guidance confirms that a score should not be interpreted in isolation; instead, it should be assessed against the relevant rural-urban classification, transport mode and destination type. A well-connected location is therefore one that performs strongly for its settlement context and provides realistic, convenient access to the destinations people need to reach.

2.7.2 In the context of the emerging Local Plan, good connectivity is characterised by the following features:

- strong overall or mode-specific percentile performance when compared with locations of the same rural-urban classification;
- balanced access across key trip purposes, including employment, education, healthcare, retail and leisure;
- multiple viable mode choices, rather than reliance on a single corridor or service;
- convenient walking, wheeling and cycling access to public transport stops, stations, local centres and everyday services;
- integration with existing or planned land-use, so that local services and employment reduce the need for longer trips; and
- early delivery of transport infrastructure where development depends on future connectivity improvements.

2.7.3 Within the study area, the strongest absolute performance is generally associated with sites within or close to Cambridge or major transport infrastructure. However, the matrix-based interpretation means that some locations outside Cambridge can still represent good connectivity where they perform strongly against comparable rural or rural town/fringe locations.

2.8 Summary of Baselining – "What does Bad look like?"

2.8.1 Poor connectivity should not be defined solely by a low raw score. The updated DfT guidance makes clear that the same numerical score can represent different levels of performance depending on the transport mode, destination type and rural-urban classification. A poorly performing location is therefore one that performs weakly relative to comparable places, particularly where this aligns with a limited choice of modes and poor access to key everyday destinations

2.8.2 Poorly performing locations typically demonstrate the following characteristics:

- low percentile performance for the relevant rural-urban classification, particularly for walking, wheeling or public transport;
- weak access to essential destinations such as education, healthcare, employment and retail;
- reliance on a single public transport corridor, with limited resilience or interchange choice;
- poor first/last-mile access to stops, stations, local centres or strategic transport hubs;
- spatial separation from established centres, strategic public transport infrastructure and everyday services;

- high car accessibility alongside weaker accessibility to a choice of modes, creating a risk of embedded car dependency; and
- limited opportunity for meaningful improvement without major public transport, active travel or land-use intervention.

2.8.3 This distinction is important because some rural or edge-of-settlement sites may appear weak in absolute terms but perform reasonably against comparable places, while some urban sites may appear strong nationally but still have specific deficiencies, for example in walking access, healthcare access or local service provision.

2.9 Summary of Baselining – Implications for the Greater Cambridge Transport Strategy

2.9.1 The baseline analysis has several direct implications for the Greater Cambridge Transport Strategy. The DfT Connectivity Tool should be treated as a strategic evidence source which helps identify relative strengths, weaknesses and intervention requirements, rather than as a standalone judgement on site suitability. The updated DfT guidance confirms that baseline connectivity scores should be used alongside local evidence, site knowledge, professional judgement and wider planning considerations.

2.9.2 The analysis supports the principle that locations that are already well connected, or where there is a clear and deliverable pathway to achieving improved connectivity, score highest in transport terms. This includes locations within or adjacent to the Cambridge urban area, sites close to existing or planned rail stations, and sites on high-quality public transport corridors where walking, wheeling and cycling access can be made convenient and direct.

2.9.3 For more peripheral or less well-connected locations, a clear package of interventions to support growth is required. These should not be limited to strategic public transport provision but should also include first/last-mile connections, active travel permeability, local centres, schools, employment space and other land-use measures, where relevant, that reduce the need for longer-distance trips. This is particularly important because the DfT Connectivity Tool does not fully capture future land-use change, new amenities or the combined effects of multiple interventions.

2.9.4 Phasing is therefore critical. Sites that are related to future rail, rapid transit, public transport corridors or local service provision should be reasonably sequenced so that travel choices are available as early as is practicable. Without this, there is a risk that early phases of development establish car-dependent travel patterns rather than providing future residents with genuine options.

2.10 Overall Summary of Baseline DfT Connectivity Analysis

2.10.1 The DfT Connectivity Tool profiling provides a transparent, and policy-aligned review that demonstrates that not all sites are equal in their ability to support development from a transport connectivity perspective.

2.10.2 Whilst the DfT Connectivity Tool is useful at providing a snapshot of connectivity and aligns with the Vision-Led approach of the current NPPF, it does lack granularity. For this reason, more detail analysis of each site across different time bands from 10 minutes to 60 minutes has been undertaken using the STEP tool, to see how the sites perform in terms of connectivity to several destination types.

2.11 Intervention Testing

2.11.1 The Intervention testing undertaken using the DfT Connectivity Tool should be interpreted as a high-level indication of the potential direction and magnitude of connectivity change rather than a comprehensive assessment of the Strategy.

2.11.2 This reflects several limitations of the DfT Connectivity Tool, as set out in **Section 2.2**. Most notably, the tool currently only allows the testing of public transport interventions and does not enable the combined assessment of multiple interventions acting together as an integrated package. It is therefore not possible to represent the full suite of proposed Do Minimum and Do Something measures being considered within the Strategy, including active travel infrastructure, highway interventions, new local centres, land-use changes, or the interaction between multiple transport schemes.

2.11.3 To provide a consistent basis for comparison, a limited number of strategic public transport interventions have therefore been tested within the Connectivity Tool. These interventions should be viewed as illustrative examples that demonstrate the potential connectivity benefits that high-quality public transport investment can provide, rather than as a representation of the complete Do Something scenario.

2.11.4 The outputs should also be considered in the context of the updated DfT Connectivity Tool guidance.

2.11.5 A more detailed assessment of the Do Minimum and Do Something is undertaken using the STEP Tool in **Sections 3** to **6**. Unlike the DfT Connectivity Tool, the STEP assessment enables the cumulative effects of multiple interventions to be considered and provides a more granular understanding of accessibility across different travel time bands, destinations and scenarios. **Consequently, the STEP analysis should be regarded as the primary assessment of the Do Something, alongside assessment of the Do Minimum, with the DfT Connectivity Tool outputs providing supporting strategic context.**

2.11.6 The following potential/conceptual interventions have been tested:

- North to West Orbital MRT
- East to North Orbital MRT
- Cambridge to Cambourne MRT
- Waterbeach to Cambridge MRT
- Cambridge to Cambridge East MRT
- Cambridge South / initial CSET ‘extended corridor’

2.11.7 The two potential and hypothetical orbital routes have also been tested as a combined scheme within the connectivity tool.

2.11.8 Other interventions tested include:

- East West Rail

2.11.9 Working assumptions for the service frequencies for each intervention has been provided in **Appendix B**.

2.11.10 For each potential intervention, the strategic sites where the connectivity score is shown to improve is shown below.

North to West Orbital MRT

2.11.11 The North to West Orbital MRT is shown to improve connectivity for the following strategic sites:

- S/ED Eddington (North West Cambridge) - new score 40-72, baseline score 34-69

East to North Orbital MRT

2.11.12 The East to North Orbital MRT is shown to improve connectivity for the following strategic sites:

- S/CE Cambridge East - new score 40-70, baseline score 33-69

Cambridge to Cambourne MRT

2.11.13 The Cambridge to Cambourne MRT is shown to improve connectivity for the following strategic sites:

- S/CB Cambourne - new score 25-61, baseline score 21-56
- S/BA Bourn Airfield New Village - new score 24-50, baseline score 19-46
- S/CBN Cambourne North - new score 14-50, baseline score 14-46

Waterbeach to Cambridge MRT

2.11.14 The Waterbeach to Cambridge MRT is shown to improve connectivity for the following strategic sites:

- S/WNT Waterbeach New Town - new score 9-51, baseline score 8-50

Cambridge to Cambridge East MRT

2.11.15 The Cambridge to Cambridge East is shown to improve connectivity for the following strategic sites:

- S/CE Cambridge East - new score 40-70, baseline score 33-69

Initial CSET 'extended corridor'

2.11.16 A high-quality public transport scheme initially between the A11 and the Biomedical Campus is shown to improve connectivity for the following strategic sites:

- S/GF Land Adjacent to A11 and A1307 at Grange Farm Site - new score 11-60, baseline score 7-45
- S/BRC Babraham Research Campus - new score 36-54, baseline score 30-42, reflecting the fact that the modelled route runs close to, but not 'through' Babraham Research Campus.
- S/WGC Wellcome Genome Campus - owing to the lack of direct extension to the Wellcome Genome Campus in this scenario, and the constraints of the Connectivity Tool with respect to intervention selection, this has been modelled more appropriately in STEP (see Chapter 4 onwards) rather than the Connectivity Tool.

East West Rail

2.11.17 East West Rail is shown to improve connectivity for the following strategic sites:

- S/CBC Cambridge Biomedical Campus - new score 54-74, baseline score 48-73
- S/CE Cambridge East - new score 40-70, baseline score 33-69
- S/CB Cambourne - new score 25-63, baseline score 21-56

- S/CBN Cambourne North - new score 14-55, baseline score 14-46
- S/BA Bourn Airfield New Village - new score 22-48, baseline score 19-46

Summary Table

2.11.18 **Table 2-12** shows the changes in scores for each site, along with the best performing option tested where applicable. The orbital scheme listed is based on the site location.

Table 2-12: Intervention Scoring Summary by Strategic Site

Site Name (Ref.)	DfT Connectivity Tool Score Baseline (2026) *	DfT Connectivity Tool Score – With Intervention (2045)	Best-performing intervention	Other Interventions tested
Eddington, North West Cambridge (S/ED)	34–69	40–72	North to West Orbital MRT	n/a
Cambridge East (S/CE)[6]	33–69	40–70	East to North Orbital MRT EWR Cambridge to Cambridge East MRT	n/a
Babraham Research Campus (S/BRC)	30–42	36–54	Cambridge South / initial CSET 'extended corridor' MRT	n/a – route runs close to but not 'through' Babraham Research Campus
Cambridge Biomedical Campus (S/CBC)	48–73	54–74	EWR	n/a
Land adjacent to A11 and A1307 at Grange Farm (S/GF)	7–45	11–60	Cambridge South / initial CSET 'extended corridor' MRT	n/a

[6] For Cambridge East all three tested interventions scored the same.

Site Name (Ref.)	DfT Connectivity Tool Score Baseline (2026) *	DfT Connectivity Tool Score – With Intervention (2045)	Best-performing intervention	Other Interventions tested
Land north of A1307, Bar Hill (Slate Hall Farm) (S/SHF)	21–53	n/a	n/a	n/a
Cambourne North (S/CBN)	14–46	14–55	EWR	Cambridge to Cambourne MRT
Wellcome Genome Campus, Hinxton (S/WGC)	Owing to the lack of direct extension to the Wellcome Genome Campus in this scenario, and the constraints of the Connectivity Tool with respect to intervention selection, this has been modelled more appropriately in STEP (see Chapter 4 onwards) rather than the Connectivity Tool.			
Northstowe New Town (S/NST)	13–53	14-62	Cambourne to Cambridge MRT	n/a
Waterbeach New Town (S/WNT)	8–50	9–51	Waterbeach to Cambridge MRT	n/a
Bourn Airfield New Village (S/BA)	19–46	24–50	Cambourne to Cambridge MRT	EWR
Cambourne (S/CB)	21–56	25–63	EWR	Cambourne to Cambridge MRT

2.12 Summary of the DfT Connectivity Tool Intervention Testing Scenario

2.12.1 Testing undertaken using the DfT Connectivity Tool to inform the scoring with interventions required a proportionate and pragmatic approach, reflecting both the level of assumptions necessary to define interventions and the functional limitation of the tool itself. Assumptions were required in relation to service patterns, frequencies, and operational characteristics of proposed schemes, introducing a degree of uncertainty in the resulting outputs. To ensure the consistency and comparability across the strategic sites, a core set of public transport interventions was therefore applied uniformly.

2.12.2 The interventions tested included a combination of strategic rail and high-quality public transport interventions, notably East West Rail and the Cambridge South / initial CSET ‘extended corridor’ MRT, and a conceptual orbital MRT-style connection linking key Park & Ride locations. These were selected to represent the types of corridor-based enhancements that might be expected to influence connectivity at a strategic level.

2.12.3 The assessment highlights a number of inherent limitations within the DfT Connectivity Tool, most notably the tool:

- Allows only a single intervention to be tested per site, limiting the ability to reflect cumulative or network-wide effects.
- Does not account for land-use changes, including the provision of new amenities, employment space, or local centres, which are key drivers of connectivity outcomes in practice.

2.12.4 As a result, the testing should be interpreted as providing a high-level indication of the relative impact of public transport interventions, rather than a fully representative picture of future connectivity performance. Within this context, the analysis indicates that the ‘do something’ interventions generally deliver more pronounced improvements in lower-performing, rural or peripheral locations, where baseline accessibility is weaker, while more modest gains are observed in urban areas, where connectivity is already comparatively strong.

3 Wider Connectivity Analysis – STEP Tool

3.1 STEP as the primary evidence base

3.1.1 The DfT Connectivity Tool provides a useful strategic overview of how well locations are connected relative to one another and supports a high-level assessment of connectivity performance across Greater Cambridge. However, as discussed in Section 2, the tool has a number of important limitations when applied to the assessment of future growth scenarios and transport strategies.

3.1.2 Most notably, the DfT Connectivity Tool is currently limited to testing individual public transport interventions and cannot assess the cumulative impacts of multiple transport schemes, active travel improvements, land-use changes, or the interaction between complementary interventions delivered as part of an integrated transport strategy. The outputs should therefore be interpreted as an indication of the potential direction and scale of connectivity change arising from selected public transport interventions, rather than a comprehensive assessment of the Do Something scenario. Furthermore, the updated DfT Connectivity Tool guidance published in July 2026 emphasises that connectivity scores are a relative measure of accessibility and should be interpreted alongside local evidence, professional judgement and other supporting analysis.

3.1.3 To address these limitations, a more detailed assessment has been undertaken using the Stantec Transport Evaluation Platform (STEP). Unlike the DfT Connectivity Tool, STEP allows the cumulative effects of multiple interventions to be assessed and provides a more granular understanding of accessibility across different destinations, travel times and scenarios. The tool enables the analysis of connectivity across a series of travel time thresholds, allowing an assessment not only of where people can travel, but also how quickly key destinations can be reached and how accessibility changes under different intervention packages.

3.1.4 The STEP assessment therefore forms the primary tool for evaluating the connectivity impacts of the Reference Case (the today situation), Do Minimum (committed development and schemes) and Do Something (Strategy interventions) scenarios. It provides a more comprehensive understanding of the implications of the Strategy and allows the benefits of integrated intervention packages to be assessed in a way that is not currently possible using the DfT Connectivity Tool alone. The DfT Connectivity Tool outputs presented in Section 2 should therefore be viewed as providing strategic context and benchmark comparisons, whilst the STEP analysis provides the principal assessment of how the proposed strategy influences connectivity outcomes across Greater Cambridge

3.2 Introduction to the STEP Tool

3.2.1 The Stantec Transport Evaluation Platform (STEP) tool is a web platform for scenario-based accessibility analysis using public transport, walking, and cycling. It allows for the comparison of accessibility by generating isochrones from site locations.

3.2.2 The STEP tool uses General Transit Feed Specification (GTFS) and OpenStreetMap (OSM) data to build a public transport and pedestrian network to provide insights into connectivity and accessibility across all areas of the network.

3.3 Rationale for the STEP Analysis

3.3.1 STEP allows modifications to be made to the existing network, including the addition of public transport services and pedestrian paths. This flexibility makes STEP the ideal tool to analyse how effective future schemes could be for network connectivity.

3.3.2 With STEP we can provide greater depth on how we expect future schemes will impact accessibility of sites. Being able to produce isochrones across a range of sites illustrates how

schemes will create change across the network. With scalable granularity, we can better understand the impact of future schemes on site accessibility.

3.3.3 STEP allows us to analyse how future schemes in Greater Cambridge will impact locations across the area. This promotes data driven decision making, allowing authorities to make informed decisions regarding funding and priority for both the Local Transport Connectivity Plan and the Local Growth Plan, as well as the emerging Local Plan.

3.4 Assumptions and Inputs

3.4.1 The GTFS and OSM networks change over time; the date the analysis was run was for 20/04/2026. A maximum of 2 transfers were allowed, with walking access / egress speed set to 5 km/h for up to 20 minutes. The isochrones display access for the 50th percentile, this is the percentage of minutes within the time period that an individual can leave and cover at least the displayed isochrone. The AM period covers 07:00-09:00 and the PM period covers 16:00-19:00. All modes of public transport were available to use, with potential to switch between e.g. take a bus to a train station then take a train to the destination.

3.4.2 The pedestrian pathfinding is constrained by the OSM network. In rural or some suburban areas, this limitation can lead to unrealistic results, as the pathfinding algorithm may fail to identify valid routes. Additionally, assumptions of travel times and frequencies of schemes were made, some of which are speculative at this stage and will need refining as part of the more-detailed scheme development process.

3.5 ‘Committed’ Transport Schemes

3.5.1 For the reference case, the Cambridge South Station (now open) and Waterbeach Station schemes were assumed to be implemented. These schemes were added via the GTFS data and were provided with pedestrian access through the addition of new pedestrian paths. As both of these stations are on existing rail infrastructure, they were added to all services passing through.

3.5.2 For the Do Minimum case, the Cambourne to Cambridge High Quality Public Transport Corridor (CtoC), Cambridge South-West Travel Hub and Waterbeach to Cambridge High Quality Public Transport Corridor schemes were implemented in addition to the Reference Case. These were added as additional public transport services and align with proposed plans.

3.5.3 A summary of assumed ‘committed’ schemes is provided in **Table 3-1**.

Table 3-1: Committed transport schemes

Scheme Name	Reference Case	Do Minimum
Cambourne to Cambridge High Quality Public Transport Corridor / Scotland Farm P&R / Travel Hub	✗	✓
Cambridge South West Travel Hub	✗	✓
Cambridge Eastern Access (Phase 1)	✓	✓
Cambridge South Station	✓	✓
New Station for Waterbeach New Town	✓	✓
Waterbeach to Cambridge High Quality Public Transport Corridor	✗	✓
Initial CSET High Quality Public Transport Corridor (Cambridge Biomedical Campus to A11 Travel Hub)	✗	✓

3.6 Destinations used in the Analysis

3.6.1 To ensure a consistent, transparent, and policy-relevant assessment of connectivity across the strategic sites, a defined set of Education, Employment and Transport destinations was used within the STEP analysis. These destinations were selected to reflect the principal locations that residents and workers are likely to access for everyday activities, including learning, employment, and onward travel, and to align with Greater Cambridge Transport Strategy objectives.

Education Destinations

3.6.2 Education destinations were selected to represent the secondary and further education network across Greater Cambridge, including village colleges, state sixth form, city secondary schools, and specialist institutions. The dataset includes all major Cambridge city secondary schools, such as Chesterton Community College, Parkside Community College, Netherhall School and Trumpington Community College, alongside strategic education hubs including West Cambridge and the Cambridge Academy for Science and Technology.

3.6.3 In addition, village colleges serving the wider sub-region were included, such as Impington, Comberton, Swavesey, Cottenham, Linton, Melbourn, Sawston and Cambourne Village Colleges, together with Northstowe Secondary College. This approach ensures the analysis captures both urban and rural education accessibility, reflecting realistic travel patterns for students across the study area.

Employment Destinations

3.6.4 Employment destinations were chosen to represent the major employment clusters and business parks within Greater Cambridge, with a focus on locations that contribute significantly to the knowledge economy and wider employment base. These include Cambridge Science Park, Cambridge Business Park, St John's Innovation Centre, Cambridge

Innovation Centre, Cambridge Research Park, the Biomedical Campus, Babraham Research Campus, Granta Park and the Wellcome Genome Campus.

3.6.5 Additional employment locations such as Cambourne Business Park and Bourn Quarter were also included to ensure appropriate coverage of significant employment areas beyond the urban core. Collectively, these destinations provide a representative picture of access to key job locations across the city and sub-region.

Transport Destinations

3.6.6 Transport destinations were defined to capture the strategic rail network and key interchange points serving Cambridge and the surrounding area. The dataset includes:

- **International gateways:** London Stansted Airport
- **Stations:** Cambridge, Cambridge North, Cambridge South (open as of June 2026), Waterbeach, Foxton, Shepreth, Meldreth, Shelford and Whittlesford Parkway.
- **Other mobility hubs:** Newmarket Road Travel Hub, Cambridge South West Travel Hub, A11 Travel Hub, Scotland Farm Travel Hub as well as Park & Rides at; Longstanton, Milton, Newmarket Road, Trumpington, Babraham and Madingley Road.

Role of Destination Selection

3.6.7 The use of a consistent destination set across all scenarios ensures comparability between sites and between the Reference Case and Do Minimum scenarios. By focusing on representative, policy-relevant destinations, the analysis provides a robust basis for identifying connectivity strengths, gaps, and opportunities, and for informing subsequent stages of transport strategy development and intervention testing.

4 STEP - Reference Case and Do Minimum Connectivity outputs and Interpretations

4.1 Overview of STEP outputs and how to read the maps

4.1.1 STEP produces raster image files which contain isochrones of the strategic sites and destinations. The isochrones are then grouped into time bands, spanning from 0 to 60 minutes in ten-minute intervals. Applying a gradient across the time bands results in our final isochrone plots.

4.1.2 Included are two types of isochrones, single isochrones around one location e.g. Cambridge Biomedical Campus and grouped isochrones around locations of one type e.g. Employment. Black diamonds indicate the location(s) selected to produce the displayed isochrone.

4.1.3 For the strategic site isochrones, destination locations are superimposed onto the map and vice versa with the destination isochrones. To improve readability, strategic site IDs are labelled on the destination isochrones, these labels correspond to the ID column in the tables.

4.2 Origin-based connectivity (Strategic Site Allocations)

4.2.1 Each strategic site has been analysed in the STEP tool to determine their level of connectivity to local facilities and to demonstrate any potential gaps in connectivity. **Tables 4-1 to 4-16** provide site by site analysis, with a short description of what the STEP output is suggesting.

4.2.2 Two scenarios have been provided a ‘Reference Case’ representing a scenario with committed and in delivery schemes, and a ‘Do Minimum’ scenario which includes emerging committed schemes. In the reporting, only the AM Peak Do Minimum output is presented with the full output available in **Appendix C**

4.2.3 The analysis provides a qualitative assessment of what the maps are showing, the spatial pattern of connectivity and an AM/PM comparison. In addition, the narrative states what can and cannot be accessed within 60 minutes, and what key implications this may have for the emerging Local Plan, and potentially other wider planning activities.

4.2.4 It should be noted that the analysis focusses on accessibility and connectivity by non-car modes (public transport, including rail and bus, and active modes including walking and cycling). This is not because these modes are more prioritised, rather it reflects that the Strategy places emphasis on improving travel choice, recognising that for some movement and place types and congestion hotspots, a highway-based analysis may be more relevant. Because the highway network is already well-developed and hence provides a reasonable existing level of connectivity relative to other modes, one of the key challenges the Strategy must address is providing alternatives for residents and employees who chose not to drive.

Table 4-1: North East Cambridge

What the map shows

This map illustrates the areas that can be reached from North East Cambridge within a 60-minute journey by public transport, including walk and wheel access, in the AM peak period under Do Minimum conditions. The AM has been analysed against the PM peak, which is available in Appendix C.

Spatial Pattern of Connectivity

Connectivity from site is characterised by a dense and highly connected network centred on Cambridge and supported by radial corridors extending in multiple directions. Accessibility is observed to be strongest in the immediate Cambridge urban area where a large number of destinations can be reached within 10-30 minutes. The spatial pattern extends along radial routes such as the A14, A10 and A428 corridors although journey times increase to 40 – 60 minutes.

AM / PM Peak comparison

No material change in AM / PM peaks has been observed, with only very minor changes to the extent of the 40 – 60-minute time bands.

What can be accessed in 60 minutes

The majority of the Cambridge urban area, including the city centre, and key transport nodes such as Cambridge North railway station and Cambridge railway station are accessible within 60 minutes or less. Multiple town and rural centres to the west and north west such as Northstowe, Cambourne and Swavesey are accessible within 60 minutes. Several major employment destinations are accessible within 60 minutes with the exception of three located to the south east

What cannot be accessed (settlement hierarchy)

Rural and minor rural centres located along the A10, A1307and B1042 and those located on the periphery of the Greater Cambridge area such as Willingham and Linton are not accessible within 60 minutes, nor are the group villages or Infill villages that are located away from the radial routes to the north and west of Cambridge.

Interpretation against the settlement hierarchy

Relative to the settlement hierarchy, North East Cambridge performs well with good levels of connectivity to Cambridge as well as a number of town-level settlements such as Northstowe and Waterbeach New Town. Access to lower order settlements is more limited with access available to a small number of rural and minor rural centres such as Histon and Impington and Swavesey, largely due to their proximity to primary transport corridors such as the Cambridgeshire Guided Busway.

Key Implications

North East Cambridge has good connectivity with a broad and resilient access to the various orders of the settlement hierarchy as well as numerous transport and employment destinations. The site therefore represents a well connection location that can support travel choice

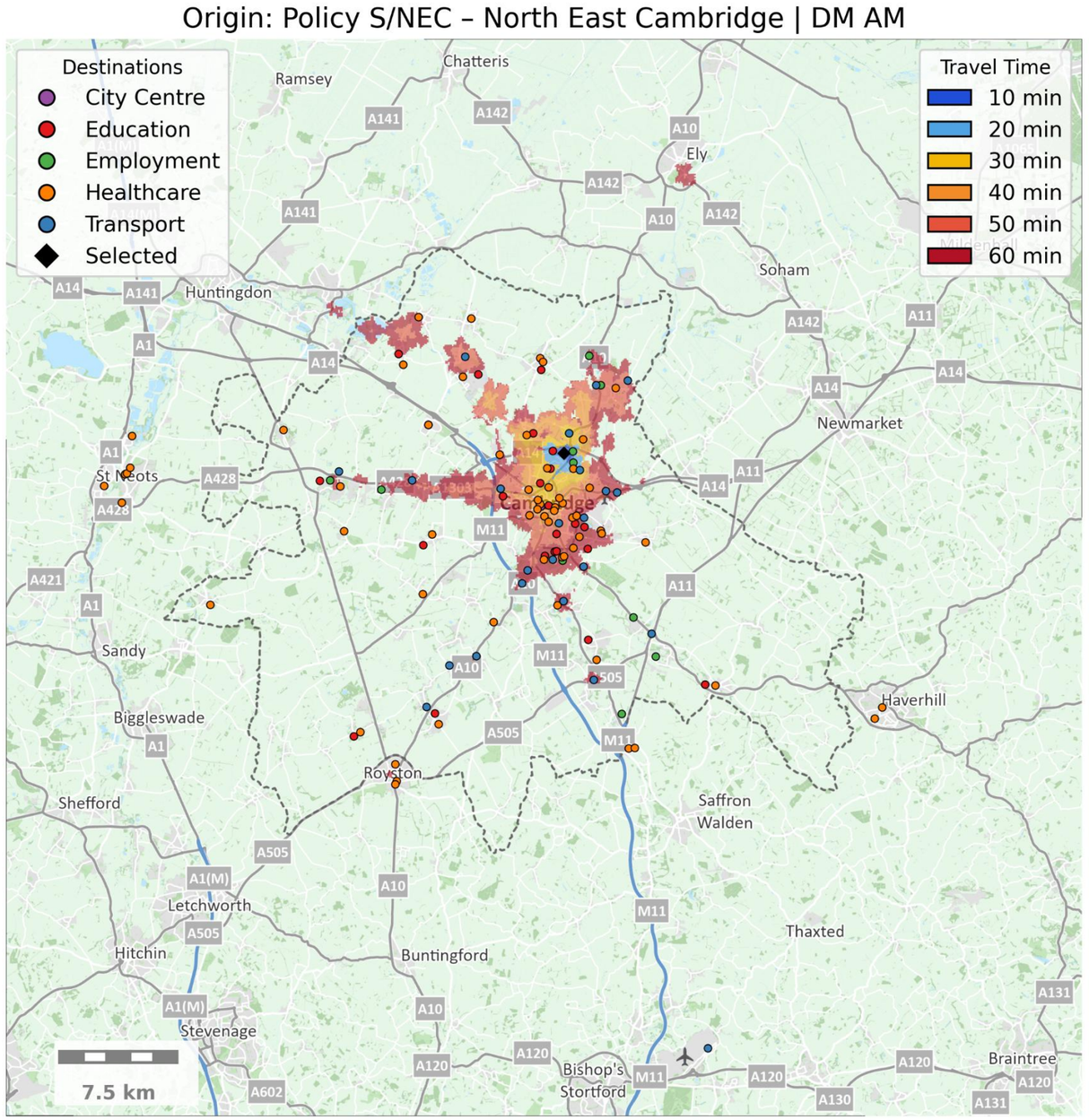


Table 4-2: S/ED Eddington (North West Cambridge)

What the map shows

Public transport accessibility from the Eddington North West Cambridge strategic site during the AM peak. PM peak connectivity is available in Appendix C.

Spatial Pattern of Connectivity

Connectivity centres on Cambridge, along with showing an east–west A428 corridor pattern. The site offers excellent access to Cambridge within 10–20 minutes, while westward connectivity is linear but less consistent, with weaker links beyond the main route. The network is highly directional, favouring the urban area and lacking extensive lateral connections.

AM / PM Peak comparison

The AM peak shows slightly stronger and more continuous accessibility into Cambridge, with a broader 20–40-minute catchment. In the PM peak, accessibility becomes marginally more constrained, with a small contraction in higher accessibility bands and greater reliance on 40–60-minute journeys, particularly west of the site. The differences are modest but indicate a slightly less efficient return journey profile.

What can be accessed in 60 minutes

Within 60 minutes, the site can access the full range of services within Cambridge, including major employment areas, higher education institutions, healthcare facilities, and key transport interchanges. Settlements along the A428 corridor are also accessible within this threshold, although typically at the upper end of the travel time range. The site therefore benefits from strong access to the region's primary service centre and its associated opportunities.

What cannot be accessed (settlement hierarchy)

Areas located away from the A1303 / A428 corridor, particularly more remote rural settlements, and locations to the north and south, are less accessible within 60 minutes. The site has limited direct connectivity to secondary and lower-tier settlements outside the main corridor, with many such locations either at the edge of or beyond the 60-minute travel threshold. This reflects the corridor-based nature of the network.

Interpretation against the settlement hierarchy

The accessibility pattern strongly reinforces Cambridge's role at the top of the settlement hierarchy, with the site functioning effectively as an extension of the urban area in terms of public transport connectivity. Links to secondary settlements are more limited and highly dependent on corridor alignment, indicating that the site is primarily oriented towards Cambridge with less strong relationships with the broader network of settlements.

Key Implications

The analysis demonstrates that the Eddington North West Cambridge site is well placed to support growth aligned with Cambridge, benefiting from strong access to higher-order services and employment. However, its reliance on a limited number of radial corridors highlights a potential need for transport investment to improve network resilience and broaden connectivity, particularly to secondary settlements. Enhancing service frequency and providing more direct or orbital connections would help maximise accessibility and support further travel choice.

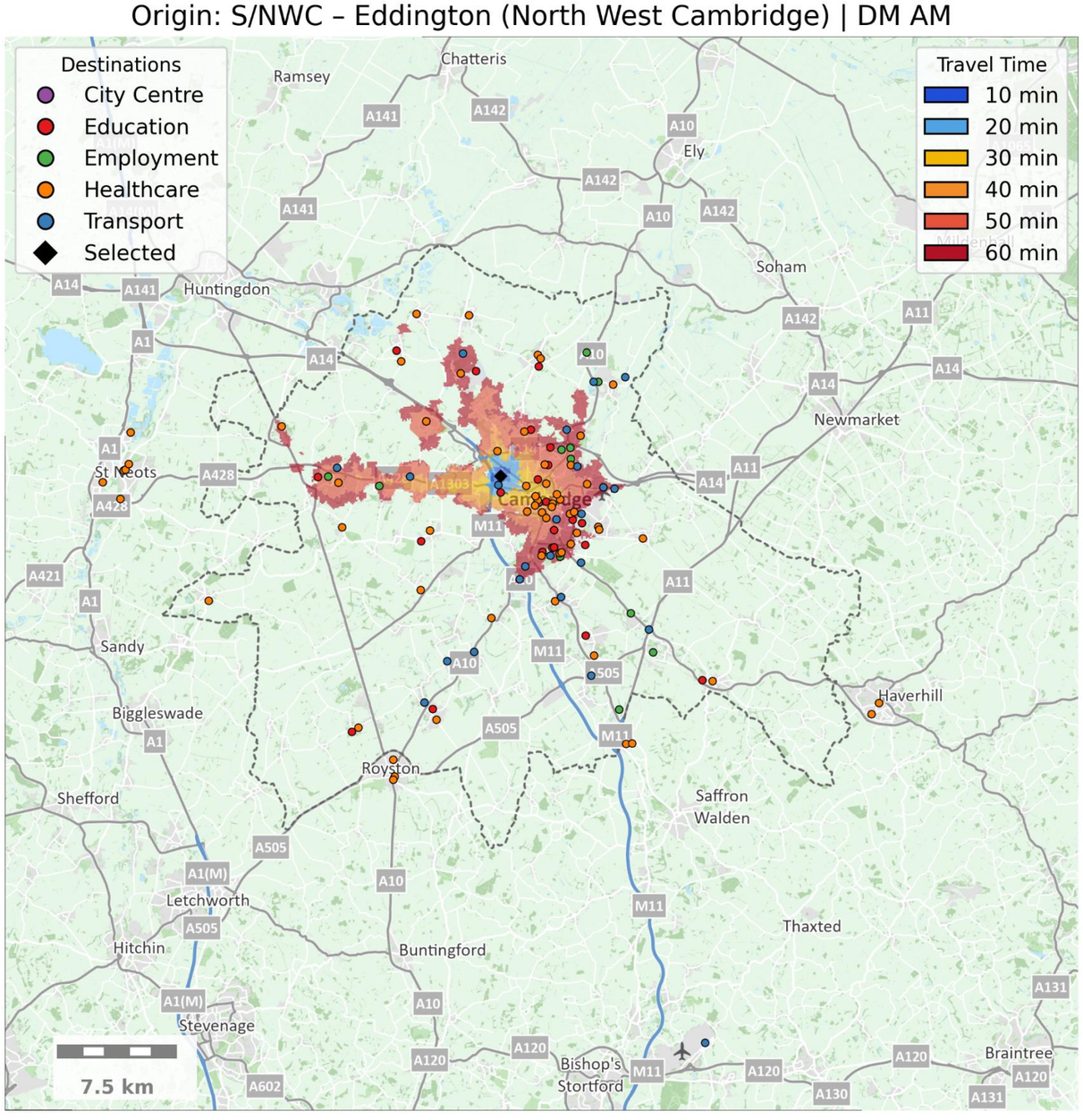


Table 4-3: S/CE Cambridge East

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

A clear Cambridge south east urban-centred pattern is visible with the city centre accessible within 60 minutes. A dense grouping of local facilities of multiple type is accessible within 60 minutes, providing a spatial structure that shows Cambridge as a dominate hub, with some health and education destinations accessible within 30 minutes. There is some wider reaching connectivity along linear corridors, but these appear limited.

AM / PM Peak comparison

The AM and PM Do Minimum scenarios appear broadly similar with no material differences in connectivity.

What can be accessed in 60 minutes

Connectivity is highly centred towards the south east and centre of Cambridge from this site, with most key facilities within this quadrant of the city accessible within 60 minutes. The Biomedical Campus is accessible within 50 minutes; however, this is the only major employment destination accessible within 60 minutes despite the relative proximity of Cambridge Science Park and St John's Innovation Centre to the north.

What cannot be accessed (settlement hierarchy)

With connectivity centred on the Cambridge urban area, lower settlement order destinations are less accessible. None of the three town locations of Waterbeach, Northstowe or Cambourne are accessible within 60 minutes. Rural centres and minor rural centres and the villages in the rural areas in the wider region are not accessible within 60 minutes as they lie away from the radial routes.

Interpretation against the settlement hierarchy

Cambridge is the dominant accessible hub, and lower settlements become progressively less accessible as they move away from the city, particularly if they lie away from the main radial routes. Many rural settlements and villages are not accessible within 60 minutes.

Key Implications

This analysis shows that the greatest accessibility opportunities from this site lie within the core Cambridge area, offering access to a large range of facilities. The site lends itself a good opportunity for offering internalised trips focused on the transport, employment and health provisions located close by. However, trip demands away from the core urban area have limited non-car choices which can be addressed through the Do Something scenario. Improving active travel connectivity to public transport through direct links will help users access services within a timely manner. There is a clear severance issue caused by the railway and River Cam, however orbital interventions provide an opportunity to address this.

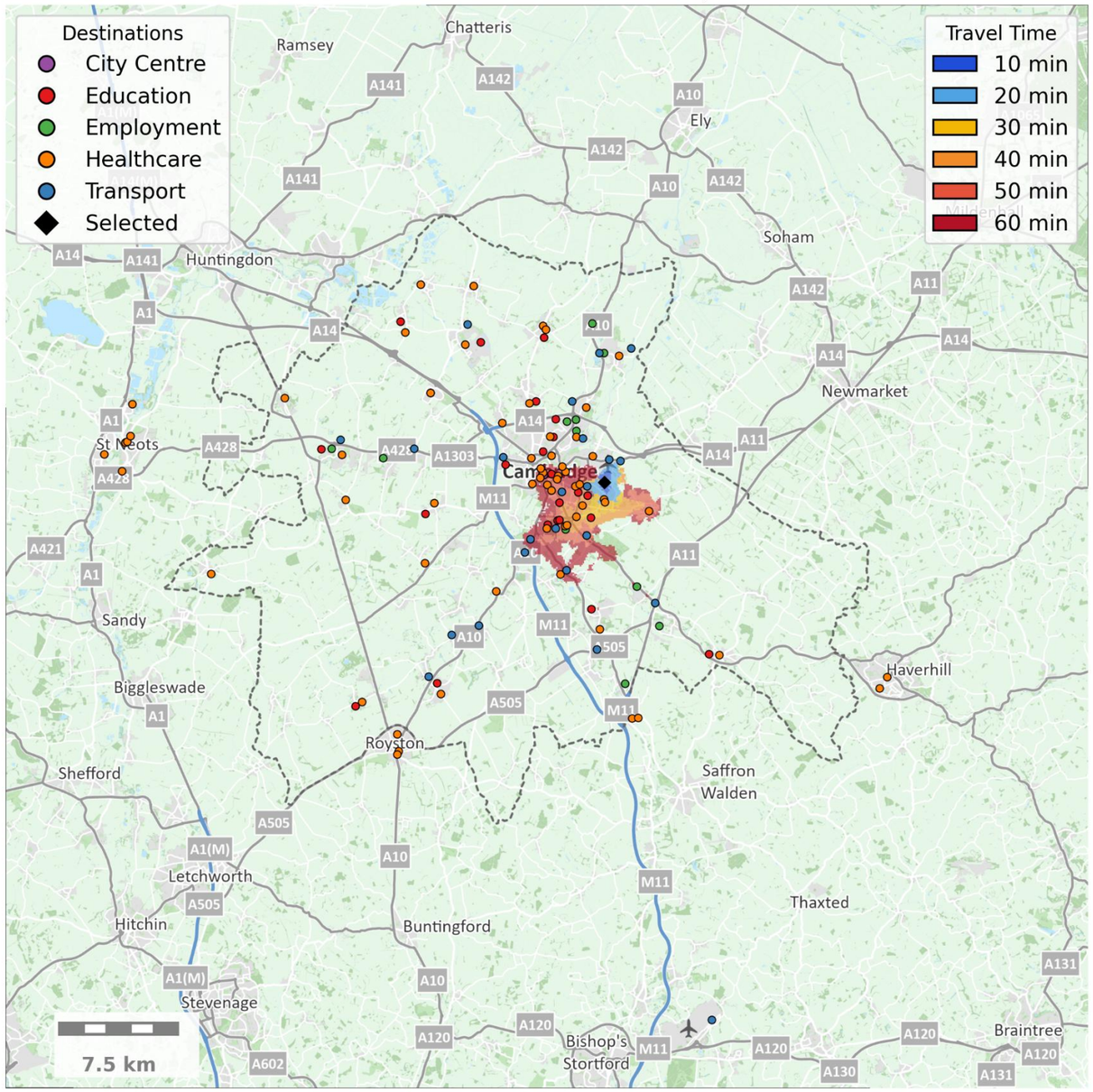


Table 4-4: S/BRC Babraham Research Campus

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

The spatial pattern of connectivity shows a strong pull to south east Cambridge with access to a range of local facilities within 30 – 50 minutes includes transport interchanges, railway stations, and the city centre. The spatial pattern also demonstrates reasonable pull towards Haverhill with the western extent reachable within 60 minutes.

AM / PM Peak comparison

There is no material difference in connectivity in the immediate linear corridor (A1307) in the AM and PM peaks, however, there is a diminishing level of connectivity shown to the west of the A10 corridor where access is possible within 60 minutes in the AM peak, but not in the PM.

What can be accessed in 60 minutes

A large and continuous area of accessibility is centred on Cambridge, particularly to the south east. This represents the more comprehensive cluster of destinations accessible within 60 minutes. Settlements sited along the A1307 are accessible within 30 – 40 minutes supported by the 13, 13A and X13 bus services. The Minor Rural Centre of Linton and a small number of group villages are accessible, but only as they are situated along the A1307 corridor. Major Employment destinations such as Granta Park are accessible within 30 minutes.

What cannot be accessed (settlement hierarchy)

Settlements located off of the main A1307 corridor and A505 on Cambridge's fringe are less accessible, including towns, rural centres and minor rural centres located to the north, west and south.

Interpretation against the settlement hierarchy

Cambridge is the primary accessible hub with high frequency public transport available along the A1307 corridor. Settlements on the wider A1307 corridor show moderate accessibility, with facilities available within 40 – 60 minutes but this depends on proximity to the public transport corridor. The lower order settlements in the wider Greater Cambridge area show limited or absent accessibility within a 60-minute public transport + walk journey time.

Key Implications

This site demonstrates good access to Cambridge and immediate hinterland areas that lie along the A1307 corridor. However, connectivity is very linear based with limited public transport availability cross corridors, limiting access to wider employment and transport interchange opportunities.

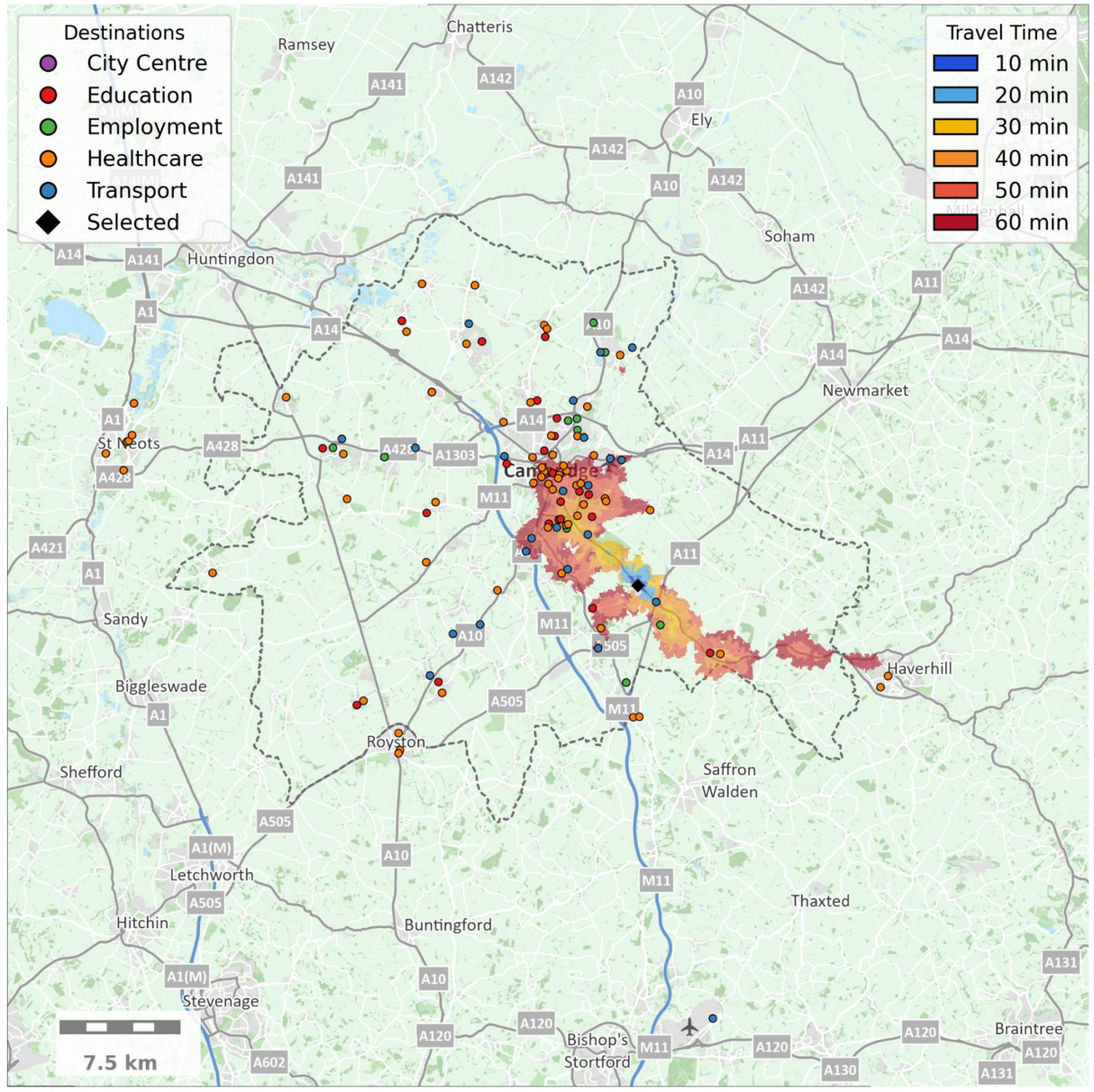


Table 4-5: S/CBC Cambridge Biomedical Campus

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

The pattern of connectivity is largely focused upon Cambridge, with this covering all of the built-up area, and the three arterial routes of the A1309, A1301 and A1307 to the south east. Some limited connectivity is observed to the south west along the A10 towards Melbourn. The spatial pattern demonstrates sparse connectivity to the west and north.

AM / PM Peak comparison

Connectivity within Cambridge is broadly similar in both peaks. The most notable changes are a reduction in wider corridor connectivity along the A1301, although there are some time improvements to/from Great Shelford with connectivity reducing from 50 minutes to 30 minutes.

What can be accessed in 60 minutes

The whole of the Cambridge urban area is largely accessible within 60 minutes with the rural centres of Great Shelford & Stapleford, Sawston and Histon and Impington also accessible within that timeframe. Major employment sites such as St John's Innovation Centre, Cambridge Science Park, Granta Park and Babraham Research Campus are all accessible under 60 minutes. Key transport destinations such as Cambridge and Cambridge South railway stations, Babraham P&R and Trumpington P&R are accessible within a 20 – 30-minute journey.

What cannot be accessed (settlement hierarchy)

Cambourne, Bourn New Village and the minor rural centres of Papworth Everard, Gamlingay, Bassingbourn and Comberton to the west, and Northstowe, Swavesey, Willingham and Cottenham to the north are not accessible via public transport within 60 minutes due to a lack of direct public transport services to the west, or the need to interchange in Cambridge which increases journey times.

Interpretation against the settlement hierarchy

Connectivity is limited to the rural and minor rural centres that are located on the radial routes to the south east and west. The group villages and infill villages away from these corridors and in the wider greater Cambridge area cannot be accessed via public transport.

Key Implications

The site appears well connected to a range of facilities and demonstrates good levels of accessibility when focused on the Cambridge area. There is a good range of major employment destinations accessible within 60 minutes. However, there are limitations in accessing the wider region particularly to the towns north such as Northstowe and the western hinterland away from radial routes.

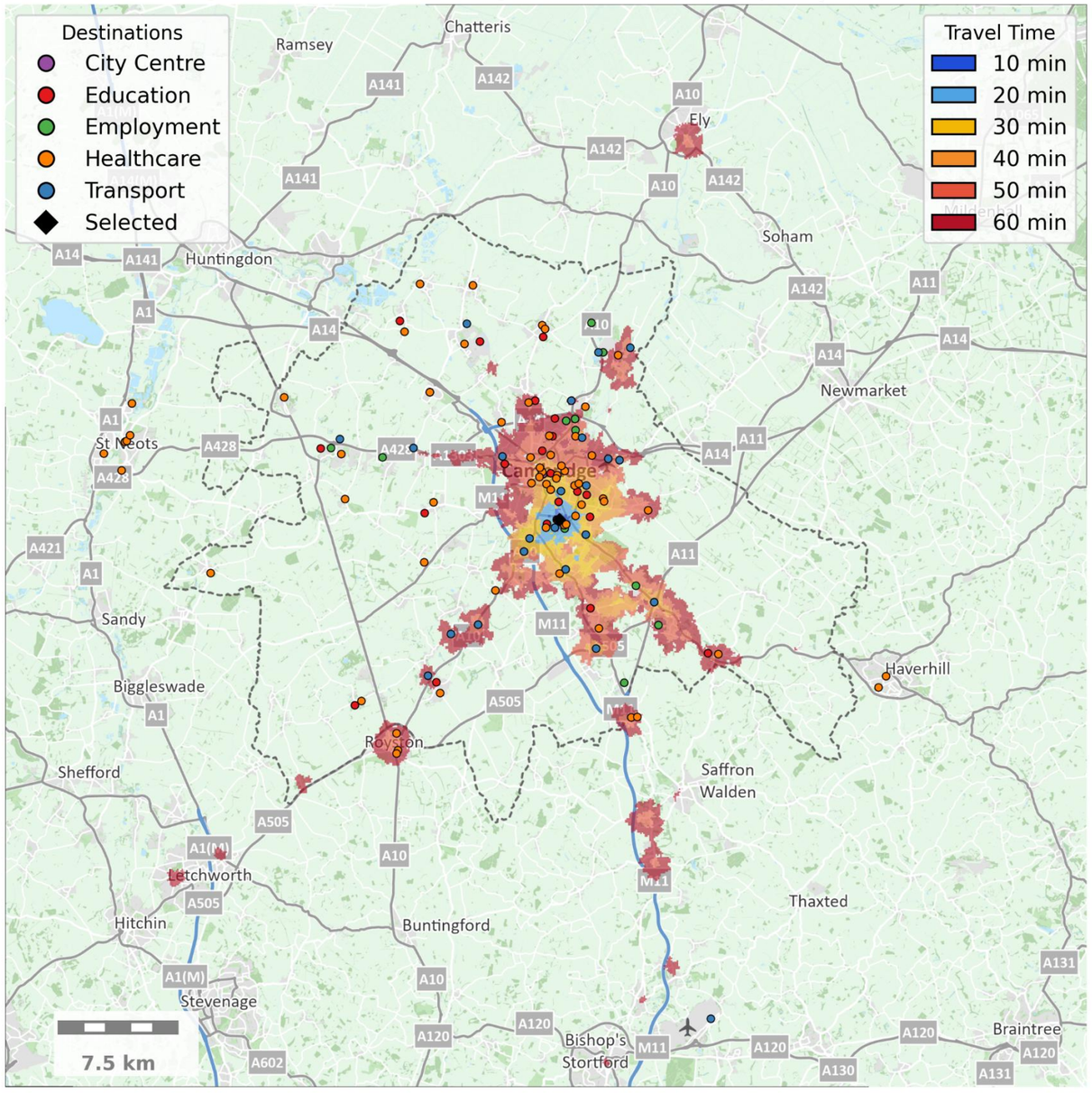


Table 4-6: S/GF Land Adjacent to A11 and A1307 at Grange Farm

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

Grange Farm is characterised by a strong-corridor based pattern along the A1307, with a band of 30 – 50 minute journey times to destinations along the route, including educational facilities and transport interchanges. Outside of this corridor accessibility rapidly reduces, with areas outside the narrow band not accessible within 60 minutes.

AM / PM Peak comparison

The AM/PM Do Minimum peaks are broadly consistent with no material improvement in connectivity observed between peak periods.

What can be accessed within 60 minutes

The south east extent of Cambridge is accessible within 60 minutes, including Cambridge Railway station (and now, Cambridge South). The city centre is border-line accessible within 60 minutes. However, the site does provide access to three major employment destinations: Biomedical Campus, Granta Park and Babraham Research Campus within 40 – 50 minutes. Connectivity is provided along both the A1301 and A1307 radial corridors provided access to Great Shelford and Stapleford and Sawston within 60 minutes.

What cannot be accessed (Settlement Hierarchy)

Whilst there is reasonable access to the top tier of the hierarchy with south east Cambridge accessible within 60 minutes, wider city areas beyond to the north and west are not accessible within a 60-minute public transport journey and require interchange. Access to lower order settlements is limited with only access to the minor rural centre of Linton possible on the A1307 corridor, whilst Shelford and Stapleford and Sawston are accessible on the A1301 corridor. Only group villages that lie on those corridors are accessible. The town and rural centre settlements to the north and west, and their associated major employment destinations are not accessible within 60 minutes.

Key Implications

Grange Farm has relatively constrained connectivity under the Do Minimum conditions with strong reliance on a single corridor to Cambridge and no orbital public transport availability to provide access to wider towns and rural centres. That said the site can access a range of facilities including three major employment destinations, and transport interchanges to the southeast of Cambridge. For trips beyond the A1301 and A1307 corridors, travel choices are limited.

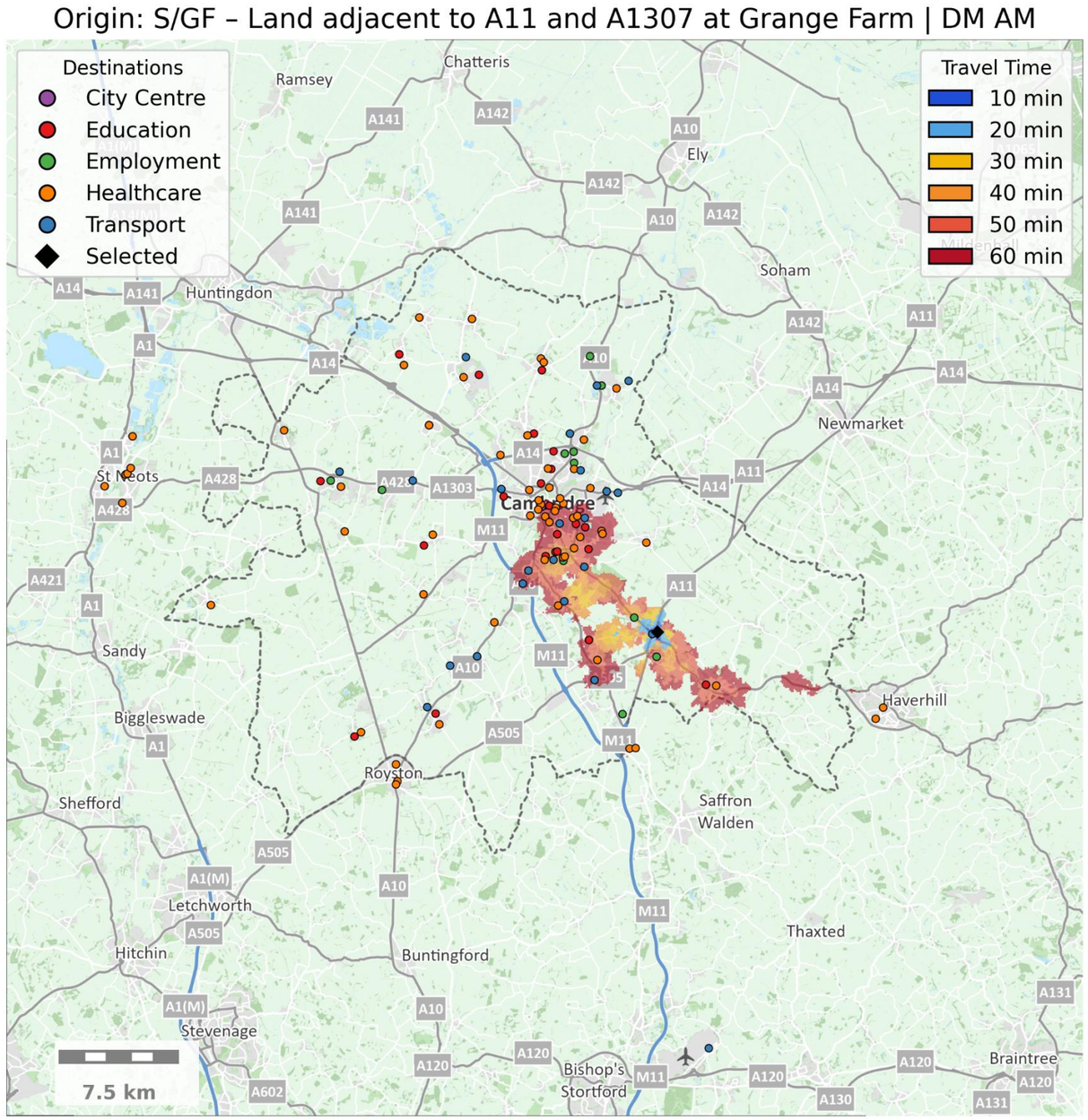


Table 4-7: S/SHF: Land north of A1307, Bar Hill, Slate Hall Farm.

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

The spatial pattern for Slate Hall farm demonstrates as linear focus extending north from the A14 via the B1050 towards Northstowe. Some connectivity is shown linearly towards Cambridge focussed along the Huntingdon Road. There is limited spatial spread beyond those two corridors.

AM / PM Peak comparison

There is no material change between the AM and PM Do Minimum outputs. The spatial extent and overall pattern of connectivity remain consistent, with only minor variations at the edge of the 60-minute catchment

What can be accessed in 60 minutes

Local facilities located in close proximity to the Huntingdon Road corridor are accessible within 50 minutes, while the city centre is accessible within 60 minutes. Longstanton P&R and Madingley Road P&R are accessible within 50 minutes to the north and south east respectively. However, wider connectivity is limited.

What cannot be accessed (settlement hierarchy)

Connectivity to many major employment destinations is not possible via public transport within a 60-minute timeframe. Aside from P&R sites, no other key transport interchange such as railway stations are accessible within 60 minutes unless users interchange within the city centre. There is poor wider connectivity to lower or settlements, except for Northstowe, with a lack of orbital public transport services

Interpretation against the settlement hierarchy

Slate Hall Farm demonstrates limited alignment with the settlement hierarchy, with only partial and constrained access to Cambridge and relatively limited connectivity to the wider network of settlements. Although some access to the highest-order centre is technically possible, this is geographically limited, time-inefficient, and often dependent on interchange, reducing the choice of modes available. Connectivity is therefore concentrated on a small number of nearby and intermediate settlements, rather than providing broad access across the hierarchy. The site performs more similarly to a peripheral or corridor-dependent location, despite its proximity to strategic transport infrastructure.

Key Implications

The analysis suggest that Slate Hall Farm has a limited choice of modes and hence connectivity, with access focused on a relatively narrow part of the Greater Cambridge network and reliant on specific corridors. The relative lack of travel choice risks the site being car-dependent without further investment in direct, high-quality, and frequent transport connections, alongside improved first and last mile access.

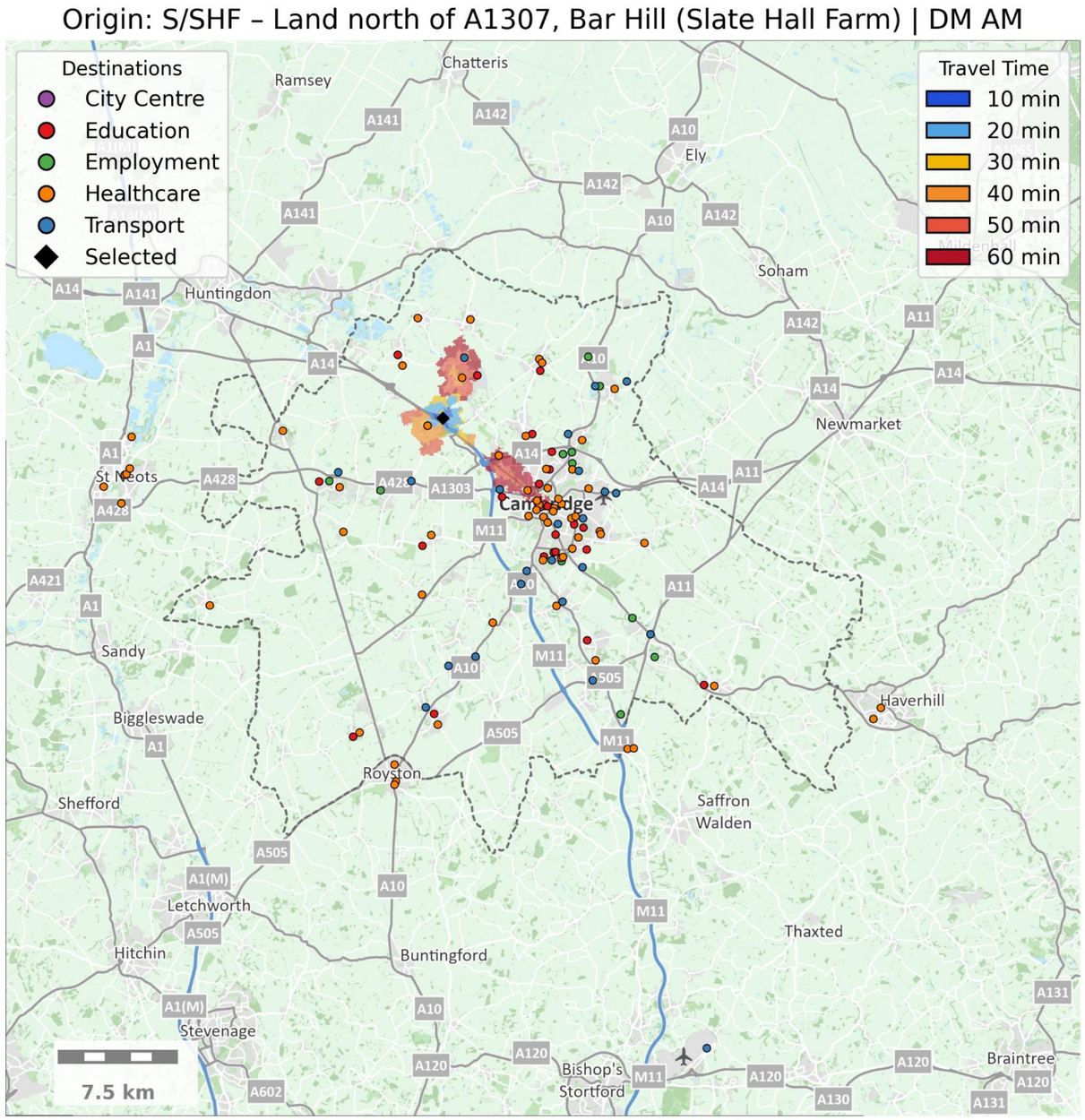


Table 4-8: S/CBN Cambourne North

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

Connectivity from Cambourne North shows a strongly corridor-based and directional pattern, aligned primarily along the A428 corridor and parallel B1046 corridor towards Cambridge, supported by two existing public transport services, bus services 4 and 18.

AM / PM Peak comparison

The AM and PM peak patterns in both the Reference Case and Do Minimum scenarios are broadly similar, indicating that accessibility is constrained by network structure and service provision. One notable difference is that Caxton is not accessible within 60 minutes in the PM peak.

What can be accessed in 60 minutes

Cambridge city centre is accessible within 60 minutes with major employment destinations such as Bourn Quarter accessible within approximately 40 minutes in both the Do Minimum AM and PM peaks.

The minor rural centre of Papworth Everard is accessible within 30 – 40 minutes respectively, therefore residents in those areas can access the employment element of the allocation via public transport in the Do Minimum AM and PM peaks.

Cambridge Railway station is borderline accessible within 60 minutes, although the proposed Cambourne Railway station provides rail access within a 20-minute journey time.

What cannot be accessed (settlement hierarchy)

The site does not provide access to towns beyond Cambridge's immediate catchment. Major employment destinations such as the Biomedical Campus, Babraham Research Campus and Wellcome Genome Campus are not accessible within the 60-minute public transport + walk journey time. Public transport trips to the major employment destinations on the A505 and A10 corridors will require interchange in Cambridge.

Interpretation against the settlement hierarchy

In terms of the settlement hierarchy, Cambourne North benefits from access to the higher-order centre of Cambridge via the A428/A1303 corridor, providing connections to a wide range of employment, education and service destinations. The site also has access to Papworth Everard and a number of nearby group villages along the A1198 corridor, supporting day-to-day travel needs within the local area. In addition, the proposed development will incorporate its own local facilities and services, helping to meet many everyday needs within the site itself and reducing the need for longer-distance journeys where appropriate. Together, this can contribute to the creation of a better-connected and increasingly self-sufficient community.

Key Implications

Under the Do Minimum conditions, Cambourne North has limited connectivity to services that fall beyond the A428 / A1303 corridor to west Cambridge and the minor rural centres and group villages to the north west and south east. However, the provision of local centres within the site itself, along with delivery of the proposed transport investments, can help to offset this.

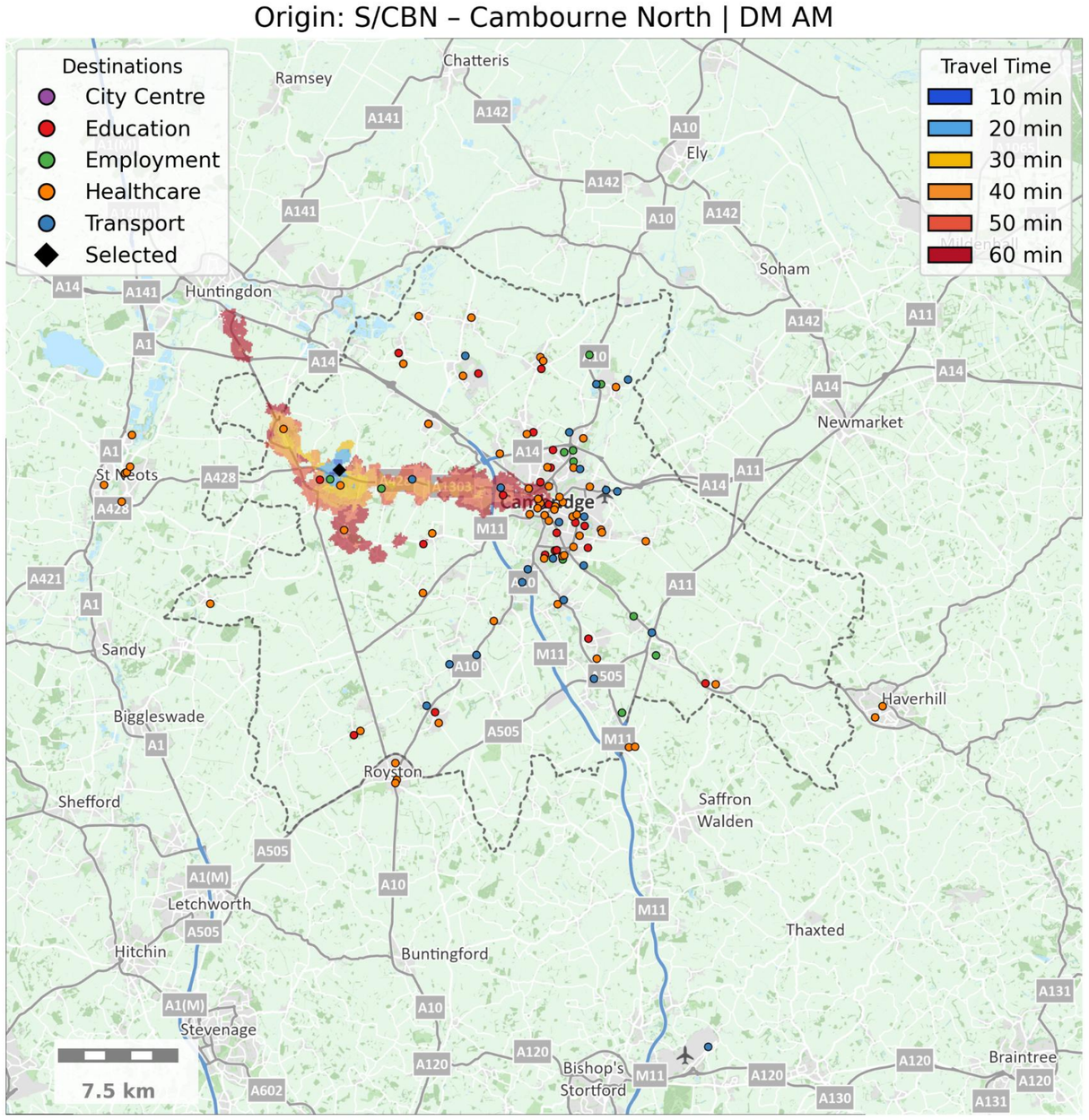


Table 4-9: S/WGC Wellcome Genome Campus

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

Although the site is located within the emerging Greater Cambridge Local Plan area, the pattern of connectivity is more reflective of a peripheral location, with large parts of the region remaining inaccessible within the 60-minute threshold

AM / PM Peak comparison

There is no material change between the AM and PM Do Minimum outputs. The spatial extent and overall pattern of connectivity remain limited and consistent.

What can be accessed in 60 minutes

Very limited connectivity beyond the campus itself is available impacting on users ability to access destinations within the 60-minute public transport + walk journey time threshold.

What cannot be accessed (settlement hierarchy)

A substantial proportion of the settlement hierarchy within the Greater Cambridge region is not accessible within 60 minutes. This includes large parts of Cambridge's higher-order employment and service areas (in practical terms due to journey time and interchange constraints), most towns and major rural centres, and the majority of group villages and infill villages, particularly those not located on main transport corridors. Connectivity to strategic transport hubs and major employment sites is also limited, with many destinations falling outside the catchment or requiring indirect journeys.

Interpretation against the settlement hierarchy

Wellcome Genome Campus demonstrates limited connectivity to the Greater Cambridge settlement hierarchy across all levels, despite being located within the emerging Local Plan area. The site will be dependent on interchange, reducing the choice of modes available. The site provides only partial access to intermediate settlements and very limited access to lower-tier settlements, resulting in a pattern of connectivity that is not well aligned with the hierarchy. In this context, there is scope to strengthen its integration with a broader range of settlements through future transport investment and service enhancements.

Key Implications

The analysis demonstrates that Wellcome Genome Campus currently has limited and constrained connectivity by public transport, with limited integration with the wider settlement network, although it must be noted that they do operate privately scheduled coaches for staff. As a result, travel choices are currently relatively limited, particularly for access to Cambridge and other key destinations. As a result, future growth at the site could be supported by targeted improvements to public transport connectivity, including enhanced service frequencies, journey time improvements and more direct connections to key settlements, including through mass rapid transit intervention in the CSET 'extended corridor'. Such measures would help broaden travel choices, strengthen integration with the wider settlement network and support wider travel choice to/from the site over the long term.

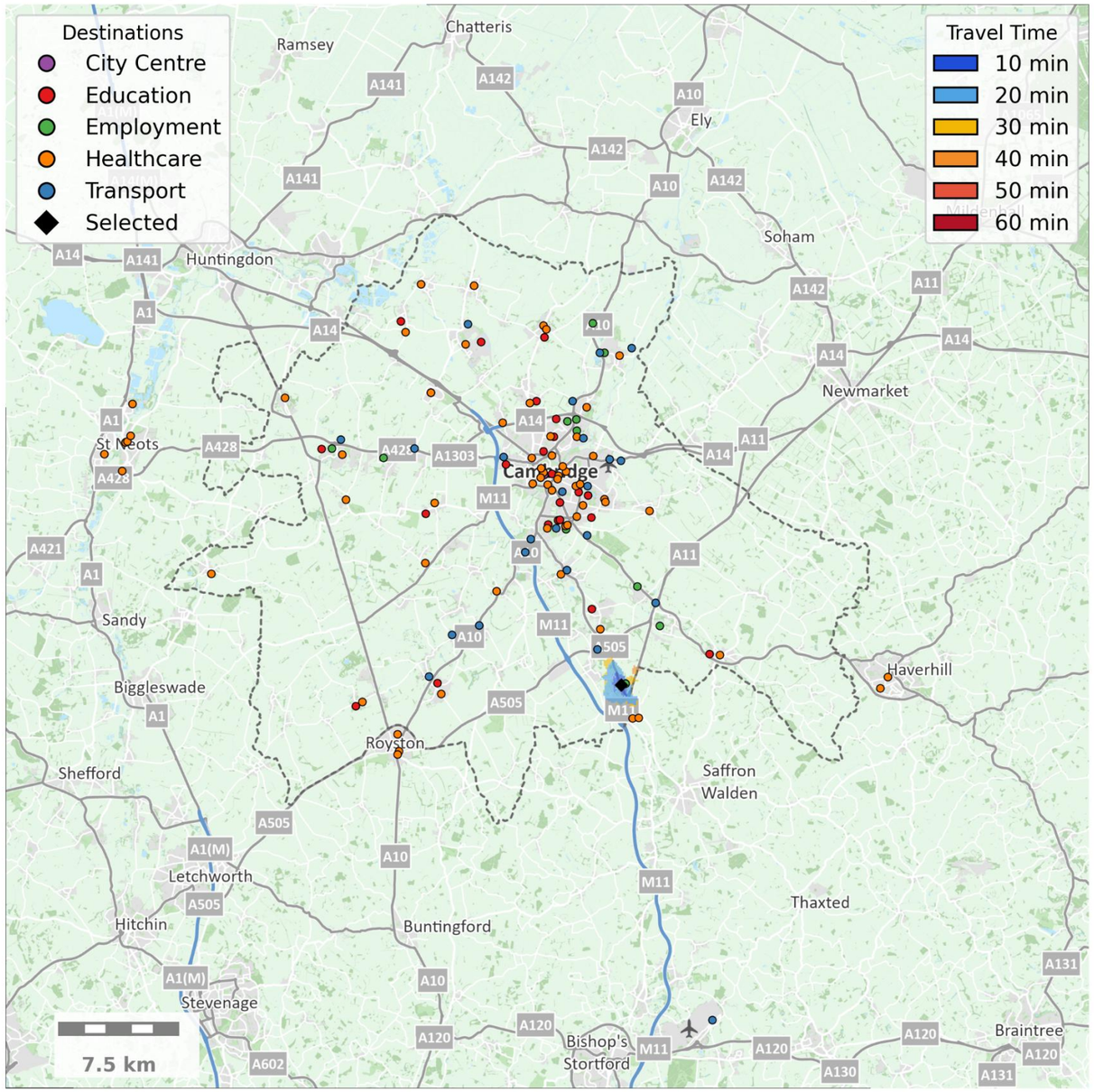


Table 4-10: S/NST Northstowe New Town

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

The spatial pattern for Northstowe covers the extents of the town which is largely accessible within 20 to 30 minutes but extends to surrounding areas such as Bar Hill, Willingham, Swavesey and the Huntingdon Road area of Cambridge city.

AM / PM Peak comparison

Differences between Reference Case and Do Minimum AM and PM peaks are limited, with broadly consistent spatial coverage.

What can be accessed in 60 minutes

Within 20 minutes the Hatton Park Primary School and the Longstanton Branch Surgery of accessible as well as a number of smaller retail, food and drink establishments. In terms of transport accessibility, the Longstanton Park & Ride and Guided Busway stops are accessible within 20 minutes.

What cannot be accessed (settlement hierarchy)

The site benefits from connections to the wider public transport network and a range of destinations within the assessed 60-minute travel time threshold. This includes the north-west area of Cambridge city and the surrounding rural centres such as Willingham and Swavesey, providing access to a range of facilities and services.

Interpretation against the settlement hierarchy

The accessibility pattern indicates that Northstowe has accessibility within the assessed 60-minute threshold to a number of locations at differing levels of the settlement hierarchy, including rural centres and city locations, as well as access to a range of services and facilities. The site is therefore reasonably connected and delivers its function as a town typology in the settlement hierarchy.

Key Implications

Northstowe benefits from public transport accessibility to a range of surrounding nearby destinations including north west Cambridge city, beyond that current connectivity is limited. However, this does provide a good basis for improvement that can be delivered through the interventions identified within the GCTS. There is, therefore, good opportunities to strengthen connectivity and broaden the range of destinations accessible by public transport and support more sustainable travel choices as Northstowe continues to build out.

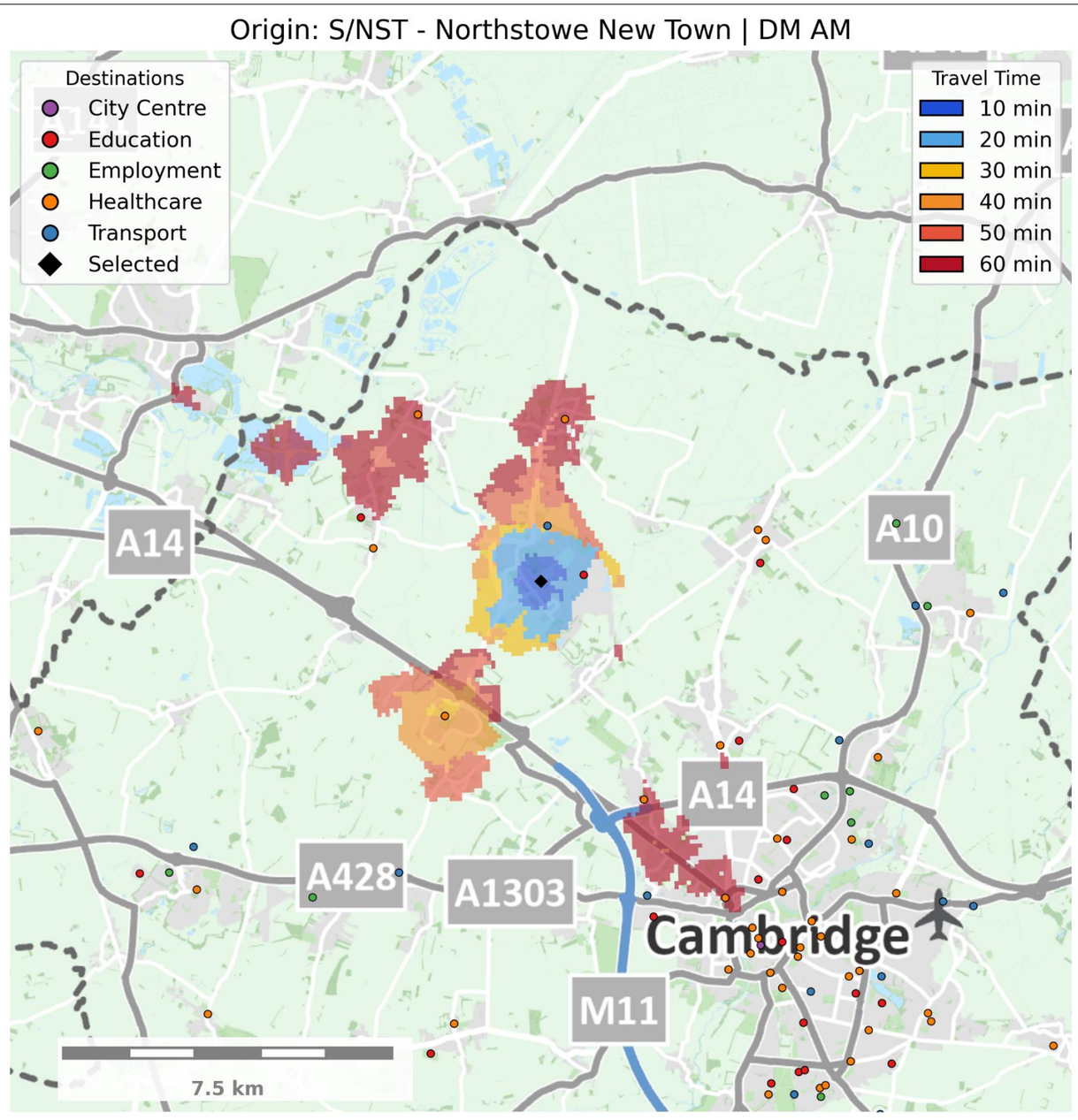


Table 4-11:S/WNT Waterbeach New Town

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

Connectivity from the site is influenced by the assumed opening of the new Waterbeach station and so is shaped by a strong north-south transport corridor, linking the site directly with Cambridge to the south. Accessibility to facilities in north Cambridge are accessible within 30 – 40 minutes with the city centre accessibility within 50 minutes. Away from the primary corridor connectivity becomes more limited and forms a linear and corridor-based pattern.

AM / PM Peak comparison

The AM/PM pattern of connectivity are broadly similar although there is a reduction in connectivity to Cherry Hinton in the PM peak with journey times extending beyond 60 minutes, likely due to variable service availability.

What can be accessed in 60 minutes

Cambridge and its large range of employment, education and healthcare facilities are accessible within 60 minutes. Key transport destinations across the centre of Cambridge are accessible in less than 60 minutes. The site provides access to five major employment locations such as Cambridge Research Park, Cambridge Science and Business Parks and St John's Innovation Centre within 40 minutes. Some minor rural centres such as Milton and adjacent Group Village and infill villages along the corridor are accessible within 60 minutes.

What cannot be accessed (settlement hierarchy)

Away from the linear transport corridor, the wider region is not accessible within 60 minutes. The towns and rural centres to the north west, west, and south are not accessible. Major employment sites near Cambourne, Great Shelford & Stapleford and Sawston are not accessible within the baseline journey time. This reflects limited cross-corridor connectivity.

Interpretation against the settlement hierarchy

Waterbeach New Town is well-positioned within the Greater Cambridge transport network, benefiting from strong public transport connectivity to Cambridge and neighbouring settlements along the A10 and parallel railway corridor. This supports access to a wide range of services, employment opportunities and day-to-day destinations. Connectivity to some employment hubs elsewhere in the area currently requires less direct public transport journeys, reflecting the structure of the existing network. Nevertheless, the site demonstrates a strong relationship with Cambridge and its surrounding communities, providing a sound basis for greater travel choice, with scope for future transport improvements to strengthen accessibility across the wider settlement hierarchy.

Key Implications

The analysis demonstrates that Waterbeach New Town benefits from high-quality corridor-based connectivity, enabling efficient access to Cambridge. However, connectivity is not well-distributed across the wider Greater Cambridge region. Additional orbital connections could improve access to wider settlements and major employment centres along the A428 and A1307 corridors, delivering greater resilience and improving travel choices for residents.

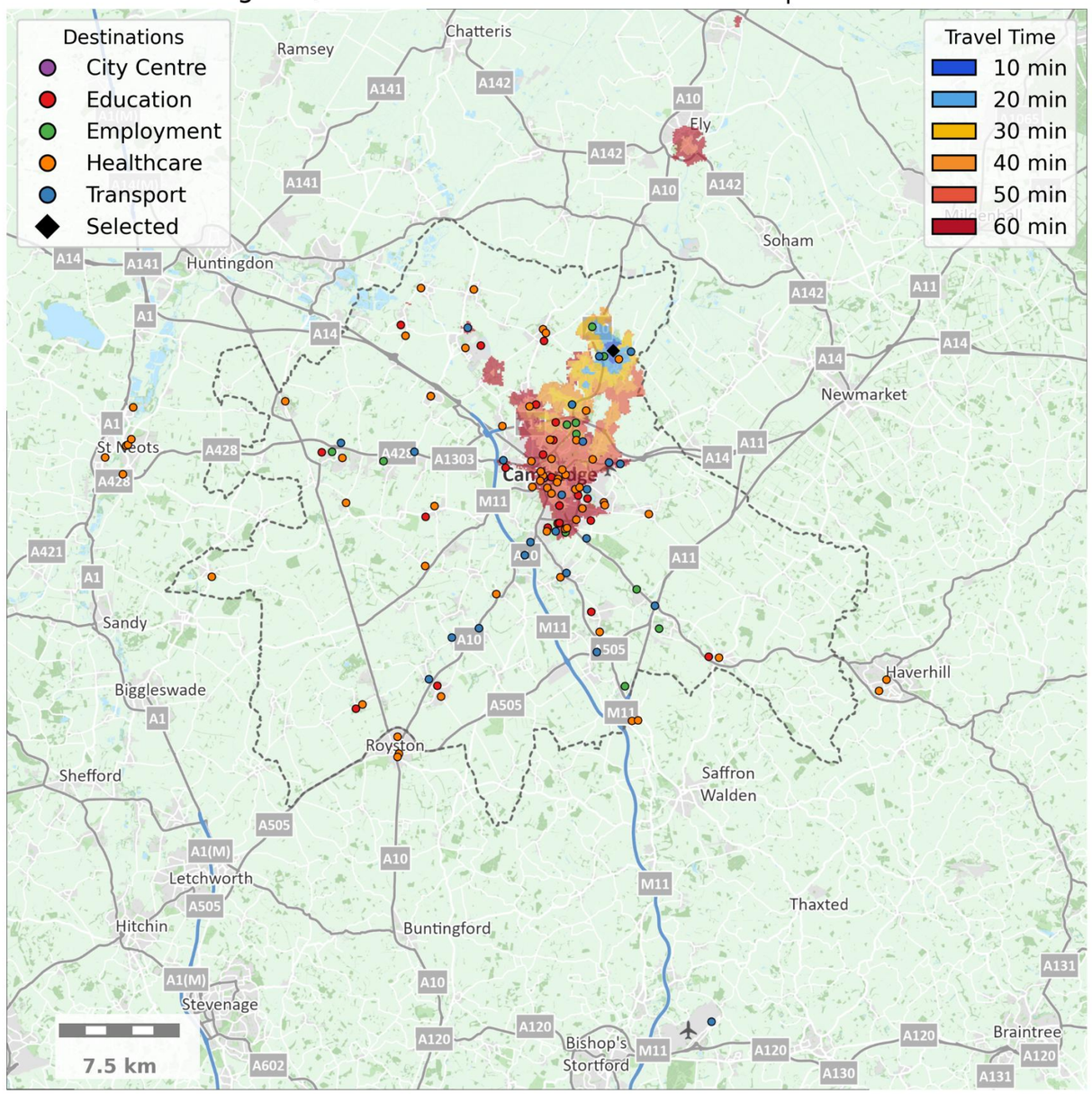


Table 4-12: S/BA Bourn Airfield New Village

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

Bourn Airfield demonstrates a linear spatial pattern between Cambourne and west Cambridge. The pattern follows the A428 corridor with some extension north west to Papworth Everard along the A1198.

AM / PM Peak comparison

There is no material difference between the AM and PM peak.

What can be accessed in 60 minutes

Local facilities and transport interchanges along the A428 corridor can be reached within a 30-minute journey time with Cambridge city centre accessible within 50 minutes. Cambridge railway station is accessible within 60 minutes. The Cambourne Business Park is accessible within 30 minutes and group villages and infill villages adjacent to the A1303 / A428 corridor between Bourn Airfield and Cambridge are accessible.

What cannot be accessed (settlement hierarchy)

Bourn Airfield has very linear connectivity meaning town settlements such as Northstowe and Waterbeach are not accessible within a 60-minute public transport journey time. The major employment destinations located on the A505, A1307 and A10 corridors north of Milton are also not accessible within the 60-minute threshold used in this analysis.

Interpretation against the settlement hierarchy

Bourn Airfield is highly dependent on facilities located along the A428 corridor, and those situated to the west of Cambridge. There is limited accessibility to the wider settlement hierarchy with the exception of a small number of rural centres, minor rural centres or villages that fall within the sphere of the A428, and its public transport services provided by the x5, 4 and 18 services.

Key Implications Bourn Airfield has a strong relationship with the corridor serving west Cambridge and would benefit from any additional measures proposed for that corridor. Away from that corridor Bourn Airfield, access to services in the wider Greater Cambridge area is more limited without investment in, for example, orbital public transport services enhancements.

Origin: S/BA – Bourn Airfield New Village | DM AM

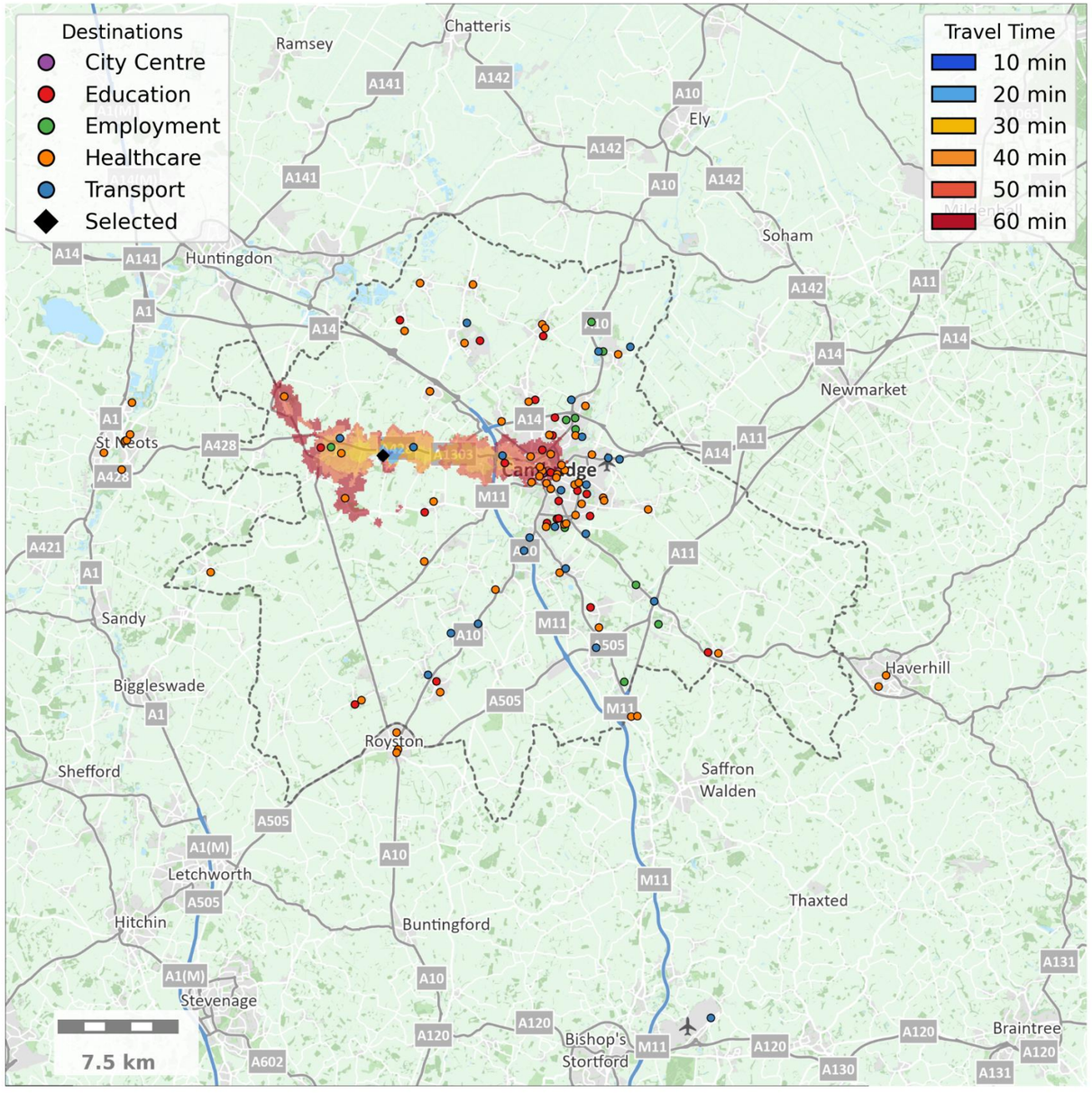


Table 4-13: S/CB: Cambourne

What the map shows

This map represents the AM Do Minimum Peak with analysis provided below outlining what it means for connectivity. The Do Minimum PM Peak has also been analysed and is provided in Appendix C.

Spatial Pattern of Connectivity

Connectivity from Cambourne shows a strongly corridor-based and directional pattern, aligned primarily along the A428 corridor and parallel B1046 corridor towards Cambridge, supported by two public transport routes, bus services 4 and 18.

AM / PM Peak comparison

The AM and PM peak patterns in both the Reference Case and Do Minimum scenarios are broadly similar, indicating that accessibility is constrained by network structure and service provision.

What can be accessed in 60 minutes

Cambridge city centre is accessible within 60 minutes with major employment destinations such as Bourn Quarter accessible within approximately 40 minutes in both the Do Minimum AM and PM peaks.

The minor rural centres of Papworth Everard and Comberton are accessible within 40 and 60 minutes respectively, therefore residents in those areas can access the employment element of the allocation via public transport in the Do Minimum AM and PM peaks.

Cambridge Railway station is accessible within 60 minutes, although the proposed Cambourne Railway station (EWR) would provide rail access within a 20-minute journey time.

What cannot be accessed (settlement hierarchy)

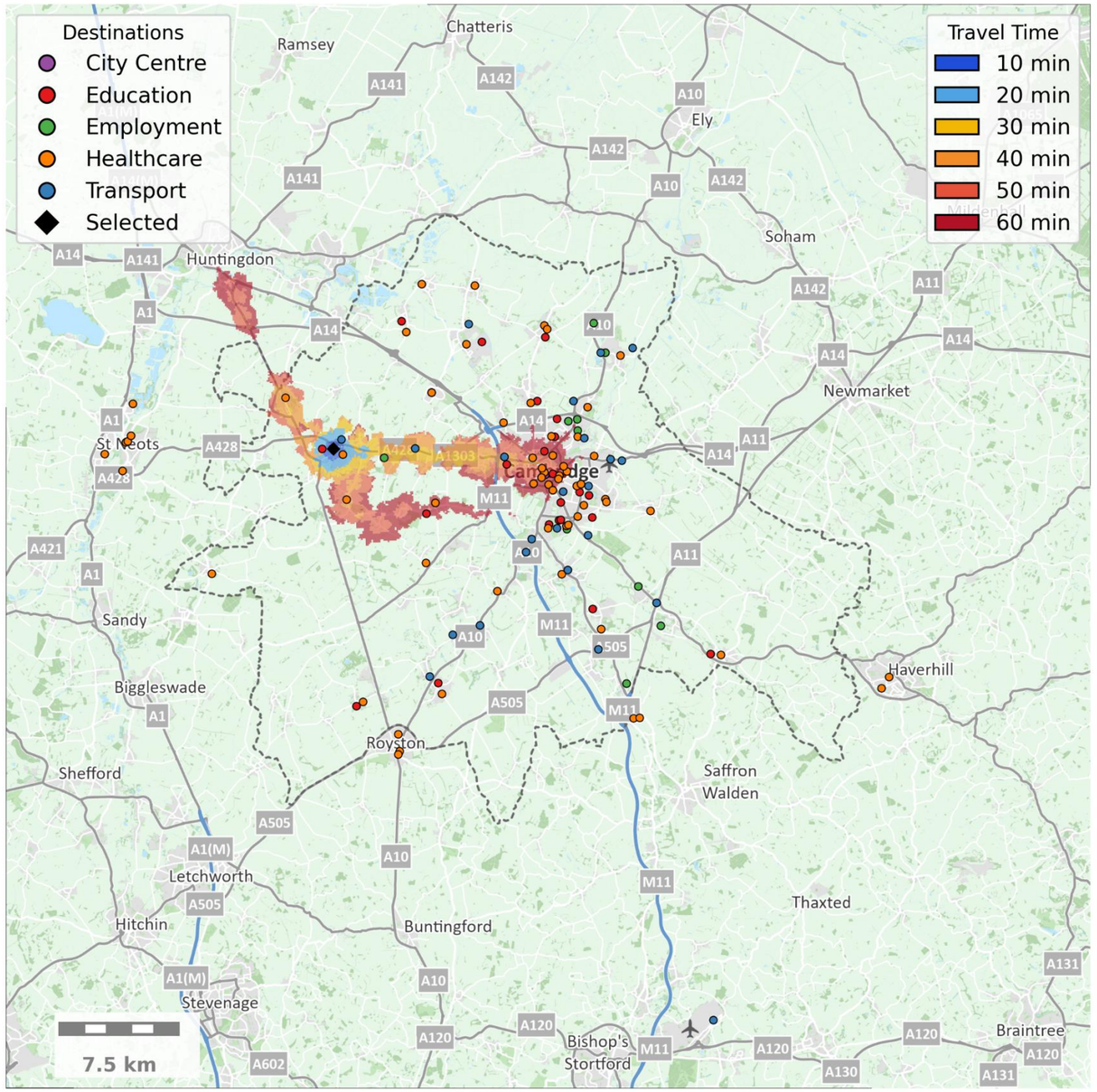
The site does not provide access to towns beyond Cambridge's immediate catchment. Major employment destinations such as the Biomedical Campus, Babraham Research Campus and Wellcome Genome Campus are not accessible within the 60-minute public transport + walk journey time. Public transport trips to the major employment destinations on the A505 and A10 corridors will require interchange in Cambridge.

Interpretation against the settlement hierarchy

Cambourne has a strong relationship with Cambridge as a key destination, with limited access to a broader range of settlements such as Papworth Everard.

Key Implications

Under the Do Minimum conditions, Cambourne has limited accessibility to services that fall beyond the A428 / A1303 corridor to west Cambridge and the minor rural centres and group villages to the north west and south east.



4.3 Destination-based connectivity (education, employment, health, transport)

4.3.1 The STEP tool has also analysed connectivity to key education, employment, and transport destinations within the Greater Cambridge area to assess current performance in the Reference Case, and whether there are any connectivity improvements within the Do Minimum scenario. It is acknowledged that some peripheral locations may look outwards to settlements beyond the Greater Cambridge region.

4.3.2 To help determine the quality of connectivity, targets of what journey time to expect have been identified according to the settlement hierarchy. The targets are set out in **Table 4-14**, with the rationale for their inclusion.

Table 4-14: Destination Connectivity targets

Settlement Type	Destination target (public transport + walk/wheel)	Transport Network Access Target	Rationale
City (Cambridge)	< 30 minutes to multiple employment, education, and healthcare destinations	Within a 5 minute (400m) walk of a bus stop and within 450m of a Tier 1 or 2 Active Travel Route	Reflects urban density, service availability and ambitions set for short journeys in the CPCA LTCP. Public transport connectivity aligns with the GCLP. Active Travel targets align with the Cambridge Active Travel Strategy.
Towns (Cambourne, Northstowe, Waterbeach New Town)	< 45 minutes to at least one major employment centre and one further/sixth-form education destination	Within a 5 minute (400m) walk of a bus stop and within 450m of a Tier 1 or 2 Active Travel Route	These targets align with DfT accessibility evidence and Movement strategies for similar town locations identified in the GCLP and the Cambridge Active Travel Strategy
Major Rural Centres (Histon & Impington, Great Shelford & Stapleford, Sawston, Bourn Airfield)	<60 minutes to at least one major employment centre and one further/sixth-form education destination	Within a 5 minute (400m) walk of a bus stop and within 450m of a Tier 1 or 2 Active Travel Route	The 60-minute envelope aligned to DfT connectivity metrics and accepted rural travel realities as well as aligning with Cambridge Active Travel ambitions.
Minor Rural Centres	<90 minutes to key service facilities (education, healthcare, town centre)	Within a 5 minute (400m) walk of a bus stop and within 450m of a Tier 1 or 2 Active Travel Route	The targets identified reflect the LTCP emphasis on access, and aligns with the Cambridge Active Travel Strategy

Settlement Type	Destination target (public transport + walk/wheel)	Transport Network Access Target	Rationale
Group Villages	Hourly bus service frequency to the nearest town or major rural centre for onwards travel or access to a railway station	Within 450m of a Tier 2 Active Travel Route	Consistent with NPPF recognition of different rural contexts and aligns with the rural context of the Cambridge Active Travel Strategy with Tier 2 routes serving rural locations
Infill Villages	No fixed target, focus on non-car dependency to nearby centres, not direct city access	No fixed transport network access target.	Policy acknowledges limitations; risk-based rather than target-based approach.

4.3.3 The destinations identified for the STEP analysis are provided in **Table 4-15**, with the analysis focussing on Education, Employment, Healthcare and Transport destinations. The full list of Health Care destinations is provided in **Appendix D**

Table 4-15: List of Destinations

Education	Employment	Health Care	Transport
E1 - Impington Village College	M1 - Cambourne Business Park	GP Surgeries (refer to Appendix D for the full list of locations)	A1 - London Stansted Airport
E2 - Sawston Village College	M2 - St John's Innovation Centre	Addenbrooke's Hospital / Royal Papworth Hospital	R1 - Cambridge Railway Station
E3 - Comberton Village College	M3 - Cambridge Science Park		R2 - Cambridge North Railway Station
E4 - Swavesey Village College	M4 - Cambridge Business Park		R3 - Waterbeach Railway Station (proposed)
E5 - Cambourne Village College	M5 - Biomedical Campus		R4 - Cambridge South Railway Station
E6 - Cottenham Village College	M6 - Cambridge Innovation Park		R5 - Foxton Railway Station
E7 - Bassingbourn Village College	M7 - -Cambridge Research Park		R6 - Shepreth Railway Station

Education	Employment	Health Care	Transport
E8 – Melbourn Village College	M8 -- Granta Park		R7 - Meldreth Railway Station
E9 - Linton Village College	M9 - Babraham Research Campus		R8 - Shelford Railway Station
E10 - Northstowe Secondary College	M10 - Wellcome Genome Campus		R9 - Whittlesford Parkway Railway Station
E11 - West Cambridge	M11 - Bourn Quarter		R11 - Cambridge East Railway Station
E12 - Hills Road Sixth Form College			R12 - Cambourne North Railway Station
E13 - Long Road Sixth Form College			T1 - Newmarket Road Travel Hub
E14 - Cambridge Regional College			T2 - Cambridge South West Travel Hub
E15 - Cambridge Academy for Science and Technology			T3 - A11 Travel Hub
E16 - Chesterton Community College			T4 - Waterbeach Travel Hub
E17 - Coleridge Community College			T5 - Scotland Farm Travel Hub
E18 - Netherhall School			T6 - Longstanton P&R
E19- - North Cambridge Academy			T7 - Milton P&R (existing)
E20 - Parkside Community College			T8 - Newmarket Road P&R (existing)
E21 - St Bede's School			T9 - Trumpington P&R (existing)
E22 - Trumpington Community College			T10 - Babraham P&R (existing)
			T11 - Madingley Road P&R (existing)

4.3.4 **Tables 4-16 to 4-19** provide a summary of the outputs for each land use classification type.

Table 4-16: Education Destinations

What the map shows

The map shows 60-minute public transport + walk journey time to education destinations in the Greater Cambridge region in the AM peak Do Minimum scenario. PM peak analysis is available in Appendix E

Spatial Pattern of Connectivity

The spatial pattern of connectivity is strongly radial, with the highest levels of accessibility centred on Cambridge and extending outward along main transport corridors served by bus and rail. Within Cambridge, overlapping isochrones create a cohesive area where multiple education destinations are accessible within relatively short travel times. Beyond the urban core, accessibility becomes increasingly corridor-based, reflecting bus and rail routes. Away from these corridors, particularly in more rural areas, accessibility is fragmented and discontinuous, with large areas only reachable within 50–60 minutes or not at all within the defined threshold.

AM / PM Peak comparison

The AM and PM peak maps show similar spatial patterns, with Cambridge as the main hub. AM peak accessibility being broader and more continuous along radial corridors, indicating better inbound services. The PM peak sees reduced and fragmented access, especially at the edges, with more areas in the 50–60-minute travel range, suggesting return trips are less efficient due to fewer services or longer transfers.

What can be accessed in 60 minutes

Within 60 minutes Cambridge and its immediate hinterland benefit from access to a wide range of education destinations. In terms of the settlement hierarchy, the three town settlements and rural centres of Histon & Impington, Bourn Airfield and Great Shelford & Stapleford located along radial routes can access education destinations within a 30 – 50-minute journey time. A good proportion of minor rural centres also have access to at least one education destination.

What cannot be accessed (settlement hierarchy)

Lower tier settlements at the edge of the study area or within more sparsely served rural hinterlands often fall outside the effective 60-minute catchment for Cambridge-based destinations, highlighting gaps in network coverage and service provision. This is particularly noticeable with the minor rural centre of Gamlingay and the infill villages between there and the Cambridge city extent, which cannot access educational facilities within 60 minutes.

Interpretation against the settlement hierarchy

Accessibility reflects the settlement hierarchy: Cambridge offers the most options, with larger secondary settlements providing moderate access and local amenities, often shaped by their location on key corridors. Smaller villages and rural areas have more limited accessibility to education facilities and rely on higher-order centres.

Key Implications the emerging Local Plan.

The analysis underscores the need to focus growth where public transport is most accessible, especially in Cambridge and along radial corridors with reasonable travel times to education. Variations between AM and PM accessibility highlight the importance of consistent service to support greater travel choice.

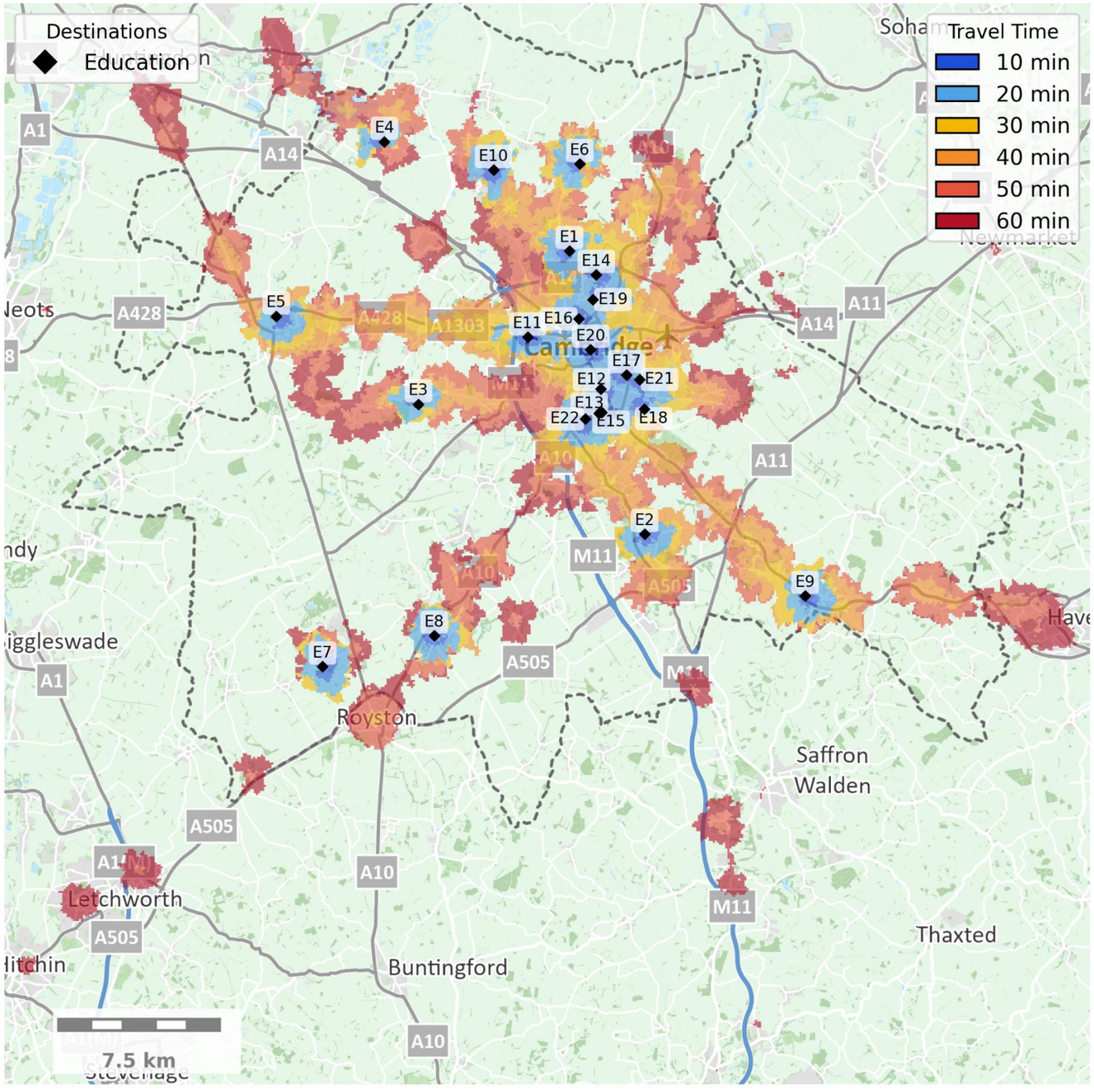


Table 4-17: Employment Destinations

What the map shows

The map shows 60-minute public transport + walk journey time to major employment destinations in the Greater Cambridge region in the AM peak Do Minimum scenario. PM peak analysis is available in Appendix E

Spatial Pattern of Connectivity

The spatial pattern of connectivity to major employment sites is strongly influenced by the key arterial corridors serving the area. A range of public transport services operating along routes such as the A1301, A1307, A428 and A10 provide connections towards employment sites across Greater Cambridge. This creates a corridor-based pattern of accessibility, with stronger connectivity to employment opportunities located along or close to these principal routes, rather than accessibility being focused solely on Cambridge city centre.

AM / PM Peak comparison

Accessibility is consistently strong across both peak periods, particularly from Cambridge and along key employment corridors. While the PM peak experiences some reduction in accessibility at peripheral locations, overall connectivity remains robust across the network.

What can be accessed in 60 minutes

The major employment sites located adjacent to key arterial corridors such as the A1301, A1307, A10 and A428 are accessible within 30 to 40 minutes of Cambridge.

What cannot be accessed (settlement hierarchy

Lower tier settlements like Gamlingay, Bassingbourn, Bar Hill, and nearby villages have limited access to many employment destinations within 60 minutes. Peripheral and rural areas are less well connected, limiting job choices. Areas lacking direct links to main corridors face clear gaps in accessibility.

Interpretation against the settlement hierarchy

Accessibility patterns follow the settlement hierarchy: Cambridge is the main employment centre with the best opportunities. Secondary settlements along major routes benefit from strong connections. Accessibility depends on both settlement size and closeness to job hubs, small settlements near major sites can do better than expected, while isolated ones face challenges.

Key Implications for the emerging Local Plan.

The analysis supports the ambitions of the Greater Cambridge Transport Strategy by demonstrating the importance of a connected and integrated transport network that provides access to a diverse range of employment, education and service destinations. Whilst Cambridge remains a key focus for many journeys, the increasingly distributed pattern of growth across Greater Cambridge highlights opportunities to strengthen connections between settlements and strategic employment locations. Continued investment in public transport, active travel and network connectivity would further enhance accessibility and increase travel choice.

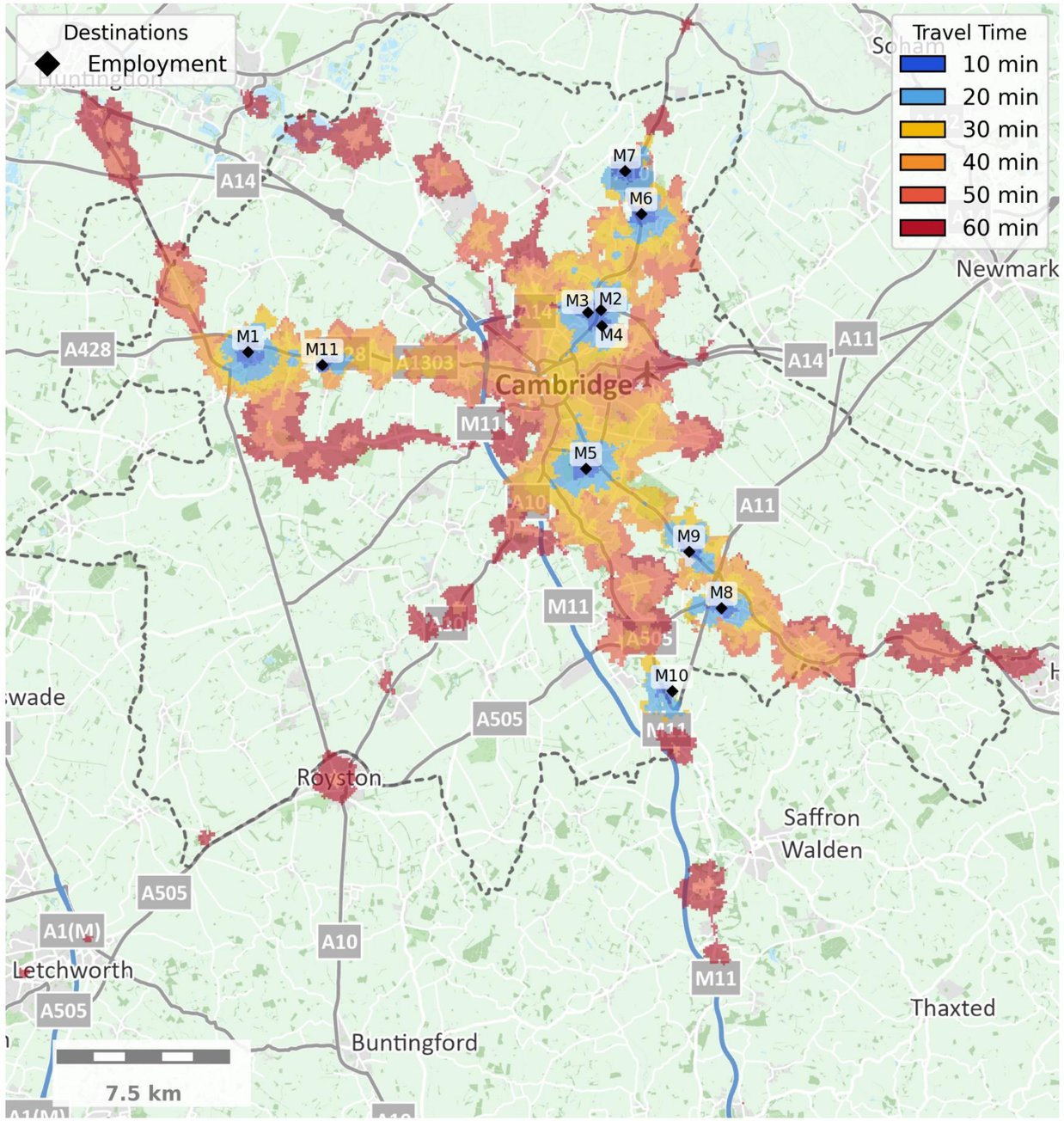


Table 4-18: Health Destinations

What the map shows

The map shows 60-minute journey time to major healthcare destinations in the Greater Cambridge region in the AM peak Do Minimum scenario. PM peak analysis is available in Appendix E.

Spatial Pattern of Connectivity

Connectivity reflects a relatively dispersed pattern of provision, with strong accessibility across Cambridge and its immediate hinterland, where multiple healthcare sites combine to create a continuous area of good access. Beyond this, accessibility is characterised by a network of smaller, distinct catchments associated with local healthcare facilities in towns and larger villages. Radial corridors remain important in linking these locations, but overall coverage is evenly distributed with fewer large gaps, albeit still with weaker connectivity in more remote rural areas.

AM / PM Peak comparison

AM and PM accessibility patterns are similar, covering Cambridge and key corridors. The AM peak offers slightly more continuous access between clusters, while the PM peak shows minor fragmentation and broader outer travel times. Overall, differences are modest, so healthcare accessibility is less affected by peak period service changes, though peripheral areas see some reduced efficiency in the PM.

What can be accessed in 60 minutes

Within 60 minutes, most of Cambridge and its surrounding settlements can access a range of healthcare facilities, including both central and local provision. The dispersed nature of healthcare sites ensures that many settlements, particularly larger villages, and service centres, are within 20–40 minutes of at least one facility. Access to the full range of services typically requires travel to Cambridge, but the presence of multiple local sites provides a reasonable level of baseline accessibility across the area.

What cannot be accessed (settlement hierarchy

Lower-tier and more remote rural settlements often lack access to the full range of healthcare services within 60 minutes, particularly higher-order or specialised facilities concentrated in Cambridge. While many such locations can access a nearby primary care facility, connectivity to larger healthcare hubs is more constrained, particularly where services are indirect or infrequent. Gaps remain in areas located away from the main transport corridors, where travel times extend towards or beyond the 60-minute threshold.

Interpretation against the settlement hierarchy

Healthcare accessibility generally follows the settlement hierarchy but is more evenly distributed than employment or education. Cambridge is central for advanced services, while secondary settlements and larger villages offer local facilities, ensuring even smaller places have basic access. Specialised care still depends on major centres, so connectivity depends on both service distribution and hierarchy—not just settlement size.

Key Implications for the emerging local plan.

The analysis indicates that healthcare accessibility is comparatively well distributed, supporting the role of a wider range of settlements in accommodating growth. However, access to higher-order healthcare remains centred on Cambridge, reinforcing the importance of good connectivity to the city. Maintaining consistent accessibility across peak periods will also be important to ensure equitable access for all users.

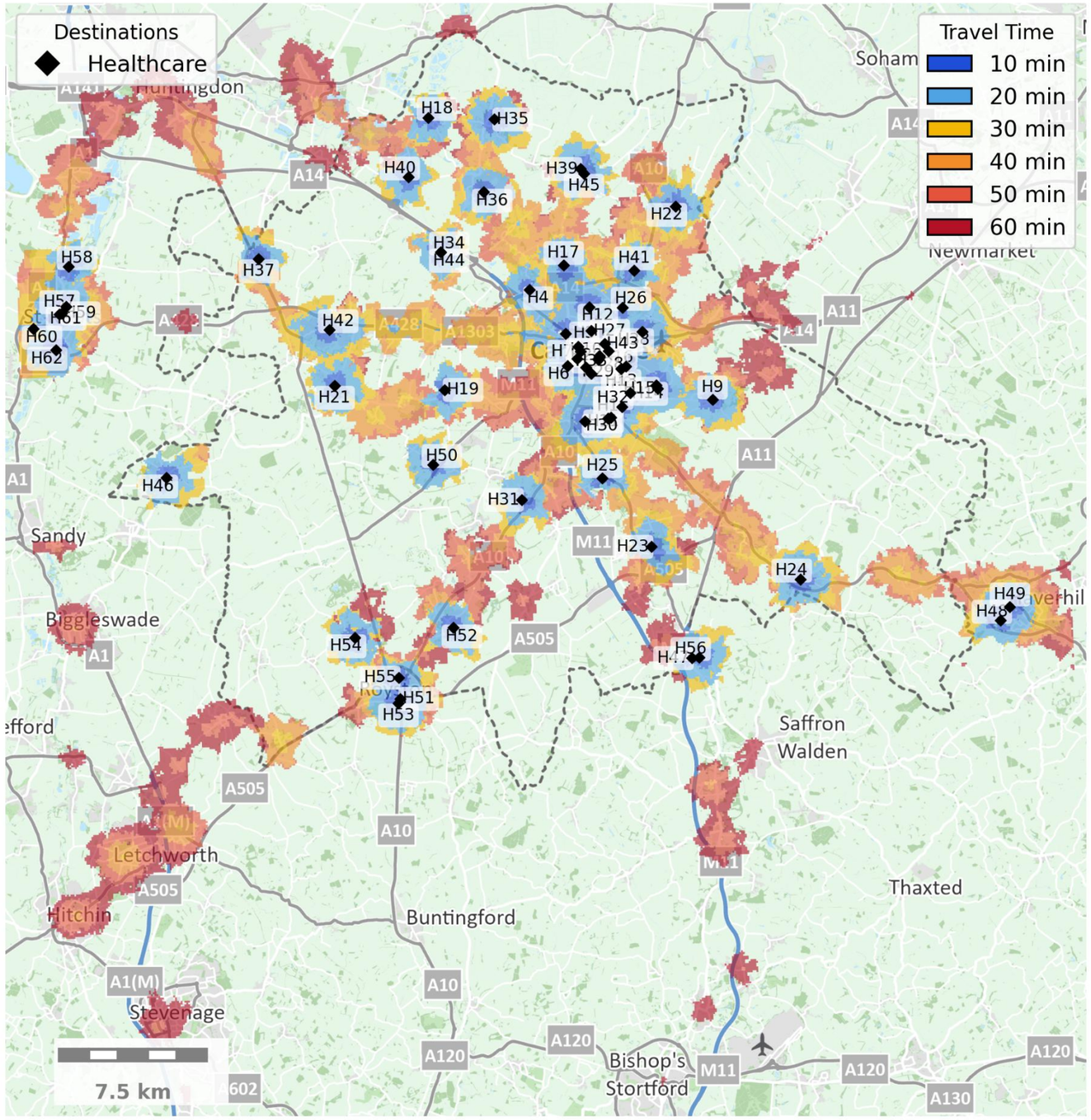


Table 4-19: Transport Destinations

What the map shows

The map adajcent illustrates the areas that can reach key transport destinations wihtin a 60-minute public transport + walk journey time. The analysis has reviewed the Reference case and Do Minimum scenarios in the AM/PM peak. Full outputs are available in Appendix E.

Spatial pattern of connectivity:

Accessibility to transport destinations is concentrated around Cambridge and its surrounding transport hubs, where a dense cluster of rail stations, bus interchanges and strategic corridors provide connectivity within 10 – 30 minutes. Beyond the Cambridge area, accessibility becomes more fragmented and corridor-based, with pockets of improved connectivity around individual rail stations and bus corridors, but shows a more limited network coverage overall.

AM and PM peak comparison:

In the Do Minimum scenarios, the AM and PM peak travel patterns remain largely consistent, with only marginal adjustments to the extent of the 30–60-minute travel time bands during the PM peak.

What can be accessed within 60 minutes:

Within a 60-minute journey, the majority of locations in and around Cambridge are able to access a variety of key transport destinations. These include multiple rail stations and strategic public transport hubs, high-frequency bus corridors, and interchange locations, as well as a wide range of onward travel opportunities that support access to employment and services across the region. This results in a relatively dense and interconnected network of transport options within the Cambridge urban area and its immediate rural and minor rural centres.

What cannot be accessed:

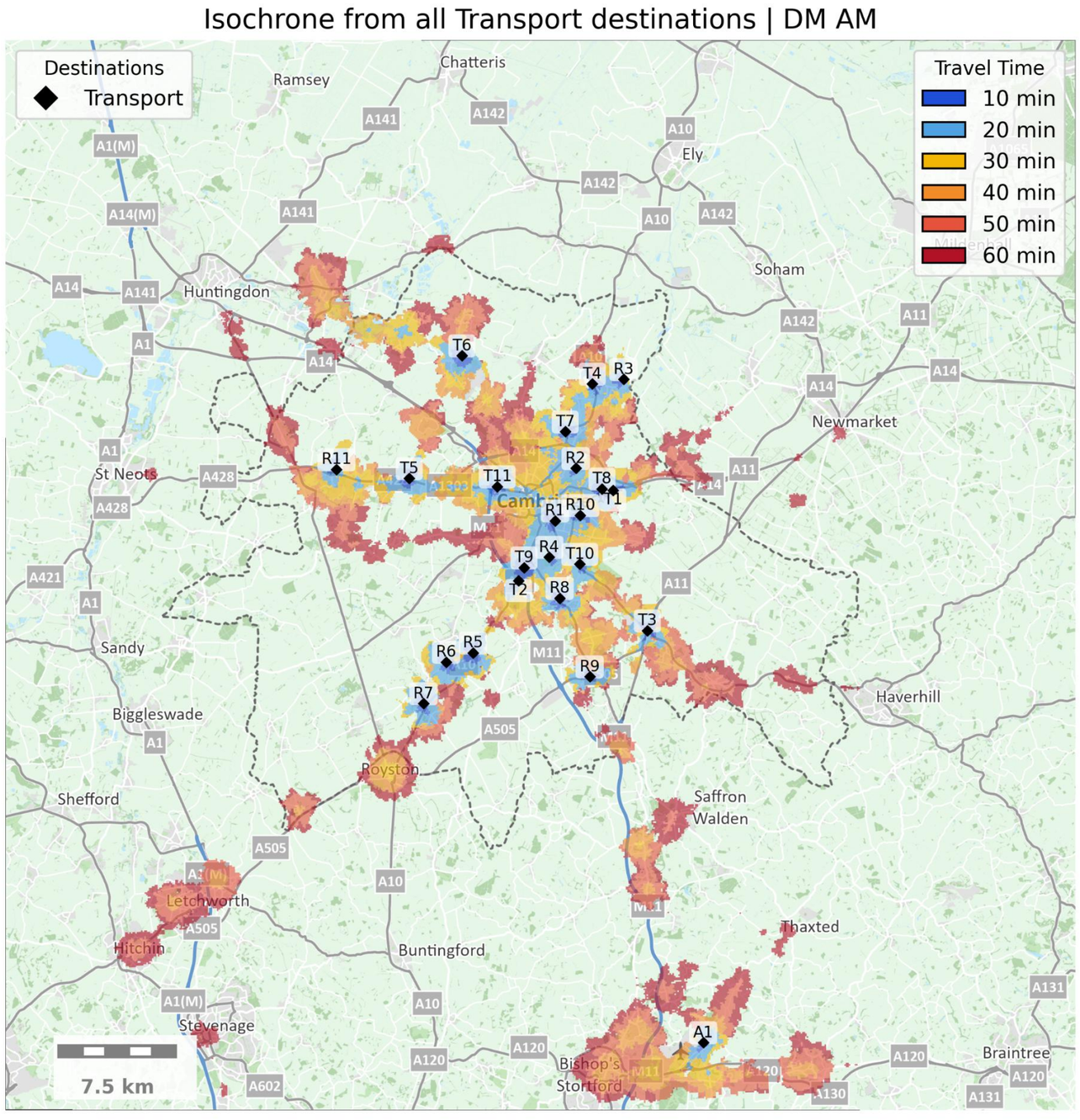
However, there are areas where access to key transport destinations remains limited. Notably, the minor rural centres of Gamlingay, Bassingbourn, and the northern extents of Cottenham do not have an accessible transport destination within 60 minutes. This highlights disparities in connectivity, particularly for settlements located beyond the principal radial routes, and underscores the need to consider targeted interventions to improve accessibility in these peripheral areas.

Interpretation in terms of the Settlement Hierarchy:

The analysis of connectivity in relation to the settlement hierarchy reveals distinct differences across settlement types. City and town locations demonstrate particularly strong access to multiple transport nodes, with travel times to key destinations typically ranging between 10 and 30 minutes. In contrast, rural centres situated across the wider Greater Cambridge area generally maintain connectivity to transport destinations within a 60-minute journey. However, minor rural centres and group or infill villages exhibit more limited access, relying primarily on radial corridors, and in some cases, a small number of these rural centres have no direct access to transport destinations at all. This variation highlights the importance of location within the settlement hierarchy in determining the level of transport connectivity available to residents.

Key implications for the emerging Local Plan

Overall, the analysis highlights the strong accessibility offered by locations connected to high-quality transport corridors, particularly around Cambridge and its surrounding settlements. As the transport network continues to evolve, further enhancements to infrastructure and services could broaden travel choice, improve connectivity to a wider range of destinations and support growth across the region.



4.4 Cross-site comparison

4.4.1 The STEP analysis demonstrates clear and consistent differences in connectivity performance across the strategic sites, reflecting location, proximity to Cambridge, and access to high-quality public transport infrastructure. Connectivity outcomes cluster into three broad groups: strongly connected urban and rail-served sites, moderately connected corridor-based sites, and poorly connected peripheral locations. Across the study area, committed Do Minimum schemes generally result in limited or marginal improvements, with benefits concentrated on a small number of already well-connected locations.

Sites with Strong Connectivity

4.4.2 Sites located within or closely integrated with the Cambridge urban area, or directly served by railway stations, consistently perform best across all destination types.

- Cambridge Rail Station, Cambridge North Station, and Cambridge South Station

  - Demonstrate very strong connectivity, with city centre facilities, employment, education, healthcare, and transport interchanges accessible within 10–30 minutes.
  - Provide extensive sub-regional reach within 40–60 minutes via public transport services that utilise the A10, A11, A428, A1301 and A1307 corridors.
  - Minor journey time benefits are observed in the Do Minimum scenarios, particularly to the north and west of Cambridge, though overall performance is already high.

- Cambridge Biomedical Campus and West Cambridge (Eddington)

  - Shows very good connectivity to Cambridge and key local facilities within 20–30 minutes.
  - Benefit from strong access to education, healthcare, and employment, with wider connectivity along principal corridors typically within 50–60 minutes.
  - Do Minimum interventions provide limited additional benefit, indicating that performance is already primarily driven by proximity and existing infrastructure.

4.4.3 These sites represent the benchmark for ‘good connectivity,’ combining short journey times, wide destination choice, and a choice of modes.

Sites with Moderate or Corridor-based Connectivity

4.4.4 A second group of sites demonstrates reasonable but constrained connectivity, typically focused along one or two key corridors and reliant on longer journey times.

- Bourn Airfield, Grange Farm, Cambridge East, and Cambridge Science Park

  - Generally these achieve access to Cambridge, employment, and education within 40–60 minutes, often concentrated along corridors such as the A428, A1307 or existing and committed public transport.
  - Connectivity beyond these corridors is limited, with persistent gaps to southern and eastern parts of the city.
  - Do Minimum scenarios deliver selective improvements (e.g. along the A428)

- Cambourne and Cambourne North

  - Connectivity is highly focused on the A428 corridor, with access to Cambridge typically at the upper end of the 60-minute threshold.

- Very limited access to destinations along the A10, A505 and A1307 corridors.
  - Babraham Research Campus
- Strong corridor-based connectivity along the A1307, with good access to Cambridge and Haverhill, although the route runs close to but not 'through' the site.
- Connectivity remains constrained outside this corridor, with no access within 60 minutes to large parts of north and west Cambridge.

4.4.5 These sites are potentially viable in connectivity terms but would require targeted, corridor-focused transport interventions to achieve parity with the urban Cambridge benchmarks.

Sites with Currently Poor or Very Limited Connectivity

4.4.6 Sites such as Wellcome Genome Campus demonstrate a more focused pattern of accessibility, with connectivity concentrated on particular destinations or transport corridors rather than across the full Greater Cambridge network.

- Accessibility to key destinations varies by location, with some destinations and employment hubs currently requiring longer public transport journeys or interchange.
- Connectivity is often strongest to nearby settlements and established transport corridors, reflecting the structure of the existing public transport network.
- Similar patterns are evident in both the AM and PM peaks, indicating a generally consistent level of accessibility throughout the day.

4.4.7 The analysis highlights opportunities to further strengthen connectivity through enhancements to public transport infrastructure and services, including improved local access to public transport, rapid transit connections and strategic rail investment where appropriate. Such interventions could broaden travel choice, improve access to employment and services, and support the continued integration of these locations within the Greater Cambridge network.

4.4.8 The following cross-site messages can be distilled from the STEP analysis:

- Proximity to Cambridge and rail access are key drivers of connectivity performance.
- The Do Minimum schemes provide an important foundation, reinforcing existing connectivity patterns and delivering targeted improvements at a number of sites.
- Corridor-based improvement enhance accessibility to key destinations, with opportunities for the wider GCTS package to broaden connectivity beyond the principal routes.
- For sites with a more focused connectivity profile, complementary investment in public transport, walking and cycling can further expand travel choice and strengthen integration with the wider network.

5 Summary of STEP Reference Case and Do Minimum

5.1 Summary of key findings

5.1.1 The connectivity baseline evidence provides a robust and transparent evidence base for understanding how different locations are connected to employment, services and key destinations across Greater Cambridge. This helps inform spatial planning and transport investment decisions by demonstrating how accessibility varies across the area and where opportunities exist to further enhance travel choice in support of growth objectives.

5.1.2 The connectivity analysis demonstrates a clear and consistent relationship between spatial location, transport infrastructure provision, and the ability of sites to support travel choice. Sites embedded within, or immediately adjacent to, the Cambridge urban area, particularly those served by existing or committed rail infrastructure, exhibit the strongest levels of connectivity across all strategic sites and destination types in both peak periods. These locations consistently enable access to employment, education, healthcare, and transport interchanges within short to moderate journey times and offer multiple viable travel options.

5.1.3 Sites located further from Cambridge often display a different accessibility profile, with connectivity tending to be focused on specific corridors, destinations or travel hubs. While journey times to some destinations can be longer and accessibility may be more variable across the network, many of these locations maintain strong links to nearby settlements and strategic routes, reflecting the structure of the existing transport network. The analysis also indicates that committed Do Minimum transport schemes generally reinforce and enhance existing connectivity patterns rather than fundamentally changing them. Where benefits are observed, these typically manifest as improved journey times, expanded catchments or greater accessibility to key destinations. This highlights the continued importance of high-quality public transport infrastructure and network connectivity in shaping accessibility outcomes across Greater Cambridge. Taken together, the evidence highlights the varying accessibility characteristics of strategic sites across Greater Cambridge and demonstrates how transport connectivity can influence travel choices and access to opportunities. The findings identify locations that already benefit from strong connectivity, alongside areas where future investment in transport infrastructure and services could further enhance accessibility, broaden travel choice and support the longer-term objectives of the Greater Cambridge Transport Strategy.

5.2 Limitations of baseline analysis

5.2.1 The analysis presented represents a baseline, accessibility-focused assessment rather than a forecast of future travel behaviour. While the DfT Connectivity Tool and STEP provide robust, policy-aligned insights into relative accessibility, they do not model congestion, demand responses, capacity constraints, or route choice in the manner of a conventional transport model. As such, the results should be interpreted as an indication of opportunity and potential, rather than predicted trip-making.

5.2.2 The STEP analysis is dependent on GTFS and OpenStreetMap data, which may under-represent pedestrian and cycling routes in some rural or semi-rural areas and can influence accessibility outputs in locations with limited mapped infrastructure. In addition, assumptions regarding service frequencies and operational characteristics of committed schemes necessarily introduce uncertainty, particularly where scheme designs are still emerging.

5.2.3 Finally, the analysis focuses on journey time thresholds and destination reach rather than quality of journey, affordability, or user experience, which will also play a critical role in shaping real-world travel choices. These factors will need to be considered through subsequent stages of the strategy development process.

5.3 Next Steps

5.3.1 The approach adopted in this report supports examination by demonstrating that connectivity has been treated as a primary consideration in site selection and phasing, rather than a secondary issue addressed solely through mitigation. By linking development locations directly to measurable accessibility outcomes, the evidence underpins soundness.

5.3.2 The Baseline Connectivity analysis of the Reference Case and Do Minimum scenarios provides a strong basis to identify well connected strategic sites with committed schemes.

5.3.3 The next step is to test the GCTS, known as the Do Something scenario, to see how strategy and its interventions impact on connectivity performance and whether targets relating to the settlement hierarchy can be achieved, or whether furthermore targeted interventions are required.

5.3.4 **Section 6** below explores the Do Something scenario and its impacts on site connectivity.

6 STEP – Do Something Scenario (Strategic Site Allocations)

6.1 Developing the Do Something Scenario

6.1.1 This section presents an assessment of the Do Something (DS) scenario, building on the baseline Do Minimum (DM) scenario presented in Section 4. The Do Something (DS) scenario utilises STEP to test a comprehensive package of transport interventions across Greater Cambridge. The DS scenario reflects the strategic direction of the Greater Cambridge Transport Strategy (GCTS) incorporating a range of public transport, active travel, and network management measures intended to enhance connectivity, provide improved travel choices and support planned growth.

6.1.2 The DS scenario includes a combination of committed schemes, emerging Local Plan-aligned interventions and additional strategic schemes identified through the GCTS process. These interventions collectively seek to improve access to key employment, education, healthcare, and transport destinations, consistent with the objectives and settlement hierarchy set out in Section 4.

6.1.3 The principal components of the DS scenario include:

- Strategic rail enhancements, including East West Rail and increased rail service frequency and capacity improvements.
- Mass Rapid Transit (MRT) and segregated public transport corridors, including interventions in the CSET 'extended corridor' including potential extensions, and potential future extensions towards longer-distance destinations such as Haverhill.
- Orbital and cross-city public transport improvements, aimed at addressing the radial structure of the network and improving connectivity between major growth locations and employment areas without necessarily having to interchange in Cambridge city centre.
- Enhanced interchange and mobility hubs, and bus priority, including travel hubs at key strategic locations such as the A11/A1307 corridor and Cambridge South West, designed to improve integration between modes and support first and last mile connectivity.

6.1.4 The DS scenario also includes complementary measures intended to encourage and broaden travel choice. These measures have not been coded within the STEP assessment because of their precise routes, locations or operational characteristics are not yet sufficiently defined, or because their benefits primarily relate to service quality, reliability, capacity, user experience and travel behaviour rather than changes in modelled journey times. Their exclusion therefore reflects the scope and functionality of the assessment rather than their anticipated contribution to the GCTS. The STEP analysis results should consequently be regarded as a conservative assessment of the Strategy's overall potential benefits, as they do not capture the additional benefits that may arise from:

- Active travel and LCWIP-based improvements, including Greenways and local connectivity measures to support short-distance trips and improve access to services and public transport.
- Complementary measures, including bus franchising, electrification of the bus fleet, bus and micro mobility measures and wider network management interventions, all intended to improve reliability, capacity, and overall network efficiency.

6.1.5 Together, these interventions represent a multi-modal and corridor-led approach to improving connectivity, with a particular focus on strengthening radial links into Cambridge, enhancing orbital connectivity between key growth areas, and improving access to transport interchanges and major destinations. The STEP analysis presented in this section assesses the extent to which this package of interventions enhances accessibility across the study area relative to the Do Minimum scenario, and the degree to which it supports alignment with the destination connectivity targets defined in **Table 4-14**.

6.2 Do Something Scenario – Quantifiable Benefits

6.2.1 This section summarises the accessibility and connectivity performance of each strategic site across the four tested scenarios: the Reference Case, Do Minimum, Do Something and Do Something + East West Rail.

6.2.2 The assessment considers access to key employment, transport, education and health destinations, enabling an understanding of how connectivity changes as successive interventions are introduced, with the number of destinations falling within the 60-minute catchment band for each destination type shown.

6.2.3 The summary tables present the relative improvements achieved compared with the Reference Case. The accompanying commentary identifies the sites that experience greatest connectivity benefits, the contribution of the GCTS, and the additional step-change in accessibility facilitated by the introduction of East West Rail. A connectivity matrix used to inform the tables below is available in **Appendix I**.

6.2.4 **Table 6-1** summarises the number of employment locations accessible from each strategic site under each scenario. Where accessibility increases, the figure in the brackets indicates the additional employment locations accessible compared with the preceding scenario.

Table 6-1: Employment Connectivity Benefits

Strategic Site	Reference Case	Do Minimum	Do Something	Do Something + EWR	Max Change Vs Reference Case
S/ED – Eddington (North West Cambridge)	6	6 (0)	8 (+2)	8 (0)	**+2**
S/CE – Cambridge East	2	2 (0)	2 (0)	2 (0)	**0**
S/BRC – Babraham Research Campus	3	3 (0)	7 (+4)	7 (0)	**+4**
S/CBC – Cambridge Biomedical Campus	6	6 (0)	6 (0)	7 (+1)	**+1**
S/GF – Land adjacent to A11 and A1307 at Grange Farm	3	3 (0)	4 (+1)	4 (0)	**+1**
S/SHF – Land north of A1307, Bar Hill (Slate Hall Farm)	0	0 (0)	4 (+4)	4 (0)	**+4**
S/CBN – Cambourne North	2	2 (0)	2 (0)	4 (+2)	**+2**
S/CB – Cambourne	2	2 (0)	3 (+1)	5 (+2)	**+3**
S/NST – Northstowe New Town	0	0 (0)	3 (+3)	3 (0)	**+3**
S/BA – Bourn Airfield New Village	2	2 (0)	2 (0)	2 (0)	**0**
S/WNT – Waterbeach New Town	6	6 (0)	6 (0)	6 (0)	**0**
S/WGC – Wellcome Genome Campus, Hinxton	1	1 (0)	4 (+3)	4 (0)	**+3**

6.2.5 The outputs shown in **Table 6-1** demonstrate that the GCTS increases access to employment destinations for a number of the emerging strategic sites, with the greatest benefits generally arising under the Do Something scenario and further enhancements delivered by Do Something + EWR at selected locations. Overall, the results indicate that the Strategy broadens employment choice across the study area, increasing the number of major employment destinations that can be reached within the assessment threshold and helping to connect future residents to a wider range of jobs and economic opportunities.

6.2.6 The Reference Case already provides relatively strong employment connectivity for sites located close to Cambridge's principal employment clusters, including Eddington (6 destinations), Cambridge Biomedical Campus (6) and Waterbeach New Town (6). In contrast, more peripheral locations such as Northstowe New Town and Slate Hall Farm have access to few or no employment destinations in the Reference Case, highlighting existing disparities in employment accessibility.

6.2.7 The Do Minimum scenario delivers only limited improvements, with a notable increase observed at North East Cambridge, where the number of accessible employment destinations increases from five to six. For most strategic sites, accessibility remains unchanged, indicating that committed transport interventions alone have a relatively modest influence on employment connectivity.

6.2.8 More substantial gains are realised under the Do Something scenario. The largest increases are recorded at Babraham Research Campus (+4 additional destinations compared with the Do Minimum) and Slate Hall Farm (+4). Significant improvements are also observed at Northstowe New Town (+3), Wellcome Genome Campus (+3) and Haverhill (+2). These results suggest that the GCTS package of interventions plays an important role in expanding labour market access for residents of existing and proposed communities, particularly for those locations that are comparatively less connected in the Reference Case.

6.2.9 The introduction of EWR provides a further uplift for a smaller number of sites, most notably Cambourne North, where accessible employment destinations increase from two to four, and Cambourne, where the total rises from three to five. Additional benefits are also realised at Cambridge Biomedical Campus. This demonstrates that EWR complements the wider GCTS measures by extending access to employment opportunities beyond those delivered through the Do Something package alone.

6.2.10 In overall terms, the largest improvements relative to the Reference Case are observed at Babraham Research Campus and Slate Hall Farm (all +4 destinations), followed by Cambourne, Northstowe New Town and Wellcome Genome Campus (all +3 destinations). While some sites show little or no change due to already strong baseline accessibility or their spatial relationship to major employment centres, the results indicate that the GCTS delivers a meaningful enhancement in employment connectivity across the emerging strategic sites. By increasing the range of accessible employment destinations, the Strategy supports greater employment choice, strengthens access to key economic clusters, and helps ensure that future growth locations are better connected to jobs across Greater Cambridge.

6.2.11 **Table 6-2** summarises the number of major transport hubs accessible from each strategic site under each scenario. Where accessibility increases, the figure in the brackets indicates the additional transport hubs accessible compared with the proceeding scenario.

Table 6-2: Transport Connectivity Benefits

Strategic Site	Reference Case	Do Minimum	Do Something	Do Something + EWR	Max Change Vs Reference Case
S/ED – Eddington (North West Cambridge)	10	11 (+1)	18 (+7)	18 (0)	**+8**
S/CE – Cambridge East	6	7 (+1)	9 (+2)	9 (0)	**+3**
S/BRC – Babraham Research Campus	8	10 (+2)	16 (+6)	16 (0)	**+8**
S/CBC – Cambridge Biomedical Campus	17	18 (+1)	18 (0)	20 (+2)	**+3**
S/GF – Land adjacent to A11 and A1307 at Grange Farm	4	9 (+5)	13 +(4)	13 (0)	**+9**
S/SHF – Land north of A1307, Bar Hill (Slate Hall Farm)	1	1 (0)	8 (+7)	10 (+2)	**+9**
S/CBN – Cambourne North	3	3 (0)	3 (0)	12 (+9)	**+9**
S/CB – Cambourne	3	3 (0)	5 (+2)	9 (+4)	**+6**
S/NST – Northstowe New Town	0	0 (0)	7 (+7)	7 (0)	**+7**
S/BA – Bourn Airfield New Village	3	3 (0)	4 (+1)	4 (0)	**+1**
S/WNT – Waterbeach New Town	7	8 (+1)	10 (+2)	10 (0)	**+3**
S/WGC – Wellcome Genome Campus, Hinxton	0	0 (0)	3 (+3)	3 (0)	**+3**

6.2.12 **Table 6-2** demonstrates that the GCTS delivers substantial improvements in access to strategic transport destinations across many of the emerging strategic sites. Compared with the employment assessment, the transport results show a more pronounced response to the proposed interventions, reflecting the direct influence of the GCTS measures on access to rail stations, travel hubs and Park & Ride facilities. Overall, the findings indicate that the Strategy significantly enhances connectivity to the wider transport network, increasing travel choices and improving opportunities to access employment, education, healthcare and other key destinations.

6.2.13 The Reference Case shows strong transport connectivity for sites located within or adjacent to Cambridge, including Cambridge Biomedical Campus (17 destinations) and Eddington (10). In contrast, a number of more peripheral growth locations, including Northstowe New Town and Wellcome Genome Campus, have access to few or no strategic transport destinations, highlighting significant disparities in accessibility.

6.2.14 The Do Minimum scenario delivers modest improvements at a number of sites, with the largest gains observed at Land adjacent to the A11 and A1307 at Grange Farm (+5 destinations) and Babraham Research Campus (+2). Most other sites experience either limited or no change, suggesting that committed schemes improve connectivity incrementally but do not fundamentally alter access to the strategic transport network.

6.2.15 Much larger benefits are realised under the Do Something scenario, where the package of GCTS interventions substantially increases the number of accessible transport destinations across the study area. The most significant improvements are observed at Eddington (+7 destinations), Slate Hall Farm (+7), Northstowe New Town (+7) and Babraham Research Campus (+6). Notable gains are also recorded at Grange Farm (+4), Wellcome Genome Campus (+3), Cambridge East (+2) and Waterbeach New Town (+2). These results demonstrate the effectiveness of the GCTS in strengthening connections between strategic growth locations and the wider public transport network.

6.2.16 The introduction of EWR delivers further enhancements, particularly for locations situated along or connected to the proposed EWR corridor. The most notable benefit is observed at Cambourne North, where the number of accessible transport destinations increases from three to twelve, representing a step change in connectivity. Significant additional gains are also recorded at Cambourne (+4), while more modest improvements are realised at Cambridge Biomedical Campus (+2) and Slate Hall Farm (+2). These results indicate that EWR plays an important role in extending the reach of the transport network beyond the improvements delivered by the GCTS measures alone.

6.2.17 In overall terms, the largest improvements relative to the Reference Case are observed at Grange Farm, Slate Hall Farm and Cambourne North, each recording an increase of nine accessible transport destinations. Substantial gains are also evident at Eddington and Babraham Research Campus (both +8), followed by Northstowe New Town (+7) and Cambourne (+6). While some sites, such as Bourn Airfield New Village, experience only modest improvements due to their existing level of accessibility or geographic location, the results show that the GCTS delivers widespread enhancements in transport connectivity across the strategic growth locations.

6.2.18 Overall, the findings demonstrate that the GCTS significantly strengthens access to key transport nodes and interchange opportunities, enabling residents of emerging strategic sites to benefit from a greater range of travel options. The addition of EWR further reinforces these outcomes by delivering transformational improvements at several western and northern growth locations, helping to support travel choice and improving access to opportunities across Greater Cambridge and beyond.

6.2.19 **Table 6-3** summarises the number of education establishments accessible from each strategic site under each scenario. Where accessibility increases, the figure in the brackets indicates the additional educational establishments accessible compared with the proceeding scenario.

Table 6-3: Education Quantifiable Benefits

Strategic Site	Reference Case	Do Minimum	Do Something	Do Something + EWR	Max Change Vs Reference Case
S/ED – Eddington (North West Cambridge)	12	12 (0)	15 (+3)	15 (0)	**+3**
S/CE – Cambridge East	8	8 (0)	8 (0)	8 (0)	**0**
S/BRC – Babraham Research Campus	9	9 (0)	14 (+5)	14 (0)	**+5**
S/CBC – Cambridge Biomedical Campus	15	15 (0)	15 (0)	15 (0)	**0**
S/GF – Land adjacent to A11 and A1307 at Grange Farm	5	10 (+5)	12 (+2)	12 (0)	**+7**
S/SHF – Land north of A1307, Bar Hill (Slate Hall Farm)	0	0 (0)	6 (+6)	7 (+1)	**+7**
S/CBN – Cambourne North	2	2 (0)	2 (0)	11 (+9)	**+9**
S/CB – Cambourne	4	4 (0)	6 (+2)	12 (+6)	**+8**
S/NST – Northstowe New Town	1	1 (0)	7 (+6)	7 (0)	**+6**
S/BA – Bourn Airfield New Village	4	4 (0)	6 (+2)	6 (0)	**+2**
S/WNT – Waterbeach New Town	5	9 (+4)	10 (+1)	10 (0)	**+5**
S/WGC – Wellcome Genome Campus, Hinxton	0	0 (0)	3 (+3)	3 (0)	**+3**

6.2.20 **Table 6-3** demonstrates that the GCTS delivers notable improvements in access to education destinations across many of the emerging strategic sites, increasing the range of schools, colleges and educational facilities that can be reached within the assessment threshold. While several sites located within or adjacent to Cambridge already benefit from strong educational connectivity in the Reference Case, the proposed interventions help address existing accessibility gaps at a number of peripheral growth locations. Overall, the results indicate that the Strategy supports greater access to educational opportunities and broadens choice for both existing and future residents.

6.2.21 The Reference Case shows the strongest education connectivity at sites such as the Cambridge Biomedical Campus (15 destinations) and Eddington (12), reflecting their proximity to a concentration of secondary, further education and higher education facilities within Cambridge. Conversely, sites including Slate Hall Farm and Wellcome Genome Campus, have access to few or no education destinations in the Reference Case, illustrating the more limited educational accessibility currently available at several of the emerging growth locations.

6.2.22 Unlike the transport assessment, the Do Minimum scenario delivers a more noticeable contribution to educational accessibility for a small number of sites. The largest increases are observed at Grange Farm (+5 destinations) and Waterbeach New Town (+4), while most other locations experience little or no change. This suggests that committed transport improvements provide some additional access to educational facilities but do not fundamentally alter connectivity across much of the study area.

6.2.23 More significant benefits are realised under the Do Something scenario. The largest improvements are observed at Slate Hall Farm (+6 destinations) and Northstowe New Town (+6), while substantial gains are also delivered at Babraham Research Campus (+5), Eddington (+3), Wellcome Genome Campus (+3) and Bourn Airfield New Village (+2). These improvements indicate that the GCTS intervention package plays an important role in expanding access to educational opportunities, particularly for growth locations which currently have relatively limited connectivity to the wider education network.

6.2.24 The introduction of EWR generates further improvements, particularly for sites in the western part of the Greater Cambridge area and those benefiting from connections to the emerging rail corridor. The most significant uplift is recorded at Cambourne North, where the number of accessible education destinations increases from two to eleven, representing a transformational improvement in educational accessibility. Significant additional benefits are also evident at Cambourne (+6 destinations), while a smaller increase is recorded at Slate Hall Farm (+1). These findings demonstrate the role of EWR in improving access to a wider range of educational opportunities beyond those delivered through the GCTS measures alone.

6.2.25 Overall, the largest improvements relative to the Reference Case are achieved at Cambourne North (+9 destinations), followed by Cambourne (+8) and both Grange Farm and Slate Hall Farm (+7). Significant gains are also recorded at Northstowe New Town (+6), while Babraham Research Campus and Waterbeach New Town both benefit from improvements of +5 destinations. In contrast, sites such as Cambridge East and Cambridge Biomedical Campus experience no change, reflecting their existing accessibility or geographic relationship to education facilities.

6.2.26 Overall, the findings show that the GCTS enhances access to a broader range of educational destinations across many of the emerging strategic sites, helping to improve educational choice and supporting access to schools, colleges and other learning opportunities. The addition of EWR strengthens these outcomes further for a number of western growth locations, providing a step change in connectivity and helping to ensure that future residents can access a wider range of educational destinations across Greater Cambridge and the surrounding area.

6.2.27 **Table 6-4** summarises the number of health facilities accessible from each strategic site under each scenario. Where accessibility increases, the figure in the brackets indicates the additional health facilities accessible compared with the proceeding scenario.

Table 6-4: Health Quantifiable Benefits

Strategic Site	Reference Case	Do Minimum	Do Something	Do Something + EWR	Max Change Vs Reference Case
S/ED – Eddington (North West Cambridge)	5	5 (0)	6 (+1)	6 (0)	+1
S/CE – Cambridge East	6	6 (0)	7 (+1)	7 (0)	+1
S/BRC – Babraham Research Campus	5	5 (0)	7 (+2)	7 (0)	+2
S/CBC – Cambridge Biomedical Campus	9	9 (0)	9 (0)	9 (0)	0
S/GF – Land adjacent to A11 and A1307 at Grange Farm	1	4 (+3)	6 (+2)	6 (0)	+5
S/SHF – Land north of A1307, Bar Hill (Slate Hall Farm)	1	1 (0)	3 (+2)	4 (+1)	+3
S/CBN – Cambourne North	1	1 (0)	1 (0)	5 (+4)	+4
S/CB – Cambourne	2	2 (0)	3 (+1)	5 (+2)	+3
S/NST – Northstowe New Town	0	0 (0)	3 (+3)	3 (0)	+3
S/BA – Bourn Airfield New Village	2	2 (0)	2 (0)	2 (0)	0
S/WNT – Waterbeach New Town	4	4 (0)	4 (0)	5 (+1)	+1
S/WGC – Wellcome Genome Campus, Hinxton	0	0 (0)	2 (+2)	2 (0)	+2

6.2.28 It should be noted that this assessment focuses on access to major healthcare destinations, including hospitals, community hospitals and larger medical centres that provide a broad range of health and wellbeing services. Given the extensive distribution of GP surgeries across Greater Cambridge, these have not been considered individually within the assessment. Instead, the analysis seeks to understand how the GCTS influences access to higher-order healthcare facilities that typically serve wider catchments and offer more specialised services. This provides a clearer indication of how the Strategy enhances access to key healthcare provision across the region.

6.2.29 **Table 6-4** demonstrates that the GCTS delivers improvements in access to major healthcare destinations across a number of the strategic sites, although the magnitude of change is generally smaller than that observed for employment, transport and education. This reflects both the relatively limited number of higher-order healthcare destinations included within the assessment and the fact that several sites already benefit from good access to key healthcare facilities in the Reference Case.

6.2.30 The strongest Reference Case performance is recorded at the Cambridge Biomedical Campus, which has access to nine healthcare destinations in the Reference Case, reflecting its proximity to Addenbrooke's Hospital and the wider concentration of healthcare services within Cambridge. Relatively strong baseline accessibility is also evident at Cambridge East (6 destinations), Eddington (5) and Babraham Research Campus (5). In contrast, locations including Northstowe New Town and Wellcome Genome Campus have no access to the assessed healthcare destinations in the Reference Case, while several western growth locations have access to only one or two destinations.

6.2.31 The Do Minimum scenario delivers relatively limited changes, with the most notable improvement occurring at Land adjacent to the A11 and A1307 at Grange Farm, where accessible healthcare destinations increase from one to four. Elsewhere, accessibility remains largely unchanged, indicating that committed transport schemes alone result in only modest improvements in access to major healthcare facilities.

6.2.32 More substantial benefits are delivered through the Do Something scenario. The largest improvements are observed at Northstowe New Town (+3 destinations) and Grange Farm (+2 additional destinations beyond the Do Minimum). Smaller but notable gains are also recorded at Babraham Research Campus (+2), Slate Hall Farm (+2), Eddington (+1) and Cambridge East (+1). These findings indicate that the GCTS intervention package enhances access to a wider range of major healthcare destinations, particularly for locations which currently have relatively limited accessibility.

6.2.33 The introduction of EWR provides additional healthcare connectivity benefits for a number of sites, particularly those located along the western growth corridor. The most significant improvement is recorded at Cambourne North, where the number of accessible healthcare destinations increases from one to five. Additional gains are observed at Cambourne (+2 destinations), Slate Hall Farm (+1) and Waterbeach New Town (+1). These results suggest that EWR helps extend access to a broader range of healthcare facilities beyond those accessible under the GCTS intervention package alone.

6.2.34 Overall, the largest improvement relative to the Reference Case is observed at Grange Farm (+5 destinations), followed by Cambourne North (+4). Cambourne, Northstowe New Town and Slate Hall Farm each record improvements of +3 destinations, while Babraham Research Campus and Wellcome Genome Campus all experience gains of +2 destinations. By contrast, no change is observed at Cambridge Biomedical Campus and Bourn Airfield New Village, reflecting either their existing level of accessibility or their location relative to major healthcare facilities.

6.2.35 Addenbrooke’s Hospital is Cambridge’s main general hospital. The GCTS improves access, via greater travel choice, to the hospital from strategic sites within 60 minutes. In the Reference Case, seven sites can access Addenbrooke’s within this threshold, with no change under the Do Minimum scenario. Access increases slightly in the Do Something scenario, with eight sites connected, and rises further to 11 sites under the Do Something + EWR scenario.

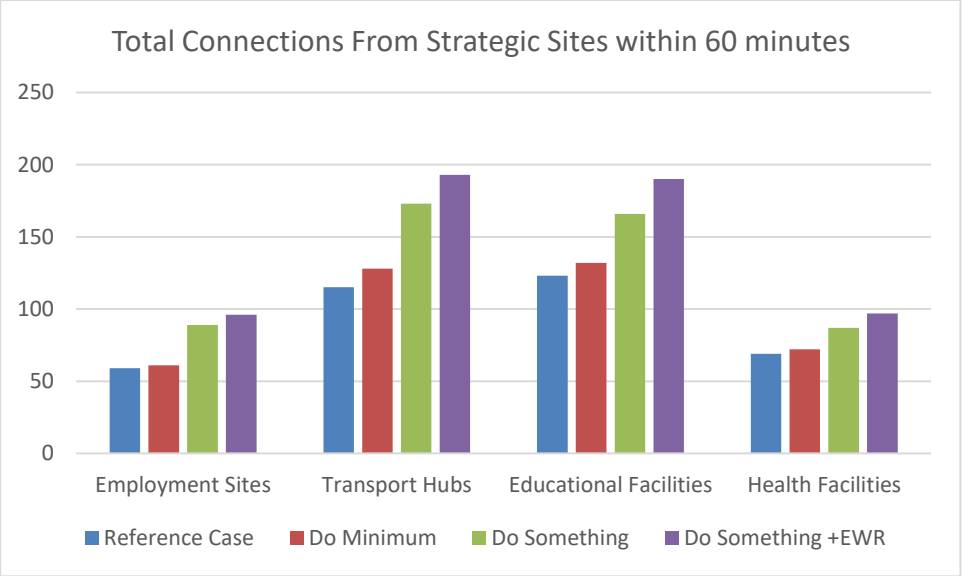


This means around 70% of strategic sites would be able to reach Addenbrooke's within 60 minutes by a range of travel choices.

6.2.36 Overall, the findings indicate that the GCTS improves access to major healthcare and wellbeing facilities for many of the emerging strategic sites, helping to ensure that future residents are able to reach a wider range of specialist healthcare services. While the scale of change is generally more modest than for transport, employment or education connectivity, the results demonstrate that the Strategy contributes towards enhanced access to key healthcare destinations across Greater Cambridge. The addition of EWR further strengthens this outcome for several western growth locations, extending access to a broader range of higher-order healthcare provision and supporting the creation of well-connected communities.

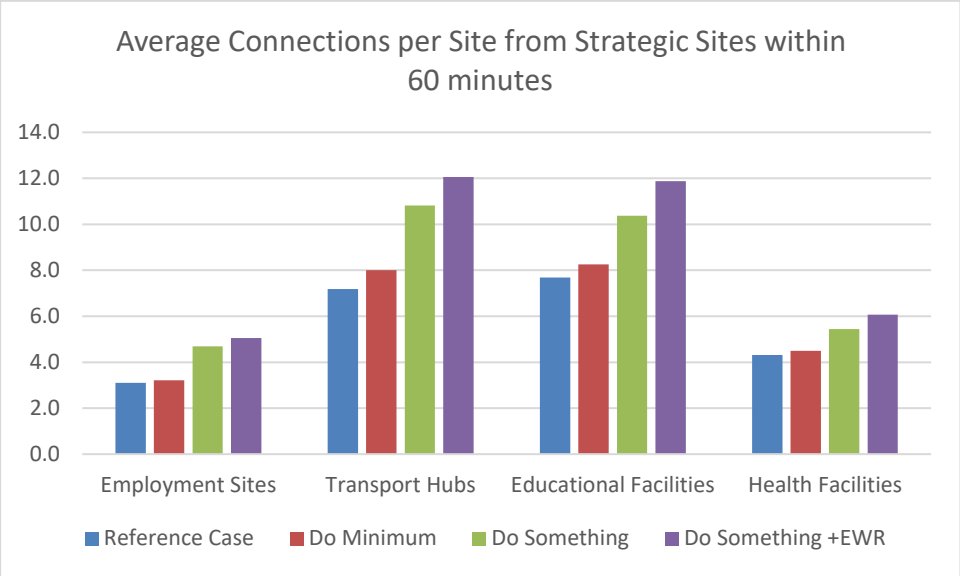
6.2.37 **Figure 6-1** demonstrates that the total number of connections from the strategic sites increases across all destination types as the intervention scenarios progress from the Reference Case to Do Something + EWR. The most substantial improvements are shown for transport hubs and educational facilities, with notable gains also recorded for employment and health destinations. The Do Minimum scenario delivers only limited benefits, while the Do Something scenario provides a more significant uplift, demonstrating the role of the GCTS in improving accessibility from the emerging strategic sites. The addition of EWR provides further connectivity benefits, particularly for transport, education and health destinations. Overall, the figure shows that the GCTS, supported by EWR, would broaden access to employment opportunities, public transport nodes, education provision and key health facilities, helping to create better connected strategic growth locations.

Figure 6-1: Total Connections from Strategic Sites within 60 minutes



6.2.38 **Figure 6-2** demonstrates that average number of connections to destinations from the strategic sites and is a clear indication that the GCTS in the Do Something and Do Something + EWR scenarios deliver meaningful connectivity benefits.

Figure 6-2: Average Connections per Site from Strategic Sites within 60 minutes



6.3 Do Something Scenario – Quantifiable Population Benefits

6.3.1 **Table 6-5 (Appendix I)** presents the population within a 60 – minute catchment of the assessed major employment destinations under each scenario. The employment destinations include key economic locations such as Cambourne Business Park, St John's Innovation Centre Cambridge Science Park, Cambridge Business Park, Biomedical Campus, Cambridge Innovation Park, Cambridge Research Park, Granta Park, Babraham Research Campus, Wellcome Genome Campus and Bourn Quarter. The table compares the population able to access these destinations in the Reference Case, Do Minimum, Do Minimum + EWR, Do Something, Do Something + EWR and Do Something + EWR + Rail Frequencies scenarios. It therefore provides an indication of how the GCTS, alongside wider rail interventions, improves the population reach of Greater Cambridge's major employment destinations.

Table 6-5: Major Employment Centres Population Reach (AM and PM)

AM Peak

Employment Site	Reference	Population in 60-Minute Catchment						RC to DM % Increase	DM to DS % Increase	DS to DS+EWR % Increase
		RC	DM	DM + EWR	DS	DS + EWR	DS + EWR + Rail Frequencies			
Cambourne Business Park	M1	96,963	96,963	151,145	137,740	190,261	206,897	0.00%	42.05%	38.13%
St John's Innovation Park	M2	195,743	195,743	197,329	212,237	212,612	226,110	0.00%	8.43%	0.18%
Cambridge Science Park	M3	199,799	200,926	202,157	222,620	222,691	241,034	0.56%	10.80%	0.03%
Cambridge Business Park	M4	223,797	224,959	225,334	244,402	244,138	266,183	0.52%	8.64%	-0.11%
Biomedical Campus	M5	227,560	227,879	241,152	240,182	254,575	277,601	0.14%	5.40%	5.99%
Cambridge Innovation Park	M6	117,732	146,859	147,900	148,033	149,392	153,122	24.74%	0.80%	0.92%
Cambridge Research Park	M7	100,924	113,876	114,564	110,851	111,502	137,726	12.83%	-2.66%	0.59%
Granta Park	M8	28,952	30,382	29,830	214,586	215,559	228,825	4.94%	606.29%	0.45%
Babraham Research Campus	M9	126,691	131,498	129,647	231,615	231,615	249,025	3.79%	76.14%	0.00%
Wellcome Genome Campus	M10	323	323	323	27,989	27,989	110,707	0.00%	8565.33%	0.00%
Bourn Quarter	M11	65,962	72,263	72,047	96,535	92,882	111,699	9.55%	33.59%	-3.78%

PM Peak

Employment Site	Reference	Population in 60-Minute Catchment						RC to DM % Increase	DM to DS % Increase	DS to DS+EWR % Increase
		RC	DM	DM + EWR	DS	DS + EWR	DS + EWR + Rail Frequencies			
Cambourne Business Park	M1	110,031	110,265	162,691	148,574	197,939	212,414	0.21%	34.74%	33.23%
St John's Innovation Park	M2	189,100	190,156	192,063	217,479	217,479	233,034	0.56%	14.37%	0.00%
Cambridge Science Park	M3	202,402	203,439	204,991	230,533	230,908	249,736	0.51%	13.32%	0.16%
Cambridge Business Park	M4	220,068	221,230	222,814	242,325	242,624	271,011	0.53%	9.54%	0.12%
Biomedical Campus	M5	219,551	221,045	236,657	230,376	247,528	275,146	0.68%	4.22%	7.45%
Cambridge Innovation Park	M6	115,669	138,321	140,244	147,271	149,135	156,063	19.58%	6.47%	1.27%
Cambridge Research Park	M7	96,568	111,674	112,579	123,726	124,276	141,660	15.64%	10.79%	0.44%
Granta Park	M8	30,961	32,617	31,381	211,627	212,173	226,252	5.35%	548.82%	0.26%
Babraham Research Campus	M9	124,759	134,711	133,260	235,325	235,061	248,349	7.98%	74.69%	-0.11%
Wellcome Genome Campus	M10	323	323	323	27,713	27,713	109,612	0.00%	8479.88%	0.00%
Bourn Quarter	M11	66,815	73,108	73,970	89,337	84,813	110,302	9.42%	22.20%	-5.06%

6.3.2 The results show that the GCTS delivers a substantial uplift in the population able to access major employment destinations within 60 minutes. In the AM peak, the aggregate population catchment across the assessed employment destinations increases from 1,441,671 in the Do Minimum scenario to 1,886,790 in the Do Something scenario, an increase of 445,119. In the PM peak, the equivalent aggregate catchment increases from 1,436,889 to 1,904,286, an increase of 467,397. This indicates that the GCTS materially improves access to employment opportunities across the study area, increasing the number of people able to reach key employment locations by public and active modes within the assessment threshold.

6.3.3 The addition of EWR provides a further accessibility benefit. In the AM peak, the aggregate population catchment increases to 1,953,216 under Do Something + EWR, which is 511,545 higher than the Do Minimum scenario and 66,426 higher than the Do Something scenario. In the PM peak, the aggregate catchment increases to 1,969,649 under Do Something + EWR, which is 532,760 higher than the Do Minimum scenario and 65,363 higher than the Do Something scenario. This demonstrates that EWR provides additional employment accessibility benefits beyond the core GCTS, although the majority of the uplift is delivered through the Do Something package.

6.3.4 A further increase is shown when enhanced rail frequencies are included. Under the Do Something + EWR + Rail Frequencies scenario, the aggregate AM peak population catchment increases to 2,208,929, representing an increase of 767,258 compared with the Do Minimum scenario. In the PM peak, the aggregate catchment increases to 2,233,579, representing an increase of 796,690 compared with the Do Minimum scenario. This highlights the additional value of service frequency improvements in maximising the employment accessibility benefits of the wider Strategy.

6.3.5 However, it must be noted that some destinations have resulted in a slight reduction in the number of people able to access employment destinations. This is notable in the Do Something scenario for Cambridge Research Park which results in a 2.66% reduction in the population able to access this location. Further investigation has determined that this is because of the need to interchange between public transport services, with the Strategy delivering improvements to one and not the other, resulting in the improved service leaving prior to the other service arriving.

6.3.6 For example, for journeys originating in Waterbeach, some passengers who depend on a transfer at a specific location and time may no longer be able to connect with their onward service. The increased speed of the feeder service means that the connecting service may have already departed before passengers arrive at the interchange. This reflects the highly interdependent nature of bus timetabling, where changes to one route or corridor can generate knock-on effects elsewhere in the network, particularly in edge-case scenarios involving timed transfers.

6.3.7 The spatial distribution of these impacts is evident along Cherry Hinton Road. This corridor is served by the Service 3 route (Fison Road–Cherry Hinton), which is one of eight services affected by the increase in operating speeds between Cambridge city centre and the railway station. The analysis demonstrates how timetable changes on a key section of the network can influence accessibility outcomes beyond the immediate corridor, affecting passengers who rely on wider network connections.

6.3.8 In regard to the GCTS this can be mitigated for by adjusting the timetabling of connecting services, which is likely to occur as a matter of cause by the bus operators when introducing new services. Should this be considered it will benefit approximately 5,000 people.

6.3.9 Similar there are some reductions in the Do Something + EWR + Frequencies scenario which has resulted in reductions of 3.78% of the population accessing the Bourn Quarter. Investigations determined that this is because the Cambourne to Cambridge (CtoC) service is assumed to be re-routed to serve the new station north of Cambourne. As a result, journeys from Bourn Quarter to Cambridge city centre experience slightly longer travel times, as access to the EWR station itself relies on the proposed Cambourne to Cambridge corridor. Consequently, trips to the city centre continue to be made via the CtoC service rather than

EWR, with the additional diversion introducing a modest increase in journey time and a corresponding reduction in the accessible population catchment.

6.3.10 A similar effect is observed for accessibility to Cambridge Business Park. Journeys originating from Cambridge city centre and using the CtoC service can experience marginal delays as a result of the diversion via the new station, leading to a very small reduction in the calculated population catchment.

6.3.11 However, the scale of change in this latter case is extremely limited. The variation between the two catchments is minimal and reflects only a very small change in journey times. Given the sensitivity of catchment calculations, it is considered more meaningful to focus on changes exceeding ±5%, with smaller variations treated as negligible for the purposes of interpreting the results.

Summary of Population Benefits

6.3.12 Overall, the outputs demonstrate that the GCTS significantly improves the connectivity of Greater Cambridge's major employment destinations by increasing the population able to access them within 60 minutes. The largest gains are associated with the Do Something scenario, indicating that the proposed GCTS interventions play a central role in expanding the effective labour market catchment of key employment centres. This is particularly important for locations where baseline accessibility is more limited, as the Strategy helps connect a larger resident population to employment opportunities and, in turn, improves access to jobs for communities across the wider study area.

6.3.13 The scale of improvement varies by employment destination. For example, in the AM peak, Granta Park increases from 30,382 people in the Do Minimum scenario to 214,586 in the Do Something scenario, while Babraham Research Campus increases from 131,498 to 231,615. Wellcome Genome Campus also shows a marked improvement, increasing from 323 to 27,989 in the AM peak under the Do Something scenario. These examples show how the GCTS improves the population reach of employment destinations that are less accessible in the baseline scenarios.

6.3.14 The benefits are also evident in the PM peak, where Granta Park increases from 32,617 people in the Do Minimum scenario to 211,627 under Do Something, while Babraham Research Campus increases from 134,711 to 235,325. Wellcome Genome Campus similarly increases from 323 to 27,713. These changes indicate that the Strategy provides consistent accessibility benefits across both peak periods, supporting improved access to major employment opportunities throughout the day.

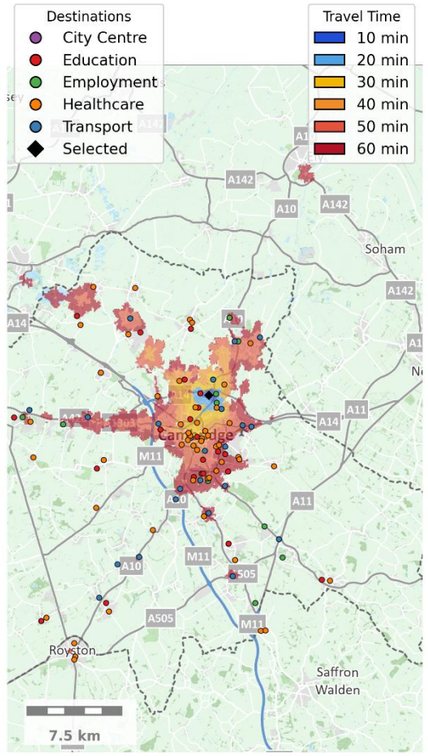
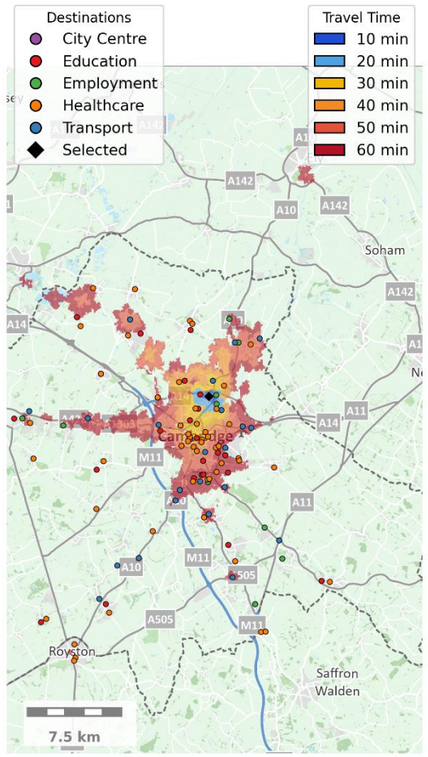
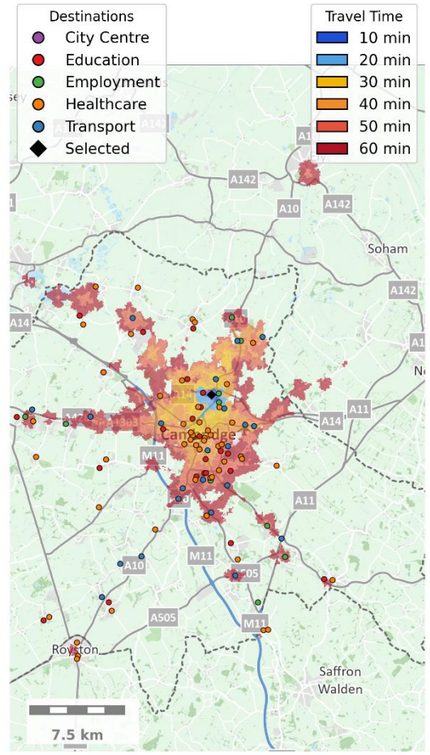
6.3.15 The results also show that EWR and rail frequency improvements provide additional benefits at selected destinations. For example, Cambourne Business Park increases from 137,740 in the Do Something scenario to 190,261 under Do Something + EWR in the AM peak, and then to 206,897 with rail frequency improvements. In the PM peak, Cambourne Business Park increases from 148,574 under Do Something to 197,939 under Do Something + EWR, and then to 212,414 with rail frequency improvements. This demonstrates the particular role of rail-based interventions in improving access to employment destinations associated with the western growth corridor.

6.3.16 Overall, the key message is that the GCTS substantially increases the population able to access major employment destinations within 60 minutes, with the Do Something scenario delivering an additional 445,119 aggregate AM peak population catchment and 467,397 aggregate PM peak population catchment compared with the Do Minimum scenario. When EWR is added, these benefits increase further to 511,545 in the AM peak and 532,760 in the PM peak compared with Do Minimum. This demonstrates that the Strategy provides a clear connectivity benefit by increasing access to employment opportunities, broadening labour market catchments, and supporting residents across existing and emerging communities to reach a wider range of jobs

6.4 Do Something Strategic Site Isochrone Analysis

6.4.1 This section builds on the quantifiable benefits presented above by providing isochrone outputs for each strategic site across the Reference Case, Do Minimum and Do Something scenarios. These outputs illustrate how the GCTS influences site connectivity, with the accompanying narrative explaining the spatial pattern of change, the differences between scenarios, and the implications for the emerging Local Plan. The analysis also considers the extent to which the Do Something scenario supports the achievement of the identified connectivity targets.

Table 6-6: North East Cambridge

Reference Case	Do Minimum	Do Something
Origin: Policy S/NEC – North East Cambridge | RC AM	Origin: Policy S/NEC – North East Cambridge | DM AM	Origin: Policy S/NEC – North East Cambridge | DS AM
		

What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: Under the Do Something Scenario, the spatial pattern of connectivity remains strongly centred on Cambridge, with the highest levels of accessibility concentrated within the urban area and along key radial corridors served by public transport.

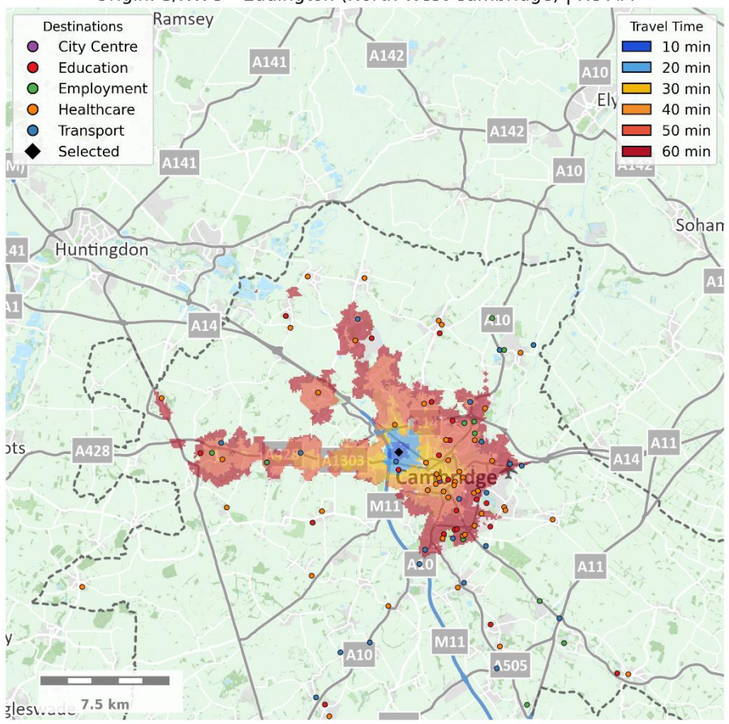
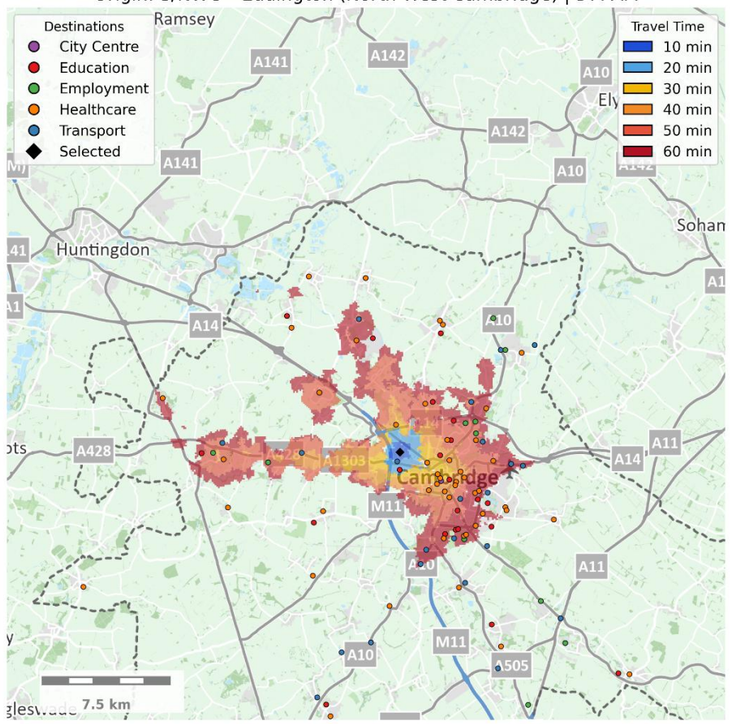
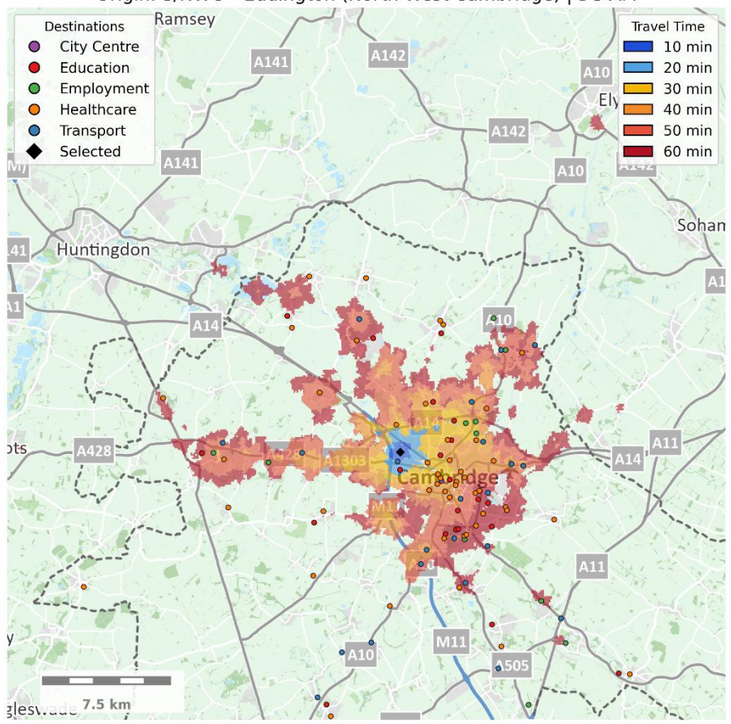
AM / PM Peak comparison: The AM / PM peaks remain broadly similar with only minor variation in the 30 – 60-minute travel bands.

RC Vs DM Vs DS Comparison: The transition from Reference Case to Do Minimum has limited connectivity benefits with the transition from Do Minimum to Do Something (without East West Rail) resulting in incremental but identifiable improvements in public transport accessibility. The key differences include; A wider 20–40-minute catchment around Cambridge, indicating improved journey times or service frequency, strengthening of the Cambridge – Cambourne corridor with more locations falling closer to the 45 minutes threshold., A more continuous distribution of accessibility along key radial routes, reducing fragmentation in some areas.

For the strategic site, connectivity to multiple transport, education and employment destinations, including Cambridge Science Park and St John's Innovation Centre, is available within 30 minutes. The site therefore aligns strongly with the settlement hierarchy targets set out in **Table 4-14**. Compared with the Reference Case, the DS + EWR scenario connects the site to four additional employment and transport destinations. However, connectivity to and from the wider hinterland remains more limited, with some locations, particularly south-western settlements such as Gamlingay and Bassingbourn, falling outside the 60-minute public transport + walk journey time. **Section 6.6** considers this in more detail and identifies how additional interventions could improve connectivity to these areas.

Do Something Implications in terms of Settlement Hierarchy: When assessed against the settlement hierarchy targets, the Do Something Scenario results in improved performance for higher-order settlements but has more limited gains for lower-order and off-corridor locations. The site offers connectivity to multiple facilities well within the 30-minute city level connectivity target and some modest improvements for the wider town settlements with journey times moving towards the 45-minute target.

Table 6-7: S/ED Eddington (North West Cambridge) Do Something Scenario

Reference Case	Do Minimum	Do Something
Origin: S/NWC – Eddington (North West Cambridge) | RC AM	Origin: S/NWC – Eddington (North West Cambridge) | DM AM	Origin: S/NWC – Eddington (North West Cambridge) | DS AM
		

What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: The Do Something spatial pattern is noticeably different to that of the Do Minimum scenarios with an extension of connectivity towards Northstowe along the guided bus way corridor. The overall pattern in terms of its radial corridor reach is recognisable to the Do Minimum scenario, but the overall connectivity appears improved in the Do Something Scenario. The Do Something with East West Rail scenario does not demonstrate any material improvements in connectivity from this site.

AM / PM Peak comparison: The AM / PM peak are broadly similar across the Do Something scenarios, with only localised variations on the edges of the isochrone rather than a materially different spatial pattern.

RC Vs DM Vs DS: The RC and DM scenarios are broadly similar with some improvements towards Waterbeach. The Do Something scenario does show a clear enhancement in connectivity, with an outward extension of reach along the radial routes, bringing more areas along those corridors into the 60-minute public transport + walk journey time catchment. This is clearly visible along the guided busway towards Northstowe and the A1303 corridor west towards Cambourne. A clear difference is the improved connectivity to the Rural Centre of Swavesey which is now largely accessible within 60 minutes when connectivity in the Do Minimum was limited. The pattern to the south west looks largely unchanged, however there are connectivity benefits to the south east with Granta Park and Babraham Research Campus now accessible within 60 minutes.

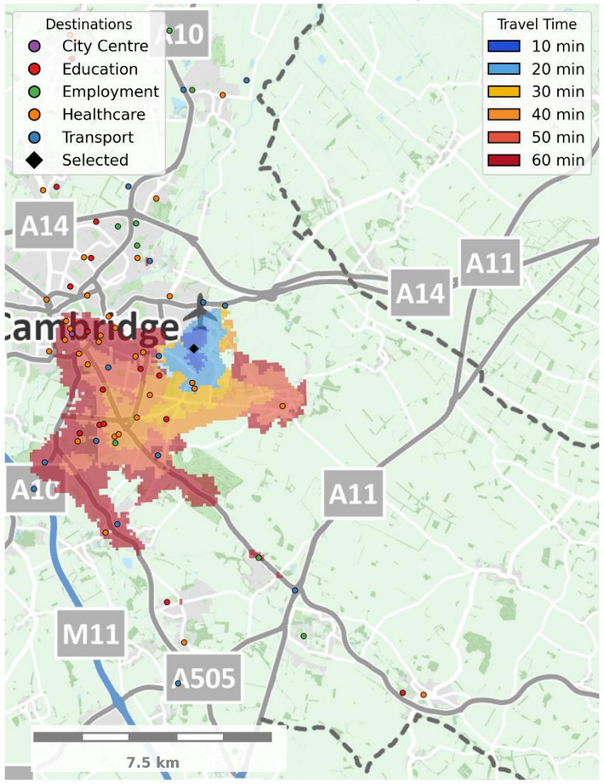
Do Something Implications in terms of Settlement Hierarchy: Eddington did display good connectivity in the Do Minimum scenario; however, this is enhanced in the Do Something in regard to the City Settlement and associated connectivity targets. There are noticeable improvements to the Major Employment centres to the north east such as St John's Innovation Centre which are now accessible within 30 minutes. A wider range of transport, education and health facilities are now also available within 30 minutes suggesting strong alignment with the city settlement connectivity targets. Compared to the DM, the DS and DS+EWR scenarios enable access to two additional major employment destinations (Cambridge Innovation Park and Babraham Research Campus) and three education facilities such as Northstowe Secondary College.

The sites connectivity to the town settlements of Northstowe, Waterbeach and Cambourne is noticeably improved, particularly access to and from Waterbeach which is far wider reaching than in the Do Minimum scenario. Furthermore, the journey time towards Northstowe has decreased from 60 minutes to 50 minutes approximately. There are Rural Centre benefits as well with improved connectivity to Swavesey suggesting that the radial corridor-based interventions do provide benefits.

Table 6-8: S/CE Cambridge East Do Something Scenario

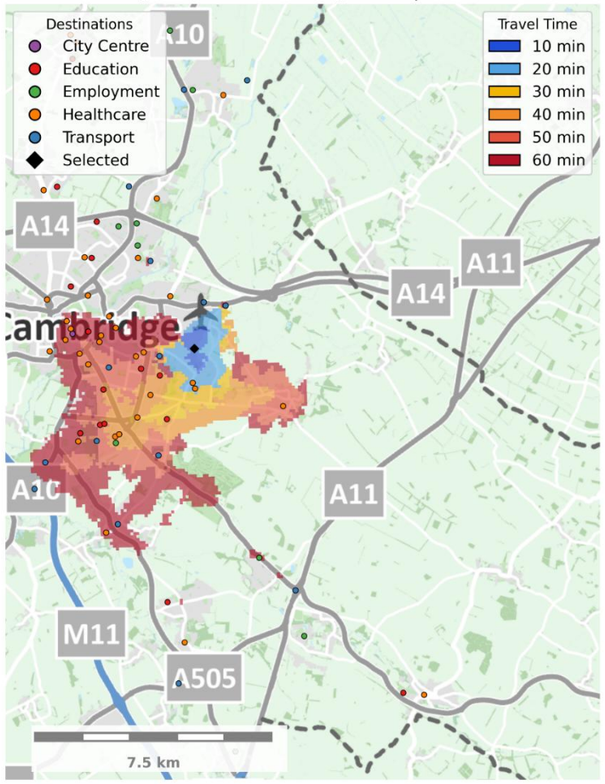
Reference Case

Origin: S/CE – Cambridge East | RC AM



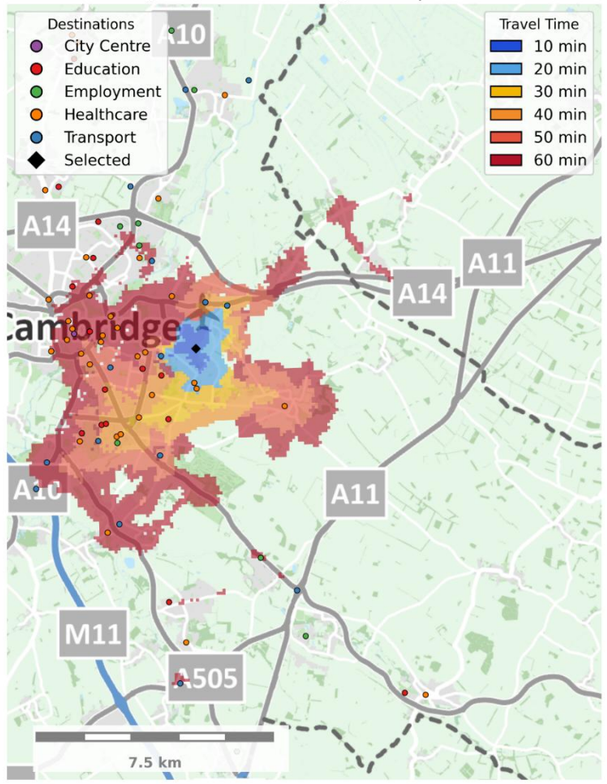
Do Minimum

Origin: S/CE – Cambridge East | DM AM



Do Something

Origin: S/CE – Cambridge East | DS AM



What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: The Do Something spatial pattern is still focused on the south east quadrant of Cambridge with some radial extension along the A1301 and A1307 corridors. The reach west and north extends as far as the city centre.

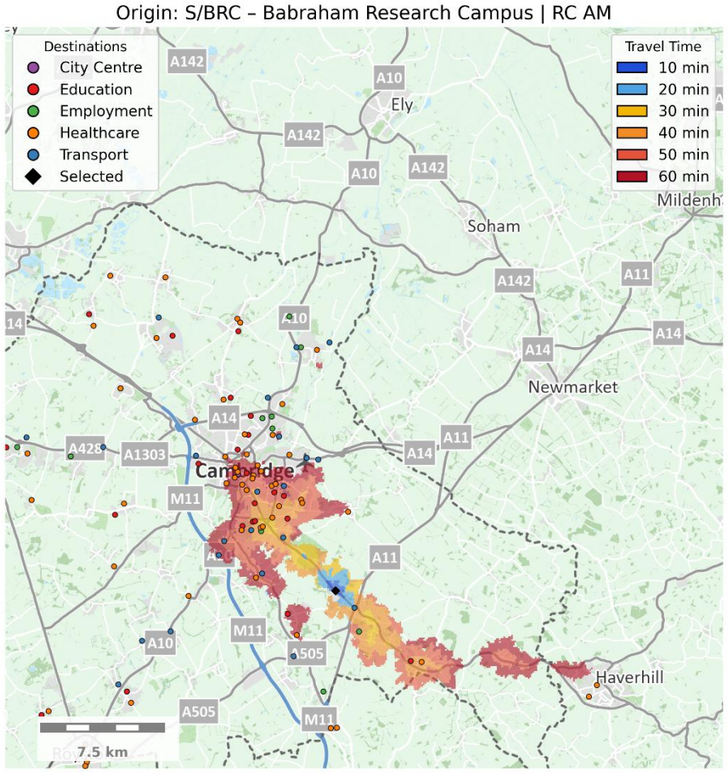
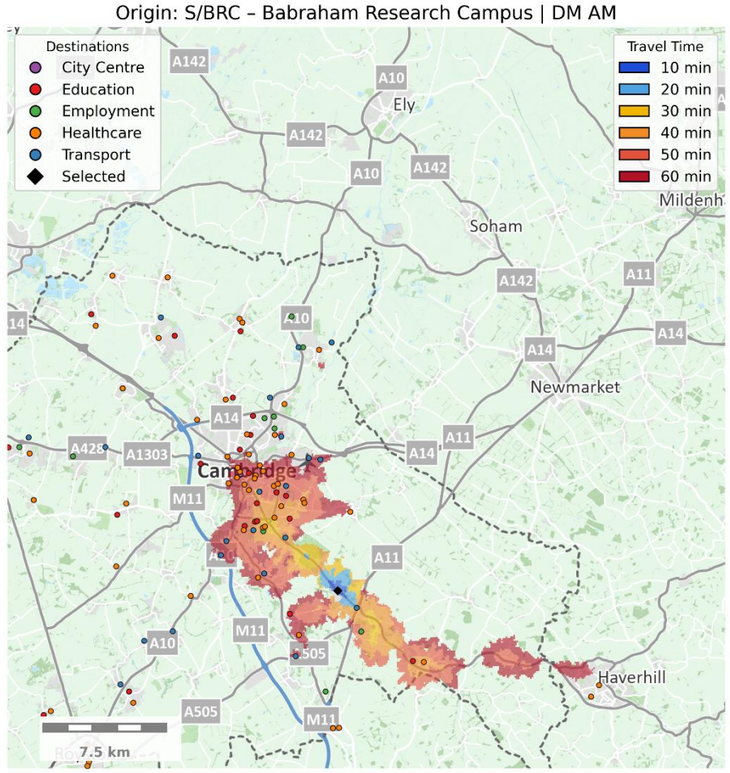
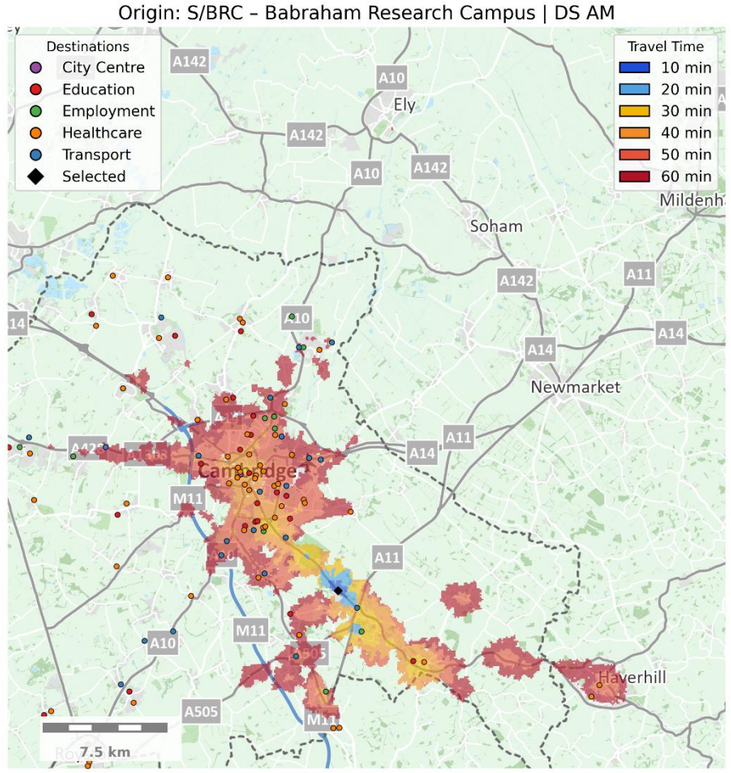
AM / PM Peak comparison; The Do Something AM and PM peaks are broadly similar with some minor differences to the isochrone's western edges. The AM Peak provides greater connectivity within 60 minutes to the A10/A1301/A1309 corridors. However, this level of connectivity reduces in the PM peak. In contrast the PM peak affords greater connectivity to Babraham Research Campus and the A1307 corridor.

RC Vs DM Vs DS Comparison; There are no material differences between the RC and DM scenario except along the Hinton Way corridor. The Do Something scenario has some improvement eastwards in the Fulbourn area. There is cross corridor connectivity between the A1301 and A1307 corridors as a likely result of the Do Something Interventions extending services from the Babraham Road Park & Ride. The Do Something + East West Rail offers no material differences in connectivity to and from this site.

Do Something Implications in terms of Settlement Hierarchy; In terms of the settlement hierarchy the site affords good access to city settlement facilities and provides access to transport facilities such as Newmarket Road Travel Hub for interchange as well as a number of education and healthcare facilities within 30 minutes, aligning with the city settlement connectivity target. The site does provide access to major employment centres such as Babraham Research Campus and the Biomedical Campus within broadly similar timescales to that of the Do Minimum scenario. The site performs well in terms of the city settlement hierarchy but does lack access to facilities and employment opportunities that fall outside of Cambridge's sphere of influence, particularly opportunities to the north and west towards Cambourne.

Further analysis suggests that connectivity is impacted as a result of the site lying marginally beyond the 20-minute walk time to public transport. Measures to reduce this walk time through more direct active travel connections would help to improve the sites overall connectivity. This is discussed in more detail in **Section 6.5**, where sensitivity testing explores how additional interventions within the Strategy can improve these limitations.

Table 6-9: S/BRC Babraham Research Campus Do Something Scenario

Reference Case	Do Minimum	Do Something
		

What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

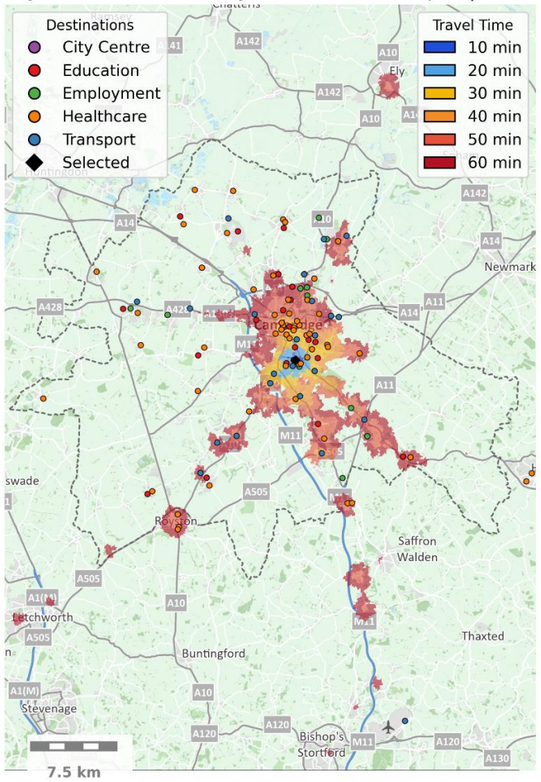
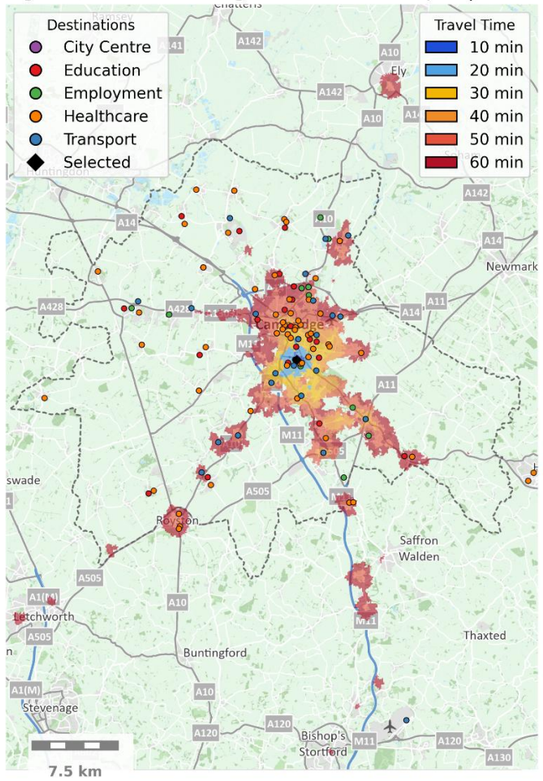
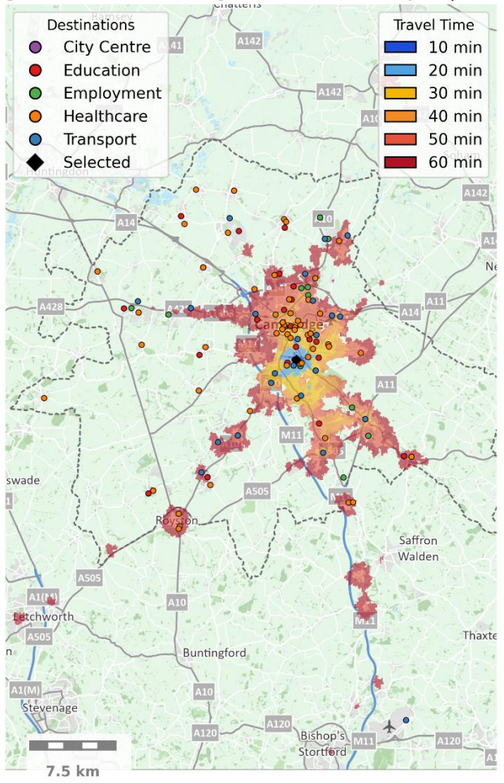
Do Something - Spatial Pattern of Connectivity: The Do Something spatial pattern still shows a clear focus towards south east Cambridge, with two radial routes extending south towards Rural Centres of Shelford and south east towards Haverhill, with some infilling between the two corridors.

AM / PM Peak comparison: The Do Something scenario's AM / PM peaks show similar levels of connectivity towards Cambridge. However, the greatest difference is in connectivity to Haverhill with the identified facilities in the town now accessible within 60 minutes. Furthermore, the PM peak affords greater levels of connectivity to Duxford and the Wellcome Genome Campus.

RC Vs DM Vs DS: There are some connectivity improvements between RC and DM particularly along the Babraham Road corridor. The Do Something scenario does demonstrate significant connectivity enhancements compared to the Do Minimum scenario, with central Cambridge accessible within 30 – 40 minutes, and the north, including Waterbeach accessible within 60 minutes. These areas were not accessible within those timescales in the Do Minimum. There is an improvement in connectivity particularly on cross corridor movements between the A1307 and A1303 as well as access to transport opportunities such as Whittlesford Park Way with improved access to major employment centres such as Wellcome Genome Campus.

Do Something Implications in terms of Settlement Hierarchy: The Strategy delivers one of the largest overall connectivity improvements across the sites here with the number of accessible destinations increasing from 25 in the RC to 44 under the DS and DS +EWR scenarios. This represents an increase in 19 destinations overall. In particular, the site gains access to Granta Park and Wellcome Genome Campus and a wider range of secondary and further education facilities such as Hills Road Sixth Form College and Cambridge Academy. Transport Nodes include the A11 Travel Hub and Cambridge South Railway Station. The results demonstrate that the GCTS intervention package significantly broadens the range of opportunities and services accessible from Babraham Research Campus. The DS + EWR scenario provides no further increase in accessibility. While the greatest connectivity benefits are concentrated along the radial corridors extending south-east from Cambridge, there are also notable improvements in cross-corridor movements. In particular, enhancements at Hinton Way strengthen links between Great Shelford, improving access to Sawston and surrounding destinations. Additional benefits are also evident along radial routes serving Waterbeach and Cambourne. Overall, the Do Something scenario provides strong connectivity gains to major employment centres and transport interchanges, supporting a wider range of travel choice and journey opportunities across the study area.

Table 6-10: S/CBC Cambridge Biomedical Campus

Reference Case	Do Minimum	Do Something
Origin: S/CBC – Cambridge Biomedical Campus | RC AM	Origin: S/CBC – Cambridge Biomedical Campus | DM AM	Origin: S/CBC – Cambridge Biomedical Campus | DS AM
		

What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

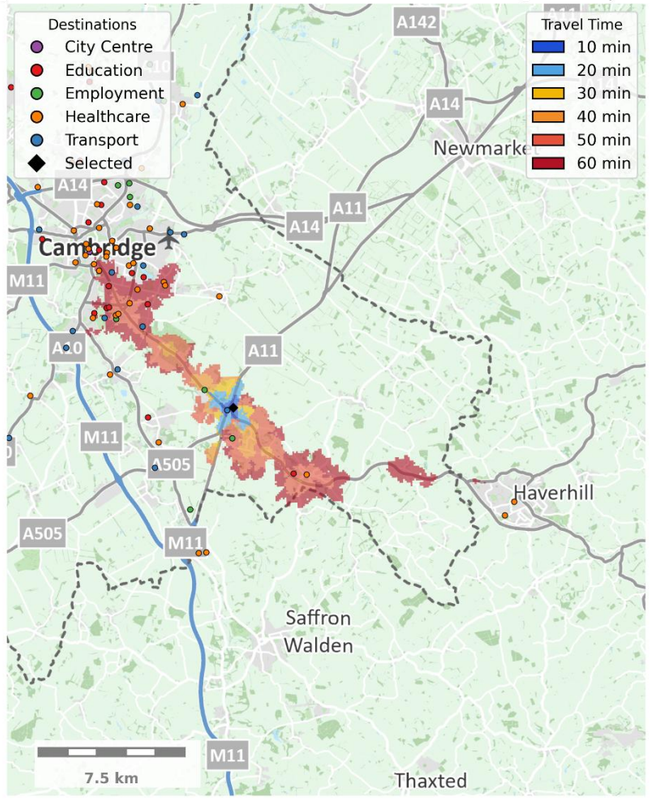
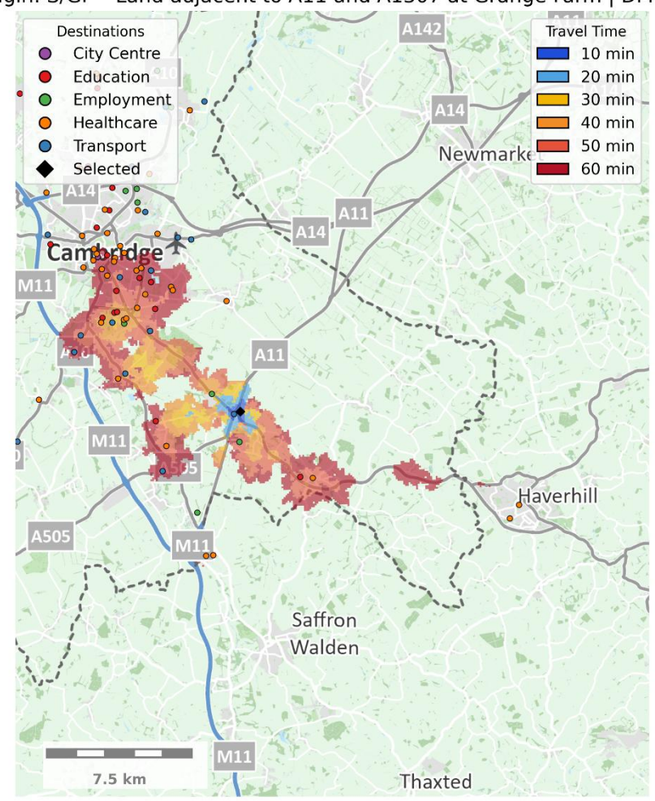
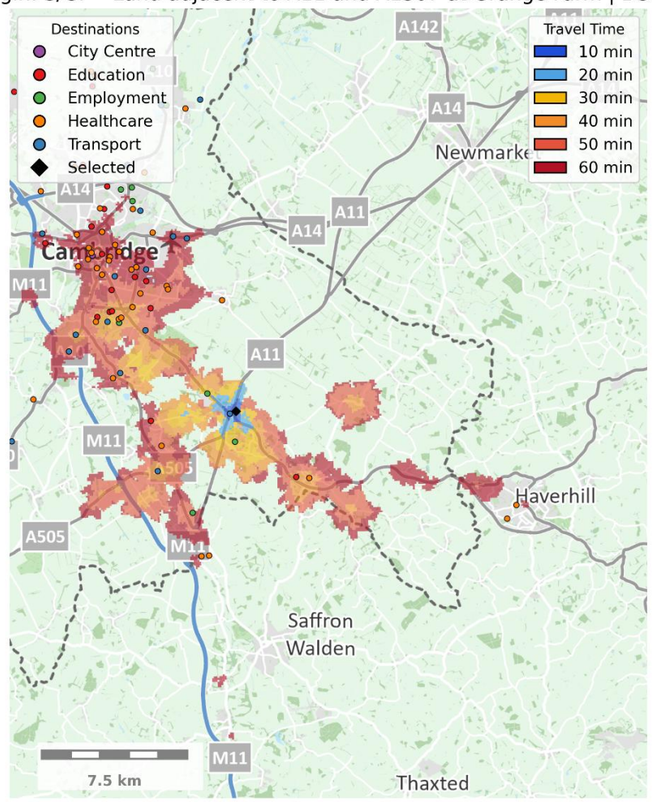
Do Something - Spatial Pattern of Connectivity: The Do Something scenario demonstrates a strong overall pattern of connectivity centred on Cambridge, with extensive radial corridors extending to the south-west and south-east. Connectivity is generally strongest along these key corridors, while links to more peripheral locations remain comparatively limited. The inclusion of the East West Rail scenario further strengthens connectivity to the west, particularly towards Cambourne and surrounding settlements.

AM / PM Peak comparison: The AM and PM peak exhibit a broadly consistent pattern of connectivity. Minor differences are evident along the western radial corridor, where slightly enhanced accessibility is observed during the AM peak from the Scotland Farm Park & Ride. However, these variations are marginal and do not materially alter the overall connectivity outcomes.

RC Vs DM Vs DS Comparison: There is immaterial differences between the RC and DM. The Do Something scenario retains a broadly similar spatial connectivity pattern to the Do Minimum scenario, reflecting the continued importance of the existing transport network. However, the proposed interventions deliver notable journey time savings across several key corridors. The most significant benefits are observed around Trumpington Park & Ride and Shelford Railway Station, where accessibility improves from approximately 40 minutes to 30 minutes. Similar gains are evident along the A1303 and A1307 corridors, where travel times reduce from approximately 50–60 minutes to 30–40 minutes, substantially increasing access to employment, services and strategic transport hubs.

Do Something Implications in terms of Settlement Hierarchy: The Do Something scenario supports Greater Cambridge's connectivity aspirations. Cambridge and its urban fringe retain strong 30-minute access to services, employment and transport connections. It also benefits Rural Centres such as Sawston and Great Shelford, Minor Rural Centres including Linton and Melbourn, and several Group and Infill Villages, particularly along the A10 corridor. For larger Town settlements, access to Waterbeach improves to 50–60 minutes. Cambourne and Northstowe remain more constrained, although East West Rail reduces Cambourne journey times to around 40–50 minutes and brings Papworth Everard within 60 minutes. The Strategy increases accessible destinations from 47 in the RC to 51 in the DS+EWR scenario. The improvements are primarily focused on transport destinations such as Cambridge East Railway Station, Cambridge South West Travel Hub and Trumpington P&R. Access to education and health destinations was already high in the RC and DM scenarios but improved access to transport destinations enables greater travel choice to a wider range of locations across Greater Cambridge.

Table 6-11: S/GF Land adjacent to A11 and A1307 at Grange Farm

Reference Case	Do Minimum	Do Something
Origin: S/GF – Land adjacent to A11 and A1307 at Grange Farm | RC AM	Origin: S/GF – Land adjacent to A11 and A1307 at Grange Farm | DM AM	Origin: S/GF – Land adjacent to A11 and A1307 at Grange Farm | DS AM
		

What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: The spatial pattern of accessibility from the Grange Farm site is characterised by a strong, linear corridor of enhanced connectivity extending towards Cambridge and along the A1307/A11 axis. The 20–40-minute catchment expands significantly, forming a more continuous accessibility spine linking the site to key employment and service destinations. This results in a clear directional pattern, with accessibility gains concentrated along the strategic corridor, while areas to the west and north-west remain comparatively less well connected

AM / PM Peak comparison: The levels of connectivity in the AM and PM peaks are broadly similar with a slight increase in connectivity in the PM peak between the A10 and A1301 corridors between Trumpington Park & Ride and Great Shelford Railway Station.

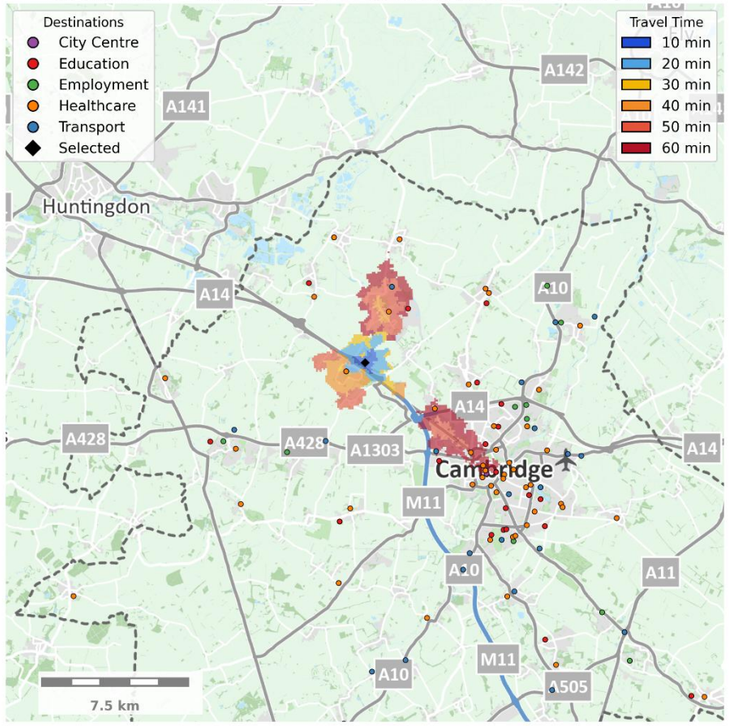
RC Vs DM Vs DS Comparison: There are notable connectivity enhancements between the RC and DM, particularly along the A1301. Under the Do Something scenario, the GCTS delivers a material improvement over the RC/DM, with a wider area of Cambridge becoming accessible within 30 to 40 minutes, including the Biomedical Campus, while the city centre is accessible within 60 minutes. The most notable benefit is along the A1301 corridor, where the major rural centres of Great Shelford and Sawston fall within a 30 to 50-minute journey time, which was not previously achieved. Connectivity to the Group Village of Balsham also improves, with journey times reduced to around 40 to 50 minutes. Access to Whittlesford Parkway Station and the Wellcome Genome Campus is also enhanced. The East West Rail scenario does not materially change connectivity to or from the Grange Farm site.

Do Something Implications in terms of Settlement Hierarchy: The Do Something scenario has clear benefits to the Grange Farm site with significant radial enhancements to Cambridge along the A1307 corridor as well as cross corridor benefits with the A1301. These benefits provide connectivity with a greater range of transport and major employment centres which become accessible within a 40-to-50-minute journey time. Grange Farm experiences one of the largest connectivity improvements across all assessed sites with the total number of accessible destinations increasing from 13 in the RC to 31 under the DS and DS+EWR scenarios, representing an increase of 18. The improvements are driven by enhanced access to transport, education and health destinations. In particular, residents gain access to education facilities such as Hills Road Sixth Form, Long Road Sixth Form College and Cambridge Academy. In terms of transport nodes, access is available to Cambridge and Cambridge South railway stations and the A11 Travel Hub. Major healthcare facilities including Addenbrooke's Hospital are also accessible. In terms of the settlement hierarchy, there are also benefits for the Local Centres and villages that lie adjacent to the A1301 and A1307 corridors.

Table 6-12: S/SHF Land North of A1307, Bar Hill, Slate Hall Farm

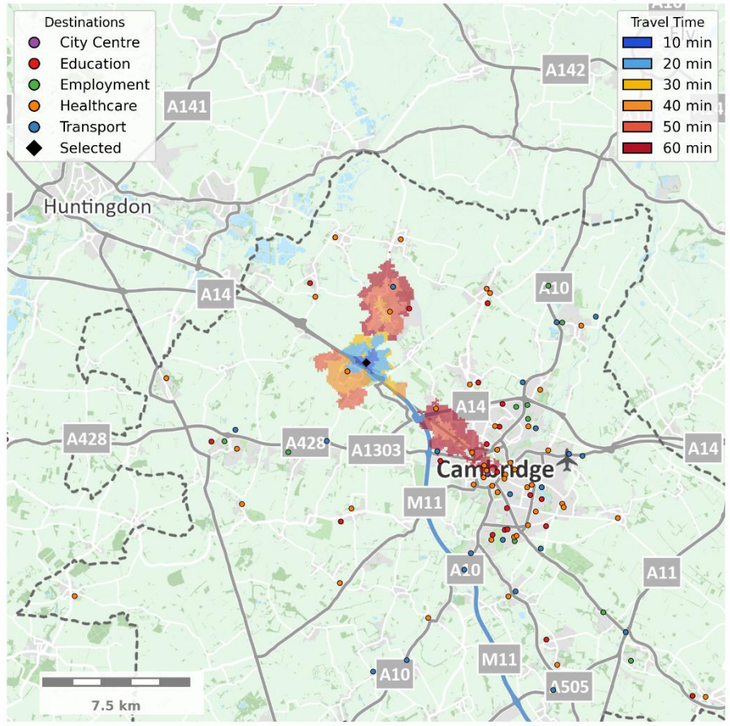
Reference Case

Origin: S/SHF – Land north of A1307, Bar Hill (Slate Hall Farm) | RC AM



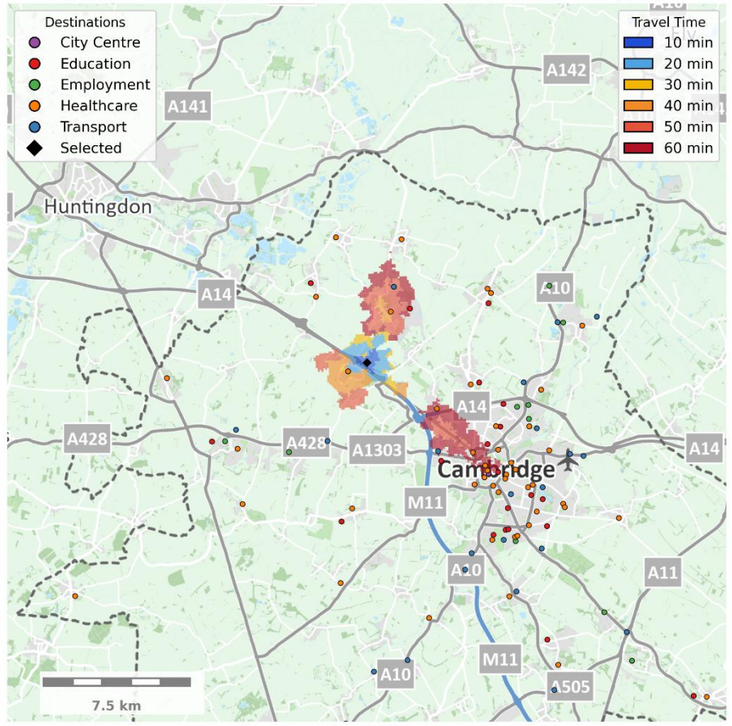
Do Minimum

Origin: S/SHF – Land north of A1307, Bar Hill (Slate Hall Farm) | DM AM



Do Something

Origin: S/SHF – Land north of A1307, Bar Hill (Slate Hall Farm) | DS AM



What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: The Spatial pattern is highly centred around the site, Bar Hill, and Northstowe with limited reach to Cambridge with access provided along the A14 and A1307 corridors only.

AM / PM Peak comparison: There are no material differences in connectivity in the AM and PM peak, except for a slight increase in journey time along the A1307 corridor with times increasing from 40 to 60 minutes.

RC Vs DM Vs DS Comparison: There is no material difference across all three scenarios, despite the presence of Do Something Interventions in the vicinity of the corridor.

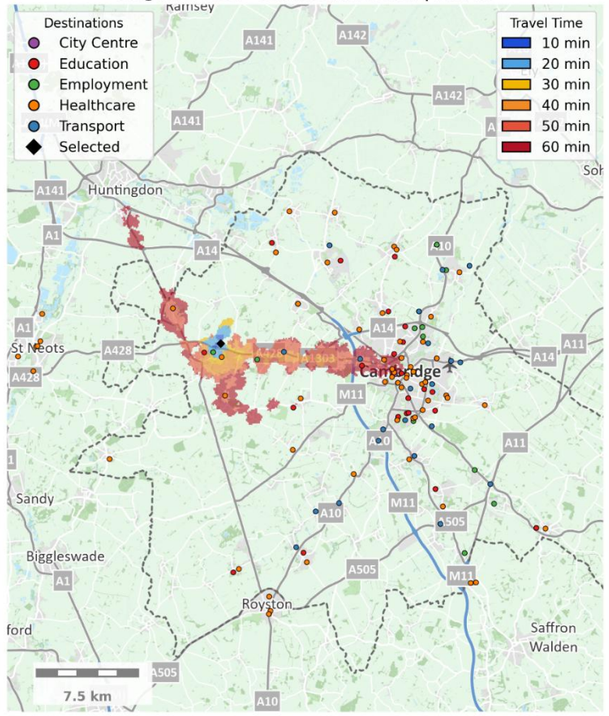
Do Something Implications in terms of Settlement Hierarchy: The site remains constrained in its connectivity to Cambridge and major employment destinations located south west in Cambourne or south of the A14 corridor in north Cambridge. This can be attributed to the lack of direct walking routes to the guided bus way with walk times taking approximately 50 minutes which only allow the north west fringe of Cambridge or Northstowe to be accessed within 60 minutes. Furthermore, the only other interchange on the A1307 corridor is located at Girton with no good way of accessing it from walk or public transport trips from the site.

Based on the assessment criteria applied, the site does not currently achieve the accessibility outcomes associated with a Major Rural Centre, particularly in relation to access to employment opportunities within the 60-minute threshold. The analysis also indicates that connectivity is primarily focused on established corridors, with more limited accessibility to destinations beyond these routes. Opportunities to strengthen connectivity were therefore explored through the testing of additional interventions, as discussed further in **Section 6.5**.

Table 6-13: S/CBN Cambourne North

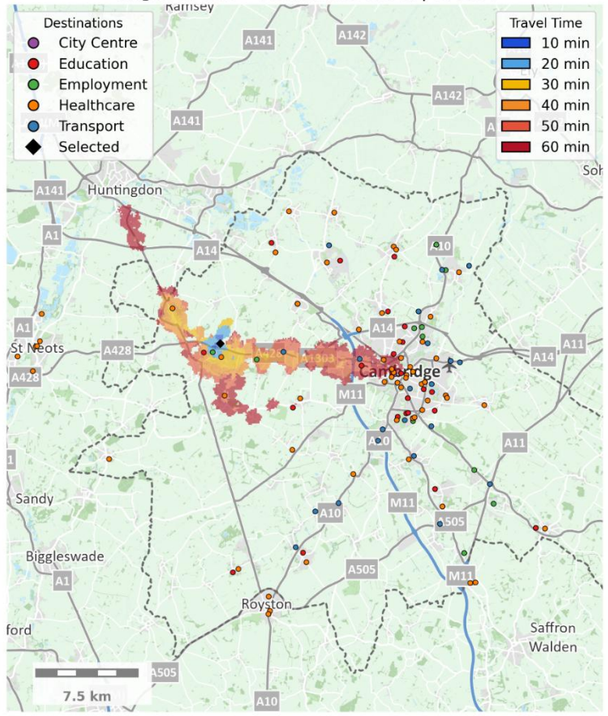
Reference Case

Origin: S/CBN – Cambourne North | RC AM



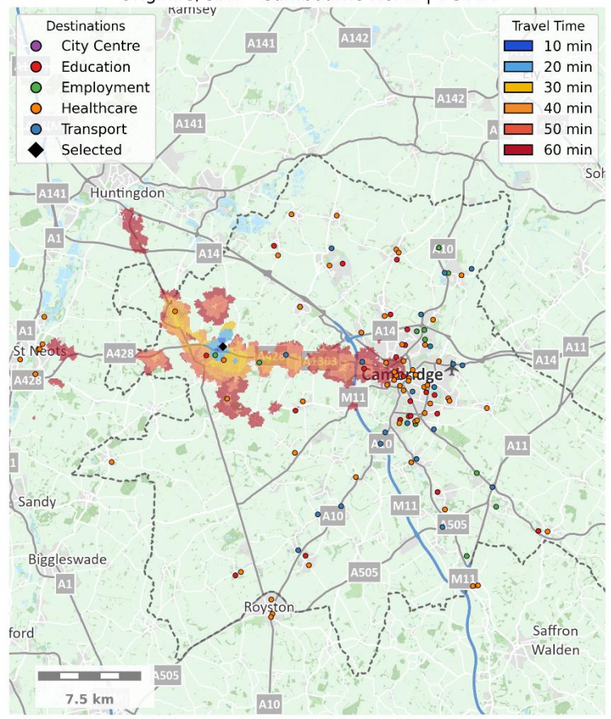
Do Minimum

Origin: S/CBN – Cambourne North | DM AM



Do Something

Origin: S/CBN – Cambourne North | DS AM



What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: The Do Something Spatial pattern is radial in nature extending along the A428 corridor west from Cambridge towards Cambourne. There is some north west reach towards Papworth Everard and southwards to group villages such as Bourn and Kingston.

AM / PM Peak comparison: Connectivity along the Cambourne–Cambridge corridor is broadly consistent across the AM and PM peaks, with areas adjoining the A428 corridor accessible within 40 minutes. However, PM peak connectivity is slightly reduced, with Bourn Village no longer reachable within 60 minutes.

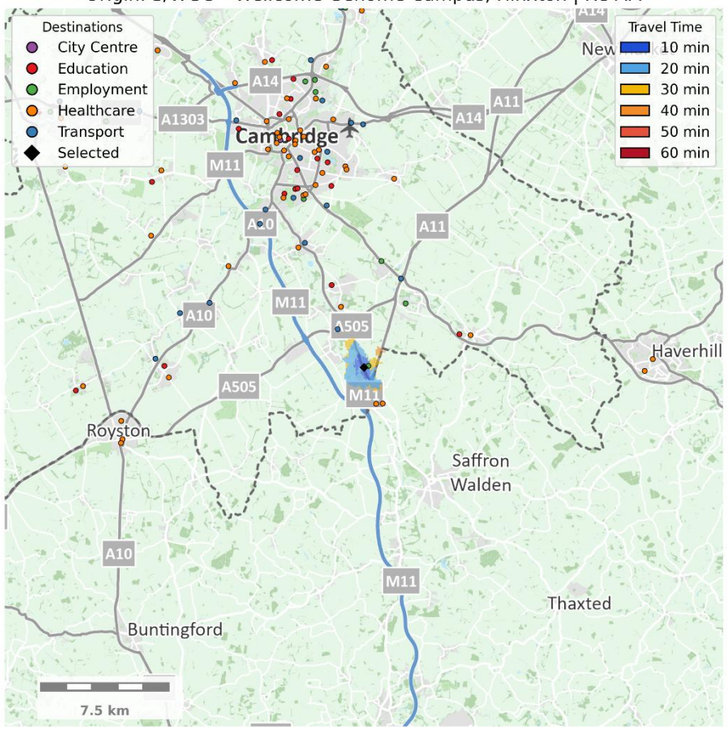
RC Vs DM Vs DS Comparison: The pattern of connectivity between RC and DM remains the same, however there are journey time improvements to Papworth Everard in the DM. The Do Minimum and Do Something scenarios provide a broadly similar connectivity and journey time offer, despite the proposed public transport intervention between Cambourne and Papworth Everard. However, the Do Something scenario improves access to Eltisley, which becomes reachable within 40–50 minutes, and brings eastern parts of St Neots within 60 minutes. With East West Rail included connectivity benefits for the Cambourne North site are more pronounced. Journey times to Papworth Everard and the wider Cambourne area reduce from around 40 minutes to 30 minutes, while access into Cambridge extends to major employment destinations such as the Biomedical Campus and St Johns Innovation Centre, which are not reachable without East West Rail.

Do Something Implications in terms of Settlement Hierarchy: The site's main connectivity constraint is its reliance on a single corridor, with wider travel dependent on the quality of interchange, particularly without East West Rail. Nonetheless, the Do Something would meet town-level hierarchy targets by providing access to education, health, employment and transport interchange within 45 minutes. Delivery of East West Rail would further improve connectivity, although the site would remain corridor-dependent and would still lack access to employment opportunities to the south-east. In terms of access to destinations, the Strategy does deliver transformational improvements to Cambourne North following the introduction of EWR, with the total number of accessible destinations increasing from 8 in the reference case to 32 in the Do Something + EWR scenario. The most significant benefits relate to access to transport and education destinations. Residents gain access to strategic transport nodes including Cambourne North Railway Station and Cambridge North Railway Station. Educational facilities such as Cambridge Regional College, Chesterton Community College and major healthcare destinations such as Addenbrooke's hospital are accessible. The results demonstrate the pivotal role of EWR in unlocking access to a substantially wider range of opportunities and services from Cambourne North, supporting the creation of a highly connected new community.

Table 6-14: S/WGC Wellcome Genome Campus

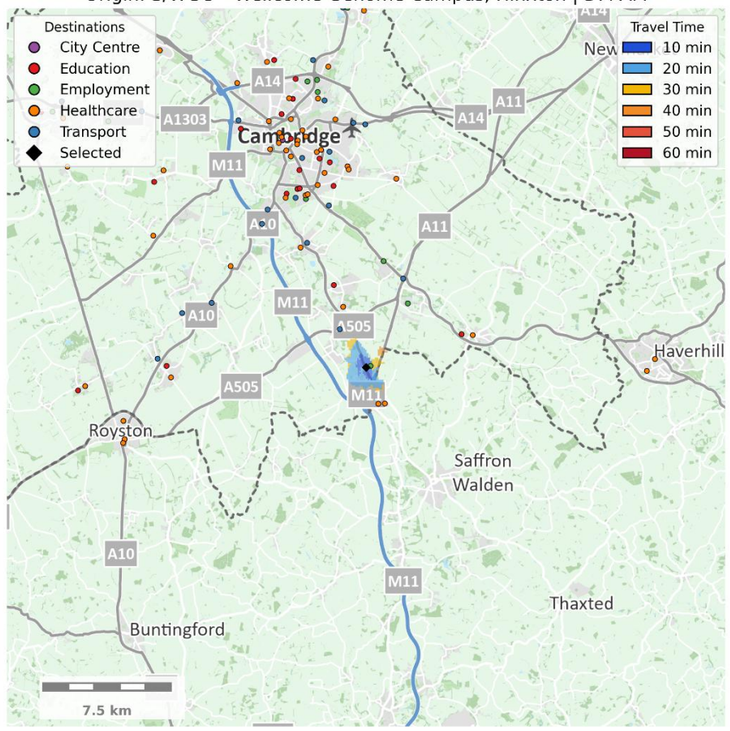
Reference Case

Origin: S/WGC – Wellcome Genome Campus, Hinxton | RC AM



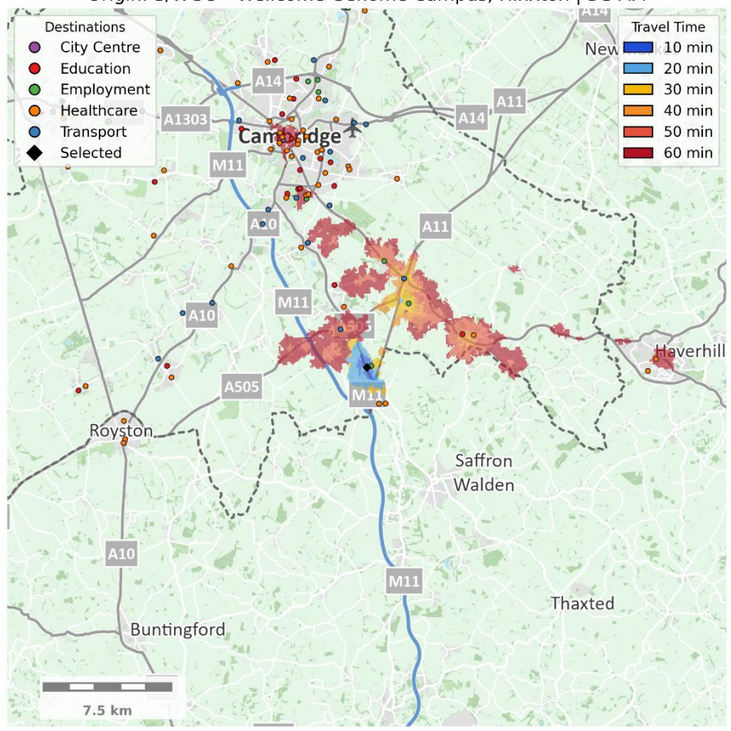
Do Minimum

Origin: S/WGC – Wellcome Genome Campus, Hinxton | DM AM



Do Something

Origin: S/WGC – Wellcome Genome Campus, Hinxton | DS AM



What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: The Do Something Spatial patterns heavily focuses on the Wellcome Genome Campus with pockets of connectivity focused on Rural Centre locations such as Great Shelford and transport interchange such as those located at the A11 and A1307.

AM / PM Peak comparison; The Do Something scenario demonstrates no material differences between the AM and PM peak periods.

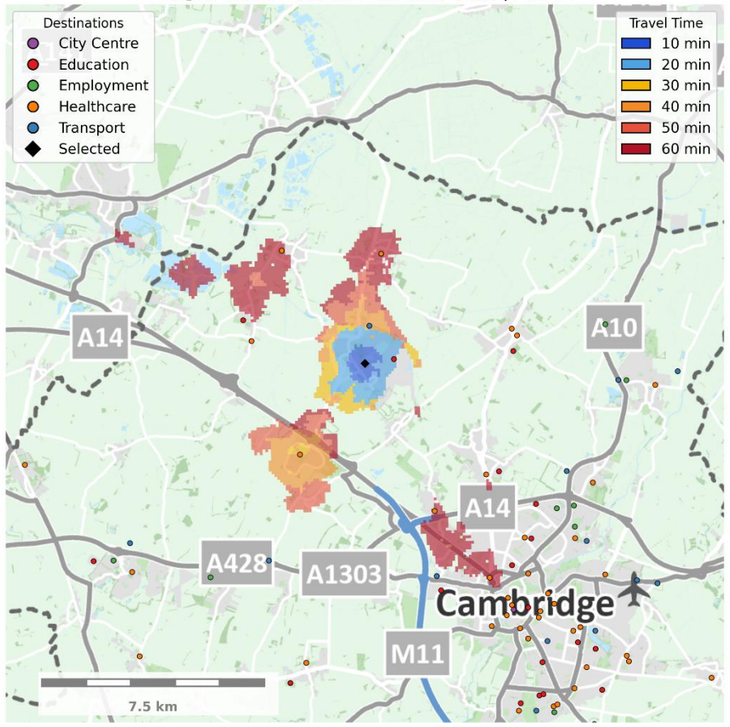
RC Vs DM Vs DS Comparison: The site shows a clear improvement in connectivity compared with the Do Minimum scenario, which provides no wider access within 60 minutes. The proposals for high quality public transport on the A11 to Biomedical Campus corridorincluded in the Do Something interventions therefore deliver a meaningful benefit, providing access to employment, health, education and transport interchange within 60 minutes, with some facilities reachable within 30 minutes or less. Access is also improved to Rural Centres such as Great Shelford and to the southern fringe of Cambridge, with the Biomedical Campus, Shelford railway station and Cambridge South railway station accessible within 50 minutes. Cambridge city centre is also reachable within 60 minutes

Do Something Implications in terms of Settlement Hierarchy: The GCTS Do Something scenario delivers a notable improvement in connectivity, enabling the site to broadly align with the Minor Rural Centre tier while also meeting some Major Rural Centre accessibility characteristics, including access to major employment and education destinations within 60 minutes. The findings demonstrate how targeted transport interventions can strengthen connectivity and expand travel choice. Together with the site's planned mix of uses and supporting emerging Local Plan policies, this provides a strong foundation for improving accessibility and reducing the need to travel for some day-to-day activities. The GCTS provides notable improvements in connectivity to destinations increasing from one in the reference case to 12 in the Do Something and Do Something + EWR scenarios. The improvements are distributed across employment, transport, education and healthcare destinations, providing residents and employees with access to a wider range of opportunities and services. In particular, the site gains access to major employment centres including Granta Park and the Cambridge Biomedical Campus, educational facilities such as Parkside Community College and Cambridge Academy for Science and Technology, and strategic transport nodes including the A11 Travel Hub and Cambridge South Railway Station. Improved access to major healthcare facilities, including Addenbrooke's Hospital, further enhances the site's overall connectivity. The results demonstrate how the GCTS intervention package strengthens links between Wellcome Genome Campus and key destinations across Greater Cambridge, supporting greater travel choice to employment, education, healthcare and transport opportunities

Table 6-15: S/NST Northstowe New Town

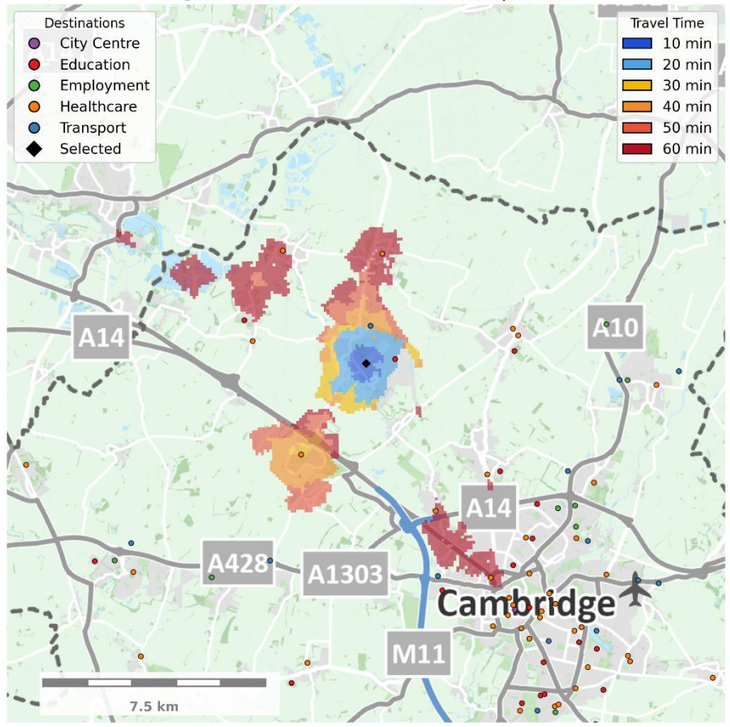
Reference Case

Origin: S/NST - Northstowe New Town | RC AM



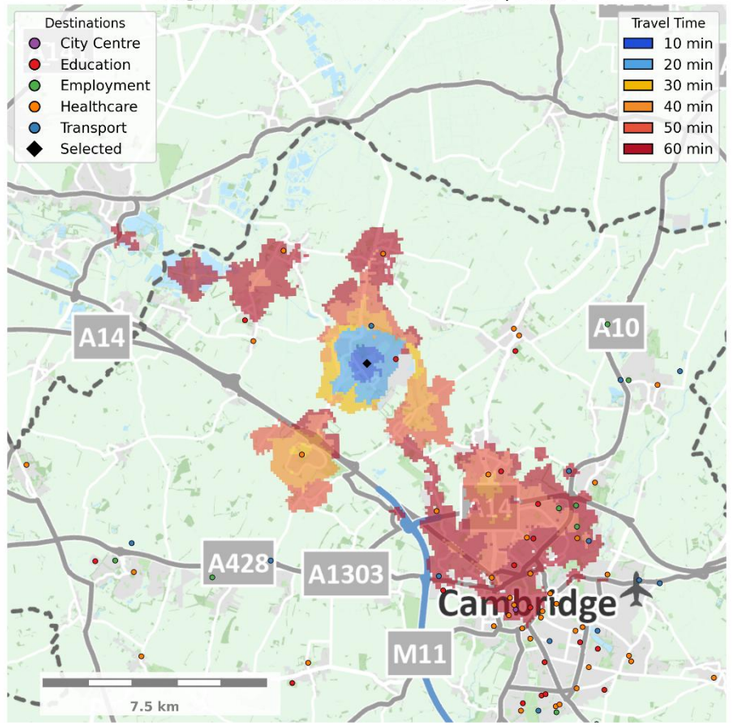
Do Minimum

Origin: S/NST - Northstowe New Town | DM AM



Do Something

Origin: S/NST - Northstowe New Town | DS AM



What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: The Do Something pattern is highly focused on Northstowe and the surrounding rural centres of Willingham, Bar Hill and Swavesey. In regard to Cambridge city the spatial pattern focuses heavily on the north and western areas of the city extending as far as the city centre and Cambridge North railway station.

AM / PM Peak comparison: There is no material difference in the AM and PM peak periods

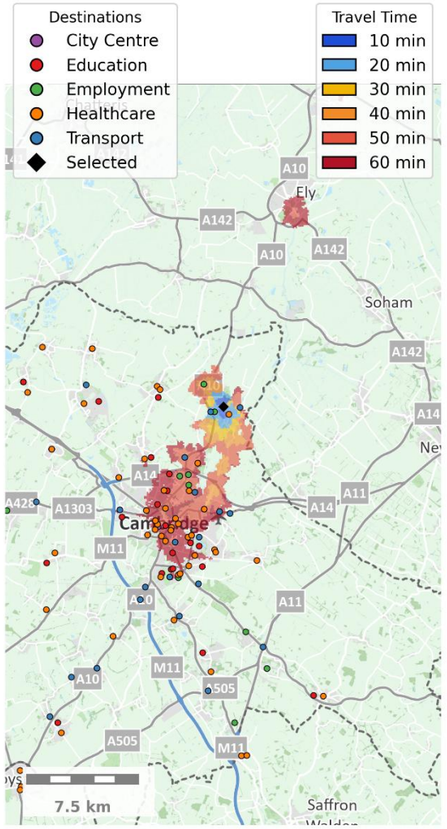
RC Vs DM Vs DS Comparison: There is no material difference between the between the Reference Case and the Do Minimum scenarios. However, there are notable improvements shown in the Do Something Scenario. Connectivity to enhanced along the guided bus way corridor and the Oakington Road / Cambridge Road corridors with widened accessibility at Oakington and Histon and Impington. The most significant improvement in connectivity is Cambridge city with connectivity extending well beyond the Huntingdon Road corridor towards the north and east. Cambridge city centre is accessible within 60 minutes whilst the major employment destinations such as St John's Innovation Park and Cambridge Science Park accessible within 40 – 50 minutes.

Do Something Implications in terms of Settlement Hierarchy: The Do Something scenario demonstrates clear improvements in connectivity for Northstowe, increasing access to major employment destinations, transport hubs, healthcare and education, and providing residents with a broader range of opportunities within the assessed travel time. The Guided Busway provides an important strategic public transport connection for Northstowe, offering a genuine alternative to travel by private car. When combined with the wider Do Something interventions, this strengthens accessibility to rural centres, surrounding villages and Cambridge, improving Northstowe's integration with the wider settlement hierarchy. Overall, the scenario demonstrates how the proposed GCTS interventions can build upon Northstowe's existing public transport provision to extend the range of destinations and opportunities accessible by sustainable modes, strengthen connections between settlements and support greater travel choice for residents as the development continues to build out.

Table 6-16: S/WNT Waterbeach New Town

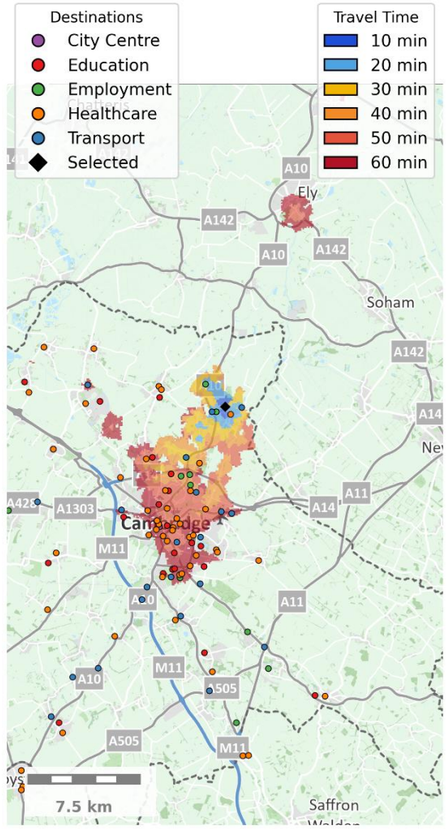
Reference Case

Origin: S/WNT – Land north of Waterbeach | RC AM



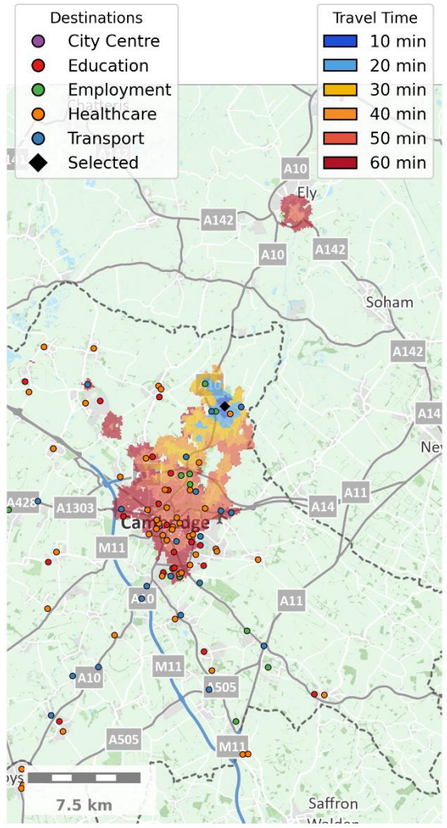
Do Minimum

Origin: S/WNT – Land north of Waterbeach | DM AM



Do Something

Origin: S/WNT – Land north of Waterbeach | DS AM



What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity; The spatial pattern shows a strongly centralised, radial accessibility structure focused on Cambridge, with the highest levels of access in the city centre and declining connectivity with distance. Improved accessibility extends along key transport corridors, while surrounding settlements provide more limited, localised access to services. Overall, the pattern reflects a clear reliance on Cambridge as the main hub, with more fragmented and weaker connectivity across the wider rural area.

AM / PM Peak comparison: The Do Something AM and PM peaks show a broadly similar spatial pattern, although the PM peak performs slightly better in some areas. Journey times along the B1049 corridor to Histon and Impington reduce from 50 to 40 minutes, while connectivity to south Cambridge also improves, extending access within the 50-minute threshold.

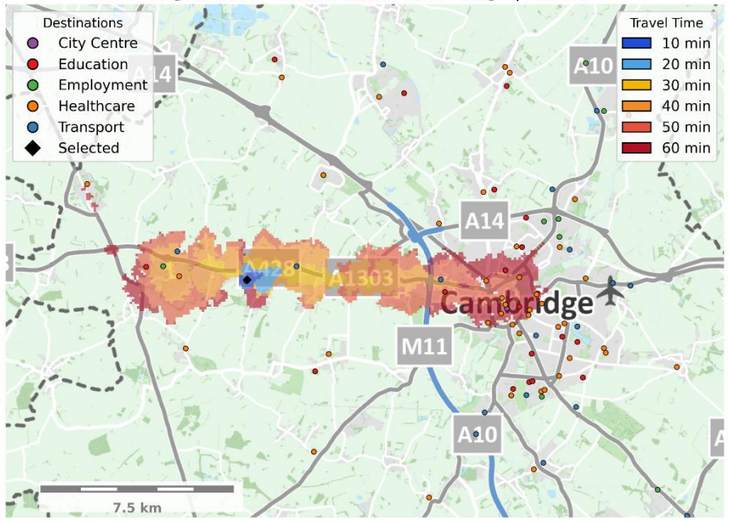
RC Vs DM Vs DS Comparison: The RC and DM scenarios are broadly similar spatially but with notable journey time reductions in the DM**.** The Do Minimum and Do Something scenarios are also broadly similar with some extension to the area covered by the 50–60-minute journey time, most notably along the A14 and A1303 corridors**.**

Do Something Implications in terms of Settlement Hierarchy: In settlement hierarchy terms, Waterbeach is classified as a Town and demonstrates the level of connectivity expected of this settlement tier. The site benefits from strong access to major employment, healthcare and education destinations, with a range of key opportunities reachable within 45 minutes. Its strategic location on both the A10 corridor and the rail network provides a strong foundation for connectivity, supporting access to Cambridge and a wide range of destinations across Greater Cambridge. The GCTS further enhances this accessibility, increasing the number of destinations reached within the assessment criteria from 22 in the Reference Case to 31 under the Do Something + EWR scenario. These improvements are driven by enhanced access to education, healthcare and transport destinations, including North Cambridge Academy, Cambridge Regional College, Waterbeach Railway Station and Cambridge East Railway Station. While accessibility to major employment destinations is already strong in the baseline scenario, the Strategy broadens access to a wider range of services and opportunities, increasing travel choice and network connectivity. Overall, the results demonstrate that the GCTS strengthens Waterbeach's role as a well-connected new community, building on an already strong accessibility position and providing further access to employment, education, healthcare and transport opportunities across the Greater Cambridge area.

Table 6-17: S/BA Bourn Airfield New Village

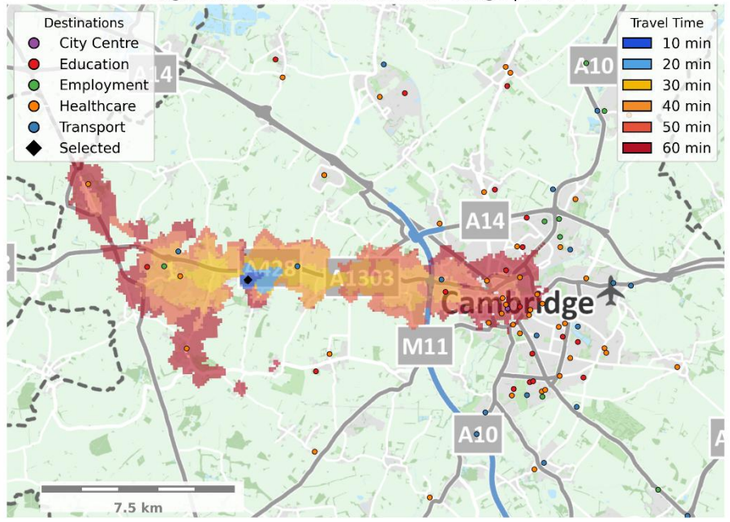
Reference Case

Origin: S/BA – Bourn Airfield New Village | RC AM



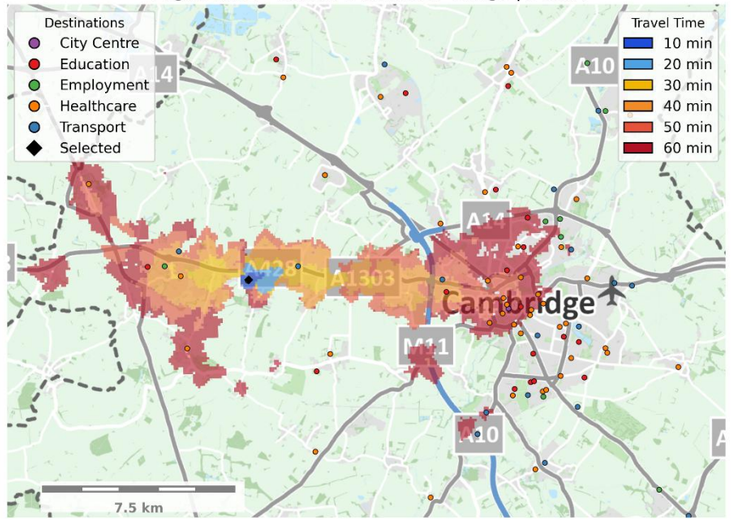
Do Minimum

Origin: S/BA – Bourn Airfield New Village | DM AM



Do Something

Origin: S/BA – Bourn Airfield New Village | DS AM



What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: The spatial pattern shows a corridor-based accessibility structure, with improvements concentrated along the west–east axis between Bourn Airfield and Cambridge. Accessibility is therefore more linear than radial, reflecting reliance on a single principal corridor linking the site to the city. Cambridge remains the dominant destination hub, with the strongest accessibility focused on the urban core, while areas beyond the corridor are more weakly and fragmentedly connected. Overall, the pattern highlights a strong directional reliance on Cambridge, with limited connectivity elsewhere and weaker integration with the wider network.

AM / PM Peak comparison: The Do Something AM and PM peaks show a broadly similar spatial pattern. However, PM peak connectivity is slightly weaker, with Caxton End and Bourn no longer accessible within 60 minutes. This may reflect differences in public transport service levels or frequencies.

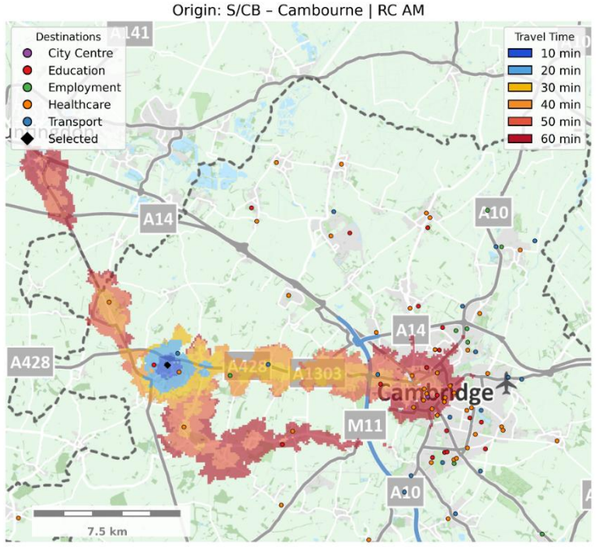
RC Vs DM Vs DS Something Comparison: Connectivity improves progressively across the scenarios, with notable benefits along the A1198 corridor and to settlements south-west of Cambourne. The Do Something scenario further enhances access to destinations south of the A14, including St John's Innovation Centre, while also bringing Trumpington Park & Ride within the 60-minute catchment. These improvements demonstrate the role of enhanced orbital connectivity in expanding access to employment, services and transport hubs, broadening travel choice and strengthening overall network connectivity.

Do Something Implications in terms of Settlement Hierarchy: As a New Village within the settlement hierarchy, Bourn Village performs well against the relevant connectivity targets. Connectivity under the Do Something and Do Something plus East West Rail scenarios is broadly consistent with expectations for Town and Major Rural Centre settlement orders. Bourn Airfield New Village experiences positive improvement in connectivity and travel choice as a result of the GCTS, with the total number of accessible destinations increasing from 11 in the Reference Case to 14 under both the Do Something and Do Something + EWR scenarios. The improvements are driven by enhanced access to educational facilities, including Cambourne Village College and Northstowe Secondary College, alongside improved connectivity to Bourn Quarter and Cambourne North Railway Station. While the scale of change is more limited than that observed at some other strategic sites, the results demonstrate that the GCTS intervention package broadens access to a wider range of employment, education and transport opportunities, helping to support the development of a well-connected new community

Table 6-18: S/CB Cambourne

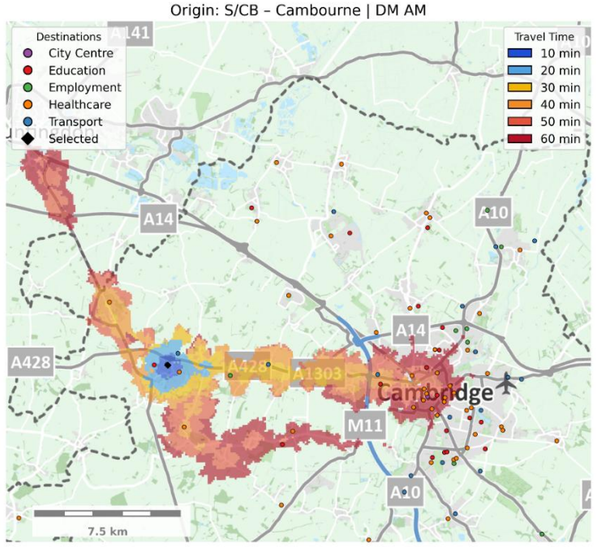
Reference Case

Origin: S/CB – Cambourne | RC AM



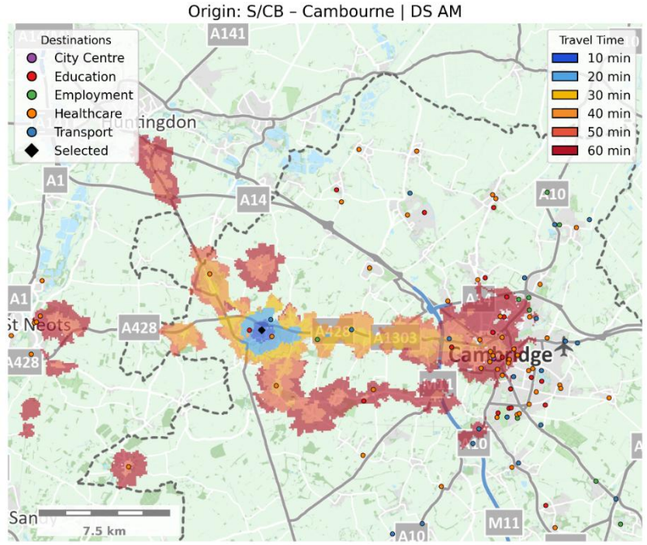
Do Minimum

Origin: S/CB – Cambourne | DM AM



Do Something

Origin: S/CB – Cambourne | DS AM



What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. They present the AM peak period, with the PM peak and East West Rail scenario included in Appendix F.

Do Something - Spatial Pattern of Connectivity: The scenario shows a mainly corridor-based pattern along the A428/A1303 between Cambourne and Cambridge, with strongest links towards Cambridge. There is some secondary reach towards Huntingdon and limited rural access, but connectivity remains highly directional rather than radial.

AM / PM Peak comparison: The AM and PM peak isochrones show broadly consistent connectivity, particularly along the main Cambourne–Cambridge corridor, where Cambridge and intermediate destinations are generally reachable within 30–40 minutes in both peaks. PM peak connectivity is slightly weaker, with the 60-minute catchment contracting to the south-west and in more peripheral rural areas. This suggests a modest decline in evening peak performance, although the core corridor to Cambridge is largely unaffected.

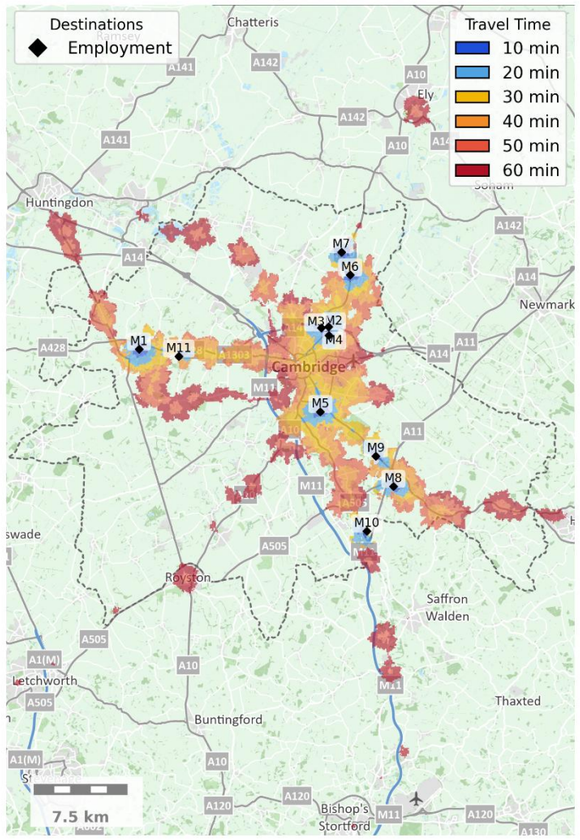
RC Vs DM Vs DS Comparison: The RC and DM and Do Something scenarios show broadly similar accessibility patterns but do demonstrate connectivity enhancement through the scenarios. The main changes are improved access to Group Villages such as Elsworth, Eltisley and Gamlingay, which become reachable within 50–60 minutes, having previously been outside this range. Cross-boundary connectivity to St Neots also improves. With East West Rail included, connectivity improves more substantially. Journey times to Papworth Everard and the wider Cambourne area reduce from around 40 minutes to about 30 minutes, while access within Cambridge expands significantly. This improves access to key employment destinations, including the Biomedical Campus and St John's Innovation Centre, which are less accessible without East West Rail

Do Something Implications in terms of Settlement Hierarchy: In settlement hierarchy terms, Cambourne demonstrates the level of connectivity expected of a Town, with employment, education, healthcare and transport interchange destinations generally accessible within 45 minutes. Building on this strong foundation, the GCTS significantly enhances accessibility, with the number of destinations reached increasing from 11 in the Reference Case to 31 under the Do Something + EWR scenario. The most significant benefits are associated with improved access to education and transport destinations, although notable gains are also realised for employment and healthcare. Residents benefit from enhanced connectivity to key strategic destinations including Cambourne North Railway Station, Cambridge North Railway Station, Cambridge Regional College, Chesterton Community College, St Bede's School and Addenbrooke's Hospital. These improvements broaden access to opportunities and services across Greater Cambridge, increasing travel choice and supporting a wider range of journey purposes. The introduction of East West Rail provides a further step change in connectivity, substantially expanding the range of destinations that can be accessed within the assessment thresholds. Together, the GCTS and EWR strengthen Cambourne's role within the western growth corridor, supporting the creation of a highly connected community with strong links to employment, education, healthcare and strategic transport networks across the region.

Table 6-19: Do Something Destination Analysis - Employment

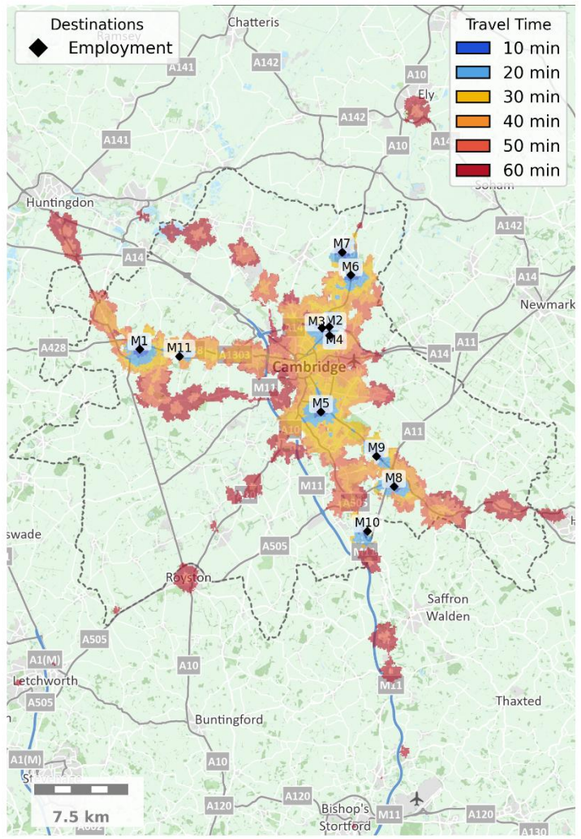
Reference Case

Isochrone from all Employment destinations | RC AM



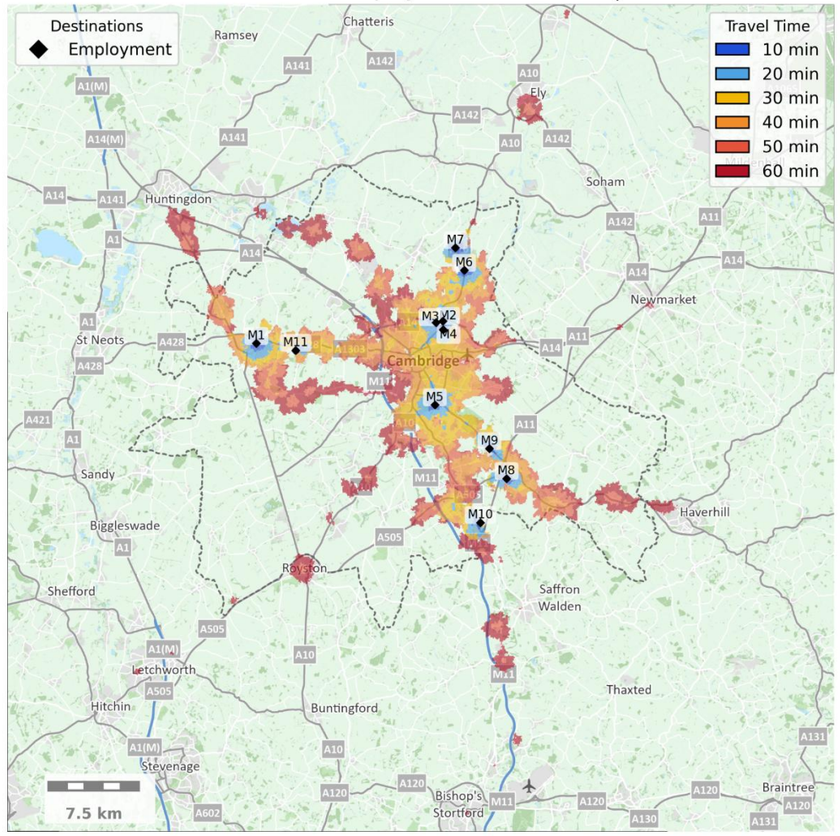
Do Minimum

Isochrone from all Employment destinations | DM AM



Do Something

Isochrone from all Employment destinations | DS AM



What the maps show: 60-minute public transport + walk journey time connectivity to Major Employment Destinations across Greater Cambridge with the Do Something interventions in place. The PM peak and East West Rail scenario are provided in **Appendix F**.

Do Something - Spatial Pattern of Connectivity: The Do Something pattern of connectivity remains radial in nature extending out along the key highway links from Cambridge. There is a good spread of access to major employment locations within 30 – 40-minute journey times.

AM / PM Peak comparison: The only material difference is the reduction in connectivity to group villages such as Bourn in the PM peak, where journey times exceed 60 minutes**.**

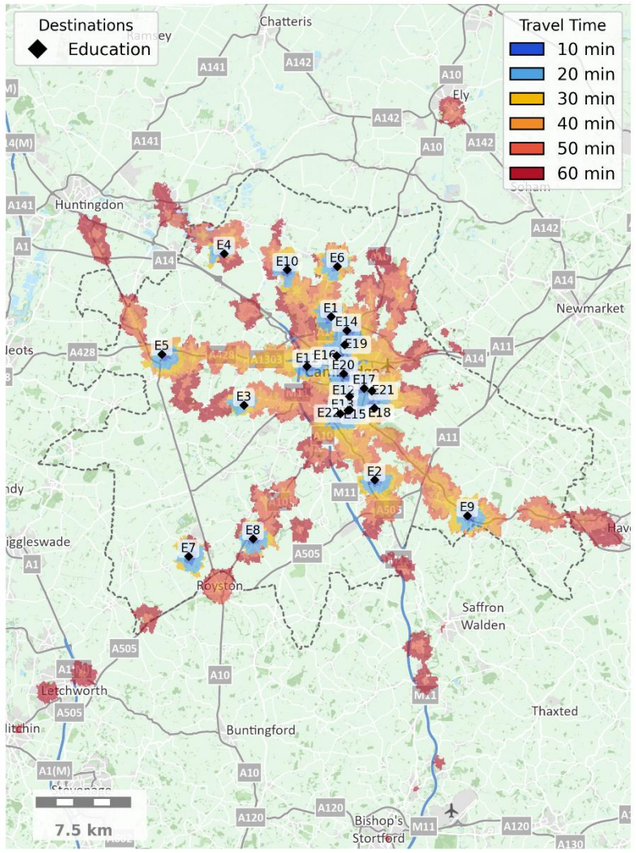
RC Vs DM Vs DS Comparison: The Do Something scenario enhances accessibility by creating a more connected and coherent network, particularly around Cambridge and along the A428/A1303 corridor. Compared with Do Minimum, accessibility catchments become more integrated, extending access to key employment locations and services and strengthening links between destinations. While the overall pattern remains focused on Cambridge and its strategic corridors, the GCTS broadens travel opportunities and improves connectivity across the wider network.

Do Something Implications in terms of Settlement Hierarchy: The Do Something Major Employment Destination connectivity scenario does show some improvements in the connectivity of lower order settlements accessing employment destinations. The major rural centres all perform well and achieve the connectivity targets of being within 60 minutes of a major employment centre or education or health facility. Waterbeach, Cambourne and parts of Northstowe demonstrate access to key destinations within the required 45-minute target. Providing dedicated active travel links to existing public transport links or proposed Girton Interchange can help to improve this further. The Do Something scenario does return a mixed picture on minor rural centre access. Linton, Fulbourn, Papworth Everard and those sited on the edge of Cambridge exhibit very good connectivity to employment destinations. However, Gamlingay, Bassingbourn, Cottenham and Comberton still have a 60-minute public transport + walk journey time. This is discussed further in **Section 6.6** that outlines measures to improve connectivity to these locations.

Table 6-20: Do Something Destination Analysis - Education

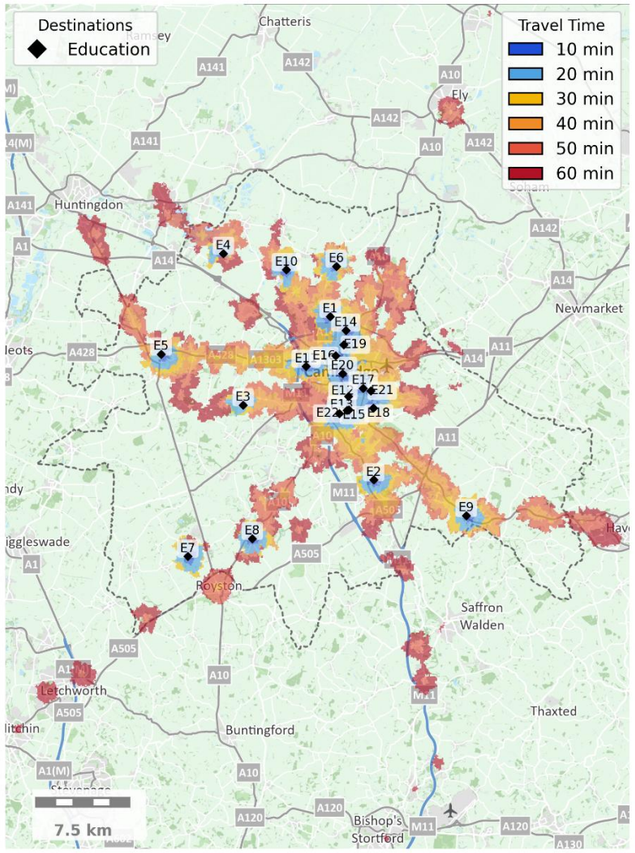
Reference Case

Isochrone from all Education destinations | RC AM



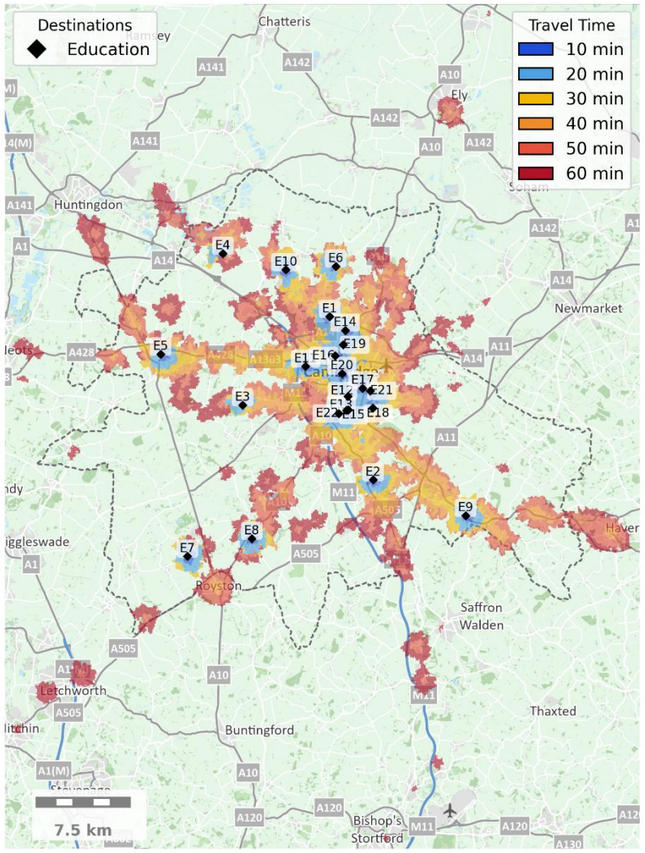
Do Minimum

Isochrone from all Education destinations | DM AM



Do Something

Isochrone from all Education destinations | DS AM



What the maps show: 60-minute public transport + walk journey time connectivity to Education Destinations across Greater Cambridge with the Do Something interventions in place. The PM peak and East West Rail scenario are provided in **Appendix F**.

Do Something - Spatial Pattern of Connectivity: The Do Something spatial pattern is characterised by a strongly centralised but corridor-led structure, with the highest levels of accessibility concentrated within Cambridge. From this core, accessibility extends outward primarily along key radial routes, forming directional corridors rather than a fully radial or evenly distributed pattern. Secondary clusters of accessibility are evident around settlements such as Huntingdon, Royston, and Haverhill; however, these remain partially disconnected and reliant on links back to Cambridge, rather than functioning as fully integrated nodes within the wider network

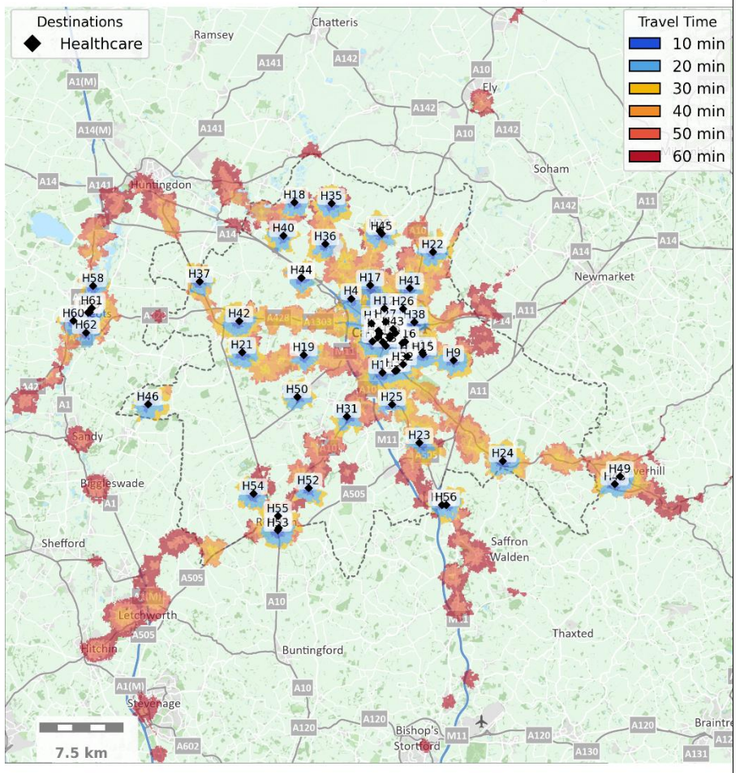
RC Vs DM Vs DS Comparison; The RC and DM scenarios demonstrate limited changes in connectivity. The Do Something scenario exhibits a broadly similar spatial structures, both centred on Cambridge with accessibility radiating out along key corridors. However, the Do Minimum scenario is comparatively more fragmented, with distinct, localised catchments around individual education facilities and weaker overall overlap between them. In contrast, the Do Something scenario shows a more consolidated and coherent pattern, with greater clustering and overlap of accessibility catchments, particularly within Cambridge and along the A428/A1303 and A10 corridors. This results in a more continuous network of access between multiple education destinations, alongside a modest expansion of higher accessibility bands (e.g. 20–40 minutes). Nevertheless, the overall improvement is incremental rather than transformative.

Do Something Implications in terms of Settlement Hierarchy: The Do Something scenario broadly supports the role of Cambridge as the primary regional centre, with strong access to a wide range of higher-order education facilities within acceptable journey times. The improved clustering and connectivity also support town-level settlements, which benefit from enhanced access to multiple education destinations within 30–45 minutes. The Strategy builds on the existing transport network by extending accessibility along key corridors and broadening access to higher-order services and facilities across Greater Cambridge. As a result, the Do Something scenario reinforces the settlement hierarchy, improves travel choice and expands access to educational opportunities for communities throughout the area, with particularly strong benefits realised along the principal public transport corridors.

Table 6-21: Do Something Destination Analysis - Health

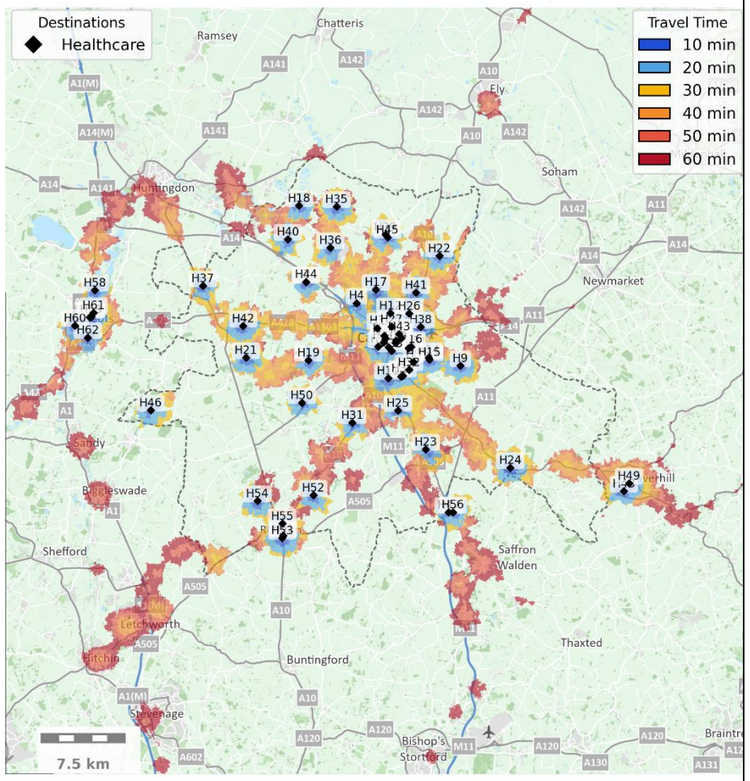
Reference Case

Isochrone from all Healthcare destinations | RC AM



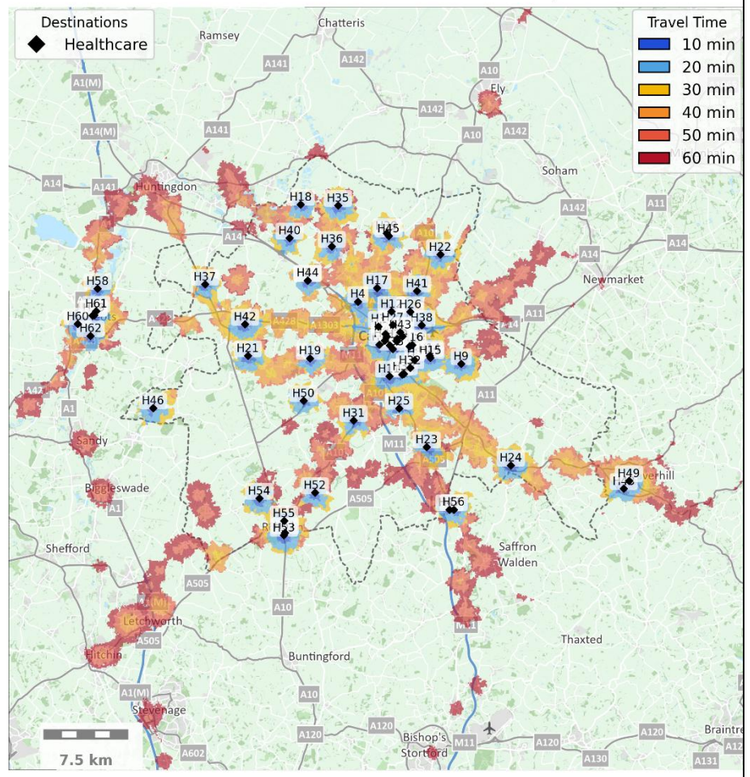
Do Minimum

Isochrone from all Healthcare destinations | DM AM



Do Something

Isochrone from all Healthcare destinations | DS AM



What the maps show: 60-minute journey time connectivity to Healthcare Destinations across Greater Cambridge with the Do Something interventions in place. The PM peak and East West Rail scenario are provided in **Appendix F.**

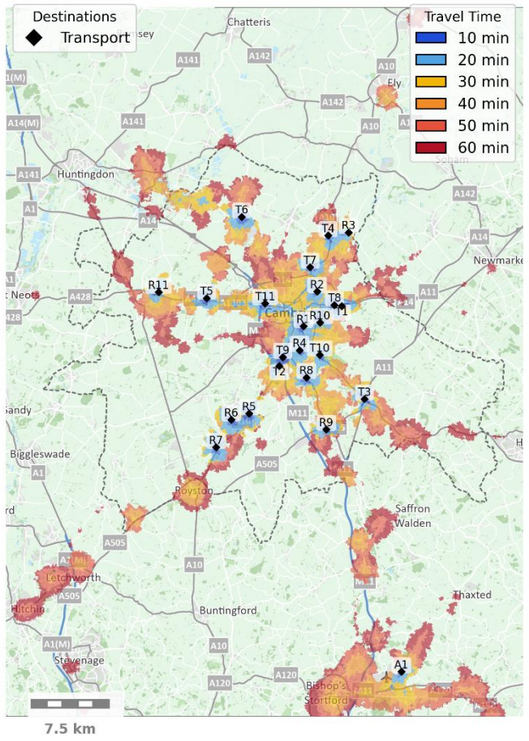
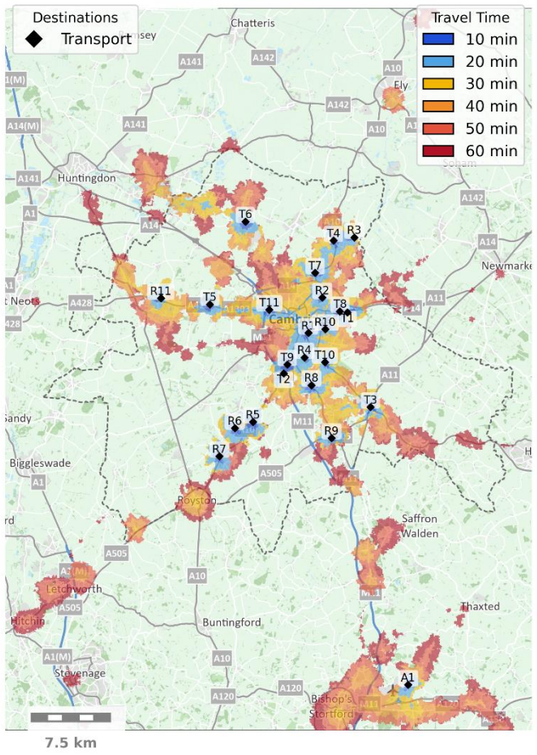
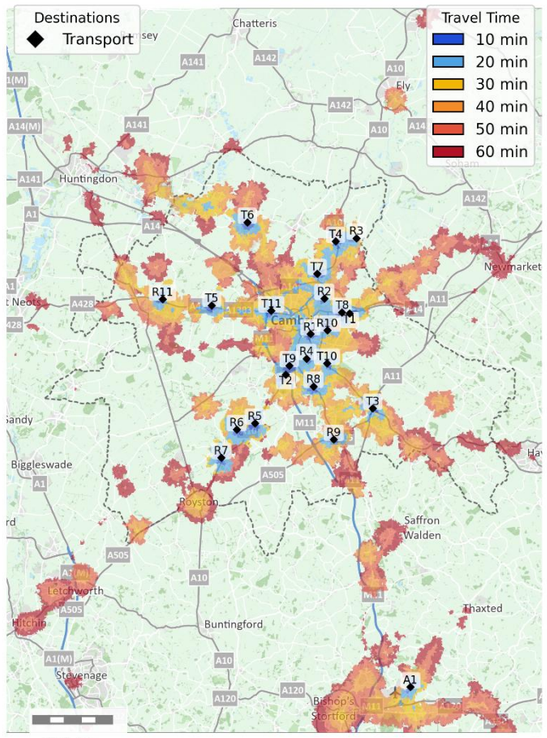
Do Something - Spatial Pattern of Connectivity; The Do Something spatial pattern is polycentric but corridor-influenced, reflecting the presence of multiple healthcare facilities distributed across the region. Cambridge functions as the principal hub, with a dense concentration of facilities and strong overlapping accessibility. Beyond Cambridge, a series of secondary healthcare clusters is evident in settlements such as Huntingdon, St Neots, Royston, and Haverhill. Accessibility extends outward from these centres but remains largely corridor-based, creating elongated catchments that follow principal routes rather than forming a uniform or radial pattern. Despite this, there are still clear gaps in connectivity, particularly in more rural areas between these clusters, most notably in the south-west and far east, where accessibility is weaker and more fragmented.

AM / PM Peak comparison: The AM and PM peaks are broadly similar with some slight connectivity reduction in the PM peak in proximity to Bassingbourn

RC Vs DM Vs DS Comparison: The RC and DM scenarios show broadly comparable levels of connectivity. The Do Something scenarios retain a similarly dispersed spatial pattern, reflecting the distribution of healthcare provision across Cambridge and surrounding settlements. However, the Do Minimum scenario is defined by more separate and localised catchments, with limited overlap between individual healthcare facilities. By contrast, the Do Something scenario provides a modest increase in catchment overlap and consolidation, particularly within Cambridge and along key corridors such as the A428/A1303 and A10. This creates a more continuous pattern of accessibility between healthcare facilities and slightly extends the 20–40-minute isochrones. Overall, the improvements are incremental, and the underlying connectivity structure remains largely unchanged. The Do Something East West Rail scenario does not result in any material change to healthcare connectivity.

Do Something Implications in terms of Settlement Hierarchy: The Do Something scenario supports a multi-level settlement hierarchy, with Cambridge continuing to perform its role as the primary centre for higher-order healthcare services, complemented by secondary centres providing more local healthcare provision. Enhanced overlap between catchments improves access to multiple facilities within reasonable travel times, typically within 30–45 minutes, particularly for communities located along key transport corridors. By strengthening connections to a wider range of healthcare destinations, the Strategy broadens travel choice and increases access to healthcare opportunities across Greater Cambridge. The benefits are particularly evident along the principal public transport corridors, where residents gain improved access to both strategic and local healthcare facilities. The analysis also highlights opportunities to further build on these improvements through complementary measures such as enhanced cross-corridor connectivity, rural mobility hubs and Demand Responsive Transport services. These interventions could further expand healthcare accessibility for communities in western Greater Cambridge, including the Group Villages and Infill Villages between Comberton and Gamlingay, helping to extend the benefits of the Strategy and support access to services across the wider area.

Table 6-22: Do Something Destination Analysis - Transport

Reference Case	Do Minimum	Do Something
Isochrone from all Transport destinations | RC AM	Isochrone from all Transport destinations | DM AM	Isochrone from all Transport destinations | DS AM
		

What the maps show: How the Do Something scenario, incorporating the Strategy's package of interventions, changes connectivity compared with the Reference Case and Do Minimum scenarios. It presents the AM peak period, with the PM peak and East West Rail scenario included in **Appendix F**.

Do Something - Spatial Pattern of Connectivity : The spatial pattern shows a strong concentration of connectivity within Cambridge which radiates outwards to the fringe major and minor rural centres. Transport destinations are well connected to the three town settlement orders and beyond there they are corridor like in appearance and relevant narrow reaching.

AM / PM Peak comparison : The AM and PM Do Something scenario is broadly similar although there are improvements to transport connectivity in the PM peak particularly along the A1307 corridor to Linton and Haverhill, north to Cottenham and north west towards Swavesey and Willingham which demonstrates a greater reach for journeys between 50- and 60 minutes**.**

RC Vs DM Vs DS Comparison: The isochrone mapping indicates that the Do Minimum (DM) scenario maintains a strong concentration of high-connectivity areas (10–20 minute travel times) within and immediately around Cambridge, with connectivity rapidly diminishing along radial corridors moving into the rural hinterland. This reflects an established pattern whereby accessibility is tightly aligned to the existing urban core and key transport corridors. In contrast, the Do Something (DS) scenario demonstrates targeted but relatively modest extensions of improved travel time bands along key corridors. The Do Something scenario does not fundamentally reshape the overall spatial pattern of connectivity; rather, it strengthens existing axes of movement and marginally expands areas with improved access, particularly along strategic public transport corridors and towards key growth locations. The PM scenario reinforces a similar pattern, suggesting that the scale of intervention does not materially alter peak period accessibility dynamics, but instead delivers incremental improvements**.**

Do Something Implications in terms of Settlement Hierarchy: The Do Something scenario enhances connectivity across Greater Cambridge, strengthening access to key destinations along the principal transport corridors and reinforcing Cambridge's role as the primary regional centre. Secondary settlements also benefit from improved accessibility and expanded travel choice, particularly where they are well connected to the strategic network. The analysis highlights opportunities for further gains through complementary measures such as rural mobility hubs, Demand Responsive Transport and enhanced cross-corridor links, helping to broaden access to opportunities for communities including Gamlingay, Comberton and the surrounding villages.

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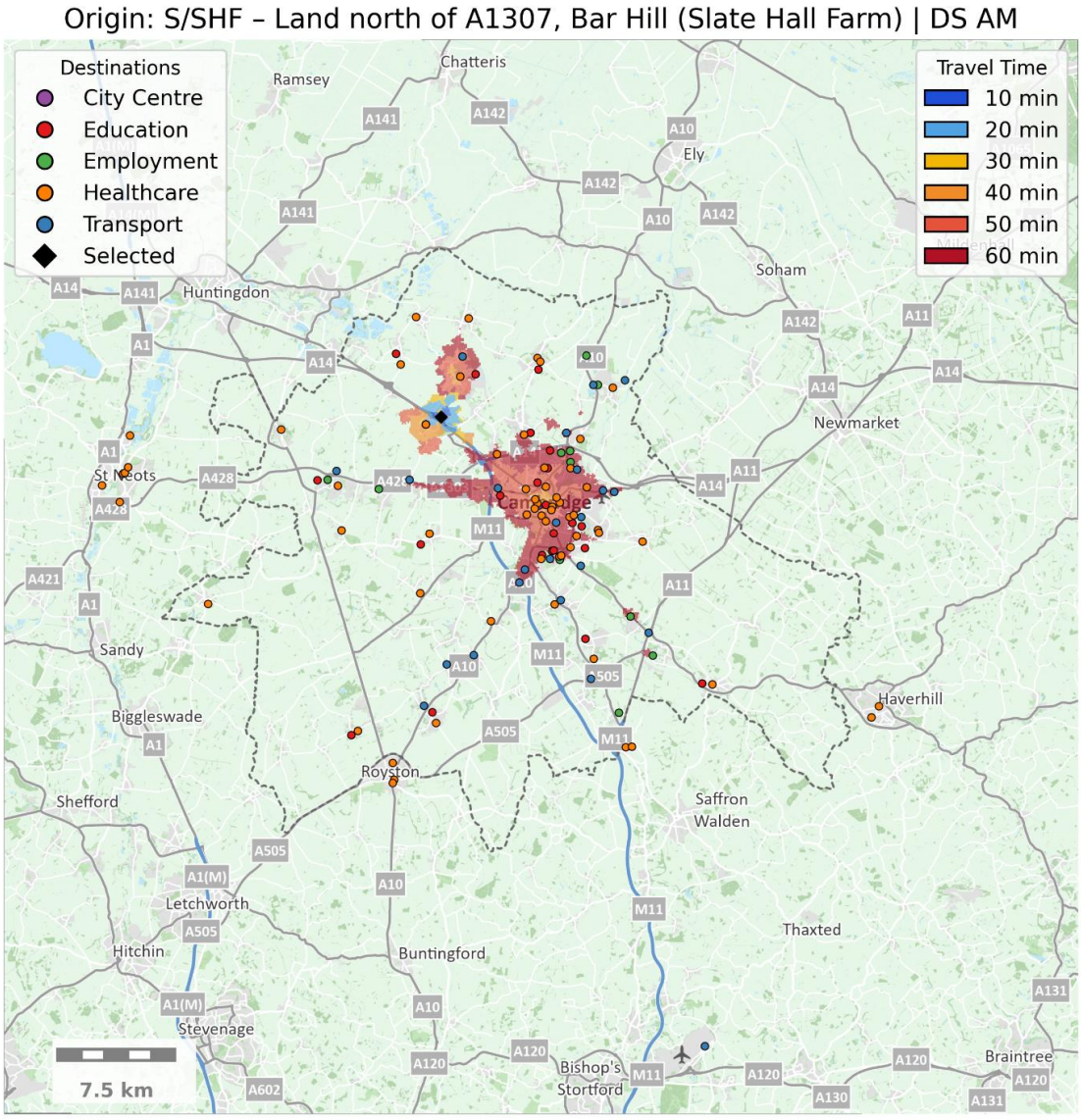
6.5 Do Something Sensitivity Testing

Slate Hall Farm

6.5.1 Slate Hall Farm currently experiences a first and last mile accessibility constraint, as the site is not served by a public transport stop within the 20-minute walking threshold applied in STEP. This limits the extent of the potential workforce catchment that can conveniently access the site by public transport.

6.5.2 To address this constraint, the sensitivity test includes a new public transport or Demand Responsive Transport service operating directly between Cambridge Bus Station and Slate Hall Farm at a 15-minute frequency. The STEP output for the AM peak is provided in **Figure 6-3**, with the full range of outputs available in **Appendix G**.

Figure 6-3: Slate Hall Farm Do Something Sensitivity Test



6.5.3 The proposed service substantially improves access to Slate Hall Farm from Cambridge. It provides connections from central Cambridge and Northstowe, while also enabling interchange with services at Cambridge railway station and other key transport hubs. Cambridge city centre would be connected to the site within approximately 30 to 40 minutes, with a wider range of locations connected within 50 to 60 minutes.

6.5.4 A similar level of accessibility is achieved in the AM and PM peak sensitivity tests, indicating that the proposed intervention could support journeys to and from Slate Hall Farm throughout the working day. The additional service therefore broadens the site's potential workforce catchment and supports access by public transport in accordance with the connectivity targets set out in **Table 4-18**.

6.5.5 The sensitivity testing demonstrates an improvement in the number of transport hubs accessibility from Slate Hall Farm, increasing from one in the Reference Case to ten in the Do Something scenarios, representing a net gain of nine hubs, providing benefit to a wider workforce catchment.

6.5.6 In particular, the intervention strengthens connections between Slate Hall Farm and established residential areas of Cambridge and Northstowe. Connections with Cambridge and Cambridge North railway stations and the wider bus network also provide opportunities for workers to access the stie from a broader range of settlements using public transport and interchange.

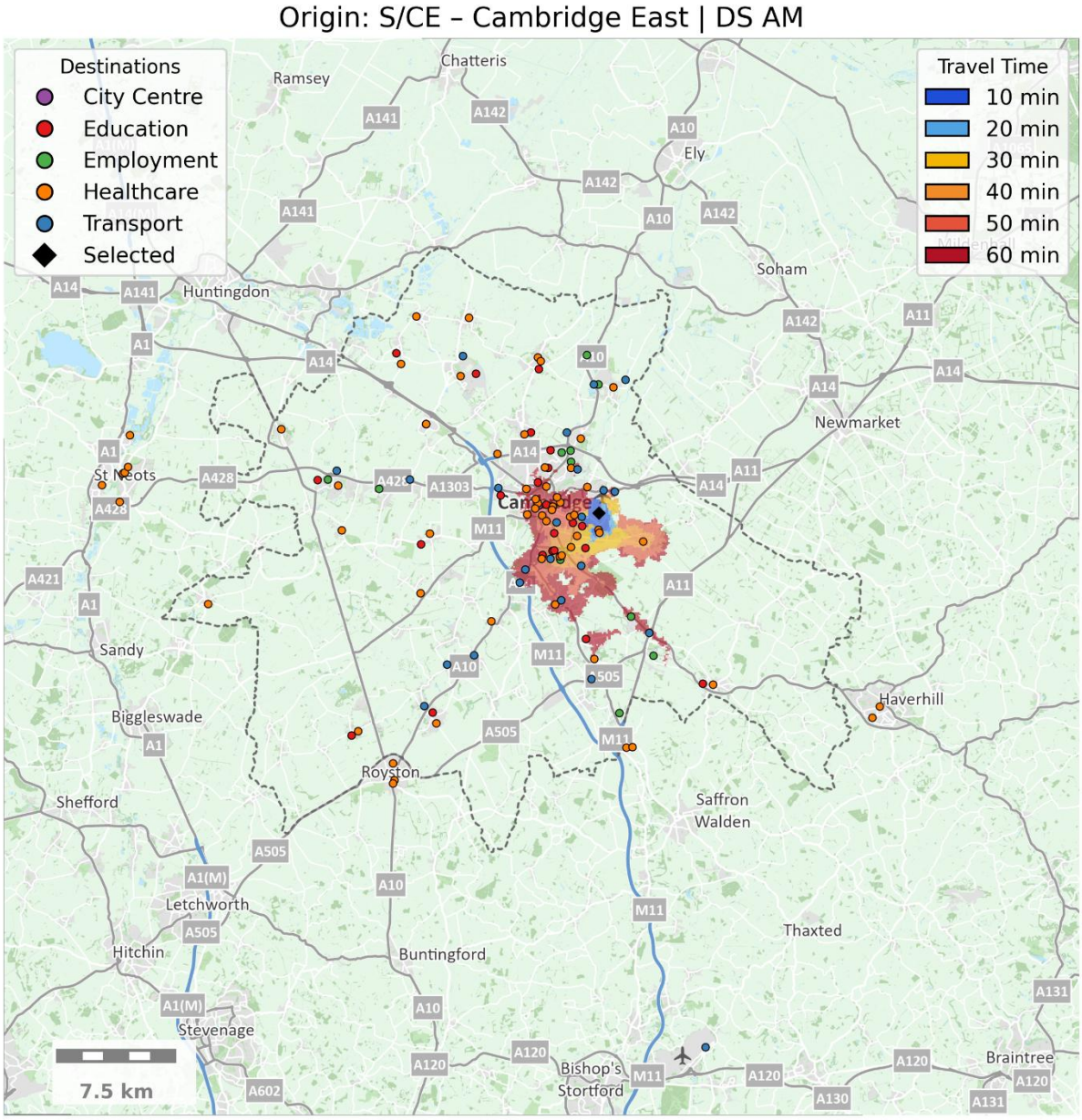
6.5.7 Overall, the sensitivity test indicates that a direct and frequency public transport connection could address the site's existing first and last mile constraint, significantly improve access to employment at Slate Hall Farm and provide future works with a viable alternative to travelling by car. The intervention would therefore support the development of Slate Hall Farm as a well-connected employment location within the wider Greater Cambridge region.

Cambridge East

6.5.8 The Do Something testing also determined that Cambridge East did not meet the required 60-minute public transport + walk journey time target as the walking distance exceeded 20 minutes. The Do Something Sensitivity testing incorporated a new pedestrian path from the site directly to Cambridge East Station and an additional direct pedestrian path from the site to the bus stop on the CEA route through the airport.

6.5.9 With these interventions provided, the journey times reduced and aligned the site well with the targets. The STEP output for the AM peak is provided in **Figure 6-4**, with the full range of outputs available in **Appendix G**.

Figure 6-4: Cambridge East Do Something Sensitivity Test



6.5.10 Both the AM and PM Do Something Sensitivity Test scenarios demonstrate that the interventions improve connectivity with access to Major Employment Centres at Babraham Research Campus and Granta Park now accessible within 60 minutes. Connectivity is further enhanced with the inclusion of East West rail with the Major Employment Centres to the north

of Cambridge now accessible within 60 minutes and a range of facilities in central Cambridge accessible within 30 minutes.

6.5.11 Cambridge East already benefits from relatively strong accessibility in the Reference Case due to its location within the urban area of Cambridge and proximity to a range of established employment, transport, education and healthcare destinations. However, the assessment results indicate a comparatively modest level of improvement relative to some of the emerging growth locations. This is partly because accessibility to a number of destinations is constrained by the initial walk component of public transport journeys, with walking times exceeding the 20-minute threshold used within the assessment. As a result, the interchange penalty associated with reaching the public transport network reduces the number of destinations that can be reached within the overall 60-minute travel time threshold.

6.5.12 Sensitivity testing has subsequently identified more direct walking routes between Cambridge East and nearby public transport services, reducing access and interchange times and enabling a greater number of local destinations to be reached within the assessment period. Consequently, the headline results are likely to understate the site's true connectivity potential. Overall, the total number of accessible destinations increases from 22 in the Reference Case to 26 under both the Do Something and Do Something + EWR scenarios, representing an increase of four destinations.

6.5.13 Whilst employment and education accessibility remain unchanged in the assessed scenarios due to the already high level of provision available in the Reference Case, the GCTS interventions improve access to a number of strategic transport and healthcare destinations. In particular, Cambridge East gains access to additional transport destinations including Cambridge East Railway Station, Newmarket Road Travel Hub and Newmarket Road Park & Ride, strengthening connections to both the local and wider regional transport network. The site also benefits from access to an additional higher-order healthcare destination, further broadening access to healthcare and wellbeing services. Existing access to key employment destinations, including Cambridge Biomedical Campus, Cambridge Science Park and Cambridge Business Park, is maintained throughout all assessment scenarios.

6.5.14 The findings should therefore be viewed as a conservative representation of Cambridge East's future accessibility. The sensitivity testing demonstrates that more direct walking connections to public transport services could bring additional destinations within the 60-minute travel time threshold, further reinforcing Cambridge East's role as a highly accessible and well-connected growth location within Greater Cambridge.

6.5.15 These interventions demonstrate improved connectivity and align the Cambridge East with the City settlement hierarchy connectivity target as outlined in **Table 4-14**.

6.6 Do Something Sensitivity Testing – Existing Settlements

6.6.1 It was also clear from the Do Something scenario testing that some of the existing settlements had constraints that impacted their ability to meet the Destination-based connectivity targets as outlined within **Table 4-14**. To achieve these targets additional interventions were required.

6.6.2 A series of interventions such as Demand Responsive Transport, Rural Mobility Hubs and targeted active travel improvements such as direct and dedicated walking routes were proposed and tested. These interventions were found to improve connectivity and bring previously the tested existing settlements into alignment with the targets set out in **Table 4-14**.

6.6.3 It must also be noted that, although minor rural centres are assessed against a comparatively relaxed journey time target of 90 minutes, the findings demonstrate that most settlements significantly outperform this benchmark. All but three minor rural centres were able to access key destinations within 60 minutes. Cottenham met the 90-minute target without intervention, while Bassingbourn and Gamlingay met the target following additional intervention. Overall, the results indicate that connectivity is generally good across the minor rural centres, particularly given their rural setting, with the majority achieving journey times substantially below the target threshold.

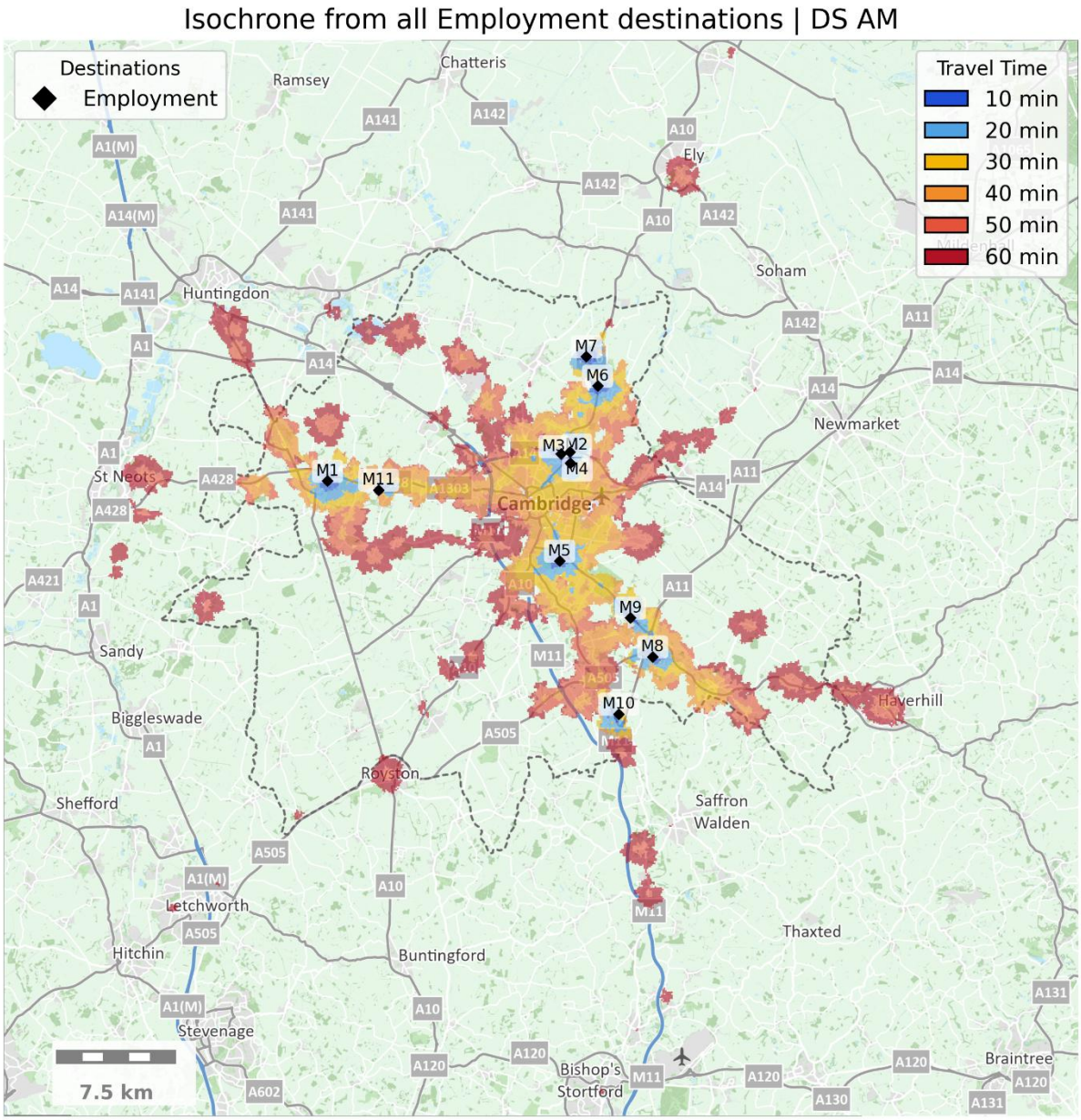
6.6.4 **Table 6-23** outlines the locations and the interventions proposed.

Table 6-23: Do Something Existing Settlement Additional Interventions.

Settlement Type	Destination Target	Transport Network Access Target	Location	Intervention
Minor Rural Centres	<90 minutes to at least one key service facility (education, healthcare, town centre)	Within a five minute* walk/wheel of a bus stop and within 450m of a Tier 1 or 2 Active Travel Route	Gamlingay	DRT running to proposed Tempsford station as part of the EWR line. Intervention was tested with a 30kmph speed and frequency of 30 minutes Additional DRT or similar was also tested to Cambourne (with or without EWR) DRT or a rural bus service connected to Royston Station
			Bassingbourn	DRT or a rural bus service connected to Royston Station
Group Villages	Hourly bus service frequency to the nearest town or major rural centre for onwards travel	Within 450m of a Tier 2 Active Travel Route	All are within 450m of an existing or proposed active travel route The following group villages do not meet the target for public transport connectivity.	A Demand Responsive bus service, rural mobility hubs or similar would be required to help meet the target
			Guilden Morden	DRT to Royston Station
			Steeple Morden	DRT to Royston Station
			Thriplow	DRT to Foxton Station
			Balsham	DRT to A11 travel hub
			Over	DRT to Northstowe
			Elsworth	DRT to Papworth Everard
			Eltisley	DRT to CtoC stop in Cambourne Centre
			Haslingfield	DRT to Harston bus stop
			Orwell	DRT to Shepreth station
			Barrington	DRT to Shepreth Station

6.6.5 The Do Something Sensitivity testing for existing settlements has considered measures including Demand Responsive Transport (DRT), rural mobility hubs and targeted active travel improvements. These interventions when tested have shown improved connectivity and enabled these settlements to align with the destination and network access targets provided in **Table 4-15**. An example of the improved connectivity is provided in **Figure 6-6** which demonstrates that the provision of DRT enables 60-minute public transport + walk journey times from rural locations such as Gamlingay to major employment centres.

Figure 6-6: Do Something Existing Settlements Sensitivity Test

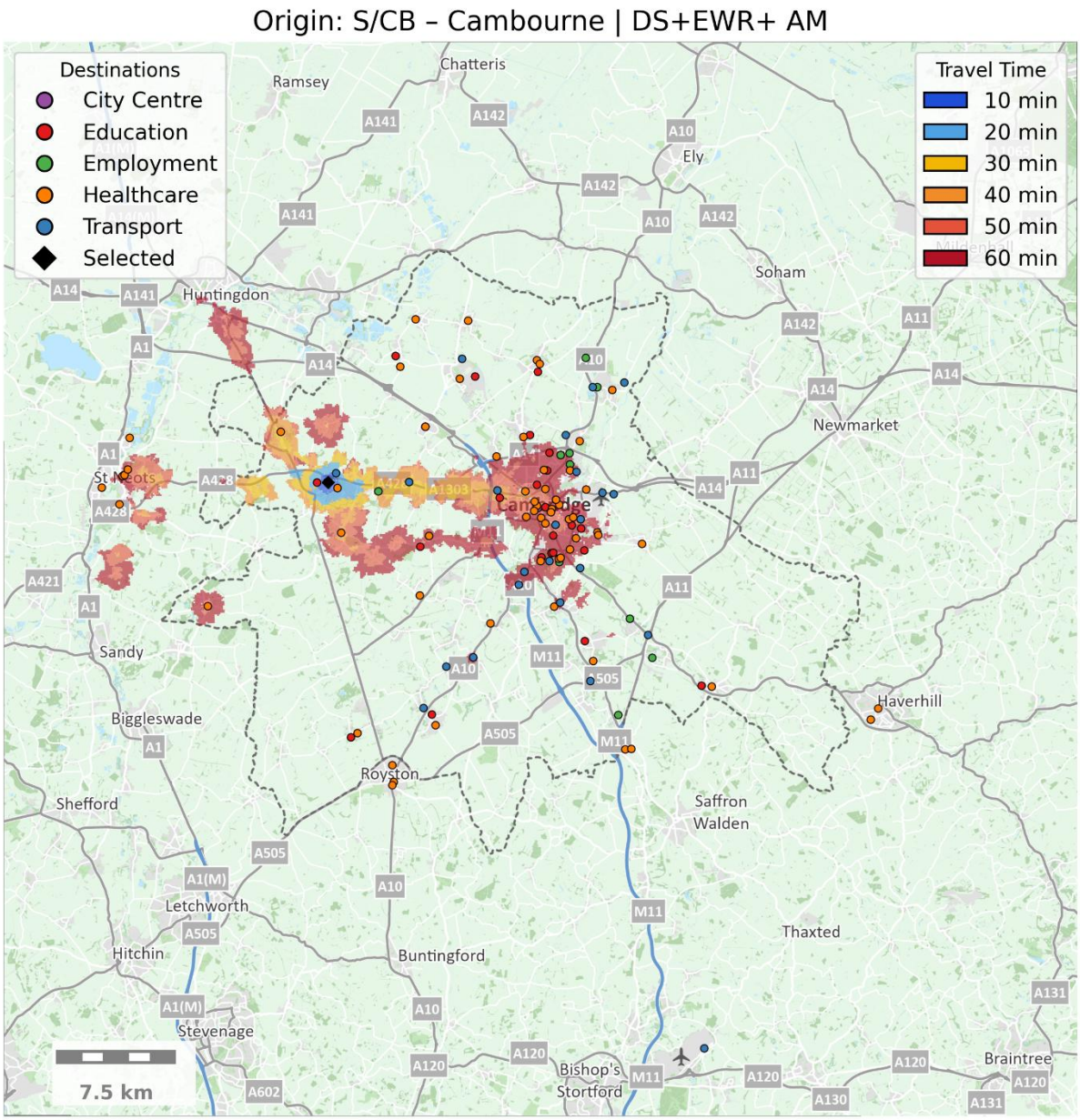


6.7 Do Something – East West Rail Frequency Sensitivity Test

6.7.1 As a further sensitivity test, the Do Something with East West Rail scenario was assessed assuming an enhanced service frequency of one train every 10 minutes (equivalent to six services per hour) for East West Rail, Mass Rapid Transit and existing rail services. This test was undertaken to understand the potential connectivity benefits that could be realised through a higher-frequency rail offering. The results indicate further improvements in accessibility, particularly for settlements located along the East West Rail corridor, as

illustrated by the accompanying Cambourne (Figure 6-7) STEP outputs. Full sensitivity test outputs are available in **Appendix H**.

Figure 6-7: Cambourne Do Something East West Rail Frequency Test



6.7.2 The sensitivity test as shown in the figure above demonstrates improved connectivity with Cambridge when compared to the Do Something Scenario. Increasing frequencies of services allows users to access the east and south east areas of Cambridge and their associated major employment centres, which are not accessible within the 60-minute timeframe utilised within the Do Something scenario.

6.7.3 The full set of results is provided in **Appendix H**. It should be noted, however, that this assessment is purely indicative and is intended to demonstrate the potential scale of benefits that could arise from enhanced service frequencies. The scenario does not represent a committed service specification, and any future progression of such measures would require detailed operational assessment and engagement with Network Rail, the relevant Train Operating Companies (TOCs) and other rail industry stakeholders to establish feasibility and deliverability.

6.8 STEP – Do Something Summary of Findings

6.8.1 The STEP Do Something (DS) scenario demonstrates that the introduction of additional public transport interventions results in measurable improvements in connectivity across the majority of strategic sites, particularly in terms of reduced journey times and expanded accessibility catchments during both AM and PM peak periods. These benefits are most evident for sites located on the Cambridge periphery and along key transport corridors, where enhanced service provision strengthens access to the city, key employment destinations, and transport interchanges.

6.8.2 For higher-order and edge-of-city locations, the Do Something scenario builds on already strong accessibility, with many sites continuing to provide access to multiple employment, education, and healthcare destinations within 30 minutes, thereby aligning well with the expectations for City-level settlements. In these cases, improvements are incremental, reflecting the already strong performance of these locations under Do Minimum conditions.

6.8.3 More notable gains are observed at sites which are relatively constrained in the baseline, where Do Something interventions introduce enhanced radial and, in some cases, cross-corridor connectivity. For example, the Wellcome Genome Campus demonstrates a clear improvement in accessibility under the Do Something scenario, with enhanced links to the A11 corridor, transport hubs, and Cambridge fringe employment locations. This enables access to key destinations within 60 minutes, representing a meaningful uplift in functional connectivity compared to the Do Minimum scenario, and bringing the site closer to the expected performance of major rural centre locations.

6.8.4 Notwithstanding these improvements, the Do Something scenario does not fully overcome the underlying spatial constraints of the network. Accessibility patterns remain predominantly corridor-based and radial, with the strongest gains concentrated along strategic public transport corridors. As a result, while journey times to Cambridge and key destinations are reduced for many sites, access to the wider settlement network remains uneven, particularly for locations that are not directly served by these corridors.

6.8.5 To understand whether these remaining connectivity gaps could be addressed, a programme of sensitivity testing was undertaken. This testing demonstrated that targeted and proportionate interventions can successfully improve accessibility and bring previously underperforming locations into alignment with the destination and transport network access targets outlined in **Table 4-15**. Examples include enhanced active travel connections to Cambridge East and dedicated public transport links for Slate Hall Farm.

6.8.6 Similar sensitivity testing undertaken for existing settlements demonstrated that a range of rural interventions, including DRT, rural mobility hubs and targeted active travel improvements, can effectively address connectivity challenges in more remote locations. DRT is particularly appropriate in rural areas where dispersed populations and lower travel demand often make conventional fixed-route bus services difficult to sustain. The testing showed that providing flexible connections to rail stations, travel hubs, and larger settlements can enable minor rural centres and group villages to meet the connectivity targets proportionate to their role within the settlement hierarchy.

6.8.7 The destination-based analysis reinforces this position. In relation to employment access, the Do Something scenario delivers modest expansion and consolidation of accessibility catchments, with increased overlap between major employment locations and improved journey times along key corridors. However, areas within the south-west and eastern hinterlands continue to experience comparatively limited accessibility, with some settlements remaining beyond the target journey time thresholds set out in **Table 4-14**.

6.8.8 A similar pattern is evident for education, healthcare, and transport destinations. The Do Something interventions improve access for a wider range of settlements, particularly those located along radial routes and in proximity to Cambridge. However, off-corridor and peripheral locations continue to exhibit fragmented accessibility and often rely on interchange via Cambridge or major hubs to access a broader range of opportunities.

6.8.9 Overall, the Do Something scenario represents a clear enhancement over the Do Minimum case, delivering tangible improvements in accessibility across the study area. Whilst the baseline network structure remains largely corridor-based, the sensitivity testing demonstrates that remaining accessibility challenges are not insurmountable and can be addressed through targeted interventions focused on first and last mile connectivity, rural mobility and improved access to strategic transport corridors.

6.8.10 Consequently, the combined Do Something and Do Something sensitivity testing demonstrates that the majority of settlements and strategic sites can achieve strong connectivity outcomes that are consistent with their role within the settlement hierarchy. The findings provide confidence that the GCTS can successfully broaden access to employment, education, healthcare and transport opportunities across Greater Cambridge, whilst increasing travel choice for residents. The results support a transport strategy centred on enhanced public transport corridors, improved interchange opportunities, rural mobility solutions and targeted active travel investment, particularly walking, helping to create a more connected, accessible and integrated transport network that supports growth across the region.

6.9 Next Steps – Developing the Transport Strategy

6.9.1 The analysis demonstrates that connectivity constraints are generally not structural barriers to growth. Most underperforming locations can be brought into alignment with the settlement hierarchy through targeted and proportionate interventions focused on public transport access, interchange quality, active travel connectivity and rural mobility solutions.

6.9.2 The findings from the Do Something scenario, alongside wider transport modelling of different intervention packages, form part of the evidence base underpinning the GCTS and have informed the development of the Strategy and its delivery plan. Further scheme, corridor and network-level study and development will build on this evidence as individual interventions are progressed.

Appendix A Full list of Interventions Tested

Appendix B Service Frequency Assumptions

Appendix C STEP Tool Do Minimum Outputs

Appendix D List of Destinations

Appendix E Do Minimum STEP Tool Destination Outputs

Appendix F STEP Tool Do Something Outputs

Appendix G STEP Tool Do Something Sensitivity Test – Strategic Sites

Appendix H STEP Tool Do Something Sensitivity Test – Existing Settlements

Appendix I Quantifiable Benefits Local Facilities Matrix