Cambridge East

Transport Approach Summary

26/03/2025



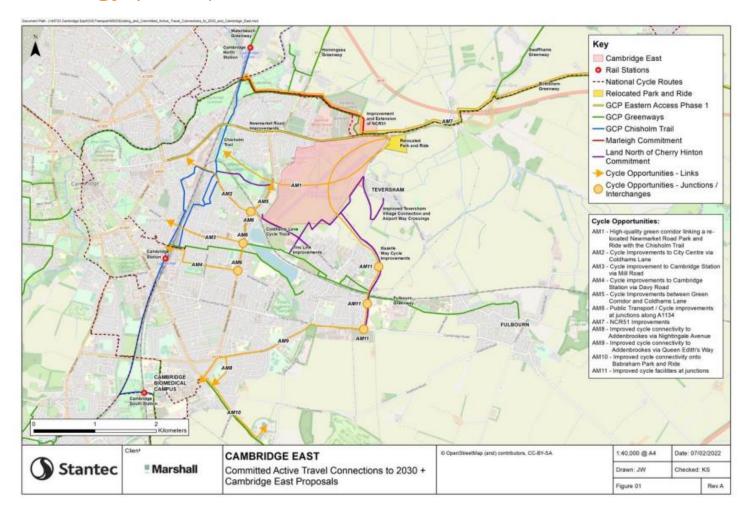




Cambridge East Transport Strategy (CETS)

Delivering Planned Growth

- Assesses the appropriateness and performance of Mitigation included in Local Plan model runs - confidence in delivery of Preferred Option and the assumed transport mitigation for Cambridge East
- Identifies additional complementary transport schemes to support this growth and mitigate impacts
- Uses "Airfield Balanced" transport modelling runs to illustrate the potential for some growth above the Local Plan Preferred Option
- Informs early viability appraisal by developing potential costs associated with mitigation





Structuring Principles

Trip Budget

Establishing and Working within a Trip Budget

This topic paper is one of a number that seek to explore different topics which his transport implication. The aim of topic papers is to set out the variations, different considerations, and resulting implications of different approaches within that spe

topic. Topic papers will be refreshed and updated at each stage of the Local Pl review process to ensure the latest information / position is available

The intention of the topic papers is to provide background information; they do

nain issues covered by this Topic Paper are: The role of a trip budget The stages of defining a trip budget What needs to be considered when setting a trip budget at Cambridge E The early trip budget for Cambridge East

Homes and Jobs at Cambridge East; and Topic Paper 4 - Low Car Living and Mode Share Precedents. Topic Paper 5 - Transport Scenario Testing Results and Deliverability

A transport policy approach that sets a limit on the level of vehicular trips that ca generated from a particular development. It seeks to ensure through all stages o planning process that there are tools and mechanism in place to measure performance with reference back to this level of trip making.

The above is based upon the definition provided within the 'Transport Evidenc Report Preferred Option Update (October 2021)'. Both Alconbury Weald and

Waterbach new town have had trip budgets implemented through the plannir process. A Monitor and Manage Adaptive Approach is implemented at both si

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Mix of Homes & Jobs

This topic paper is one of a number which seeks to explore different topics which have a transport implication. The aim of topic papers is to set out succinctly the variations, different considerations, and resulting implications of different approar within that specific topic. Topic papers will be refreshed and updated at each stage.

TRANSPORT TOPIC PAPER 3

Prepared by: M Nejad / K Stannard / E Page

The main issues covered by this Topic Paper are:

. How the mix of homes and jobs influence travel patterns

How the mix of homes and jobs can benefit sustainability

The interface between development mix and trip budget
 The performance of different homes and jobs mixes at Cambridge East.

This topic paper should be read alongside the other Topic Papers for the Cambr East site, in particular:

Topic Paper 2 – Establishing and working within a trip budget
Topic Paper 4 - Low Car Living and Mode Share Precedents
Topic Paper 5 - Transport Scenario Testing Results and Deliverability

How does the mix of homes and jobs influence site-level travel patterns

The sustainability benefits of achieving a good mix between homes and jobs wisite are that this can facilitate low carbon living, can reduce the need to travel or (including by car) and therefore congestion and emissions, and can make best on and off-site transport infrastructure networks.

It should be noted that this approach to finding an appropriate mix between the number of jobs and homes within a site, only considers the transport patterns for site itself, rather than the role the provision of each can individually play in positiv influencing travel behaviour beyond the site boundary.

Job Number: 332210903

Low Car Living

Deliverability

Star TRANSPORT TOPIC PAPER 4 19th December 2022

Job Number: 332210903 Subject: Low Car Living and Mode Share Precedents Prepared by: J Welch / S Young

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The intention of the topic papers is to provide background information; they do not

- This topic paper will demonstrate that aligning the car driver mode share with the trip

This topic paper should be read alongside the other Topic Papers for the Cambrid

- site including:
 Topic Paper 2 Establishing and working within a trip budget
 Topic Paper 3 Understanding the transport implications of diff
 and Jobs at Cambridge East; and
 Topic Paper 4 Low Car Living and Mode Share Precedents.
- 2. What is Low Car Living?

Low Car Living (LCL) refers to a way of life in which sustainable transport modes are we use using touch; reteres to a way or see in which sustaination frainsport modes are frioritisted and preferable over the use and ownership of the private car. I CL is aided nocuraged by the location and design of sustainable developments which are built for citifate the use of sustainable transport. I CL developments are intentionally created duce or minimise driving, creating opportunities for healthier modes of transportation

Developments in which I CL is prioritised use a combination of 'push' measures to discourage private car use, and 'pull' measures to improve the attractiveness of walk cycling, wheeling, public transport, and various types of shared vehicle use. These ty

- Designing neighbourhoods for walking and cycling.

 Providing high-quality, high-frequency, affordable public transport.

 Creating compact and permeable mixed-use areas with short distances
- Increasing mobility by regulating parking and road use. Marketing and promoting sustainable transport choices.

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TRANSPORT TOPIC PAPER 5

Job Number: 332210903 Subject: Transport Scenario Testing Results and Deliverabilit Prepared by: K Stannard / E Page

This topic paper is one of a number that seek to explore different topics which have rins sopic pager is one or a number that seem to expore uniter introduced within his transport implication. The aim of topic pagers is to set out the variations, different considerations, and resulting implications of different approaches within that specific topic. Topic pagers will be refreshed and updated at each stage of the Local Plan

The intention of the topic papers is to provide background information; they do not

- The main issues covered by this Topic Paper are:

This topic paper should be read alongside the other Topic Papers for the Cambridge East site, in particular:

- Topic Paper 1 Site structuring features and principles, including accesses, public transport and neighbourhood design approach. Topic Paper 2 Establishing and working within a trip budget Topic Paper 3 Understanding the transport implications of different mixes of
- Homes and Jobs at Cambridge East; and Topic Paper 4 Low Car Living and Mode Share Precedents.

2. Transport Scenario Testing - Target Car Driver Mode Shares

The 'Greater Cambridge Local Plan Preferred Option Transport Evidence Report October 2021) contains an assessment of the potential traffic impacts of 7,000 nomes and 9,000 jobs against a 2041 baseline (i.e. referred to hereafter as 'Local

As set out in Tonic Paper 2. Stanter has used the Local Plan CSRM external As set out in Topin 2, stainted has used and 9,000 Job) as the benchmark for acceptable traffic impacts at this first stage of developing a trip budget at Regulat 18 stage. These peak hour highway trips are reproduced in Table 1 below.

Job Number: 332210903

TRANSPORT TOPIC PAPER 2

contain any policies, proposals or site allocations

2. The Role of a Trip Budget

A trip budget can be defined as:

What is a trip budget?

The main issues covered by this Topic Paper are:

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TRANSPORT TOPIC PAPER

Prepared by: E Page / K Stannard

This topic paper is one of a number which seeks to explore different topics whave a transport implication. The aim of topic papers is to set out succinctly variations, different considerations, and resulting implications of different considerations, and resulting implications of different by which that specific topic. Topic papers will be refreshed and updated at each tel. Local Plan review process to ensure the latest information / position is a

The main issues covered by this Topic Paper are:

- 1. Connected 5-minute Neighbourhoods contributing to a 15-minute City
- 2. Points of Access
- Design Principles of the high frequency Public Transport Route (Easter Access Phase B)

These principles have been identified as being structuring elements that sho reflected in emerging policy and design thinking.

due course. However, there are elements that have underpinned the transp made thus far which are considered important to the success of the transpor strategy and the subsequent adherence to the Trip Budget requirements goi forward (See Topic Paper 2 for details of the trip budget

These should be capable of reinterpretation by the designers of the site but st be considered as guiding principles that would help to support a sur

Connected 5-minute

contributing to a 15-

Neighbourhoods

Points of Access

Design Principles of

the high frequency

Route (Eastern Access

Public Transport

minute City

Phase B)

The role of a trip budget

- · The stages of defining a trip budget
- What needs to be considered when setting a trip budget at Cambridge East
- The early trip budget for Cambridge East

- How the mix of homes and jobs influence travel patterns
- How the mix of homes and jobs can benefit sustainability
- The interface between development mix and trip budget
- The performance of different homes and iobs mixes at Cambridge East.

- The meaning of Low Car Living and the benefits associated with it.
- Successful precedents from elsewhere in achieving Low Car Living.
- Low Car Living in the context of Cambridge East.

- A summary of the transport outputs from the following two transport scenarios:
- 7,000 homes and 9,000 jobs
- 9,500 homes and 9,000 jobs
- A summary of the key mitigation associated with these scenarios



A trip budget can be defined as:

A transport policy approach that sets a limit on the level of vehicular trips that can be generated from a particular development. It seeks to ensure through all stages of the planning process that there are tools and mechanism in place to measure performance with reference back to this level of trip making.

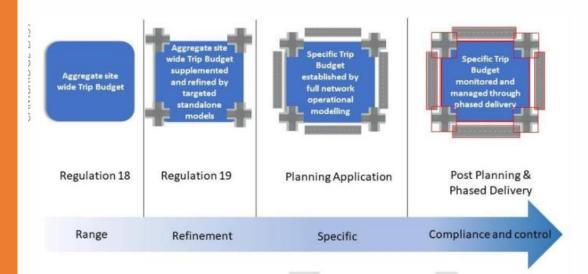


Table 1 – "Range Stage" External Peak Hour Highway Trips Reported in CSRM Modelling

External Car Driver Trips		Source	
AM Peak Hour	PM Peak Hour		
1,500	1,800	Atkins Note "Additional Analysis of Existing GCSP Runs"	

Table 2 - Scenario Testing Car Driver Mode Share Summary

Homes	Jobs	Car Driver Mode Share (peak hour)		Source
		AM Peak Hour	PM Peak Hour	
7,000	9,000	18%*	22%*	Atkins Note "Additional Analysis of Existing GCSP Runs"
8,000	7,200	18%	23%	Spreadsheet Tool
9,000	8,100	17%	22%	Spreadsheet Tool
9,500	8,550	16%	20%	Spreadsheet Tool
9,500	9,000	16%	20%	Spreadsheet Tool
10,000	9,000	15%	20%	Spreadsheet Tool
11,000	9,900	14%	18%	Spreadsheet Tool
12,000	10,800	13%	17%	Spreadsheet Tool

Vast majority of trips were within 5km with most being made by modes of walking and cycling. Growth in the right place.....





Greater Cambridge Local Plan: Development Strategy Update (Regulation 18 Preferred Options)

January 2023

Cambridge Airport – this site's suitability for development was previously established through its inclusion in the Cambridge East Area Action Plan 2008, and then being identified as safeguarded land for future development in the adopted 2018 Local Plans. No new evidence has changed the Councils' position regarding its suitability for development; indeed it is identified in the First Proposals strategy for a major new eastern quarter for Cambridge, being the second most sustainable location for strategic scale development available within Greater Cambridge. The inclusion of the site in the Local Plan is contingent on the relocation of Cambridge Airport. Marshall of Cambridge (Holdings) Limited submitted an outline planning application to Central Bedfordshire Council in November 2022 for relocating the Airport operations to Cranfield Airport. A decision at this point on the inclusion of the site in the draft Local Plan will help give confidence to Marshall to continue to develop their relocation proposals, which in turn will form a critical part of the evidence supporting the Local Plan as it progresses to the proposed submission stage. Taking all these factors into account, the Greater Cambridge Local Plan should include and prioritise delivery of this site, with timing of delivery informed by the approach of the plan in respect of water supply and housing delivery.



What's changed?

- Making Connections has been abandoned, and the Local Plan needs to work with some increased shorter-term uncertainty.
- The Cambridge Growth Company has been formed, and Cambridge is central to the Govts growth agenda and Cambridge East is more than ever a site that aligns with Govts stated objectives for the area (contiguous urban extensions)
- East West Rail are planning for delivery. The
 potential for a **new railway station** to the east of
 the city is a real possibility.
- Updated NPPF which embraces Vison led transport planning within a Monitor & Manage Framework which deals with uncertainty.
- Local Transport and Connectivity Plan adopted
- GCP corridor schemes moving forward
- Bus Franchising moving forward



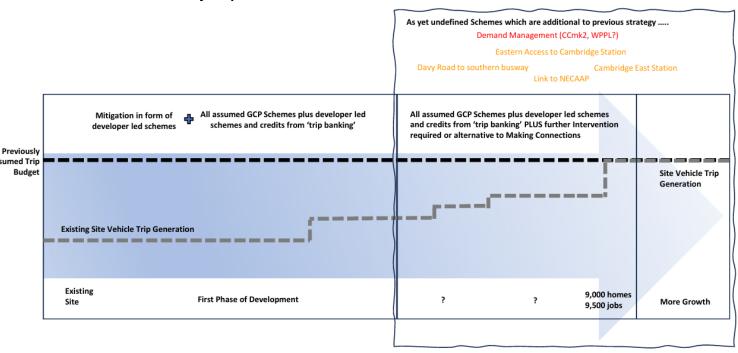
What's not changed?

- Greater Cambridge needs to transition to net zero carbon by 2050
- Climate Change was and will remain the highest priority for next Local Plan
- Making best use of land through appropriate densities in areas where walking, cycling, public transport and low car living can be credibly achieved must be a priority for decision makers.
- The Greater Cambridge Partnership aims to "reduce city traffic flows by 10–15%" on 2011 data. The LTCP's commitment to a reduction in car mileage by 15%, using a 2019 baseline, across the region.
- A longer-term transport strategy for Greater
 Cambridge is needed which may or may not include
 Demand Management.
- A Trip Budget approach to managing impact is right and enforceable at a site such as CE with single land ownership
- To respond to shorter term uncertainty by 'underallocating' prime sites in favour of sites where greater car trips can be accommodated would be a land use and transport failing.
- The proposals which formed part of the transport strategy, and which are in the control of the developer remain valid.

A slightly different approach required...

- Despite uncertainty surrounding what might replace the Making Connections proposals, Cambridge East remains well placed to form a foundation of the next Local Plan.
- This confidence relates to the certainty that a substantial first phase of development can be delivered without any dependency on investments outside the control of the development.
- The site has an extant vehicle trip generation which can help facilitate a first phase.
- Beyond this first phase strategic transport opportunities are being developed, including GCP busway through the site and other corridor investments.
- The possibility of a new station to the south of the site was never assumed in the previous strategy.
- Marshall have developed numerous options for strategic connections and these proposals may potentially form part of the GCTS or CGC proposals going forward.

Working with uncertainty but from the foundation of a substantial first phase....



- Solutions beyond the initial phases need direction and commitment but with Vision in mind.
- Uncertainty is inevitable but direction and increasing confidence is a requirement.

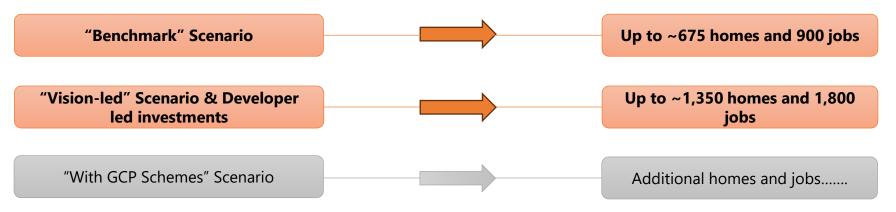


First Phase and Trip Budget

Recent analysis has considered the number of homes and jobs that produces a level of trips equivalent to the existing trip envelope of the site (informed by 2023 surveys conducted at Cambridge Airport)

Methodology:

- Identified a trip budget from 2023 surveys.
- Phase 1 trips calculated using trip rates agreed for neighboring Project Newton (Employment) and Land North of Cherry Hinton (Homes). Jobs and homes calculated against existing trip budget known as "Benchmark" Scenario.
- Additional calculation of further homes or jobs unlocked by more ambitious car driver mode share **and** developer-led transport schemes known as **"Vision-led" Scenario**.
- No additional allowance made for programmed GCP schemes due complexities and dependencies. Inclusion of these schemes (e.g. Cambridge Eastern Access Phase A, Greenways programme) and the benefits they would bring would reasonably increase the scale of any first phase

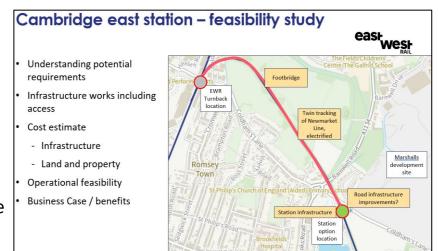


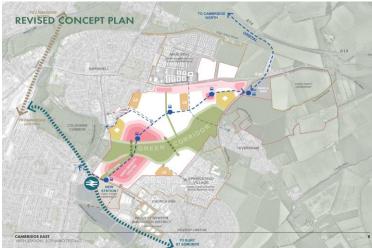
- Beyond the level of trips achieved within the existing Cambridge Airport trip envelope, additional homes and jobs could be justified through the delivery of GCP schemes which would extract further vehicular trips from the highway network.
- A greater level of development beyond the existing envelope of the trip budget would introduce a greater level of uncertainty with regards to whether the proposal would be accepted by CCC. The outcome would be guided by what level of impacts CCC consider to be 'severe'.

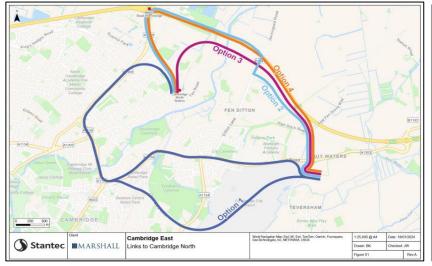


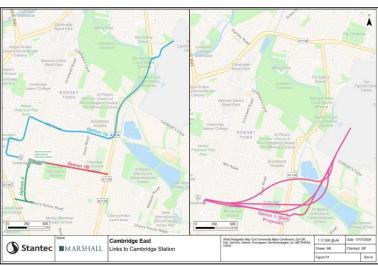
Wider Connectivity Solutions

- Beyond the first phases, substantial opportunities exist for further transformational investments.
- A new railway station would provide regional access to jobs and provide intercity access between the east side of the city and CBC.
- Other connections being explored relate to an expanded public transport network or Mass Transit BRT system.
- These are not just development connections but subregional enhancements for which CE is a contributor and facilitator.











How does a Local Plan process deal with uncertainty?

Whilst M&M and therefore by association V&V has been successfully used in Planning Applications for a number of years (M&M as part of Urban&Civic new communities at Alconbury and Waterbeach for instance), its use as part of Local Plan making has been less prevalent.

However, recently **Maidstone Borough Council (MBC)** adopted its updated Local Plan and this included a Monitor & Manage Strategy for all of its strategic sites. A summary of key inclusions, and text is set out below.

- The strategic sites all make reference to Monitor & Manage.
- Each site Policy starts by stating that 'The council will work with the promoter to produce an agreed Supplementary Planning Document to masterplan and facilitate the site's delivery.'
- Each site's Policy then sets out proposed Phasing and Delivery and includes a statement similar to this 'Subject to Transport Assessment and Monitor and Manage strategy, implement delivery of other supporting transport infrastructure that is necessary for this stage, including off-site junction mitigations.'
- As part of the 'Transport Connections' part of the Policy, the following is typically stated 'Prior to the first occupation of any floorspace or units on the development of a 'Vision and Validate' and 'Monitor and Manage Strategy' shall be submitted to and approved by the Local Planning Authority, in consultation with National Highways and KCC Highways. Thereafter, the approved framework shall be implemented until full completion of the development unless otherwise agreed by the Local Planning Authority, in consultation with National Highways and KCC Highways.'
- The Policy then states 'Routes identified as sites for potential mitigations will be subject to further assessment, and this will be undertaken via the Supplementary Planning Document and prior to any initial planning application. The assessment will include consideration of mitigations in in accordance with the Monitor and Manage process set out in the IDP. Off-site highway improvements, some of which may be necessary in the area, will be subject to further assessment and delivered in accordance with the development phasing provisions'.

The above appears to be broadly consistent with our experience of M&M and the application of it. What is interesting however, is that even the first phases use M&M to determine the requirement of highway infrastructure. There is no explicit reference in the main document and policy to highways works and only that it will be established through further work and Transport Assessment.

South Worcestershire Councils also proposing M&M and agreed with National Highways.



This is not now unusual for plan making

This area has done it before....

- Support for a 'Vision-led' approach to the delivery of a Phase 1, achieved via the mechanism of 'Monitor and Manage'
- 'Monitor and Manage' is a mechanism for the validation aspect of the 'Vision', observing travel patterns over time (monitoring), and implementing required measures at the appropriate time (managing). This promotes the ability of a site to achieve better transport outcomes.
- 'Monitor and Manage' approach successfully applied at Waterbeach and Alconbury Weald in the delivery of a first phase

Waterbeach

- Outline permission 6,500 homes and associated uses
- Transport Strategy based on 'monitor and manage' approach for initial phase (~1,600 units) and future phases
- Defined mitigation package, emphasis on sustainable travel, and selected highway interventions to support initial phase
- Trips from the development are monitored with the view to capping these to accord with a Phase 1 'Vehicle Budget'
- Any material exceedance of vehicle budget will lead to mitigatory measures as set out in the Phase TA
- Later phases and development required further transport assessment work – reconsider vehicle budget
- Monitor and manage process controlled through a S106 agreement and Key Phase conditions



Alconbury Weald

- Outline permission 5,000 homes and 290,000 sqm employment uses
- Transport Strategy based on 'monitor and manage' approach for initial phase (879 homes and 80,000 sqm employment) and future phases
- Phased TA approach allows the development to respond to the A14 improvements and other changes in transport patterns
- Monitoring strategy for first phase and later phases captures the actual impacts that occur on the highway network and enables suitable measures to be applied





Summary & Next Steps

- Cambridge East remains an **unrivalled opportunity for longer term strategic growth** in a location which is surrounded by jobs, services and facilities. Trip forecasts indicate very many journeys are short where genuine modal alternatives exist.
- Whilst some uncertainty exists across the plan area, decisions to allocate more away from the city will compound the challenges of travel distances, carbon, existing infrastructure deficits and viability challenges to address them.
- This is the best site in **single landownership** where collaboration to address longer term uncertainty can be undertaken.
- The foundation of a **substantial first phase provides confidence in 'plan making' and investment terms** and allows central government to plan for it alongside local authority partners.
- Extant trip generation for Cambridge East site equates to approximately **675 homes and 900 jobs**. Adding relatively "easy win" developer-led mitigation may facilitate an increase of up to **1,350 homes and 1,800 jobs**.
- Beyond the level of trips achieved within the existing Cambridge Airport trip envelope, additional homes and jobs could be justified through the delivery of GCP schemes which would extract further vehicular trips from the highway network.
- Vision led transport planning deals with uncertainty by ensuring that adaptive planning delivers the better vision led outcomes it seeks.
- Marshall continues to engage and work with partners to ensure that uncertainty diminishes and that its emerging planning strategy can embed the flexibility needed. A policy which acknowledges this approach is appropriate and sound
- As appropriate, we would encourage CCC to undertake model runs/ evidence which include both the Preferred
 Option quantum and the 'Airfield Balanced' scenario of '9 and 9' alongside strategy elements contained in the
 CETS and the emerging GCTS.

