



Note

Timescales for the Delivery of Cambridge East

1 Introduction

- 1.1 Marshall is committed to relocating its airport business to enable the redevelopment of Cambridge Airport and create a vibrant new piece of city known as Cambridge East. To support the Councils' ongoing preparation of a new Greater Cambridge Local Plan, Marshall has undertaken a capacity testing exercise to establish the potential mix and scale of development which could be delivered at Cambridge East. This exercise included the development, testing, and iteration of four development scenarios (A through D) to identify the full scale of the opportunity presented by the site.
- 1.2 To develop a justified and deliverable Local Plan, it is critical for the authorities to understand not just the likely scale and mix of development that could be brought forward on a particular site, but also the expected timescales for the delivery of that development. The rate of delivery for development is dependent on a range of factors which can vary greatly depending on the location and particular characteristics of a given site. This note sets out the expected timescales for the delivery of Cambridge East and provides evidence to support these assumptions.

The unique proposition of Cambridge East

- 1.3 By nature of its size, location within Cambridge, and planning status (e.g. largely free from planning constraints), Cambridge East is a unique site within the local, regional, and even national context. It is the largest single site within and immediately adjacent to the existing city which has been submitted to the Councils' Call for Sites exercises¹.
- 1.4 As set out above, four development scenarios have been developed and tested as part of the Cambridge East capacity testing exercise. Of these, Scenario C presents the greatest development potential, delivering 12,000 new homes and 38,000 jobs over a site area of 316 ha, supported by a mass rapid transit link². It also represents the greatest mix of uses among the scenarios, including a larger research hub, a new College for University of Cambridge and substantive retail, leisure, sport and cultural offerings which, alongside new homes and jobs, would support a vibrant and diverse community. Figure 1 below shows a summary of the quantum, mix and possible distribution of Scenario C.

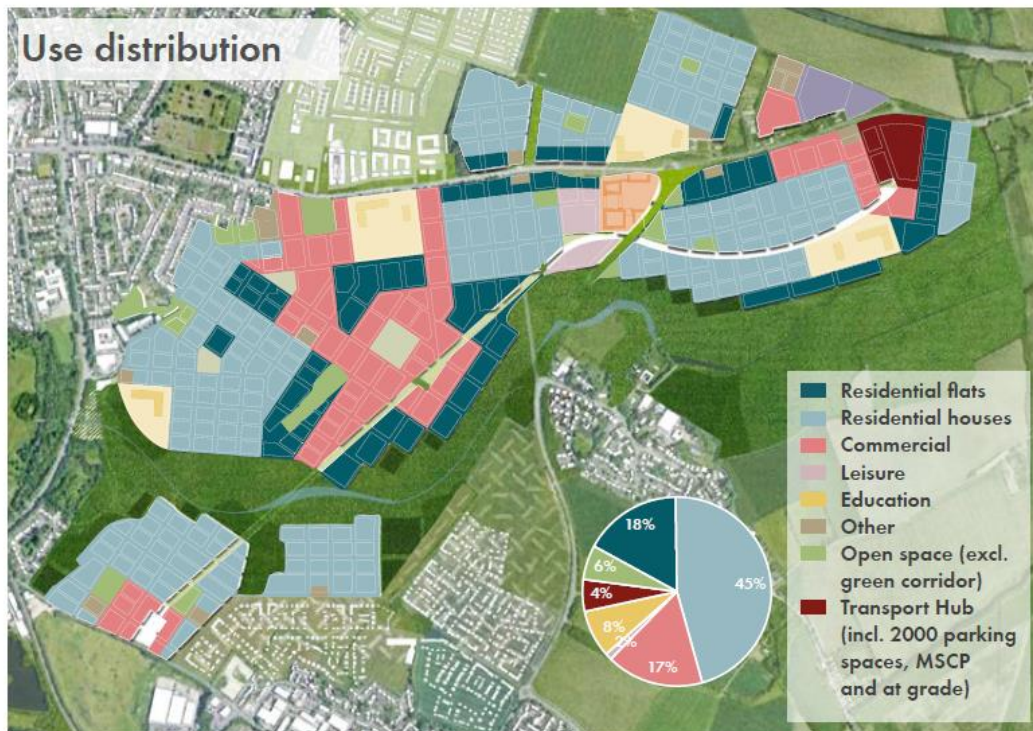
¹ Map of sites submitted across the whole of Greater Cambridge, source:

<https://greatercambridgeplanning.org/media/1416/gclp-call-for-sites-submissions-map-at-201119.pdf>

² Please refer to *Cambridge East Capacity Analysis and Option Appraisal* prepared by Allies & Morrison for a complete description of Scenario C.



Note continued



Number of homes **12,000**

Houses: flats (market) **50:50**

Houses: flats (all types) **35:65**

Quantum*

Main uses	NIA (sqft)
Commercial	6,100,000
Retail	150,000
Leisure	415,761
Hotel	193,750

Average heights



Figure 1: Summary of Cambridge East Scenario C

- 1.5 Marshall has evidenced its commitment to relocation and demonstrated the feasibility of the move in a submission to the local authorities in October 2020. It is anticipated that relocation could be achieved by the late 2020s, which would release the full opportunity at Cambridge East and enable development to start on the core, safeguarded land. For Scenario C, the part of the site to the east of Airport Way currently in the Green Belt is free from physical development constraints and could be brought forward for development earlier. It may be possible to accelerate the relocation and release the site for development sooner, but this is not assumed at this stage.



Note continued

- 1.6 Cambridge is under pressure to deliver growth and the Local Plan must rise to the very significant challenge of identifying enough land to deliver the homes and jobs that the area requires over the plan period³. Critical to identifying the right amount of land is the rate at which development can be reliably brought forward. The particular characteristics of Cambridge, the Cambridge East site, and the emerging proposals mean that Cambridge East will deliver development at a faster pace than traditionally achieved, as evidenced in the following sections of this note.

2 Local Plan evidence base

Housing Delivery

- 2.1 The Greater Cambridge Local Plan Housing Delivery Study (Interim Findings), prepared by Aecom, advocates that build-out rate assumptions of no more than an average of 300 dpa per strategic site should be used for calculating housing trajectories and identifying spatial options (Para 3.23). This delivery rate is largely based on historic trends and ‘comparator sites’. The report itself acknowledges that it does not account for recent Government initiatives aimed specifically at increasing the rate of housebuilding, nor does it account for other measures which have been shown to accelerate housing delivery such as Development Corporations or the proactive delivery of infrastructure by the public sector (Para 3.23-3.24).
- 2.2 The study also recognises that there may be “the ability to ‘buck’ these trends moving forward,” and commits to exploring “the potential of higher average build out rates/new models for delivery” in the next stage of the Study (Para 3.24).
- 2.3 The Housing Delivery Study acknowledges that “*The published research shows that historic delivery rates are highly influenced by the private sector’s ability to build and sell homes based on market absorption and their own business models,*” (Para 3.22). This is important for Cambridge East where a number of factors unique to the scheme and delivery strategy will enable a faster rate of delivery than that evidenced by historic averages.

Employment Delivery

- 2.4 The Councils have committed to doubling GVA as part of the Devolution Deal (2017) and reconfirmed this commitment via the Growth Ambition Statement (November 2018). In order to achieve this target there would need to be 126,000 additional jobs in Greater Cambridge by 2041 (the end of this plan period) and 232,000 by 2055.
- 2.5 Unfortunately, the evidence for the emerging Local Plan does not meet the Councils’ commitment or the Government’s expectation to double GVA. The underlying Employment Land and Economics Needs Study sets out a number of growth scenarios, only one of which is close to achieving the target. However, that trajectory is not proposed to be taken forward in the Plan, and the maximum scenario that is taken forward falls significantly short of the target,

³ Please refer to the *Strategic Case* prepared by Quod which considers the appropriate scale of growth for the emerging Local Plan.



Note continued

delivering only 79,000 of the additional 126,000 jobs needed by 2041. The low growth scenario is also significantly lower than the Needs Study itself states will be needed.

- 2.6 The emerging Local Plan risks under-estimating the necessary level of floorspace needed to support growth. More fundamentally, it overestimates the ability of the existing pipeline of sites to meet the area's real economic needs and concludes that only 50,000 to 100,000 sqm of additional floorspace is required⁴.

3 Accelerating delivery

- 3.1 The proposals for Cambridge East are being developed with careful consideration of the phasing of infrastructure, including social infrastructure, in order to make the scheme an attractive place to live and work – with green and social infrastructure provided alongside new homes and jobs to sustain the growing community. Marshall believes that early, high quality place making and infrastructure delivery is key to successful, accelerated delivery.

- 3.2 There are several key aspects of achieving sustained delivery rates as identified and discussed by the Letwin Review (Independent Review of Build Out, October 2018⁵). Characteristics which can be replicated at Cambridge East include but are not limited to:

- **developing within an area of high demand** – high average house prices and a very substantial overhang of demand in the local area create confidence that the market would respond to a significant new opportunity;
- **engaging a range of house builders**, each with their own distinctive market strategies – the Letwin Review identified a number of instances where 6-8 house builders were engaged on large sites at the same time and recorded how this enhanced overall rates of delivery;
- **providing house builders with serviced land parcels with infrastructure already in place**; and
- **variety in house types and tenures**, including a strong component of affordable housing and the potential for other tenures such as Build to Rent and student accommodation.

- 3.3 These characteristics have been shown to accelerate delivery rates and they each form part of the delivery strategy for Cambridge East.

- 3.4 A market study *Start to Finish*, published by consultants Lichfields in February 2020⁶, identified relatively high rates of housing delivery achieved from a range of large sites. The Study sets

⁴ Please refer to the *Strategic Case* prepared by Quod which considers the appropriate scale of growth for the emerging Local Plan.

⁵ Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752124/Letwin_review_web_version.pdf

⁶ Available at: https://lichfields.uk/media/5779/start-to-finish_what-factors-affect-the-build-out-rates-of-large-scale-housing-sites.pdf



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out details for large sites in Devon, Berkshire, Cambridgeshire, Milton Keynes and Corby achieving maximum rates of housing delivery between 419 and 620 dwellings per annum (see table 5 of the study).

- 3.5 The Lichfields Study also considered the potential effect of multiple outlets on delivery rates; it identified:

“Outlets and tenure matter

Our analysis suggests that having additional outlets on site has a positive impact on build-out rates. Interestingly, we also found that schemes with more affordable housing (more than 30%) built out at close to twice the rate as those with lower levels of affordable housing as a percentage of all units on site. Local plans should reflect that – where viable – higher rates of affordable housing support greater rates of delivery. This principle is also likely to apply to other sectors that complement market housing for sale.”

- 3.6 This evidence from the Lichfields Study shows that having more outlets operating at the same time has a positive impact on build-out rates. This has been taken into account in developing the delivery strategy for Cambridge East, which offers such a scale and variety of sites and tenures that it would enable multiple concurrent development outlets.

4 Timescales for the delivery of Cambridge East

- 4.1 Current scheme delivery timings assume conservatively that the airport relocation starts in 2025 with vacant possession by around 2030. Scenario C includes significant land outside the airport boundary which allows for early phases to the east and north east of the current runway to commence prior to relocation. There may also be scope to deliver some parts of the masterplan located closer to the runway before relocation is complete, as part of the phased vacation of existing office, hangar and warehouse buildings. These early phases could come forward in parallel with the relocation project. A detailed phasing plan will be developed to support the coordinated delivery of Cambridge East.

- 4.2 Due to its scale, it is expected that Cambridge East will be delivered adopting a master developer model – with the master developer managing multiple developers during delivery. The strategy is built around the coordinated early delivery of infrastructure and other enabling works to bring forward the masterplan structure and enable multiple developers and house builders to operate at the same time. Marshall’s current view is to appoint a developer partner by around 2022, who would work in partnership with Marshall to bring forward a planning application for the scheme, ahead of moving into the delivery stages of the project. Given the scale of the project, it is considered that major urban regeneration projects are better comparators; schemes such as the Olympic Park, Kings Cross and Vauxhall Nine Elms Battersea are more representative of the ambition for Cambridge East than local precedents. There will be a more limited pool of developers capable of taking forward a scheme of this scale, who would work to create the serviced infrastructure to enable multiple sales outlets to come forward for delivery by the housebuilding industry, as part of a visionary masterplan framework. Marshall has the highest ambition for securing a partner befitting the opportunity at Cambridge East.



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- 4.3 As described above, a high-quality mass transit system is at the heart of the emerging plans for Cambridge East and this supports the proposed delivery model. The transport strategy includes the introduction of transport improvements on a phased basis to enable the incremental release of development capacity before the mass rapid transit scheme is operational⁷. This facilitates the early delivery of the first phases of Cambridge East which could come forward whilst the airport remains operational. The new rapid transit could be aligned to run parallel to the runway (avoiding safeguarded areas), allowing early delivery in line with GCP objectives (circa 2025/26) and ensuring land east of Airport Way is connected to the City by rapid transit infrastructure from day one.
- 4.4 The very large scale of the site creates the opportunity to deliver different character areas and themed hubs across the development which, together with the broad mix of proposed uses and typologies, allows for a rate of delivery which is unprecedented for Cambridge.

Housing delivery at Cambridge East

- 4.5 Absorption rates in Cambridge have historically been constrained primarily by limited land supply and supply in poorer locations. The scale of demand in Cambridge will enable a greater rate of absorption at Cambridge East than has been experienced in the past.
- 4.6 As set out earlier in this report, the Housing Delivery Study prepared by Aecom states:
- “At this interim stage, we would advocate that build-out rate assumptions of no more than an average of 300 dpa per strategic site should be used for calculating housing trajectories and identifying spatial options. This is supported by an interim analysis of comparator sites drawn from the OxCam Arc, Combined Authority area and other strategic sites in strong housing market areas.” (Para 3.23)*
- 4.7 We believe the build-out rate put forward by the Aecom report significantly underestimates the potential delivery rate for Cambridge East for the reasons set out below.
- 4.8 The report notes that this delivery rate is largely based on historic trends and ‘comparator sites’, which are not true comparators to Cambridge East for the reasons set out below. The report itself also acknowledges that this rate does not account for recent Government initiatives aimed specifically at increasing the rate of housebuilding, nor does it account for other measures which have been shown to accelerate housing delivery such as Development Corporations or the proactive delivery of infrastructure by the public sector. I
- 4.9 Cambridge is unique compared to any other of the listed “comparable” trajectories given it is a world leading academic and science centre, with the highest housing affordability ratio of any city outside London, evidencing exceptional pent up demand.
- 4.10 Similarly, Cambridge East would form an extension to Cambridge – not a new settlement – with a genuinely mixed community, exceptional place making, and significant employment provision. The vision for Cambridge East is not comparable to other Cambridge fringe developments or new settlements such as Cambourne and Northstowe. With the necessary

⁷ Please refer to the *Transport Strategy* prepared by Stantec for further details.



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ingredients to create world leading quality of place, including a globally competitive commercial and cultural offer, Cambridge East should be compared with leading examples nationally.

4.11 Given the prominence of the Cambridge market and submarket, it is necessary to look further afield to understand what might be possible in relation delivery rates. Studies of sites in Didcot, Milton Keynes and Eastern Quarry at Ebbsfleet, as well as large sites in London, such as sites at Wembley and Barking show a range of delivery rates between 275-572 dwellings per annum. Perhaps the most relevant are the following reported rates of delivery:

- Western Expansion Area (Milton, Keynes) – 6,500 units @ 400 dpa on average but peaking at well over 600 dpa
- Eastern Quarry (Ebbsfleet) – 6,250 units @ 359 dpa on average but peaking at over 700 dpa

4.12 This shows that given the right conditions, it is entirely possible to achieve a much greater delivery and sales rate than anticipated by the current Local Plan evidence base. Whilst the circumstances on these sites are no doubt different from Cambridge East, the ingredients are there for Cambridge East to showcase what can be achieved at scale, particularly when enabled by early investment in transport infrastructure.

4.13 From the start of the design process rates of sale have been a key consideration. The design team is continually testing the design to ensure maximum flexibility is retained for phasing. This will enable the project to bring forward and open up different and multiple sales fronts, each with a distinct character, which is vital to ensure all segments of the market are covered and will provide the best chance of a rapid and continuous sales rates.

4.14 It is also important to consider the overall strategy of the provision and delivery of housing. Affordability in Cambridge has and continues to be one of the most significant barriers to the delivery of housing. Outside of London, Cambridge is one of the least affordable housing markets in the country with a median house price to median income ratio of 13, compared with the national average of 7.8. By setting an unsustainable “bar” in terms of what should be delivered, and the amount of housing land, this is only amplifying the problem further. Allocating more housing land would clearly help to address the significant affordability issues that Cambridge City and South Cambridgeshire are experiencing.

4.15 The following schedule sets out the absorption rates we have adopted for Cambridge East (Scenario C):

Table 2: Absorption Rates⁸

Absorption Rates	Option C
Sales rate (units per annum per outlet)	100

⁸ For market and affordable housing only; excluding other tenures such as Built to Rent and student accommodation.



Note continued

Average number of outlets	4
Total sales rate (units per annum)	400
Office take up (sq ft per annum)	300,000

4.16 Marshall recognises the need for a bespoke housing strategy to ensure the scheme delivers the fullest range of housing typologies and tenures, addresses affordability challenges and with appropriate diversity of product and tenure to increase rates of delivery. This will be developed in consultation with stakeholders in due course.

Delivery of commercial space at Cambridge East

4.17 The average take up of office and lab space across Cambridge has been c.778,000 sqft per annum historically. In reality, take up across Cambridge in the future is likely to be higher than this due to pent up demand for space.

4.18 Take up at Cambridge East (300,000 sqft per year) would be c. 39% of the annual take-up if take-up across Cambridge if take up across the city was sustained at historic levels, and a lower proportion if take-up increased. These are very realistic average assumptions; we believe take up rates could well be higher as the scheme creates critical mass, with the opportunity to attract major anchor occupiers clustered around a Research Hub.

4.19 The assumed rate of annual take up and employment growth identified in Table 2 is supported by the economic analysis set out in the Strategic Case.

4.20 In order to achieve the doubling GVA target, there would need to be 126,000 additional jobs in Greater Cambridge between 2020 and 2041 – the end of this plan period – and 232,000 additional jobs if growth was extended to 2055.

4.21 Cambridge East would deliver 13,000 jobs by 2041, and 38,000 jobs by 2055. This means Cambridge East would be deliver 10% of the growth needed within the plan period and 16% of the growth needed to 2055.

4.22 Even compared to the lower Local Plan Evidence Base forecasts:

- The Local Plan medium scenario assumes 58,000 additional jobs between 2020 and 2041 – Cambridge East would account for 22% of this (within the plan period)
- The Local Plan max scenario assumes 79,000 additional jobs between 2020 and 2041 – Cambridge East would account for 16% of this (within the plan period)



Note continued

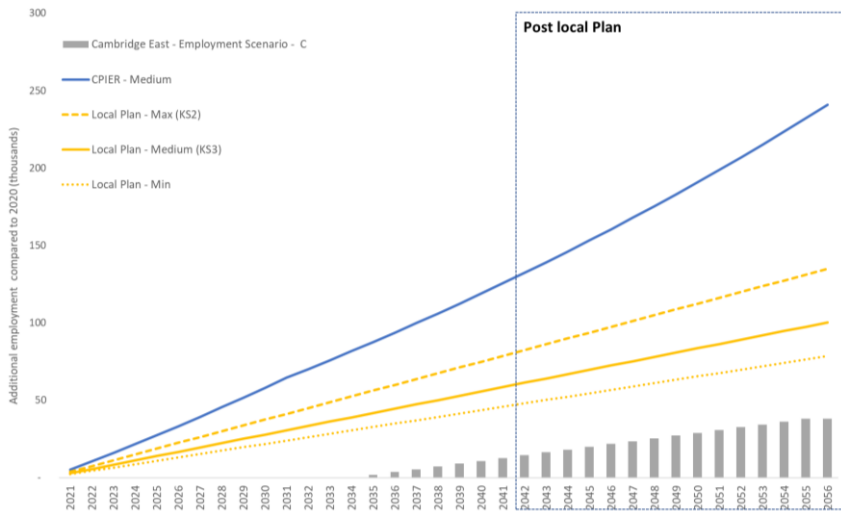


Figure 2: Cambridge East contribution to employment in Greater Cambridge

4.23 The scale of employment proposed at North East Cambridge (58,000 by 2055) would be only c. 25% of the total requirement across Greater Cambridge (232k additional jobs). The scale of employment proposed at Cambridge East is therefore plausible as a proportion of employment across Cambridge City and South Cambs in all growth scenarios.

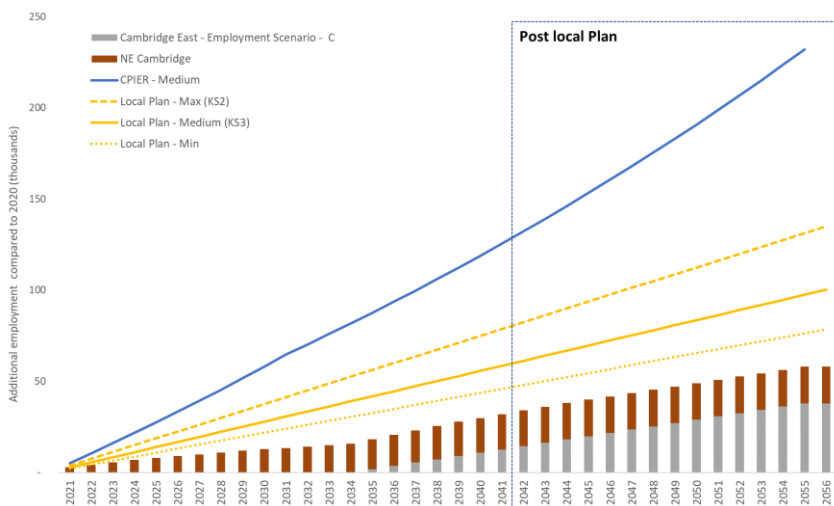


Figure 3: Cambridge East and North East Cambridge contribution to employment in Greater Cambridge

4.24 The Biomedical Campus is anchored by various University of Cambridge and Government sponsored research institutions which have attracted other high achieving commercial organisations to join the cluster, further boosting its success. The Cambridge Science Park has become established and highly successful due to its scale and critical mass – achieved over many years.



Note continued

- 4.25 At Cambridge East a major research hub is planned where the University of Cambridge and other leading research institutions will be invited to participate. Marshall is in very early discussions with the University of Cambridge about the potential to create an “Eastern Campus” at Cambridge East. The strategy is to form an innovation district of international importance anchored by a research hub which will attract major interest from companies looking to co-locate alongside organisations with shared interests. Anchor occupiers potentially have requirements for very significant floorspace (e.g. AstraZeneca is currently building approximately 80,000 sqm in Cambridge), and Cambridge East will be able to offer major companies the kind of development that they have been calling for in Cambridge. High quality, connected space, access to housing and open spaces, culture, sport and recreation facilities for the enjoyment of staff. This also has potential to increase internalisation and to secure the most sustainable patterns of development.
- 4.26 This will support a much higher rate of absorption than a scheme which does not have the scale and ambition to provide this research anchor. The scale of the hub means that it will not need to be “themed” to a single segment of the knowledge economy, but will be able to support a wide range of activities reflective of Cambridge now and in the future including high-tech manufacturing, information technology and telecoms, healthcare, environmental, conservation and many more.

5 Conclusion

- 5.1 Cambridge East will bring forward a mix of uses in such a way that they are mutually supportive and create functional, thriving places that work at every stage of the development. It will deliver a range of jobs across the employment spectrum from international companies focussed on knowledge-based research and development to affordable workspace for artisan trades, artists, and charities. It will provide a major theatre and concert venue alongside a signature art gallery, and a multi-use sports stadium that could house Cambridge United alongside myriad other sports clubs.
- 5.2 In short, Cambridge East boasts the right mix of ingredients to attract unprecedented demand from homebuyers and commercial occupiers. The world-leading quality of place at Cambridge East will drive higher delivery rates than previously seen at Cambridge, which could accelerate well beyond those that are currently being assumed. The flexibility embedded in the masterplan will support multiple delivery outlets with distinct characters to maximise delivery rates.
- 5.3 The emerging Local Plan risks underestimating residential delivery rates and underproviding for jobs growth in Cambridge. Cambridge East is uniquely placed to make a significant contribution to meeting Cambridge’s needs because of its large scale and particular characteristics which enable an accelerated pace of delivery.