Quod

Economic and Employment Study

Tendring Colchester Borders Garden Community

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1 Introduction

Context

1.1 Tendring Colchester Borders Garden Community (TCBGC) is a proposed garden community allocated in the adopted North Essex Local Authorities Shared Local Plan (Policy SP 8). The proposal includes an allocation of 25 hectares (ha) of land for B class[1] use employment (alongside 7,000 to 9,000 new homes). Seven hectares of this land is expected to come forward within the Plan period to 2033.

1.2 Tendring and Colchester Councils aspire for their Garden Community to become an "exemplar and forward-thinking new community in its own right, while resulting in clear benefits to its surrounding area. The new Garden Community will enable its residents to live healthy, happy, green, sustainable, connected and thriving lifestyles. This is a once in a lifetime opportunity to create a place to live, work and play in a better way."[2]

1.3 The project is supported by Tendring District Council, Colchester Borough Council and Essex Country Council ("the Authorities") working in partnership.

1.4 The Authorities are committed to exploring available opportunities for them to promote investment, support pioneer tenants and work with existing economic anchors, particularly the university, to deliver employment floorspace to create jobs for new and existing residents, drive skill development and support the growth of Essex University's spin-out and innovation potential. They want to ensure that economic aspirations are evenly weighted with housing, as part of a comprehensive Garden Community based around "connected" living and to meet the objective of one new job within a reasonable commuting distance of every new home.

1.5 This Report considers the economic evidence supporting the allocation of 25 hectares of employment land for the Garden Community, how it might be achieved and any barriers to success, what might be done to reduce those barriers and how to secure the authorities' ambitions through planning policy.

1.6 If left to the market alone, a proportion of this land is expected to come forward outside the Plan Period. But with political will and support from the Authorities and Latimer (the master developer for the Site), the Garden Community could disrupt trend growth by de-risking investment, establishing a unique offer and delivering quality that competes on a regional scale.

[1] The evidence base preceding this report was generated before the use class order changes in 2020. The allocation in policy is referred to as "B use employment land". In 2020 the use class order changes brought in a new class E; Class E(g) replaces B1a/b/c. We make reference to both of these nomenclatures in the report, subject to the context.
[2] Mission Statement (p13), Tendring Colchester Borders Garden Community Masterplan Strategic Vision, January 2022 (Prior + Partners).

Brief

1.7 In mid-2021 the Authorities instructed Quod to undertake an Economic and Employment Study, to inform the preparation of the emerging TCBGC Development Plan Document (DPD). This will form part of the Development Plan for Colchester and Tendring Local Planning Authorities, and will set more detailed policies for how this 25ha should come forward.

1.8 The Study's brief is to:

- Advise the Authorities on the potential means of maximising the positive economic and employment generation opportunities at TCBGC;
- Provide an analysis and options for location, format, and potential end-users of the employment allocation at the site;
- Take into account the long-term nature of the development, and the potential for innovation and change over the period of construction; and
- Consider the wider objectives of the Garden Community, including its aspirations to create one job per household (within a sustainable commuting distance) and achieve a modal shift towards sustainable transport solutions.

1.9 This document is the final report from Quod which sets out the evidence, analysis and recommendations which has informed the drafting of the DPD and responded to comments from the Authorities and stakeholders.

1.10 The brief was not to challenge or test the 25ha allocation, which is established in planning policy and has therefore already been subject to testing through Examination in Public and found sound. The evidence and engagement with stakeholders (as set out in more detail in this report) indicates that this policy remains sound, assuming there is flexibility and breadth in how the 25ha could be delivered.

Quod's Work and Outputs

1.11 This document sets out the work Quod has undertaken to meet the brief. It is structured by the following sections:

- **Baseline and Policy Review**, which sets out a brief review of the historic evidence base to support employment land development at the TCBGC site, with the intention of providing an overview and not repeat work already undertaken as part of the plan making process (much of which is still up to date). This includes an update of the policy and socio-economic context of relevance to the TCBGC site where this is necessary to inform the direction of travel;
- **Forecast update**, which draws together evidence and analysis of the latest forecasts relevant to development of employment at the TCBGC site, including land and employment forecast growth and sector analysis;

- **Market Assessment**, which explains the latest evidence and forecasting for various employment uses, with input from Bidwells;

- **Economic Opportunities and Threats,** which discusses the exogenous opportunities for the site, including its proximity to the University of Essex and the proposed Freeport East;

- **Masterplanning and Policy Implications**, which sets out the work undertaken between Quod and Prior + Partners to develop and specify the employment land options; including broad location options, typologies and land use, and relationship to key infrastructure;

- **The Role of the Authorities**

- **Summary SWOT**, which summarises the identified strengths, weaknesses, opportunities and threats for employment activity uses and quantum at the site, informed by the data and engagement with stakeholders;

- **Recommendations for the DPD**

1.12 Quod's work has been undertaken with the benefit of guidance and direction from the client team across the Authorities (including representatives from economic development, planning and policy teams). Quod has worked closely with the team to develop proposals.

1.13 Quod has undertaken an extensive programme of interviews and information gathering with a range of stakeholders including representatives from the Authorities, the private sector, and the University of Essex.

1.14 A draft report was published alongside the Regulation 18 DPD consultation in early 2022. This version of the report has been updated, taking account of consultee feedback and further stakeholder discussions.

Overview of findings

1.15 Based on our experience, the Authorities, Latimer, and the University are committed to working together to achieve the aspirations of the policy. The need for housing is clear and unequivocal. The role of employment land here is more nuanced and associated with more risk and uncertainty, but with the right support and investment, there is evidence of an opportunity for above trend growth in both a traditional business park and innovative "Knowledge Gateway 2" offer.

1.16 The prospects for a business park (B2/B8 logistics, industrial and ancillary office) with direct access to the A120 are strong in the short term.

1.17 The evidence shows that demand for innovative, knowledge intensive office-based research and spin-out space (E(c) and E(g)) is longer term but that there could be opportunities to accelerate if it is de-risked.

1.18 Development on the scale of Garden Communities can be a disruptor to markets. Up to 20,000 residents supported by new rapid transport will expand the pool of skilled workers and

entrepreneurs in the local economy and, in turn, the attractiveness of Colchester and Tendring for investment. Based on 2011 qualification levels (the most recent comprehensive dataset) the Garden Community would bring at least 1,500 new residents qualified to at least Level 4 (CertHE and above) to the local area[3].

1.19 The Knowledge Gateway at the University of Essex Colchester Campus is a relative newcomer to the market and offers a business park-style cluster but with the amenities and facilities sustained by proximity to the University. It is generally seen as very successful with strong prospects for growth, alongside significant planned growth in student numbers, over the long term. The general office market in Colchester and Tendring is currently dominated by small scale units in Colchester town centre (many above shops or converted from other uses) and low-to-mid-rise clusters of purpose-built space out of centre and in business parks, many along the A12. In general, it is not a significant office destination. Demand for office space is steady but not showing signs of significant growth.

1.20 Existing industrial and logistics space in Colchester and immediate surrounds is likewise relatively small scale, clustered mainly in Whitehall Industrial Estate and Severalls Park in the area close to the site. In Tendring, there are clusters at Harwich Port, Telford Park / Gorse Lane in Clacton, and Lawford in Manningtree. Harwich forms part of the cluster of port infrastructure planned to grow significantly under the umbrella of Freeport East[4], including substantial planned investment in Green Energy (including wind and hydrogen) at 77,900 sqm of new manufacturing facilities, offices and workshops[5].

1.21 Overall, trend-based projections (as set out in more detail in this report) show steady but small scale growth in jobs in Tendring and Colchester over the next 10-20 years. Based on these trends, take-up of the full 25 ha of land would be slow. However, there are two important caveats to these trends – one: they do not reflect recent economic shocks (particularly the pandemic, but also exit from the EU) that have caused a significant break in the trajectory for logistics space demand; and two: trend based projections "bake-in" the trends of the past and do not reflect changes that might come from innovation or intervention which captures whole new markets. New housing, opening up Tendring and Colchester to new and different residents and employers, could also be such a catalyst. Local Authorities and master developers can also have a role to play in attracting investment through forward funding, marketing, partnerships, curation and placemaking.

1.22 The most likely source of office (or office/research and development mixed space) will be university linked growth through spin-offs from the Knowledge Gateway or expansion of the Gateway itself. The University has ambitious aspirations for growth in its student numbers and its commercial activities. While this will not lead to an immediate significant demand for more land (as their current land holding already has some room to grow), University linked growth is expected to play a key part in driving demand for commercial space at TCBGC in the long term, and an exciting opportunity for capturing growth in new, innovative sectors.

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[3] This is a conservative estimate based on previous rates of qualification and historic (2011) rates of internal migration within Tendring and Colchester. Both increased rates of degree level qualifications, and the attraction of a new community could increase the number of skills residents entirely new to the area.
[4] Harwich, Felixstowe, Gateway 14
[5] https://www.freeporteast.com/harwich accessed 16/11/22

1.23 Market intelligence identifies a very tight supply of B2/B8 locally. Demand is immediate and high. In an appropriate location, with good road connections, public transport links and the relationship to housing and other uses, a B2/B8-led business park is expected to be imminently deliverable and lettable. The recommendations set out in this report seek to balance the current known market appetite for different types of space; the need for high quality placemaking; and the opportunities for future occupation some of which cannot be known at this time. In its planning policies the authority has discretion to go above and beyond what the current market evidence shows if there are, for example, placemaking aspirations in mind.

1.24 As part of the TCBGC, a new Rapid Transit System (RTS) will be delivered (the exact route is to be confirmed) linking the community with the town centre and the University of Essex, integrating the new homes with existing Colchester and facilitating sustainable commuting between them. Colchester has a "town centre first" policy[6], designed to ensure growth out of centre is not to the detriment of the vitality and sustainability of town centre uses, and to avoid "hollowing out". The RTS will ensure TCBGC residents can easily access jobs in the town centre, but could also mean activity flows away from the town centre. Employment space at TCBGC should therefore be focused on uses that could not or would not otherwise locate in the town centre, and this reinforces the combination of a business park zone and a university-linked zone as the appropriate strategy. Other employment uses within the TCBGC are expected to serve a mostly local (within the GC) catchment area.

1.25 The evidence base preceding this report was generated before the use class order changes in 2020. The allocation in policy is referred to as "B use employment land". In 2020 the use class order changes brought in a new class E, which supersedes some of the B class uses: B1a/b/c. We make reference to both of these nomenclatures in the report, subject to the context.

[6] Paragraph 3.46, Colchester Local Plan Section Two (adopted July 2022).

2 Baseline and Policy Review

Historic Evidence Base

2.1 Quod has reviewed the evidence base and supporting documents that have been generated in the development of the economic and employment proposals at TCBGC. These are listed at Appendix 1. In summary, the evidence base is comprehensive and reasonably up to date; it does not require significant updates to remain a sound basis for policy making and delivery of the TCBGC. Some significant national and international economic and social shocks have occurred, and new or stronger policy directions have emerged at a local and national level. These are discussed in more detail below. These are relevant context for the DPD, and may be instructive on the detail of the future design work and delivery strategy, but they do not change the broad direction of travel as established in policy to date.

Policy and Context: Key developments since 2019

2.2 Macro and national economic trends are thoroughly explored in the evidence base documents produced by Cebr, CE and SQW (see Appendix 1). The latest studies were produced in 2019, which preceded Brexit (31st January 2020) and the start of the Coronavirus pandemic (~March 2020). These are not singular events and the impacts of these on housing demand, population dynamics, working patterns, consumer behaviours, demand for distribution facilities, and many other matters are not conclusive – it is likely that the reverberations of these events will continue for many years. While there is much that remains unknown, some updated forecasting which has been produced to reflect these changes has been reviewed as part of this brief (see Section 3).

2.3 At a more granular level, the following changes or developments that have taken place in the past two or so years should be considered in developing economic and employment proposals for TCBGC:

- **Freeport policy:** Freeports are “special areas within the UK’s borders where different economic regulations apply”, typically located near shipping ports and/or airports. This is a national Government policy which confers tax and customs incentives within geographic boundaries, including business rates retention, advantageous planning conditions, and trade and investment support. Candidate sites were put forward by local authorities and private stakeholders, and those selected were granted freeport status in March 2021 by the Department for Levelling Up, Housing and Communities (DLUHC).

- **Levelling up and government funding pots:** Tendring and Colchester are priorities for the Government’s Levelling Up agenda (being in Tier 1 and 2 respectively) and are both well placed to apply for central government funding for specific infrastructure projects. Colchester successfully secured £18.2m from the Towns Fund in March 2021.

- **Net Zero policy:** Climate action is a higher priority for both central Government and the Authorities. It is intended for net zero targets to influence policies across the

spectrum, including growth of green jobs, architecture, design, modern methods of construction, and sustainable travel patterns and “local living”.

- **Covid and changing working patterns:** The historic evidence base identifies scope for TCBGC to support hybrid working patterns. This trend will take time to play out, but the Garden Community can be planned to support changing needs of office-based businesses. This could include the approach to phasing, as well as the type, design, and characteristics of business accommodation. In relation to this, we are familiar with ECC’s Cambridge Econometrics commission to forecast the long-term impact of the pandemic on working patterns, particularly impacting town centres and commuting.

- **Location of housing growth:** The Coronavirus pandemic appears to have had an impact on where people want to live, although the long-term impact of this current trend remains to be seen. The Cambridge Econometrics work can also inform forecasts for the location and pace of housing growth.

- **The Role of Town Centres:** long-term declines in high street retail profitability have led to challenges on many of the UK’s high streets. The pandemic accelerated these trends in many places (although reversed them in others). These trends are prompting a rethink on how to promote and sustain town centres. For Colchester, the Local Plan promotes economic and employment growth in established centres. This ambition needs to be balanced against opportunities for growth elsewhere, in particular the Garden Community.

- **Step Change in distribution demand:** The Coronavirus pandemic has expedited a long-term behavioural trend for consumers to rely more heavily on home delivery for various goods, accelerating the demand for increased warehousing and logistics network capacity.

2.4 The evidence base also pre-dates the changes to the use class order made in 2020. The evidence base forecasting for the site refers to B class uses, of which Ba/b/c have been subsumed into the new E class. The DPD will need to use the nomenclature set out in the updated use class order, which includes referring to the new E class uses. This should be done where relevant, to describe the proposed uses, utilising the clauses within E class to describe the particular types of proposed uses in particular locations. The DPD should be cognisant of the new flexibility for permitted change of use between different E class types, and account for that in its policy wording, adding additional restrictions where this is possible and necessary to achieve policy restrictions.

Baseline: Key developments since 2019

2.5 Much of the data in the historic evidence base remains the latest information and cannot be updated at this stage, for example Census data. Only limited datasets from the 2021 Census have been published.

2.6 Since 2019, the East of England Forecasting Model has been updated, and BRES data on employment has also been updated. Tendring’s Local Plan was adopted in January 2021, but the evidence base was available prior to that point.

2.7 We have undertaken an update to the baseline evidence in Section 3.

Evidence Base Starting Point

2.8 25ha of B use employment land is allocated at TCBGC in the North Essex Local Authorities Shared Local Plan. 7ha of this total is to be delivered within the current Plan Period, which ends in 2033.

2.9 This is based on the 2019 Cebr work which estimated that, in order to retain the current ratio of jobs per household across North Essex, c.45,000sqm would need to be delivered by 2033, and c.160,000sqm would need to be delivered by the “final state”, i.e. complete occupation of the TCBGC (sensitive to plot ratio and use class split assumptions). Through the Local Plan process, the Authorities have specified that these jobs should be met within a “sustainable commuting distance” of the new homes (which means not all need to be delivered on site). As such, the TCBGC Policy SP8 seeks one job per household – so 7,500-8,000 jobs - within a sustainable commuting distance.

3 Forecast Update

Evidence Base Update

Land use and employment targets and forecasts for Tendring and Colchester

3.1 The Shared Local Plan targets a total of 34ha growth of B class uses across both districts over the plan period (2013 to 2033). There is a "stretch target" of 50ha over the plan period. Using a 0.64 plot ratio[7], this equates to the creation of between 12,200 and 18,000 jobs over the plan period.

3.2 The East of England Forecasting Model (EEFM) is a standalone forecasting system to guide local authorities and local enterprise partnerships in the region on 'baseline' economic forecasts with their associated demographic and housing implications; and to allow users to generate alternative scenarios. It models employment, housing and population-based trends, constrained by UK and international assumptions. It does not reflect planning policy or local government aspiration or intervention (unless the model has been run with those assumptions assumed specifically).

3.3 It suggests that total employment in Colchester and Tendring will grow at a faster rate than Essex as a whole for the period to 2033. It suggests that 3,900 jobs will be generated across the two authorities over the plan period. However, on an annualised basis, this still represents relatively a slow employment growth – both rate (1-2% per annum) and gross change.

3.4 The land allocations in the Shared Local Plan reflect an ambition to increase significantly the rate of growth of employment. At present, economic forecasts are not showing that level of growth but, as stated, they do not reflect policy or interventions which could cause above trend growth or significant changes in economic specialism, such as those which could be promoted by the public sector.

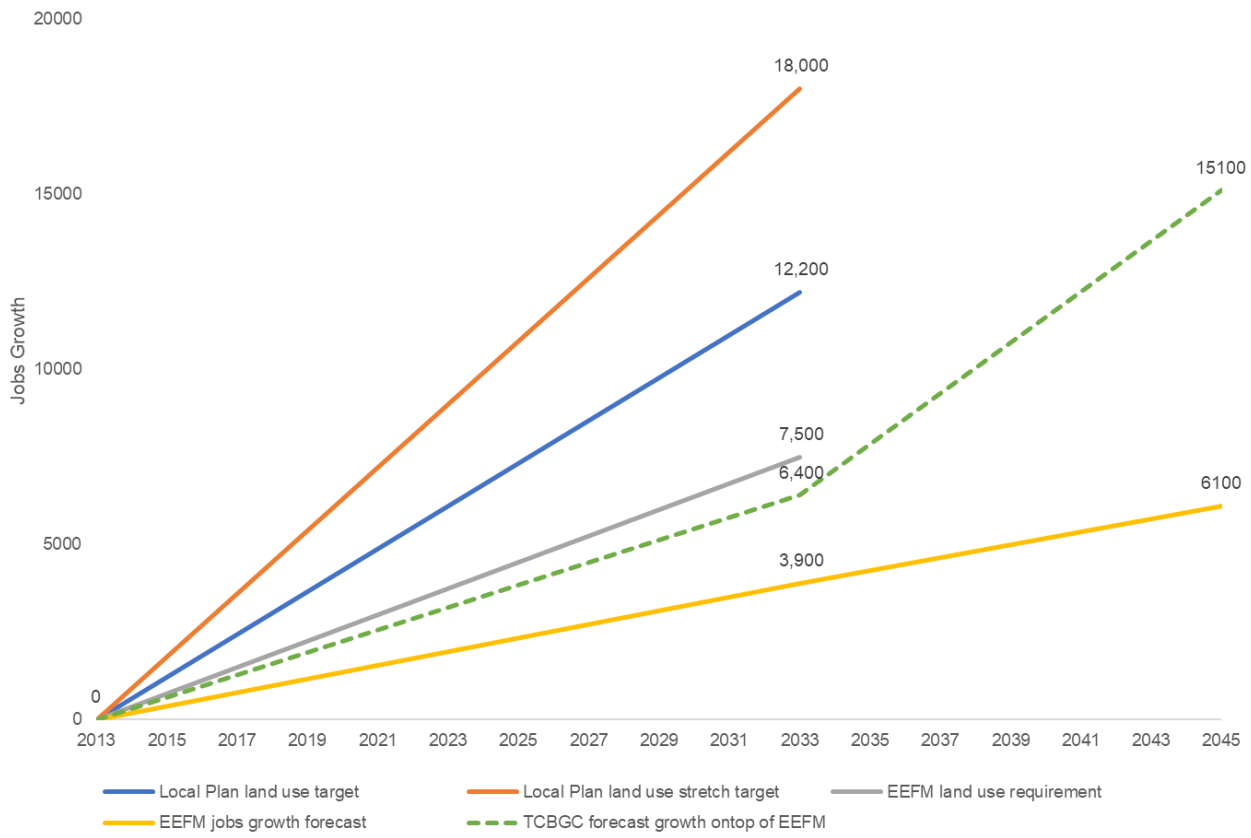
3.5 These forecasts and targets are set out in Figure 3.1. The forecast growth in jobs at TCBGC, which is in addition to that forecast by the EEFM, is shown in the green dotted line.

3.6 There are some anomalies in the forecasts (as there are in any economic model); these are partly driven by rapid acceleration of certain trends under the pandemic which could not have been foreseen in 2019. For example, the EEFM in 2019 forecast a flatlining of warehousing floorspace demand between 2019 and 2045 (c.3.4m sqm), and steady growth in office uses (>10% growth between 2019 and 2045). Accounting for the socio-economic change that has taken place in the two to three years since these forecasts were set, the warehousing market has sustained growth, and the office market has (location dependent) gone through a range of shocks, many of which are yet to settle. This further underlines the need to caveat the latest forecasting with caution, especially when using it to inform plans with a decades-long delivery timescale. In all likelihood, demand for warehousing space, particularly on major road networks

[7] Taken from the Cebr 2019 report

linking ports and conurbations, will continue to be strong for the foreseeable future. The potential for the office market to bounce back is more uncertain.

Figure 3.1: Land use and employment targets and forecasts for Tendring and Colchester[8]



Sector analysis

3.7 The 2019 EEFM identifies sectors that are anticipated to grow over the Plan Period. Across Tendring and Colchester, key growth sectors are forecast to be real estate, tourism, construction, retail and wholesale, education, health and care, and some knowledge-sector jobs.

3.8 Sectors that are large or growing and/or have a competitive advantage locally could represent growth opportunities at TCGBC. Providing space to accommodate growth sectors will reduce the likelihood of displacing activity from elsewhere. We have undertaken a location quotient analysis, the key outputs of which are set out in Appendix 2.

3.9 This method of analysis charts sectors that are growing (total jobs) both absolutely and relatively. Relative growth indicates increasing competitive advantage or new emerging

[8] Note: Data is for B class type employment only. Assumptions have been made (e.g. on selection of SIC codes).

specialisms, but the total jobs/employment space projected might still be small, especially in the short to medium term.

3.10 Looking at Broad Industrial groups, health and education are the largest sectors in Colchester as well as sectors in which Colchester has a relative and increasing competitive advantage.

3.11 Motor trades (a traditional Essex employer) stand out as a growth sector when compared to the England average (and slightly compared to the Essex average). Manufacturing has a low, but improving, competitive advantage. Looking in more detail at the sector, the manufacture of furniture, machinery, food, and wood products stand out as small but increasingly competitive specialisms – with the growth in advantage in food being particularly marked. In Tendring specifically, the manufacture of fabricated metal and machinery are both growth sectors, but retain only a slightly higher relative advantage compared to the England average. These sectors remain small total employers, employing several hundred employees each. The area has a small but growing advantage in finance and insurance, mainly focused on auxiliary services, and a small but growing presence of advertising/market research.

3.12 We have mapped the sectors identified as local policy priorities against the latest forecasts for employment growth (Appendix 3). There are some clear synergies where both policy direction and trends show either existing strengths or potential for growth. Figure 3.2 shows sector priorities in bold, and large/growing sectors with a tick. Sectors that are reflected across both trends and policy are likely to have the strongest chances of success at TCBGC.

3.13 There are some sectors (green energy and advanced manufacturing) which are policy priorities (at a local and national level) but which do not have current scale or forecast growth. That is not to say that this means growth is not possible, but it is more likely to require either a rapid change in that sector (due to a relocation of a large firm most likely) or an intervention. These are rapidly changing industries and trends may not reflect the opportunities for disruptors to rapidly and significantly change their economic geography. An example of a disruptor is the Clean Energy Hub at Bathside Bay in Harwich, part of Freeport East, which, if built as per the current proposals, will support the production of energy from offshore wind and hydrogen. If Freeport East comes forward as proposed, it will:

- Create the Green Energy Hub, producing green hydrogen for use both within the freeport and externally in locally important industries such as Agri-tech, alongside growing the hydrogen supply chain and supporting the construction and operation of offshore wind.
- Leverage the presence of forthcoming active nuclear power stations at both Sizewell and Bradwell sites to support hydrogen development, along with inducing further global investment and innovation.
- Be the first Net Zero Carbon port by 2030[9].

3.14 Interventionist approaches at a local or national scale (incentives, planning strategy, direct delivery by the public sector - of buildings, for example - tax breaks, government funding, etc) can disrupt forecast trends.

[9] Freeport East Final Bid Submission 09/02/2021

Figure 3.2: Comparison between growth sectors identified in policy for TDC, CBC and ECC, against evidence strengths and forecast growth sectors[10]

Sector identified in policy	Evidenced Strength Locally	Forecast to Grow Locally
Green energy		
Care and assisted living	✓	✓
Digital, creative	✓	✓
Construction	✓	✓
Tourism	✓	✓
Food production and processing	✓	
Advanced manufacturing		
Transport and logistics	✓	
Life sciences, healthcare	✓	✓

Wider economic geography

3.15 Tendring and Colchester both have pockets of deprivation. In Colchester, neighbourhoods to the east and south (bordering the TCBGC site) are the more deprived. Tendring has a severely economically deprived coastline with Clacton-on-Sea, Jaywick and Walton-on-the-Naze among the most deprived places in England according to the government's Indices of Multiple Deprivation. It is of great importance to the Authorities that these areas see a benefit from growth either through direct job opportunities or through increased economic prosperity that has effects beyond the TCBGC. Equally, policies supportive of growth at TCBGC should be mindful to avoid displacing any more economic activity from these areas if possible, by capturing growth that would otherwise go outside the districts (or the region).

3.16 To maximise the opportunities for benefits to reach existing residents, the Authorities should consider how employment and training initiatives could be used effectively to leverage opportunities on site during both construction and in the long term.

3.17 In addition, the Authorities should consider how transport interventions could support economic growth in the area. These transport interventions could include capital public transport projects

[10] Bold text indicates sectors typically operating in B class uses (old use class order).

as well as interventions in the network to improve connectivity. Reliable, multi-modal access into the Garden Community – for workers living elsewhere but employed on-site – will be important to facilitating jobs on site. Demonstrable efforts to secure these sorts of interventions will be important to businesses which consider locating onto the Garden Community, to give them confidence that they will be able to secure the labour they need. The Garden Community crosses two Travel to Work Areas so the Garden Community, and its transport system, will be a disruptor to the current patterns of movement, which presents an opportunity for businesses both and on and offsite to benefit from a wider labour market. Enabling that labour market to access the jobs will be primarily a transport intervention but may require additional training and job readiness support from public partners for those not currently able to take up the opportunities.

Implications for TCBGC

3.18 The data indicates a modest job growth of ~1% per year. Accounting for an increased rate of working from home in some sectors, and the Colchester Local Plan's emphasis on "the need for economic growth to be targeted at the most marketable, accessible and sustainable locations"[11], lower forecast demand for employment space means that TCBGC will have to either:

- Capture a significant proportion of the total growth projected for the Authorities;
- Increase local growth overall, above trend;
- Attract more inward investment, above trend.

3.19 Growing by 7,500-8,000 jobs would represent around one quarter of Tendring and Colchester's total forecast jobs growth between 2019 and 2045 (c.35,000 jobs). Ensuring these jobs are within a reasonable commuting distance to the TCBGC is likely to require a step change in current local trajectories. In this location, buildings alone will not bring the types of jobs and growth that the authorities want to see and, left entirely to the market, the evidence shows that B2/B8 space would be deliverable in the short term but office, research and innovation space would be slower.

3.20 The Authorities and their partners could support this step change by:

- Creating policies and granting planning permissions that secure a very high quality, and therefore competitive, employment land offer (including through placemaking and the leisure/F&B etc offer).
- Considering phasing of development as part of all planning permissions and base triggers points when critical mass will be achieved
- Actively engage with the property market to attract delivery partners and tenants (which is the current economic development model practiced by the Authorities.)

[11] Paragraph 3,27, Colchester Local Plan Part 2 (adopted July 2022).

- Building joint venture partnerships
- Exploring opportunities to de-risk the opportunity for investors
- Using soft measures such as marketing and branding to widen the market for occupiers and investors alongside the vision for the Garden Community
- Support particular sectors or businesses to take space at the Garden Community through marketing and incentives
- Delivering skills and training interventions to match local people to jobs on site and to ensure there are skills to support target industries
- Support professional networks which promote business growth and innovation to attract and retain high quality businesses at TCBGC
- Work with representatives from the University of Essex, including both academic and commercial arms, to build networks to promote and sustain commercial activity at TCBGC
- Investing in supporting infrastructure, especially transport interventions, to better support sustainable travel to and from the site (already planned through the RTS)
- Pump priming key sites early through permanent or meanwhile use
- Actively seek funding or support companies to apply for funding in a start-up/R&D/incubator/accelerator context.

3.21 Considering that there is scope for public sector intervention, but there will inevitably also be market reliance, the evidence supports a flexible approach to the DPD. The approach should allow TCBGC to take advantage of economic opportunities, especially for growth sectors and disruptors, but will not compromise the other objectives of the garden community (including placemaking) or encourage displacement of activity from elsewhere in Essex.

3.22 Intervention to drive above trend growth is likely to be required to reach the top end of the objectives.

4 Market Assessment

4.1 This section outlines the recent trends and forecasting for employment uses relevant to the TCBGC site. It has been informed by close working and market testing with Bidwells, property consultants and agents with experience of the region, and specific expertise in industrial and employment strategies alongside housing development.

Industrial Market

4.2 The industrial employment floorspace market (E(g)(iii) / B2 / B8) is big and growing in the Colchester – Tendring area. Between 2015 and 2020, the average take up was around 18,000sqm every year, and after a pandemic-induced lull, in quarters 1-3 of 2021 take up rebounded to 14,000sqm.

4.3 Availability of suitable floorspace is tight, and demand is sufficient to make new development viable. Demand is typically for logistics, light industrial, and research and development (R&D) uses. Based on trends and forecasts, 10,000sqm or 1.5ha per year could be brought to market on site.

4.4 The Northern Gateway development (which is public sector controlled) is located close to the northern boundary of the TCBGC site. It includes a pipeline of E(g)(iii)/B class uses, which is on target to come on stream in 2-3 years' time. This development was previously envisaged to be office and leisure led; responding to market interest, it is now industrial business park led with R&D (but not logistics). Large format retail tenants have also shown an interest in the site, although that use is currently not permitted under the outline planning permission.

4.5 While it may represent competition, the delivery timing for the Northern Gateway could dovetail well with related business park uses on the TCBCG site, and opportunities for synergies should be explored as Northern Gateway is built out.

4.6 There is a pipeline of industrial sites in the Authorities which have been identified to support the development of the Freeport. To the east of TCBGC, further along the A120, is land southwest of Horsley Cross which is allocated in the Local Plan for 11.2ha of B2 / B8 employment space. The site has been identified as a customs site to support the Freeport. Bathside Bay is an industrial site located in Harwich, and is allocated for significant expansion of the Freeport including a Clean Energy Hub for both wind and hydrogen.

Office Market

4.7 In comparison to industrial, the office market is small, but there is a fair supply of space for small organisations, such as start ups, across the Authorities, with over 5,000sqm of space, spread across over 200 units. The office market in the Colchester – Tendring area is typically driven by smaller deals: the average size of transaction over the past five years is c.200sqm. There is new space coming on stream, for example in Tendring at Jaywick Sands (supported by the Authority). The Authority also secured funding for redevelopment of grow-on space at the former Queen Street bus garage in Colchester town centre through the Local Growth Fund.

4.8 In order to attract larger organisations, the provision of grow-on and larger floorplates in the rental market may be attractive to prospective tenants.

4.9 The market is dominated by provision in Colchester town centre. Much of this space is second hand and/or non-purpose-built, which commands a lower market rent; typical rents for the area are £10-£15/sqm.

4.10 The going rate for new builds in the area is £30/sqm. Where new builds have come to market locally, in many cases rents and/or capital costs have been subsidised. This may also be necessary at TCBGC. However, spaces that are flexible, which can be added to, broken up, or used in different ways, are attractive, and these sorts of spaces are difficult to achieve through conversions and where new build is set apart. Similarly, improved environmental credentials and improved social spaces for workers give new build a further premium. The town centre will struggle to provide this sort of space, so tenants will look elsewhere to meet their needs.

4.11 There is a growing market appetite for spaces that allow for co- and shared-working, meeting spaces, flexible spaces, and shared facilities. These uses suit being delivered alongside typical mixed-use areas, including with high street uses, such as convenience retail, food and beverage, and leisure activities. They are well suited to being alongside higher density residential in a local-centre context. Provision of a small amount of this type of use on site will sustain high street place making, all-day viability of shops and services, as well as helping support more flexible working needs.

4.12 TCBGC can and should offer something different to what is currently on offer, both to attract tenants and avoid negatively impacting on Colchester Town Centre.

Local Centres Benchmarking

4.13 Demand for flexible office spaces has expanded rapidly in recent years, being particularly appealing to smaller firms who value the flexible, lower risk rents and the opportunity to scale up or down quickly. They also value the potential opportunities for networking and collaboration that the shared facilities provide. They can serve as satellite offices for workers who do not want to commute every day but cannot or do not want to work from home.

4.14 With 7,500-8,000 homes on the TCBGC site, it is reasonable to assume that some residents will generate some demand for flexible working spaces which are in easy reach of home. Facilities that are in demand include:

- Shared services such as printing facilities, meeting rooms, break out spaces
- Hot desking and co-working spaces
- SME / Start up space.

4.15 It is likely that this demand will come primarily from local people and firms, rather than from a wider catchment, taking account of the competition from alternative office locations nearby and also the aim for workers to reduce their commute through local options. Due to uncertainties in working behaviours and the office market demand more generally, it is difficult to forecast

what demand could look like over the delivery timeframes for TCBGC. Traditional "ready reckoners" on the amount of office floorspace that could be sustained in local centres may not be as reliable as they once were.

4.16 Quod has undertaken a benchmarking exercise to understand the amount of E class floorspace (particularly retail and office) that has been planned for local centres in garden towns and urban extensions of comparable size and scale.

4.17 There is a benchmark of around one local centre per 1,000 to 3,000 homes. A critical mass of activity is important, in order to sustain footfall from convenience and passing trade, as well as to support co-located facilities such as food and beverage and leisure activities. A historic "ready reckoner" benchmark is around 2.6sqm of commercial floorspace per home, with a wide range from 0.6sqm to 5qsm. This equates to between c.1,700sqm and c.15,000sqm per "neighbourhood" of 3,000 homes.

4.18 Bidwells' expectation is that the commercial space requirement will be at the lower end of the benchmarking, split half and half for E (a-c)) and E(g)(i) class uses. These uses can be delivered flexibly through the new use class E.

Potential for Modular Construction Factory

4.19 Modular and modern methods of construction provide an opportunity for faster, more efficient building and are considered a "vital" requirement to meet Net Zero in the UK and part of a "housing led industrial strategy[12]." The benefits could be:

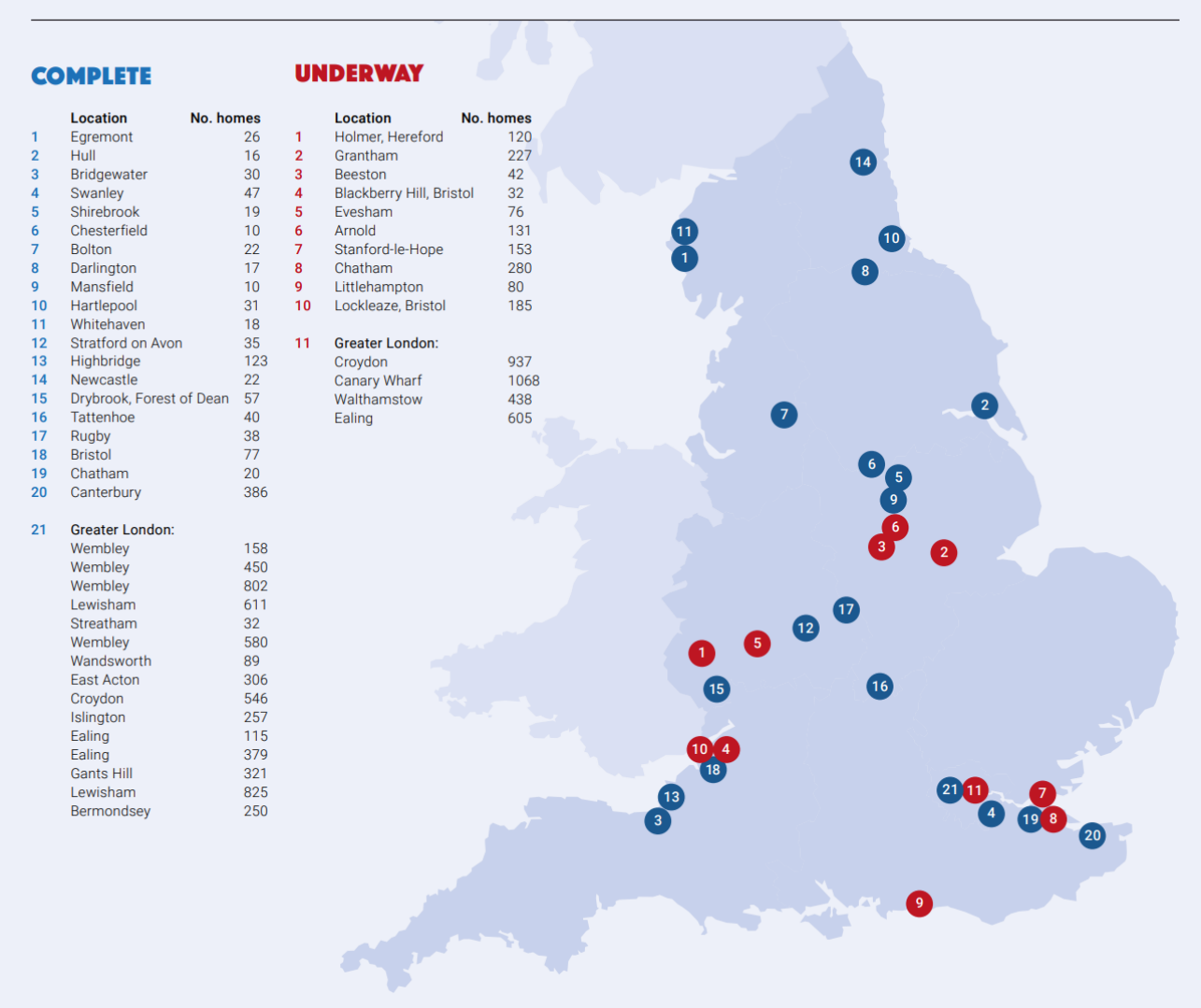
- More homes, faster
- More jobs and more of these upstream in the supply chain, with higher skills
- More innovation in energy performance, manufacturing methods and embedded carbon reduction strategies
- Higher quality control
- Improved health and safety for workers
- More transferable skills in the construction sector.

4.20 Manufacturers including Berkeley Modular, Ilke, Legal & General Modular Homes (L&GMH), Swan Nu Living, TopHat, and Urban Splash have each recently invested in factories, products, and system development with ambition to deliver thousands of homes a year (see Figure 4.1).

4.21 These companies are focused on low rise modular homes, predominately houses, with potential to deliver apartments in medium rise blocks. Medium to high rise volumetric modular delivery has been honed by fewer specialist manufacturers, such as Caledonian, Elements and Vision Modular Systems. Berkeley Modular's new system will be capable of delivering from 2 to 20 storeys providing an unprecedented level of versatility enabled by one of the most advanced digital manufacturing platforms in the world.

[12] Mike De'Ath (HTA), Mark Farmer (Cast), 2020, Build Homes, Build Jobs, Build Innovation: A Blueprint For A Housing Led Industrial Strategy

Figure 4.1: Map of modular housing sites as of October 2022[13]



COMPLETE

	Location	No. homes
1	Egremont	26
2	Hull	16
3	Bridgewater	30
4	Swanley	47
5	Shirebrook	19
6	Chesterfield	10
7	Bolton	22
8	Darlington	17
9	Mansfield	10
10	Hartlepool	31
11	Whitehaven	18
12	Stratford on Avon	35
13	Highbridge	123
14	Newcastle	22
15	Drybrook, Forest of Dean	57
16	Tattenhoe	40
17	Rugby	38
18	Bristol	77
19	Chatham	20
20	Canterbury	386
21	Greater London:	
	Wembley	158
	Wembley	450
	Wembley	802
	Lewisham	611
	Streatham	32
	Wembley	580
	Wandsworth	89
	East Acton	306
	Croydon	546
	Islington	257
	Ealing	115
	Ealing	379
	Gants Hill	321
	Lewisham	825
	Bermondsey	250

UNDERWAY

	Location	No. homes
1	Holmer, Hereford	120
2	Grantham	227
3	Beeston	42
4	Blackberry Hill, Bristol	32
5	Evesham	76
6	Arnold	131
7	Stanford-le-Hope	153
8	Chatham	280
9	Littlehampton	80
10	Lockleaze, Bristol	185
11	Greater London:	
	Croydon	937
	Canary Wharf	1068
	Walthamstow	438
	Ealing	605

4.22 Improved quality, ability to customise design and ability to build taller buildings in this way (all of which have been challenging with MMC to date) should lead to expansion of the market over the next decade.

4.23 Prerequisites for this type of industry are good transport networks between the prefabrication factories and the sites – avoiding bridges and other physical challenges like narrow roads. The distance between fabrication factory and site is less important than the quality of the connection: most of the major players are located within ten miles of a major motorway, and operate all over the country from one or two sites, as follows:

- Ilke Homes has its factory in Yorkshire half a mile from Junction 47 of the M1 (near York), but has delivered schemes across the country, including up to 300 miles from the factory;
- Legal & General have a factory in Leeds five miles from Junction 42 of the M1 (near Leeds), and has delivered homes in Bristol, North Yorkshire, Essex, Berkshire, and Sussex;

[13] Make UK Modular, 2022, Greener Better Faster: Modular's Role in Solving the Housing Crisis

- TopHat has a factory in Derby, located equidistant from the M6 in the west and M1 in the east, and has delivered homes in Kent, Essex, Rugby, and Bristol;

- Berkeley Modular is in Gravesend, Kent, within seven miles of Junction 2 of the M25, with the intention to deliver homes at schemes across the south east.

4.24 The Authorities are interested in exploring the potential for MMC within the Garden Community bringing the win-win of manufacturing jobs and skills, and localised construction supply chain (and therefore even lower carbon) to support the growth of TCBGC and the other significant amounts of housing growth in the pipeline for the East of England and London.

4.25 The TCBGC site is less well connected to a motorway (36 miles to the M11) but still has A road connections throughout the East of England and directly into London and the M25 via the A12.

4.26 The recommendation from the Greener, Better, Faster report (October 2022) was that modular capacity should be expanded in high housing demand areas and levelling up priority regions. There is substantial housing pipeline within 50 miles of the TCBGC site, including Harlow and Gilston, North Uttlesford and Chelmsford – as well as London. These sites will all require major housebuilding operations. Tendring is a Level 1 Priority Area for Levelling Up.

4.27 There is government[14] and industry support to grow the modular construction sector[15]. Modular factories can play a role in "levelling up" left behind places, so central government policy should be monitored for strategic plans for modular factories and opportunities that could come forward in Tendring.

Occupier Needs

4.28 For the purpose of planning successful commercial spaces and marketing these effectively, there are considerations which should be worked into the design and planning of these spaces. This is especially important if the Authorities and the master developer want to attract specific types of tenants.

4.29 The once clear distinction between Planning Use Classes has been decreasing with tenants now using spaces in more flexible ways and mixing types of uses very differently. Increasingly businesses co-locate different uses within a single building as well as different uses co-existing on the same site. This process has gone furthest in London where previously "industrial" uses are being designed into mixed-use communities.

4.30 The distinction between research/lab space and "ordinary" office space is diminishing as more research is done on computers and small scale manufacturing now sits alongside offices and distribution.

4.31 The government recognised this in bringing in the changes to the Use Class definitions in 2020 – which support much greater flexibility between retail, office, industrial and leisure uses. B2

[14] For example, in 2019 Homes England invested £29m in a modular homes factory owned by Ilke Homes
[15] For example, see *Build Homes, Build Jobs, Build Innovation: A Blueprint for a Housing Led Industrial Strategy* (September 2020)

(some industrial processes) and B8 remain separate, although in practice even these are coming forward as part of mixed-use developments in a way not seen before.

4.32 The planning system, which has an outline and then a detailed stage, allows decisions to be made over time and detail to be added the closer the project is to implementation. At the strategic masterplan stage, the location requirements and adjacency requirements will be particularly important to meet; at the more detailed design stage, the internal requirements will be addressed.

4.33 Table 4.1 sets out the typical market requirements of different target occupiers. The locational requirements for different employment spaces / uses can be considered at this strategic planning stage.

Table 4.1: Occupier Needs

Employment Space	Locational Requirements	Internal Requirements
Logistics, warehousing, final mile delivery, packaging	• Accessibility to strategic road network more important than adjacency to services (leisure, F&B) • Design for road safety for pedestrians and other vehicles • Acceptable levels of local traffic • For final mile delivery – nearby access to high density population • Where relevant, access to airports, ports, rail freight infrastructure • Strategic access to customer base, suppliers, producers • No limitations on utilities or broadband • Distance from homes to avoid noise/light complaints, especially for 24-hour operation	• Building heights • Large areas of unpartitioned space – i.e. limited internal structural columns • Blend of operational space – warehouse supporting by increasing proportion of office • Significant server rooms and data processing capacity • Loading docks for receiving and shipping
Research and development, life sciences	• Near a highly skilled labour market • Adjacencies to other similar firms (agglomeration, clusters) more important than access to services and recreation	• Subject to occupants: wet or dry activity space • Office space – for focused working and collaboration • Generous floor to ceiling heights

Employment Space	Locational Requirements	Internal Requirements
	• Skilled labour force more important than access to services and recreation • Strong transport links (including public transport) • Near or part of a network or cluster of other R&D activity including university	• High quality ventilation and additional riser space
Flexible, hybrid and innovation office space	• Access to recreational activities essential to attract these employers • For “front of house” activity, desirable location is within industry hubs in urban areas to support easy access to clients • For “back of house” activity, seek cheaper accommodation out of town • Near or part of a network of other innovative/high growth businesses and/or opportunities for networking	• Flexibility to create a range of spaces for different functions and activities • 2.4m high ceilings for focused working and 3m high ceilings for collaborative spaces • Space dividers made with noise absorbent materials • Plentiful natural light and views to daylight and scenery
Light industrial and advanced manufacturing	• Access to other parts of the supply chain, for example parts suppliers, finishing / packaging activities, and distribution partners • Access to research and development activities supporting the development of products – these activities are often located in R&D agglomeration hubs, with the manufacturing activities being located in cheaper locations • Access to appropriate skill level and labour market more important than adjacencies to recreation and services	• Mix of spaces to include “back office” functions, research and development, and manufacturing / product creation space • Particular operations will require highly technical environments, with specifications relating to ceiling heights, built structure, access

4.34 Employer needs are changing all the time, and this rate of change has dramatically accelerated in the last decade. In 2018, the Greater London Authority commissioned research into the changing typologies of industrial land and how co-location and design could facilitate increased intensification of industrial floorspace to achieve more industrial floorspace delivery[16]. The research found that the future of industrial and industrial-led mixed use could include components of residential, small industrial units and workshops/studios.

4.35 Given the long programme for the detailed design of the site, co-location and intensification could be interesting to explore at TCBGC. The Authorities and master developer can explore new opportunities to mix uses, including employment and residential, to support vibrant neighbourhoods and improve plot ratios.

4.36 This will be less appropriate (and probably not appropriate at all) for the potential B2/B8 uses, but has definite potential for mixed use neighbourhood centres and potential for some elements of Knowledge Gateway 2.

4.37 For the Knowledge Gateway space in particular, the strong links between housing and employment floorspace could help to sustain the food and beverage, leisure, and quality of place elements that sets the office offer apart.

4.38 The planning system allows a significant amount of flexibility – through both the changes in the use class system and through the structure of planning applications to allow reserved matters.

4.39 We recommend the Authorities consider the location factors in the table above as critical to the success of the proposed uses, and therefore there is merit in securing broad location in policy, but that they should allow other design factors including heights[17], typology/density and internal design to have significant amounts of flexibility until reserved matters stage.

[16] Mayor of London, 2018, Industrial intensification and co-location study: Design and Delivery testing
[17] Subject to other constraints, such as controls required to reduce landscape and visual effects

5 Stakeholder Engagement

5.1 Quod has undertaken an extensive programme of interviews and information gathering with a range of stakeholders including representatives from the Authorities, the private sector and the University of Essex. This section sets out the findings and themes of the information gathered.

University and Knowledge Gateway Expansion

5.2 The University of Essex is a regional (and national) success story. The Colchester Campus (the largest of three) is located on the boundary of the TCBGC developable area (south of the A133).

5.3 The University itself has an expansion strategy in place, out to 2025, which is aligned to an increase in student numbers. Student numbers may almost double to 30,000 by 2035 (across all campuses). The University is in talks with the Authorities on the expansion of university facilities such as sports facilities, accommodation, and other ancillary uses. These uses are not part of the Quod brief, and so are not expanded on in this report, although the Authorities and masterplanners have been made aware of these aspirations and this will influence the wider strategy for the GC.

5.4 Within the campus is the Knowledge Gateway, a business community run by the University, which is focused on supporting university spin outs and start-ups as well as providing space for local businesses. It describes itself as a "research and technology park" and "the location of choice in the east for knowledge-based science, technology and digital creative companies[18]".

5.5 It is officially "sector agnostic" – meaning that, unlike some university linked commercial space, it does not restrict tenants to a specific sector or activity, but it is particularly keen to attract higher productivity, knowledge-sector businesses. There is a general trend towards data analytics, artificial intelligence and "health tech[19]" among tenants, which is reflective of university specialisms. The University has dedicated academic institutes for Public Health and Wellbeing; and Analytics and Data Science (among others) and a Centre for Computational Intelligence. The Business School is co-located with the Knowledge Gateway, along with a hotel, conferencing facilities, hospitality and childcare. The jobs on site are majority knowledge-led, either wholly commercial or a mix with research and development.

5.6 The Knowledge Gateway was first planned in 2002 and construction commenced in 2014. Phases 1 and 2 are built out and phase 3 is anticipated to be completed by the early to mid-2030s. The Knowledge Gateway may support 1,500 to 2,000 jobs across ~15,000sqm by the end of this phase. In principle there is land available to provide the same floorspace again within the existing site, totalling c.30,000sqm across ~12ha – at a very low density with substantial parking. Given the long planning timescales, the density for the completed Knowledge Gateway will be influenced by a range of factors including sector-specific demand

[18] https://www.essex.ac.uk/business/knowledge-gateway accessed 11/02/22
[19] A broad term used to define technology-centred innovation in the health and care sector

and the type of transport connections supporting the site (which we expect could significantly reduce the need for parking).

5.7 The University has a long-term aspiration to expand the Knowledge Gateway further – possibly into a "Knowledge Gateway 2". It has aspirations to provide the same volume of space again, possibly at a higher density. Commercial space at the Knowledge Gateway has historically required subsidy – future phases may need to be similarly supported which may limit scale of ambition and/or require a joined up supporting role between the University and the Authorities.

5.8 Land within the TCBGC developable area may be suitable for this expansion and has the potential to be directly linked, such as via a pedestrian or cycle route across the A133, and via the Rapid Transit System. At floorspace delivery rates to date, the development of any additional land would likely be over a long-time horizon.

Freeport East

5.9 Freeport East is one of eight freeports allocated by central government in 2021. It will be located at Felixstowe / Harwich, the latter being east of the TCBGC site along the A120. There is an intention for the Freeport to be focused on growing clean energy (at Harwich) and "agri-tech[20]" activities. Freeport East promotes its competitive advantages in manufacturing wind turbine infrastructure, such as its proximity to the North Sea and east coast of England – a significant wind energy location – as well as the currently limited competition in the south and south east for dedicated deep water manufacturing facilities.

5.10 Quod has reviewed evidence relating to the Freeport, provided by the Authorities. TCBGC is located within the 45km "Outer Boundary" of the Freeport, which is the "natural economic catchment area" of the ports. However, TCBGC is not identified as a key site (e.g. a customs zone or tax site) to principally support the operations of Freeport East, at this stage in the development of the proposals. Additionally, TCBGC is not located on the primary transport spines (A12 and A14) which are identified to likely be part of the main network supporting the supply chain for the Freeport.

5.11 The opportunities for TCBGC to develop commercial operations and employment opportunities that are directly related to the Freeport are, at this stage, uncertain. There could be a role for employment land at TCBGC as part of the supply chain, particularly relating to last mile logistics or manufacturing / packaging / assembly activities, particularly on land adjacent to the A120, given that the road links into Harwich. Government's Freeport policy allows for customs sites to be applied for at a later date, so the supply chain catchment could shift westwards towards TCBGC if particular sites come online as a result of such applications.

5.12 The University of Essex has a Plant Innovation Centre "to address the grand challenges facing farmers, technologists and all those in the agricultural and horticultural sectors[21]", so an agri-tech specialism may well have synergies with the Knowledge Gateway and its growth.

[20] A broad term used to refer to technological innovation in agriculture, farming and food production.
[21] https://www.essex.ac.uk/centres-and-institutes/essex-plant-innovation accessed 11/02/22

5.13 The Freeport aims to generate 13,500 new jobs over the first decade of its conception[22]. The Office for Budgetary Responsibility's analysis[23] of the in principle Freeport opportunity identifies that freeports are likely to displace growth rather than generate extra growth at a national level. The 13,500 jobs forecast are a large proportion of the total jobs forecast to grow in the region over the next decade (and the remainder of the plan period), and are of comparable scale and scope to the 9,000 jobs sought within sustainable commuting of the TCBGC site.

5.14 Given the relative proximity of the Garden Community to the Freeport site, and the early stage that the Freeport plans are at, it may be that the Freeport will generate growth some of which could be captured by the Garden Community. However, considering the Garden Community has not been identified as a primary location for specific Freeport development, the Garden Community may be reliant on an element of market intervention in order to secure specific benefits of the Freeport on site. The Site's role in delivering, and/or benefiting from, skills development is one area to explore.

Sector Opportunities

5.15 There is appetite from the Authorities to grow jobs in high tech sectors, in order to boost productivity in the economy, broaden opportunities for residents' skills growth and employment; and take advantage of sectors that could experience substantial growth over the next few decades. There is a lot of activity in the wider area which is aligned to high tech growth, such as the "energy coast" and "green growth", the Freeport, and the University. Colchester's own business community has success stories in these areas. Key sectors the Authorities are keen to grow in include green growth, high tech manufacturing, modular and high-tech construction and creative and digital.

5.16 There is an obvious connection to the University and the Knowledge Gateway. However, as explained above, this growth will be above the trend of what is predicted. This may require additional support and an interventionist approach from the Authorities (perhaps with additional support or funding from Central Government).

[22] https://www.freeporteast.com/
[23] https://obr.uk/efo/economic-and-fiscal-outlook-october-2021/

6 Summary SWOT

Strengths

- Clear policy support for employment growth on site, tested through Examination in Public (i.e. allocation)
- Forward thinking authorities with aspirations for growth, including in new, potential disruptor sectors with central government policy backing
- Colchester is an established business environment, but small scale
- Knowledge Gateway driving growth and innovation
- Site is on the A120 transport spine – ease of access for workers (although road impacts need to be considered), and access for business transport / logistics
- Rapid Transit route linking the site and Knowledge Gateway with Town Centre

Weaknesses

- A limited number of the obvious forecast growth sectors, as set out in policy, are seeking space in this location
- Some parts of the workforce face challenges in skills and training – investment and targeting initiatives required to achieve best social outcomes.
- Low demand / take up for office space in the area

Opportunities

- Broad sector growth opportunities in the local area – particularly along transport spines
- Site is close to the University / Knowledge Gateway with ambitious aspirations for growth in both student numbers/facilities and in spin-off commercial and research activity
- Shift to home working driving small scale office demand in neighbourhood centres and disrupting traditional commuting patterns
- Greater diversity of employment uses could be sustained with more “local living” (e.g. 15-minute neighbourhood models)
- Logistics and warehousing is a growth area, and the site is well located on a transport spine to support this
- More employment locally can help address local deprivation (especially in Tendring) and there will be opportunities for skills and training initiatives to support this.
- Opportunities for growth to have spill-over effects that support struggling Essex communities, including the seaside towns, which are a policy focus (but reliant on transport infrastructure investment).
- Absence of flexible, grow on and large scale stock – site could provide space for these types of businesses.

Threats

- Town centre focus – growth should minimise displacement
- Tendring’s priority is investment and activity in existing urban areas and more deprived communities (many of which are on the coast away from TCBGC)
- Other sites and growth corridors are prioritised as the primary locations for growth of the Freeport; TCBGC is not identified as a key site
- University / Knowledge Gateway not seeking to expand in the short to medium term

7 Masterplanning and Policy Implications

Summary Findings

7.1 Planning policy seeks 25ha of employment land at TCBGC. The updated economic growth projections establish that this is ambitious but achievable with the right intervention and planning. The masterplan must be carefully designed in order to maximise demand for space on site. The masterplan must consider:

- Quality of space and place (linking back to Table 4.1: Occupier Needs);
- Mix of commercial uses (within the prescription of policy);
- Total volume of commercial space;
- Mix of commercial unit sizes;
- Location of commercial uses;
- Transport infrastructure to, from and within the site;
- Digital (broadband) infrastructure;
- Deliverability;
- Phasing, including early critical mass and how empty plots for later phases impact on placemaking.

7.2 Each of these considerations has a part to play in maximising the desirability of the site for commercial tenants and employees, as well as making it an attractive place to live for residents. These factors are important if development is left to the market, and they are also factors which the public sector needs to be appraised of as well. There is scope for the public sector to intervene should it wish to take control of particular areas of the masterplan listed above, where the market is not able to co-ordinate effectively or sufficiently, and/or where market externalities mean that a sub-optimal outcome is likely or possible without intervention.

7.3 For the purposes of the DPD, in order for a combination of the market and public sector to bring the masterplan forward (or a combination of both), flexibility of format, typology and phasing should be established in the DPD. There is a different projected demand profile for different types of use, and different policy provisions should be made for different uses. The DPD provides an opportunity to set out a vision for the site and these uses, without fixing it in policy.

7.4 In summary, delivery of 7ha by 2033 is likely to be possible if efforts are focused on the Business Park in the short term. Smaller scale offices will come forward incrementally within neighbourhood centres and the Knowledge Gateway 2 will be a longer term (potentially beyond the Plan Period) aspiration unless there is active intervention to deliver above trend growth.

7.5 Timing is key. The Business Park will stand alone, relatively speaking and its integration with other uses will be less important (except both road and public transport connections). The Knowledge Gateway and neighbourhood centres will be closely linked to, and reliant on, adjacent uses.

7.6 Phasing – both spatial and temporal – should consider these factors. Developing the Knowledge Gateway 2 too early in the masterplan phasing would compete with the current phasing plan for the existing Knowledge Gateway expansion site, although providing some safeguarding of the KG2 site could ensure its long term developability. This is something the public sector may need to do in the absence of the market stepping in.

7.7 While the remit of this study does not include the specifics of the transport infrastructure, it is important to note the criticality of transport connections to garden communities. These need to be developed in tandem with the phasing of employment land (and, of course, homes). A common theme of less successful town extensions and garden communities is the mismatch in provision and phasing of transport infrastructure – active travel, public transport, and cars – with the phasing and delivery of on-site uses[24]. The RTS is a good start to this, and further development of transport provision will be critical to avoid sterilisation of parts of the site in the early years, as well as to ensure the long-term success and vitality of the employment spaces

The Business Park

7.8 E(g)(ii)(iii) / B2 / B8 uses are in demand and are expected to be able to be delivered and let quickly on site. Office use is expected to be integrated with the Business Park with auxiliary function. This *range* of uses supports the placemaking objectives outlined in Table 4.1: Occupier Needs, but also reflects the need to keep a variety of uses on the table at this masterplanning stage.

7.9 Our recommendation is therefore that these should be located as a consolidated single site, on a part of the GC with appropriate road access (and other location factors as listed in Table 3.1) that can come forward in the earliest phases. This area is hereafter referred to as the Business Park.

7.10 Logistics is likely to drive the immediate demand for space in this location, but the Authorities have aspirations for B2 uses that could work here as well, including manufacturing and assembly. Given the market demand for these uses, and the existing transport connections, bringing them forward early on is likely to be achievable and this will support local economic development in the quickest and most efficient way.

Knowledge Gateway 2

7.11 There is an expansion opportunity for the Knowledge Gateway, over the long term. This is unlikely to be before the end of the Plan Period, but the land should be safeguarded. Given these timescales, the relevant land may remain un-used for some time and the potential impact of this needs to be considered as part of the masterplanning process. Meanwhile, uses can play a part, for example in establishing early occupiers and/or proving demand or land values. Consideration of sustainability factors and securing vacant possession at the necessary time

[24] *Garden Villages and Garden Towns: Visions and Reality* (2020), Transport for New Homes, Foundation for Integrated Transport

will need to be factored into the design of meanwhile uses and the phasing of the site's use as well.

Neighbourhood centres

7.12 Office uses will most likely come forward integrated with other neighbourhood centre uses, serving a local catchment of SMEs and supporting home and flexible working.

7.13 There is limited evidence of demand for significant E(g)(i) office use in the short term and the preference for these to have town centre locations means that TCBGC is not likely to be a preferred location for significant and large floorplate office buildings, if left to the market.

Masterplanning and Design

7.14 Quod has worked closely with masterplanners Prior + Partners to develop an understanding of where different uses could be located within the TCBGC scheme, considering the relationship with the road network, the Rapid Transit Route, the topography and other site constraints including the masterplanning, and the relationship with the University. Working together, we have identified three key elements to the scheme which could sustain B class employment:

1. East of the new link road, there is a parcel which is physically separated from the main residential development area. It is bordered by the new link road to the west and the A120 to the north. This area already supports green commercial activity (including an anaerobic digestion facility) and the topography and other natural conditions could sustain further business development. There is a space here for a minimum of 10ha and maximum of 20ha of developable land, which, taking account of the transport links, would be well suited to supporting **the business park with a B2/B8 focus**.

2. At the southern end of the TCBGC site is the University of Essex Colchester campus. Within the campus is the **Knowledge Gateway**. To the east of the campus, and to the north of the campus (north of the A133), there appears to be parcels of land that could sustain expansion of the University and Knowledge Gateway activities.

   Specifically relating to the expansion of B class uses, i.e. at the Knowledge Gateway (KG), it will be important to ensure there is a legible link between any new development and the existing KG; this will be the case in either development scenario, whether that is north of the A133 or east of the campus. It will also be important for any land to be brought forward on a long-term basis, as explained elsewhere in this report.

   A parcel of land is located in the south west corner of the TCBGC developable area, north of the A133 and across the road from the existing KG. This parcel would be particularly appropriate to expand the KG, given it is on the edge of the developable area and therefore would not pose a sterilisation risk to other elements of the site, should it be left undeveloped for some time. It is also attractive for KG expansion given the potential to design legible links into the residential portions of the masterplan, without having to cross a major existing road.

The upside of expanding the KG eastwards, and south of the A133, is that it will be easier to physically connect the existing and new KG areas without needing to cross the A133. The downside would be the challenge of physically connecting the new KG site into the residential and mixed use area (including the placemaking and amenity connections that would likely make it attractive) given the need to cross the A133.

3. Prior + Partners has explored a range of options for a hierarchy of **local centres**, which would be distributed in appropriate locations in relation to homes and the RTS. Office space is likely to be most successful where there is a critical mass of other services and uses animating the street and driving footfall (including pubs and convenient retail). It will be more sustainable where it is clustered with other offices and uses.

   The scope for collecting "passing trade" for office tenants along one of the A Roads is considered to be limited and, given the desire to avoid detracting economic activity from the town centre, is not likely to be preferred by the Authorities.

   Our shared recommendation is that one or two centres should be prioritised for the purposes of sustaining office uses. The most appropriate centres for such development should be selected based on consideration of placemaking requirements as set out in Table 7.1 below.

Occupier Needs

7.15 The quantum and type of development in land use terms is an appropriate scale and level of detail to inform this masterplan stage. The next step will be to develop more specific plans for the buildings proposed on site – this will become central to the development of the detailed masterplan and detailed planning applications. Table 7.1 sets out typical occupier needs in placemaking and infrastructure terms relating to the proposed types of buildings within the masterplan.

Table 7.1 Occupier needs for placemaking and infrastructure

Types of Buildings	Placemaking requirements

• Business Park
• Typical business park buildings including for:
  ○ storage and distribution,
  ○ packaging,
  ○ assembly,
  ○ light and advanced manufacturing
  ○ logistics / delivery,
• Including office / support floorspace
	• Access to outdoor spaces and amenities (e.g. café, shop) for workers to utilise during breaks
	• Physical and clear delineation of spaces for people (such as recreation spaces, pedestrian and cycle routes), and spaces for vehicles (Especially HGVs)

• KG2 • Knowledge sector-led buildings such as hybrid office and lab spaces for	• An attractive setting and access to a range of amenities and leisure activities is important in attracting footloose R&D workers

research and development, and/or flexible spaces for collaboration	• Social spaces, access to a range of shops and services on site, and good quality outdoor spaces to take breaks • Conference facilities for knowledge sharing and collaboration • Brand and marketing • High ESG standards • Excellent maintenance
• Local Centres	• Proximity to a range of amenity and recreational spaces • Setting to be designed so that it supports business development and external visitors such as meeting spaces, presentation and event spaces • Neighbourhood settings that support active travel

8 Recommendations for the DPD

Recommendations for DPD

8.1 Quod's recommendations on employment land, to feed into the DPD, are as follows:

1. Up to 20ha in the north east of the site, east of the new link road, for industrial business park uses: E(g)(ii), E(g)(iii), B2, B8, and ancillary uses (such as ancillary to service the business park, for example office space (E(g)(i)), associated food and drink amenities (E(b)),or a hotel (C1). Market signals indicate these uses should be capable of being delivered early in the programme. If they wish to, the Authorities could prescribe particular uses on site, in order to align to their particular aspirations (e.g. to promote or limit particular commercial uses or unit sizes), but if this does not happen then market demand should be sufficient to generate economic activity on site.

- The transport network is critical to the success of this portion of land – for occupier businesses as well as employees. For occupiers, the strategic road network supports commercial uses – particularly goods-heavy ones – and policy can help protect and/or enhance the strategic road network for the benefit of this site. For employees, sustainable transport options to and from this site should be prioritised – to align with the aspiration to create one job per household (within a sustainable commuting distance) and achieve a modal shift towards sustainable transport solutions. These interventions may include the link to the RTS, pedestrian and cycle routes, and the DPD can support the securing and implementation of these.
- Additional masterplan considerations could be prescribed in the DPD relating to the placemaking elements of the employment land (such as green space for employees), broadband, and servicing.

2. Between one and two local centres comprising flexible E class uses that are able to achieve a critical mass of activity and footfall, in order to sustain office-type command. These centres would be focused on convenience and community uses, as well as E(g)(i) use class space (e.g. office-type hot desks, meeting rooms). This does not preclude additional local centres being established elsewhere onsite, but the office space should be concentrated. For Eg(i), critical mass should be prioritised over distribution throughout the development. At the lower end of our benchmarking is 1,400sqm per 3,000 homes of flexible E class space, but it would be reasonable to plan for more.

3. Up to 8ha of "Knowledge Gateway 2", on a parcel in the south west corner of the TCBGC developable area, north of the A133. This should support university-linked commercial space and/or higher density office and lab space. It may allow ancillary uses such as food and beverage and hotel/conferencing (predominantly E(g) with ancillary E(a), E(b), E(c) and C1). It is likely that this will develop over the medium to long-term including at least some outside the plan period.

   As per 1 above, connectivity for operators and employees will be critical in making the site attractive to tenants. Key connectivity will be into residential neighbourhoods (including Colchester, TCBGC and other settlements), commercial / labour markets (such as

Colchester and Tendring town centres), and transport interchanges. In addition, connectivity into the existing University campus will need careful design consideration to ensure the parcel is sufficiently linked to the current Knowledge Gateway. The DPD can establish these considerations in policy.

Similarly, considerations relating to placemaking will be important and can be set out in the DPD. Authorities should work with the applicant to identify the most appropriate way to safeguard this parcel for future development while also ensuring the parcel does not sterilise other parts of the site – this could also be prescribed in the DPD.

8.2 Taking account of the feedback from the market and forecasting work we have undertaken, we recommend that the total employment land does not surpass the 25ha as required by the adopted Section 1 policy. An estimate of the range of end-user jobs which could be created on site is provided at Appendix 4.

8.3 The DPD should be cognisant of the new flexibility for permitted change of use between different E class types, and account for that in its policy wording. In many cases this flexibility should be supported, as the Use Class Order amendments were designed to improve the ability of landowners to respond to changes in market demand and act more creatively to drive footfall and vitality by diversifying activity. However, the Authorities may wish to limit this flexibility to some extent through the DPD wording.

9 Appendices

Appendix 1: List of Evidence Base Documents

- Economic Vision and Strategy for the North Essex Sub-Region, Centre for Economics and Business Research, August 2018
- Employment provision for the North Essex Garden Communities, Centre for Economics and Business Research, July 2019
- North Essex Garden Communities Employment & Demographic Studies, SQW and Cambridge Econometrics, April 2017
- Colchester's Economic Prosperity Strategy 2007 to 2010, Colchester Borough Council, June 2007
- Colchester Employment Land Study, Lambert Smith Hampton and Atkins, June 2007
- Colchester Employment Land Needs Assessment (+ EEFM 2019 update), Nathaniel Lichfield & Partners, January 2015
- Colchester Employment Land Supply Delivery Trajectory (Final Report + Appendix), Lichfields, May 2017
- Employment Land and Floorspace, Peter Brett Associates, May 2017
- Report on the Examination of the North Essex Authorities' Shared Strategic Section 1 Plan (Report + Schedule of Recommended Main Modifications), Roger Clews (The Planning Inspectorate), December 2020
- North Essex Authorities Strategic Section One for Local Plans: Draft Publication (Regulation 19) – Draft Sustainability Appraisal (SA): Non-Technical Summary, Place Services, June 2017
- Additional Sustainability Appraisal of North Essex Local Plan Section 1: Summary of Draft Findings, LUC, July 2019
- North Essex Authorities' Shared Strategic Section 1 Plan (Tendring District Local Plan 2013-2033 and Beyond), Tendring District Council, Colchester Borough Council and Braintree District Council, January 2021
- Tendring District Council Local Plan 2013 – 2033 and Beyond: Section 2 (Proposed Modifications + Publication Draft Final [2017]), Tendring District Council
- The Tendring District Local Plan 2013 - 2033 and Beyond Policies Map 1 West Tendring, Tendring District Council

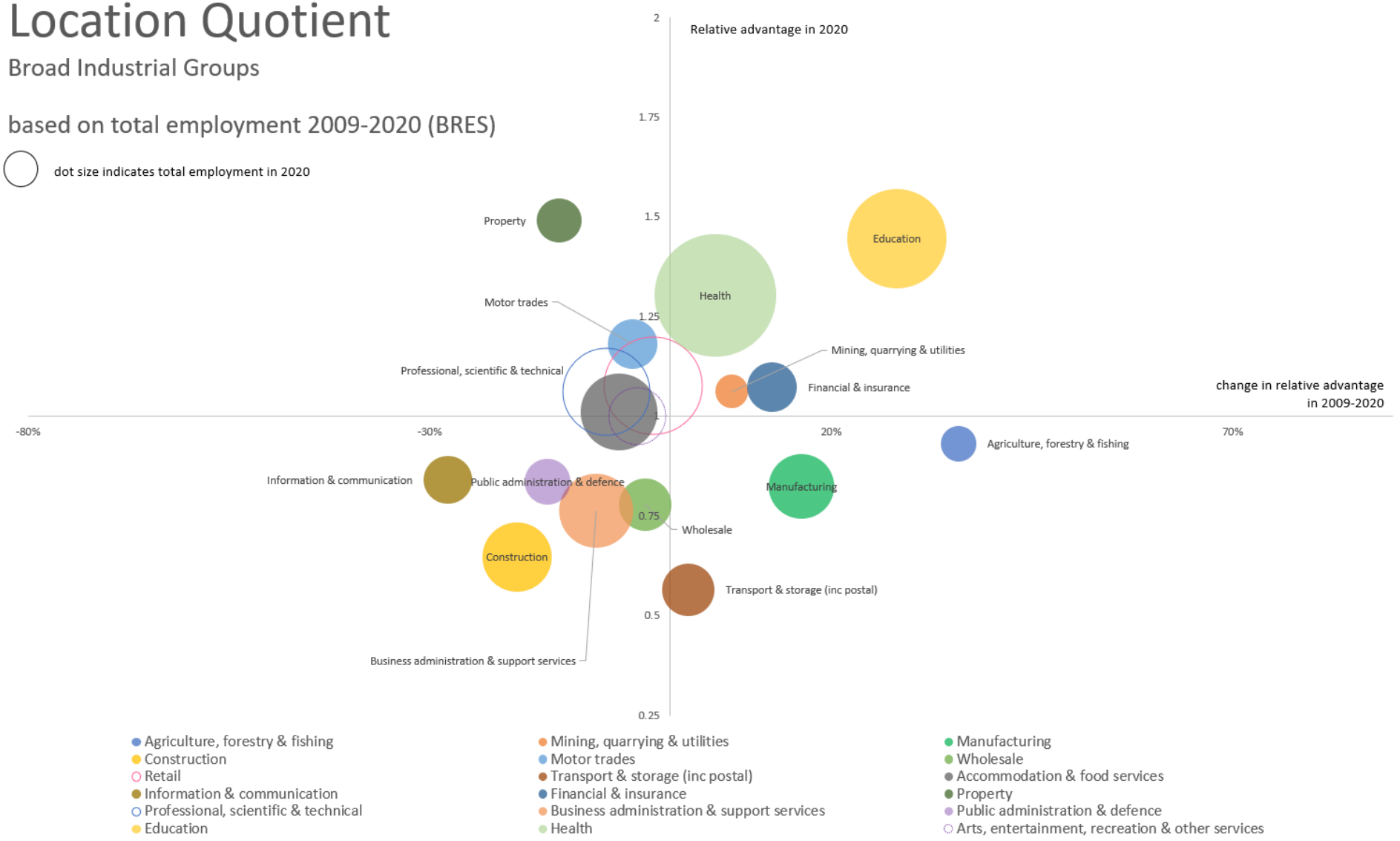
- The Tendring District Local Plan 2013 - 2033 and Beyond Policies Map 2 South East Tendring, Tendring District Council
- The Tendring District Local Plan 2013 - 2033 and Beyond Map Key, Tendring District Council
- Schedule of Recommended Main + Additional + Map Modifications on the Examination of the Tendring District Local Plan 2013-2033 and Beyond Section 2, Anne Jordan and Jameson Bridgwater, November 2021
- Tendring District Council (TDC) Local Plan – Section Two: Main Modifications Sustainability Appraisal (SA) Addendum, Place Services, June 2021
- North Essex Garden Communities Economic Narrative, Garden City Developments, November 2017
- Tendring Economic Strategy (+ Socio-Economic Baseline), Regeneris Consulting, October 2013
- Tendring Economic Strategy 2020-24 (+ Socio-Economic Evidence Base), Hatch Regeneris, November 2019
- Tendring Employment Land Review, Hatch Regeneris, September 2019
- Employment Land and Floorspace, Peter Brett Associates, May 2017
- Tendring Employment Land Review, Regeneris Consulting, October 2013
- Tendring Employment Land Review, Aspinall Verdi, May 2016
- Tendring District Council Retail Study, WYG, May 2016
- Essex County Council Sector Development Strategy: Interim Report, Essex County Council, June 2021

Appendix 2 Location Quotients

Colchester vs Essex
Location Quotient

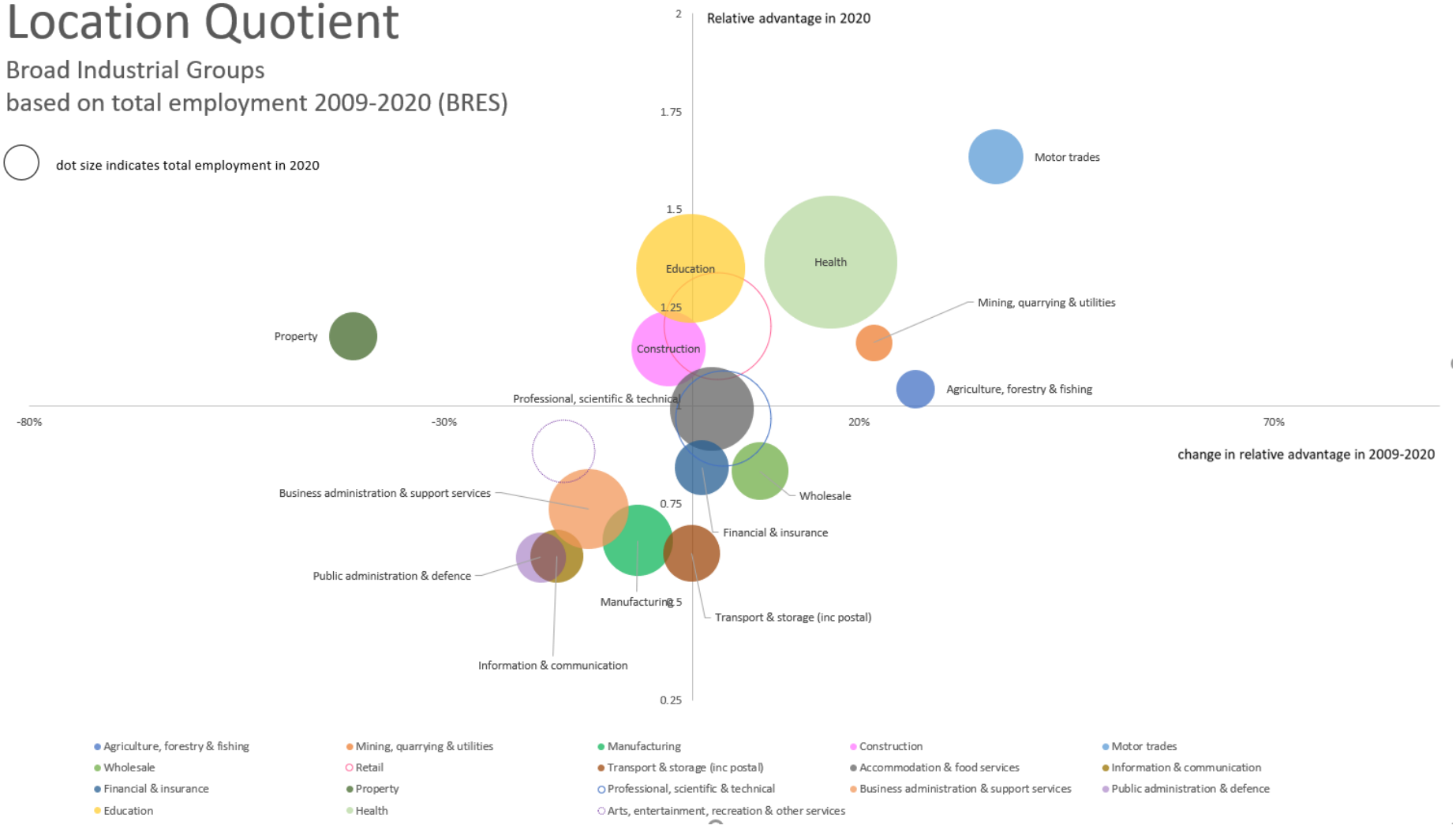
Broad Industrial Groups

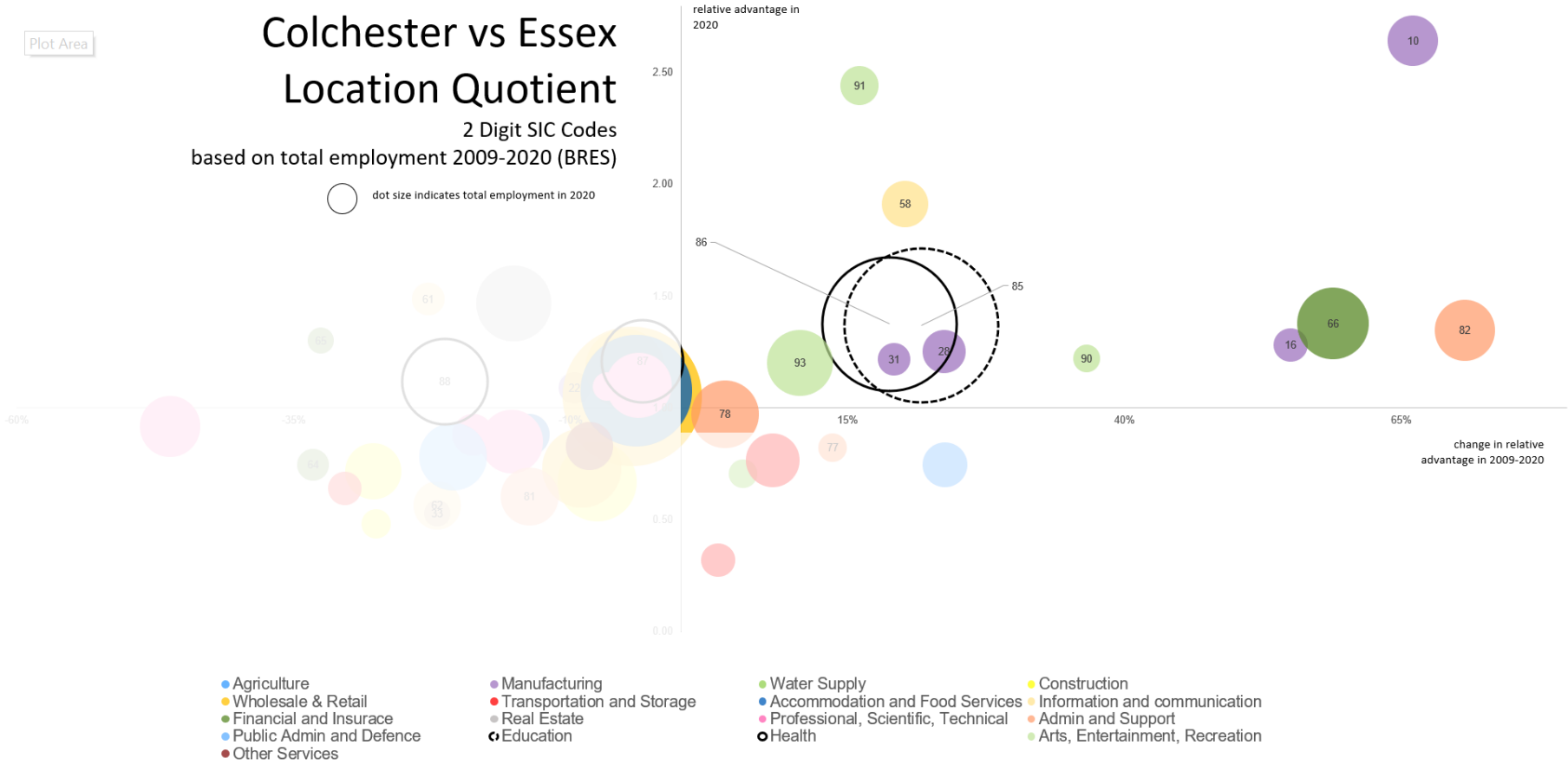
based on total employment 2009-2020 (BRES)



Colchester vs England Location Quotient

Broad Industrial Groups based on total employment 2009-2020 (BRES)




Plot Area
Colchester vs Essex
Location Quotient
2 Digit SIC Codes
based on total employment 2009-2020 (BRES)
dot size indicates total employment in 2020
relative advantage in 2020
change in relative advantage in 2009-2020
2.50
2.00
1.50
1.00
0.50
0.00
-60%
-35%
-10%
15%
40%
65%
10
91
58
86
85
66
16
82
93
31
28
90
78
77
Agriculture
Wholesale & Retail
Financial and Insurace
Public Admin and Defence
Other Services
Manufacturing
Transportation and Storage
Real Estate
Education
Water Supply
Accommodation and Food Services
Professional, Scientific, Technical
Health
Construction
Information and communication
Admin and Support
Arts, Entertainment, Recreation

Key to numbers :

01 : Crop and animal production, hunting and related service activities

10 : Manufacture of food products

16 : Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials

22 : Manufacture of rubber and plastic products

28 : Manufacture of machinery and equipment n.e.c.

31 : Manufacture of furniture

33 : Repair and installation of machinery and equipment

38 : Waste collection, treatment and disposal activities; materials recovery

41 : Construction of buildings

42 : Civil engineering

43 : Specialised construction activities

45 : Wholesale and retail trade and repair of motor vehicles and motorcycles

46 : Wholesale trade, except of motor vehicles and motorcycles

47 : Retail trade, except of motor vehicles and motorcycles

49 : Land transport and transport via pipelines

52 : Warehousing and support activities for transportation

53 : Postal and courier activities

55 : Accommodation

56 : Food and beverage service activities

58 : Publishing activities

61 : Telecommunications

62 : Computer programming, consultancy and related activities

64 : Financial service activities, except insurance and pension funding

65 : Insurance, reinsurance and pension funding, except compulsory social security

66 : Activities auxiliary to financial services and insurance activities

68 : Real estate activities

69 : Legal and accounting activities

70 : Activities of head offices; management consultancy activities

71 : Architectural and engineering activities; technical testing and analysis

73 : Advertising and market research

74 : Other professional, scientific and technical activities

75 : Veterinary activities

77 : Rental and leasing activities

78 : Employment activities

81 : Services to buildings and landscape activities

82 : Office administrative, office support and other business support activities

84 : Public administration and defence; compulsory social security

85 : Education

86 : Human health activities

87 : Residential care activities

88 : Social work activities without accommodation

90 : Creative, arts and entertainment activities

91 : Libraries, archives, museums and other cultural activities

93 : Sports activities and amusement and recreation activities

96 : Other personal service activities

Appendix 3 Sector Analysis

	Green energy	Care and Assisted Living	Specialisms of Essex Uni: digital, creative	Construction	Tourism	Food production and processing	Advanced manufacturing	Transport and logistics	Life sciences, healthcare
Joint Local Plan 2021	Tendring (offshore wind)	Tendring							
Cebr Economic Vision and Strategy 2019	Site specific: TCBGT (renewable energy and environmental business)			Site specific: TCBGT (off site construction)					
Tendring draft Local Plan Part 2	Tendring (renewable energy)	Tendring							
Tendring 2019 EDS	Tendring (clean energy, offshore wind, low carbon energy)	Tendring	Site specific: TCBGT (Tendring)	Site specific: TCBGT (off site construction) (Tendring)	(Tendring)	(Tendring)			
Tendring 2013 EDS	Tendring (offshore energy)	Tendring							
Colchester Economic Growth Evidence Base (2020/21) (reflects 2015 NLP report findings)	Colchester		Colchester		Colchester		Not Colchester	Colchester	Colchester
ECC Sector Development Strategy 2021	Essex (Green sectors)	Essex	Essex (Uni: computer science, information technology)	Essex (construction and retrofit)			Essex		Essex (life sciences)
Economic Plan for Essex 2014	Essex (low carbon and renewables)		Essex				Essex	Essex (logistics)	Essex (life sciences, healthcare)
2019 EEFM Forecast	Some R&D growth forecast (small base)	Growth forecast in healthcare	Growth forecast in accomm and food services and arts and entertainment	Growth forecast in construction	Growth forecast in accomm and food services	Limited growth forecast	Mixed growth forecast	Mixed growth forecast	Growth forecast in healthcare
2019 BRES LQs	Very limited job numbers currently	Important sectors locally	Some specialisms in creative sectors and IT, but not major sectors	Important sectors locally	Important sectors locally	Particularly important in Colchester	Limited strength locally	More important in Tendring than Colchester. Significant but not necessarily growing	Healthcare is big and important. R&D mixed picture

Appendix 4 End-User Jobs Modelling

The table below provides an estimate of the range of end-user jobs that could locate at the TCBGC site, depending on the scale and nature of the business occupiers.

When projecting employment, it is important to remember that:

- An outline planning application is likely to retain some flexibility in what use class(es) is secured

- Changes in the use class order (which came in 2020) facilitate greater flexibility within and between use classes, to reflect changing business needs and to encourage market responsiveness and flexibility in commercial floorspace occupancy (in line with Paragraph 82 d of the NPPF[25]).

As such, it is relevant to consider a likely range of employment density outcomes when projecting employment for a given amount of floorspace.

The table below is split into three sections to reflect the land use mix and phasing proposed in Section 8 of this report, namely: that up to 7ha of the Business Park could be built out during the plan period (up to 2033); that up to an additional 10ha could be built out thereafter; and that up to 8ha could be developed to grow the Knowledge Gateway.

The Site Utilisation Rate assumption for the Business Park is based on the assumption in the existing evidence base from the site (Employment provision for the North Essex Garden Communities, Cebr, 2019). This has been interpreted as a GEA figure based on the Cebr report.

The percentage split between Use Classes (i.e. % of B1a, A1, B1b, B1c) for the Business Park is indicative only in order to provide a reasonable/likely spread.

Standard job densities applied are based on the Employment Density Guide (Homes and Communities Agency, November 2015) and Quod's professional, sector specific experience.

[25] "Planning policies should […] be flexible enough to accommodate needs not anticipated in the plan, allow for new and flexible working practices (such as live-work accommodation), and to enable a rapid response to changes in economic circumstances."

Land Use	Site Utilisation Rate	Area (ha)	Use Split Assumptions		Standard Job Densities		Jobs Total	
			Use*	Use Split	Max	Min	Max	Min
Business Park (Plan Period to 2033)	64%	7	B1a	15%	10	13	1,250	1,030
			A1	5%	15	20		
			B1b	20%	40	40		
			B1c	20%	47	47		
			B8	40%	70	95		
Business Park (Post Plan Period)	64%	10	B1a	15%	10	13	1,800	1,480
			A1	5%	15	20		
			B1b	20%	40	40		
			B1c	20%	47	47		
			B8	40%	70	95		
Knowledge Gateway 2	80%	8			20	20	3,600	3,200
	90%	8			20	20		
Total							**6,650**	**5,710**

*Pre 2020 Use Class

Standard Job Densities:

Sqm per job

	Max	Min
B1a	10	13
B1b	40	60
B1c	47	47
B2	36	36
B8	70	95
A1	15	20
Blended average for KG	20	20
Hotel	1 FTE per 3 beds - 20 jobs Est. falling within the range above	

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