Haven Gateway Partnership

Suffolk Haven Gateway Employment Land Review & Strategic Sites Study

Appendix 1: Employment Floorspace Projections

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CONTENTS

1. OVERALL APPROACH

1.1 In order to establish the future gross employment floorspace requirements in the three local authority areas to 2026 a four step approach is applied:

1) Allowance for Economic Growth;
2) Contingency Allowance;
3) Allowance for Churn; and
4) Allowance for Economic Development Aspirations.

1.2 Each of these steps is described in more detail below.

Step 1: Allowance for Economic Growth

1.3 The allowance for economic growth takes into account the projected employment changes presented in the Oxford Economics RSS growth forecast model using the Spring 2009 updated baseline scenario (June 2009). This is viewed as a robust indication of future employment growth as it takes into account future housing and population changes as well as past sectoral trends into account. It also considers the job target for the "Suffolk Haven Gateway" area of 30,000 jobs as set out in the East of England Plan. The forecast assesses 28 economic sectors. Employment in the 28 sectors is converted into employment floorspace in four use types as follows:

- **Office (B1a)**: pure office space, not including office space in shopping areas such as banks, estate agents and betting shops (A2 office space).
- **Other Business Space (B1b/c, B2)**: including premises for research and development of products or processes, light industry and general industry.
- **Warehousing (B8)**: premises used for storage or distribution centres.
- **Non-B-Use-Class**: any other premises in which employment might occur such as shops, health and medical centres, schools, hotels, restaurants and leisure facilities, etc.

1.4 For the conversion of employment by economic sectors into the floorspace use types, a conversion matrix has been used. This matrix is based on the ODPM Employment Land Review Guidance and ratios. Additional refinements based on 4-digit-SIC analysis of current employment in the relevant local authorities have been carried out. The conversion matrix

assigns a proportion of the employees in each of the 30 economic sectors from the employment forecast, to one or more of the four floorspace use types.

1.5 As a next step employment in the three B-Use-Class floorspace types (office, other business space, warehousing) is converted into floorspace using the following employment densities. These are in line with the EEDA and ODPM Employment Land Review Guidance:

- Office 18 sq m per employee
- Other business space 32 sq m per employee
- Warehousing 55 sq m per employee[1]

1.6 At this stage we maintain our projections in floorspace (m^2) however, as a final stage we convert this into a land hectarage in each Local Authority Chapter.

Stage 2: Contingency Allowance

1.7 In order for future employment forecasts to be based on more than an economic forecast and reflect the fluid nature of land allocations, we make a contingency allowance which takes into account the fact that a proportion of designated employment land will not be entirely used by B-Use-Class employment. Land uses such as recycling, waste management, combined heat and power plants and bus depots can, under certain circumstances and where appropriate, be located on employment land.

1.8 A significant part of the projected employment growth also arises from sectors which have traditionally not been located on employment land such as healthcare, education, hotels and leisure. Recent planning experience has shown that under specific circumstances and where appropriate such uses might be permitted on employment land. However this has to be monitored carefully to ensure there is enough available land for B-Use-Class employment on employment land.

1.9 Under specific circumstances and where appropriate, employment land might also be used as part of a more mixed-use scheme which would enable employment development to come forward on a proportion of it.

[1] Warehousing employment densities typically range between 50 sq m for general warehousing and 80 sq m for large scale and high bay warehouses. As large parts of the sub-region are not suitable / attractive for large scale warehousing we have used an employment density only slightly higher than for general warehousing.

1.10 The need for a flexible supply of employment land takes the potential unexpected loss of employment land into account. An allowance also has to be made for a different range of space needs by the economy over the next 20 years.

1.11 To estimate the amount of land used in the contingency allowance, historic losses of employment land to other uses such as housing and leisure as reported in each local authority's Annual Monitoring Report (where available) have been used as a guideline. Where these are not available we have used internal local authority monitoring data.

1.12 While acknowledging that using this data from AMR's or internal monitoring data has its drawbacks, principally this information has only been collected in a coherent manner for around four years, it is still viewed as the most robust measure of losses to non employment uses. In particular, in a small District like Babergh, one major loss can significantly skew the figures but this is considered and is viewed as the strongest measure of forecasting future demand. In the absence of any other reliable proxies we use this data with the proviso that it should be monitored on an annual basis to give a longer term projection of losses of employment land.

1.13 The allowance for unexpected losses takes into consideration the fact that for various reasons under specific circumstances some employment land might be used for other purposes. To estimate future losses, reference to historic losses has been made and projected forward throughout the planning period.

1.14 This approach has its drawbacks, principally because the information has only been collated for four previous years. We still use this data, however, with the proviso that it should be monitored each year and new figures considered to give a longer term projection of losses of employment land. This could have a considerable effect on future employment land needs, depending on employment land losses in each year.

stage 3: Allowance for Churn

1.15 As well as making an allowance for unexpected losses of employment land, we also make allowance for the fact that locational and premises needs of businesses change over time. This requires businesses to move. In other cases an existing business might cease its operations and a new business take over a site for redevelopment. For this to happen smoothly there is a need for certain level of available vacant land. This type of demand has been called 'churn' demand or 'frictional vacancy'.

1.16 It typically takes two years to achieve a planning consent, site preparation and construction after a site has changed hands. For these reasons we take the annual net take-up of employment floorspace and multiply it by two to estimate the churn demand. This is, in effect, an allowance for the necessary frictional vacancy to allow the market and relocation chains to operate.

1.17 This allowance for churn, coupled with the contingency allowance, allows the commercial property market realities to be added to the baseline economic forecast.

Recessionary Impact

1.18 It is pertinent to consider the effect of the current recession as part of the economic scenario work at this stage. Of particular importance here is to assess the short term effect (5 years) that the recession is forecast to have on demand for employment land. Two scenarios are considered at this stage:

- Severe Recession: The effects on employment land demand of a severe and prolonged economic downturn across the East of England; and
- Faster Recovery: The effects on employment land demand of a quick recovery from the current recession across the East of England.

stage 4: Allowance for Economic Development Aspirations

1.19 So far the employment land projection is based on macroeconomic forecasting. The model behind this forecast is driven by national and regional employment, housing and population trends, growth trends in specific sectors and takes into account the local sector distribution and performance. Macroeconomic models however do not take into account local economic development activities. In this step of the forecasting process the local economic development aspirations are considered to assess their quantitative and qualitative effect on future employment floorspace requirements.

1.20 At this stage other factors which might influence future employment floorspace demand, such as changes in working practice, are also considered.

Next Steps

1.21 In the remaining part of this Chapter the data for each of the steps of the employment floorspace demand forecast is presented. This provides demand based requirements for our

"base case" in each local authority and for additional economic growth scenarios for each authority.

1.22 The final stage is a comparison of the current employment floorspace supply with the projected gross demand. The resulting net demand is then translated from floorspace into land demand by use types (office, other business space, and warehouse). The following plot ratios, which are in line with the ODPM 2004 Guidance on employment land reviews, are applied:

- Office: 1
- Other Business Space: 0.4
- Warehouse: 0.4

2. EMPLOYMENT FORECAST RESULTS

Allowance for Economic Growth Aspirations

2.1 In addition to employment projections based on economic forecasts, unexpected losses and churn demand it is important to consider the impact that economic growth aspirations may have on employment floorspace requirements within each local authority area throughout the planning period. As outlined, our demand analysis is based on economic forecasts which do not consider significant growth outside of that based on past trends and forecast housing and population growth.

2.2 We therefore outline future employment growth scenarios for each local authority based on the evidence gathered through this study, in particular the economic drivers within each local authority, to allow a number of future growth options to be explored.

2.3 To assess its impact on land demand across the sub-region we derive scenarios of steady growth and high growth from Felixstowe South Reconfiguration and apply any additional employment land demand to our baseline for each local authority.

2.4 The recent Felixstowe Port Logistics Study[2] assesses the likely future demand for employment land arising from port related activity at Felixstowe. We therefore use this document as a basis for estimating potential additional land demand in Suffolk Haven Gateway arising from the Port of Felixstowe expansion.

2.5 The Study outlines a number of potential growth scenarios for the future of the Port of Felixstowe but does not make any recommendation on which is the most likely scenario. We therefore use the "Optimistic Scenario," which assumes that the growth in container shipments remains constant until 2023 and the "Business As Usual" Scenario, which assumes a continuing decline of 1.8% per annum.Felixstowe A14 Corridor

2.6 Our analysis so far has identified the Felixstowe A14 Corridor as a major economic driver of B-Class employment growth across Suffolk Haven Gateway. To assess its impact on land demand across the sub-region we derive scenarios of steady growth and high growth from Felixstowe South Reconfiguration and apply any additional employment land demand to our baseline for each local authority.

[2] GHK Consulting, Royal Haskoning (2008), Felixstowe Port Logistics Study

Rationale

2.7 In order to apportion growth from the Port of Felixstowe to Suffolk Haven Gateway we use the short list of potential sites (some allocated and some unallocated employment land) that can accommodate port related uses, as defined in the Study. These are:

- Shepherd's Grove, Stanton – St Edmundsbury Borough
- British Sugar site, Sproughton – Babergh District
- Cuckoo Farm, A12, Colchester – Colchester Borough
- Trinity 2000, Felixstowe – Suffolk Coastal District
- Suffolk Business Park, Bury St Edmunds – St Edmundsbury Borough
- Orion Court, Great Blakenham – Mid Suffolk District
- Land at Innocence Farm, A14, Felixstowe – Suffolk Coastal District
- Land at Fagbury Cliff, Felixstowe – Suffolk Coastal District
- Land off Mill Lane, Stowmarket – Mid Suffolk District

2.8 Given our work through this Employment Land Review we also consider the former Cranes site and Ransomes Europark to have the potential to accommodate port related uses and we therefore include these in this analysis.

2.9 This list of sites allows us to define the local authorities within which future growth from the Port of Felixstowe is most likely to occur. We also add Ipswich Borough to the list of local authorities that could potentially affected by growth at the Port. The following authorities are therefore considered to be influenced by future growth at the Port of Felixstowe:

- Suffolk Coastal District
- Mid Suffolk District
- Ipswich Borough
- Babergh District
- Colchester Borough
- St Edmundsbury Borough

2.10 The next step is to define the sectors that "port related" activity relates to. This is not specified within the Port Logistics Study (it refers to Open Storage, Warehousing and Ancillary Uses) but using our 4-Digit Sector Matrix we can define those sub sectors which comprise the "Land

and Other Transport" sector. The Matrix also allows us to apportion each sub-sector to either Office, Industrial and Non B-Class employment. An analysis of the "Land and Other Transport" sector shows that it incorporates the following sub-sectors (and associated land use classes):

- 6010 : Transport via railways (Non B Class)
- 6021 : Other scheduled passenger land transport (Non B Class)
- 6022 : Taxi operation (Non B Class)
- 6023 : Other passenger land transport (Non B Class)
- 6024 : Freight transport by road (Non B Class)
- 6030 : Transport via pipelines(Non B Class)
- 6311 : Cargo handling (Warehousing)
- 6312 : Storage and warehousing (Warehousing)
- 6321 : Other supporting land transport activities (Non B Class)
- 6330 : Activities of travel agencies and tour operators; tourist assistance activities not elsewhere classified (Non B Class)
- 6340 : Activities of other transport agencies (Office)

2.11 The next step is to analyse the current split of employees within the Land and Other Transport Sector in both Office and Warehousing use types in each of the relevant local authorities to provide an estimate of the division of future employment in each of the local authorities. This is shown in Table 1 below.

Table 1 Current Employment Split in Land and Other Transport Sector in Port of Felixstowe Local Authority Areas

	Office (B1a)		Warehouse (B8)	
	Employees	% of Total	Employees	% of Total
Suffolk Coastal	1,501	49.3%	222	16.8%
Babergh	82	2.7%	121	9.1%
Colchester	261	8.6%	61	4.6%
Mid Suffolk	188	6.2%	735	55.5%
St Eds	64	2.1%	186	14.0%
Ipswich	946	31.1%	403	23.3%
Total	2,096	100.0%	1,325	100%

Source: GVA Grimley / ABI 2007

2.12 Table 1 shows that Suffolk Coastal currently accounts for 49.3% of the Office related employment in the local authorities related to the Port of Felixstowe, and 16.8% of the Warehousing related employment. Babergh accounts for a small proportion of Office related employment and 9.1% of Warehousing employment. Finally, Ipswich accounts for 31.1% of Office employment and 23.3% of Warehousing employment.

2.13 Using this as a basis for the nature of future growth from the Port of Felixstowe we apply this to two future growth scenarios set out in the Felixstowe Port Logistics Study.

Scenario – High Growth from the Port of Felixstowe

2.14 This Scenario assumes that the Port of Felixstowe will retain its current market share of 40% until new competitors come into operation. It forecasts that a total of 114.5 Ha of additional land demand will be created by the Felixstowe South Reconfiguration by 2023. In order to marry this analysis with the timeframe of our study we firstly carry this projection forward to 2026. To do this we calculate the growth trend of land requirements from the Port of Felixstowe between 2020 and 2023. This shows that the rate of growth is forecast to decline by 1% each year between 2020 and 2023 on average. We therefore assume that between 2023 and 2026 land requirement growth will be 7%, 6% and 5% respectively. This results in a total additional land demand until 2026 of 136.4 Ha. This is shown in Table 2 overleaf:

Table 2 Growth in Land Demand from the Port of Felixstowe 2018 - 2026

	2018	2019	2020	2021	2022	2023	2024*	2025*	2026*
Total Land Requirement (ha)	71.1	79.8	88.5	97.1	105.9	114.5	122.5	129.9	136.4
Annual Growth Rate (%)		12.2	10.9	9.7	9.1	8.1	7	6	5

*Source: GVA Grimley based on GHK estimates * = Projected Growth*

2.15 We then apply the additional land demand from the Felixstowe South Reconfiguration to the current proportion of Warehousing and Office employment in the Land and Other Transport sector in Suffolk Coastal, Babergh and Ipswich (as shown in Table 1), and the results are shown later in this Chapter.

Scenario B – Steady Growth at the Port Of Felixstowe

2.16 This Scenario assumes that the current trends at the Port of Felixstowe i.e. a decline of 1.8% per annum over the last five years will continue. This scenario forecasts that a total of 43.7 Ha

of additional land demand will be created by the Felixstowe South Reconfiguration by 2023. In order to carry this projection forward to 2026 (the timeframe of our study) we calculate the growth trend between 2020 and 2023. This shows that the rate of growth is forecast to decline by 1.7% each year between 2020 and 2023 on average. We therefore assume that between 2023 and 2026 land requirement growth will be 6.2%, 4.5% and 2.8% respectively. This results in a total additional land demand until 2026 of 50.2 Ha and is shown in Table 3 below.

Table 3 Growth in Land Demand from the Port of Felixstowe 2018 - 2026

	2018	2019	2020	2021	2022	2023	2024*	2025*	2026*
Total Land Requirement (Ha)	26.2	30	33.6	37.2	40.5	43.7	46.8	48.9	50.2
Annual Growth Rate (%)		14.5%	12.0%	10.7%	8.9%	7.9%	6.2%	4.5%	2.8%

*Source: GVA Grimley based on GHK estimates * = Estimated Growth*

2.17 Applying this to the current proportion of Warehousing and Office employment in the Land and Other Transport sector in Suffolk Coastal, Ipswich and Babergh (shown in Table 1) the results are shown in the main report.

Growth in R&D and Telecommunications

2.18 Our commercial market analysis and detailed stakeholder consultations have identified growth from Adastral Park as the major driver of economic growth in Suffolk Haven Gateway. The development of the site provides opportunities throughout the sub-region and beyond for Telecommunication and Research & Development employment associated with activity clustered around Adastral Park. There is already a large presence of R&D / telecommunications firms at the site which indicated its potential for the future

2.19 Using the future potential for the Adastral Park site as a justification we develop a scenario for future growth in the sub-region as follows:

- Growth in Research & Development / telecommunications activity.

Rationale

2.20 In order to measure the potential impact of growth in R & D in Suffolk Haven Gateway from Adastral Park we firstly define those sectors that constitute R & D / Telecommunications. To

do this we take the appropriate sub-sectors from the ABI 4-digit classification. We then apportion these ABI sub-sectors to the correct Oxford Economics defined sector in order to assess future growth. We show examples of the relevant sub-sectors from ABI contained within the Oxford Economics definitions in Table 4 below.

Table 4 Sectors Considered as Research & Development / Telecommunications

Relevant Sub-Sectors (ABI)	Oxford Economics Sector
7210 : Hardware consultancy	Business Services - Computer Related
7221 : Publishing of software	Business Services - Computer Related
7222 : Other software consultancy and supply	Business Services - Computer Related
7230 : Data processing	Business Services - Computer Related
7310 : Research and experimental development on natural sciences and engineering	Business Services - Research & Development, Technical Testing
7320 : Research and experimental development on social sciences and humanities	Business Services - Research & Development, Technical Testing
7430 : Technical testing and analysis	Business Services - Research & Development, Technical Testing

Source: GVA Grimley / ABI / Oxford Economics

2.21 As Table 4 shows the two sectors we use as a proxy for Research & Development are as follows:

- Business Services – Computer Related
- Business Services – Research & Development, Technical Testing

2.22 The next step is to measure the growth rates of Research & Development in the local authorities of Cambridgeshire between 2006 and 2026 to assess the potential level of future growth that could occur within Suffolk Haven Gateway. This is a good comparator as Cambridge is viewed as a world class destination for Research & Development therefore success in Haven Gateway Suffolk would be matching those levels. Current (2006) employment levels and projected growth rates up until 2026 are shown in Table 5 below.

Table 5 Current Employee Numbers and Growth Rates of R&D Employment in Cambridgeshire / Suffolk Haven Gateway

R & D	Employees	% Change
	2006	06 - 26
Cambridge	7,383	10%
East Cambridgeshire	743	49%
Fenland	369	-13%
Huntingdonshire	2,934	-2%
South Cambridgeshire	8,160	16%
Cambridgeshire	19,589	11%
Suffolk Coastal	789	45%
Ipswich	993	-11%
Babergh	543	-5%

Source: Oxford Economics

2.23 As Table 5 shows R&D is forecast to grow significantly in the majority of the local authorities within Cambridgeshire and in Suffolk Coastal. Employment in R & D related sectors is forecast to decline in Babergh and Ipswich however.

2.24 We therefore assume that the R&D sectors will grow at the higher rate of East Cambridgeshire as an indication of what may occur in Suffolk Haven Gateway if it begins a world class destination for R &D. This will, of course, have the effect of increasing the overall requirements for floorspace within the sub-region.

Assessment of Changing working Practices

2.25 The issue of changing work practices and their effect on the space needed per employee in the future is a much debated topic. The theory is that the increase in home working, hot-desking and cost pressures on employers to use space more cost effectively results in higher employee densities per sq m.

2.26 A recent study[3] asserted that there was some evidence to support changing practices, with big employers such as BP and IBM requesting lower employment densities for their offices. Anecdotal evidence suggests they were encouraging more hot-desking and flexible working patterns within their organisations. However, a quantitative study of the South East[4]

[3] Roger Tym & Partners, Ramidus Consulting & King Sturge (2006), The Use of Business Space in London

[4] DTZ Pieda (2004) Use of Business Space and Changing Working Practices in the South East

concluded that employment densities were not changing overall in the region and did not make any strong conclusions on changing work practice.

2.27 While there is no quantifiable evidence to suggest that employment densities are changing, the view that they will alter in the future is supported by a recent report by the Chartered Management Institute[5]. They predict that the workplace will undergo significant change by 2018. They cite pressures to reduce carbon footprint and an ageing population which will require more time looking after elderly relatives as key reasons for this change. This will result in more work from home and possibly an alteration in the number of days that an individual works per week.

2.28 While there is a strong consensus that working practices will change, there is a lack of detailed quantitative studies to give an idea of what it will mean for employment density requirements in the future.

[5] Chartered Management Institute (March 2008): Management Futures – The World in 2018

3. CONCLUSION

3.1 In summary, we have based employment floorspace requirements in each local authority on forecasts from Oxford Economics which give an indication of employment needs into the future. We have made allowances for unexpected losses of employment land and for churn demand. The allowances for both factors are based on past trends of the preceding four years. Both churn requirements and unexpected losses have been apportioned to the different floorspace use types according to their current size.