

Thames Freeport Scoping Study – Local Multipliers

Executive Summary

This paper provides a concise overview of a scoping study which has considered the basis for estimating the potential indirect employment associated with Thames Freeport. The purpose of this scoping study is to provide a recommendation to Thurrock Council concerning whether there is value in incorporating an estimate of this potential indirect employment into its Economic Development Needs Assessment (EDNA) which is in the process of being updated.

In summary, our review has found that there is limited publicly available evidence that could inform an in-depth assessment of the indirect and induced multipliers associated with the Freeport. This is similar to the position with other Freeports located elsewhere in the country. It is possible to provide a higher level estimate of the indirect impacts based on the headline estimate of indirect employment specified in the Thames Freeport Business Case. However, such an estimate should be treated with caution as: (i) the profile of employment coming forward at the Freeport is likely to differ from what was expected when the Business Case was being developed and (ii) such an approach would be based on the existing distribution of employment in relevant sectors within Essex and would not take account of any impact the Freeport may have on business investment decisions over the medium and longer term.

On this basis, it is not recommended that such an approach is taken forward given the high levels of uncertainty that would be associated with any estimate and the potential for the results to be challenged. Instead, the scale of indirect employment set out in the Freeport Business Case provides an indication of the potential impact and can be considered by the EDNA on a more qualitative basis.

Introduction

Thurrock Council are seeking to understand the potential impact of the Thames Freeport on Thurrock and its local Functional Economic Market Area (FEMA) to inform their Local Plan evidence base.

The Institute for Fiscal Studies (IFS) report that Freeports in England can benefit from a range of economic incentives and support measures, including:

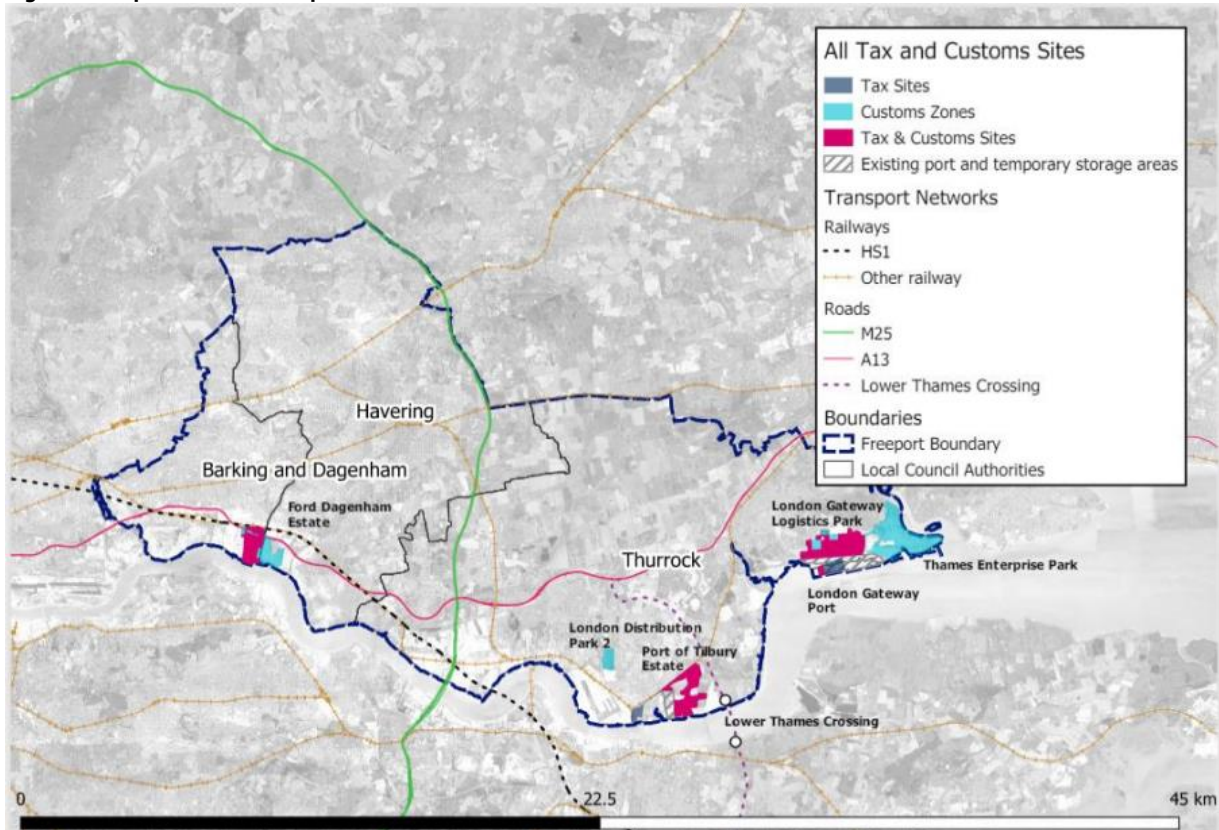
- Customs deferrals, reliefs and simplified procedures
- Tax reliefs
- Seed capital for investment in enabling infrastructure
- Enhanced trade promotion and support for innovation, and
- Increased local retention of growth in business rates revenues.

These incentives and support measures are available in specific areas within each Freeport's 'outer geographic boundary'. In particular, each Freeport includes a number of 'customs sites', where the customs measures are in place, and between one and three 'tax sites', where the tax reliefs and increased local retention of growth in business rates revenues will apply. Funding and other support can apply in

other areas within a Freeport's outer geographic boundary, provided a clear economic link to the tax and customs sites can be demonstrated.¹

The Thames Freeport ('the Freeport') Outer Boundary is a 34 km corridor covering Thurrock, Havering and Barking & Dagenham. It contains a number of Customs Sites and three Tax Sites. Of the Tax Sites, both Port of Tilbury and London Gateway are located within the Thurrock local authority area. The third, Ford Dagenham Estate, is located in LB Barking and Dagenham. The various components of the Thames Freeport are set out in the map below.

Figure 1: Map of Thames Freeport



Source: [Maps of the Successful English Freeport Bids \(gov.uk\)](https://gov.uk/maps-of-the-successful-english-freeport-bids)

The Thames Freeport – with activity and support focused on the tax and customs sites set out above – has the potential to create significant employment within and close to Thurrock and this in turn will impact on the local economy through: (i) the local supply chains of businesses locating in the Freeport and (ii) jobs within businesses located at the Freeport being taken up by existing local residents or people seeking to move into the area. Consequently, this has the potential to impact on the local demand for employment land and housing.

ekosgen are in the process of developing an updated Economic Development Needs Assessment (EDNA) for Thurrock Council which will consider the supply and demand for employment land in the borough to 2044. The EDNA focuses on the need for employment land associated with office, industrial and warehousing sectors within the borough, including demand resulting from the Freeport activities within Thurrock.

¹ Freeports: what are they, what do we know, and what will we know? The Institute for Fiscal Studies (March 2023).

The EDNA does not currently quantify the potential multiplier impacts for Thurrock of the jobs supported by the Freeport because of uncertainties around the likely distribution of multiplier jobs by sector and location, and therefore the extent to which they will be captured by sectors relevant to the EDNA and within Thurrock itself. This paper provides a supplementary review of the available evidence concerning the Freeport to consider the extent to which it is possible to assess the local employment and labour market effects of the Freeport within Thurrock and the wider FEMA in order to help inform the EDNA .

The paper is based on:

- A desk review of the [Thames Freeport Business Case](#) and associated technical appendices to consider the scale of employment benefits estimated at the time the business case was developed and the extent to which this considered local multiplier effects.
- A desk review of the wider evidence of Freeports to consider what additional research exists in relation to the local impacts of Freeports, the extent to which such affects have been considered at other Freeport sites, and the extent to which these findings may be applicable to the Thames Freeport and Thurrock context.
- Consultation with relevant stakeholders, including the Freeport and its landowners to determine whether there is further evidence or insight that could inform the assessment of the multiplier impacts of Thames Freeport on a quantitative or qualitative basis.

It should be noted that figures discussed in this review in relation to the employment impacts associated with the Freeports may differ to those discussed in the EDNA due to differences in the timing of the preparation of the Business Case, which preceded the EDNA, as well as differences in sectors and geographies considered in the EDNA compared to the Freeport as a whole, which spans three local authority areas.

Background Evidence

Desk Research

Thames Freeport Business Case (Public Version, June 2023)

The Thames Freeport Business Case describes the proposals for the Freeport and the basis on which it will be delivered and operate. Of most relevance to this assessment, the Business Case includes: (i) a **Strategic Case** which sets out economic and social context for the freeport, the rationale for public investment, and the local and national policy objectives supported by the Freeport, and (ii) an **Economic Case** which considers the economic impacts of the Freeport proposal, including estimates of associated job creation and investment.

To consider the economic impact of the Freeport Proposals, the business case provides estimates of a series of employment related outputs, including:

- **Direct Gross Jobs Created** – the total number of jobs created within businesses locating at Freeport Sites².

² Of the 32,718 Gross Direct Jobs estimated for the Thames Gateway, 31,995 are associated with the three Tax and Customs sites (Tilbury, Ford, London Gateway) and the Thames Enterprise Park Customs Site. 722 jobs are associated with other Freeport locations elsewhere within the Freeport Outer Boundary.

- **Indirect Gross Jobs Created** – the total number of jobs created off-site in the supply chains of Freeport businesses.
- **Additional New Jobs** – estimated for both direct and indirect jobs, additional new jobs are those jobs that are created over and above what would otherwise have been achieved (i.e. if the Freeport proposals were not taken forward). This takes account of deadweight³ and displacement⁴.

The figures provided in the Business Case for net additional employment are disaggregated by Essex and London, but no further breakdown is provided.

The Business Case also sets out an ambition for 12,000 of the net additional new jobs to be from 'local communities', however the term 'local community' has not been defined in the business case.

The assessment of direct gross jobs created is based on the HCA Density Guide for relevant land uses. Indirect jobs created has been estimated using Vivid Economics' proprietary I3M model, however the Business Case and supporting annex do not include details of how these estimates were derived or any further disaggregation of the inputs and outputs.

Thurrock Council have confirmed that no further information has been shared with them concerning figures for disaggregated direct or indirect employment and that the confidential version of the Business Case (available to Thurrock Council) does not provide any further detail regarding employment.

Table 1 sets out the Business Case estimate of direct and indirect jobs – on a gross and additional basis. From this information it is possible to make the following observations in relation to employment:

- The overall multiplier⁵ associated with additional employment is estimated to be 1.71.
- This ranges from 1.49 for jobs located in London to 1.74 for jobs located in Essex. While no explanation of this variation has been provided in the business case, this could reflect both the mix of sectors assumed to be accommodated in London compared to Essex plus the nature of the business base in both locations (with Essex more likely to be home to businesses within relevant supply chains).
- Of the 21,400 net additional jobs, over half (56%) are expected to be located in local communities. However, this figure should be treated with care as: (i) the extent of the area defined as 'local communities' is not clear from the business case and (ii) unlike the estimate of indirect employment, which is based on economic modelling, this figure appears to be a target and the basis on which it has been derived is unclear.

All references to multipliers above relate to Type 1 Multipliers. These are associated with indirect employment generated through businesses spending in their supply chain. Conversely, Type 2 Multipliers

³ Deadweight captures those jobs that would have been created in the absence of the intervention. For example, in this case it is an estimate of those jobs that would have been created at the Thames Freeport sites if the Freeport proposals were not taken forward (direct deadweight) and the associated supply chain jobs (indirect deadweight).

⁴ Displacement captures the extent to which the creation of jobs at the Freeport sites: (i) represents jobs relocated from elsewhere, (ii) reduces the extent to which jobs are created elsewhere in the future. For example, businesses may choose to locate at the Freeport because of the incentives on offer instead of an alternative employment site within the FEMA.

⁵ The employment multiplier is equal to the sum of direct and indirect employment divided by direct employment. An additional employment multiplier of 1.71 means that there are 0.71 additional indirect jobs created for every additional direct job created.

are concerned with induced employment, which is the employment created through employee spend⁶. The Thames Freeport Business Case only considers Type 1 Multipliers.

Table 1: Thames Freeport – Direct and Indirect Employment Assumptions

	Number	Associated Type 1 Multiplier
Direct Gross Jobs	32,718	
Indirect Gross Jobs	24,123	
Total Gross Jobs	56,841	
Gross Employment Multiplier		1.74
Direct Additional Jobs	12,478	
Indirect Additional Jobs	8,887	
Total Additional Jobs	21,365	
Additional Employment Multiplier		1.71
<i>Of Which</i>		
<i>Direct Additional Jobs - Essex</i>	11,171	
<i>Indirect Additional Jobs - Essex</i>	8,243	
<i>Total Additional Jobs - Essex</i>	19,414	
<i>Additional Employment Multiplier - Essex</i>		1.74
<i>Direct Additional Jobs - London</i>	1,307	
<i>Indirect Additional Jobs - London</i>	644	
<i>Total Additional Jobs - London</i>	1,951	
<i>Additional Employment Multiplier - London</i>		1.49
Jobs in Local Communities	12,000	
Share of Additional Jobs in Local Communities	56%	

Source: Thames Freeport Full Business Case Consolidated (June 2023)

The majority of the additional jobs (c. 18,000) are expected to be in the target sectors of automotive manufacturing, energy and circular economy, logistics and transport, and light manufacturing. The remaining 3,000 net additional jobs will be created in the region from other non-target sector aligned investments, such as infrastructure improvements.

The business case does not disaggregate indirect employment below the Essex or London level. However, it is reasonable to assume that the distribution of indirect employment will to a large extent reflect the existing geographic profile of relevant businesses. While this does not take account of the potential for new firms establishing in areas that are not currently strongly represented in relevant sectors, there is unfortunately no means of accurately forecasting such an outcome to this level, as it will depend on a range of local economic factors and the decision making of individual businesses.

⁶ It should also be noted that Type 2 Multipliers are likely to result in employment across a different array of sectors than Type 1 Multipliers. Whereas a significant proportion of employment associated with business supply chains is likely to be within closely related sectors, employment created by employee spend will be more heavily weighted towards retail and consumer services which are less likely to generate demand for traditional B use classes.

Wider Research

ONS publish **Type 1 multipliers** for all sectors of the UK economy. These are national level multipliers – i.e. they are not disaggregated to a regional or sub-regional level. They are also based on standard SIC sector definitions and therefore do not map directly to the target sectors for Thames Freeport. However, below we present the Type 1 FTE Multipliers for a range of sectors that are consistent with the Freeport target sectors. This is not intended to be an exhaustive list, rather it is provided to place the multipliers presented above into context.

Table 2: National Level Type 1 Multipliers (Selected Sectors)

Sector	Type 1 FTE Multiplier	Associated Target Sector
Manufacture Of Motor Vehicles, Trailers And Semi-Trailers	2.99	Automotive Manufacturing
Manufacturing or Processing of Food Products	1.77-5.55	Light Manufacturing
Manufacture of Textiles and Clothing	1.38-1.58	
Printing And Reproduction Of Recorded Media	1.51	
Manufacture of Computers and Electrical Equipment	1.77-1.78	
Manufacture Of Machinery And Equipment N.E.C.	1.91	Light Manufacturing / Energy and Circular Economy
Other Manufacturing	1.59	
Waste Collection, Treatment And Disposal Activities; Materials Recovery	1.99	Circular Economy
Remediation Activities And Other Waste Management Services	1.44	
Warehousing And Support Activities For Transportation	1.60	Logistics and Transport

Source: ONS Input-Output Analytical Tables 2019 (Published 2023)

As can be seen from the table above, the ONS multipliers range from 1.38 to 5.55. The largest multipliers are associated with more intensive manufacturing activity (such as automotive manufacturing) or where much of the raw materials will be sourced from the UK. For example, the largest multiplier listed above (of 5.55) is associated with manufacture of grain mill products, starches and starch products. While a number of the multipliers set out above are below the sub-regional figures presented for Thames Freeport, they are not inconsistent with an average multiplier across all of the potential uses.

We have also reviewed the available literature for nine **other Freeports across the UK**.⁷ Where available we have reviewed the Freeport Business Cases. Where these have not been published, we have sought to identify evidence regarding expected levels of employment generation from their website and other supporting material. In summary:

- Many of the Freeport proposals do not consider indirect employment (or, at least, this is not set out in the publicly available material).
- In some instances, there has been an assessment of supply chain spend, but the associated indirect employment has not been considered.
- Where employment multipliers have been considered, these are often based on benchmark values – such as the HCA Additionality Guide. These include Liverpool Freeport (which adopts a composite

⁷ Inverness and Cromarty Firth Green Freeport, East Midlands Freeport, Freeport East, Humber Freeport, Liverpool City Region Freeport, Plymouth and South Devon Freeport, Solent Freeport, Teesside Freeport, and Forth Green Freeport.

multiplier of 1.44 based on the HCA guidance) and Plymouth and South Devon Freeport (which adopts a multiplier of 1.5, similarly based on HCA guidance).

On this basis, while the Thames Freeport estimate of indirect employment exceeds the level assumed elsewhere, it is based on a bespoke analysis that takes the existing industrial profile of the area into account, rather than simply adopting benchmark values.

None of the Freeport assessments (including Thames Freeport) consider very localised employment multipliers (i.e. below a county level) or the potential for induced employment (Type 2 multipliers).

Consultation

In carrying out this work, we consulted with:

- Thames Freeport
- London Gateway
- Port of Tilbury
- Thames Enterprise Park

In some instances these consultations formed part of our wider engagement on the EDNA. The purpose of the consultations was to explore whether there was any additional research or intelligence that could inform an assessment of indirect and induced employment.

Key findings from the consultations relevant to this assessment are:

- None of the consultees have access to or are in a position to share supporting evidence relating to the Business Case.
- While the Freeport Business Case is dated as June 2023, the economic modelling was largely completed in 2021 and this should be taken into account when drawing conclusions based on its assumptions and analysis.
- There is some evidence that interest in the Freeport, since the business case was prepared, has been weighted more heavily towards the green economy and advanced manufacturing and away from logistics. Based on the ONS Multipliers presented above, this has the potential to increase the level of indirect employment set out in the Business Case.
- The consultees recognise that the supply of housing and the associated potential to supply labour for the Freeport is a risk to delivery. This is an important consideration as multipliers typically assume that potential for employment growth is unconstrained. While this may be reasonable at a national level, at a more local level such constraints could have a large impact on the geographic distribution of employment.
- While the consultees were taking steps to promote local employment and were aware of commitments to do so, they were not aware of specific targets for local employment and recruitment.

Implications and Recommendations

Evidence Review

In summary, the main available estimates concerning indirect employment are the aggregate figures from the Business Case. These are consistent with national level multipliers from ONS. A sub-regional multiplier of 1.7 is not unreasonable given that many of the national level multipliers are above this level. While these estimates are 3 years old, they remain the main, available estimate. While the delivery of the Freeport will inevitably vary from what was proposed, evidence from stakeholders suggests that any changes will have a positive impact on indirect employment (i.e. it may be greater).

However, while these figures can be used to provide an estimate of employment at the Essex level. They do not provide a figure for Thurrock or the FEMA.

Considering Local Impacts

When considering more local impacts, one approach for approximating the potential impacts would be to apportion the Essex-wide indirect employment based on the distribution of the existing business or employment base within Essex, by local authority. There is the potential for this to under-estimate local impacts as it is reasonable to assume that indirect employment may be over-represented in Thurrock relative to more distant authorities. However, to take this into account, it is possible to provide a range with (i) a lower bound estimate based on a simple distribution of induced jobs based on the current profile of employment and (ii) a higher estimate assuming an agreed percentage uplift arising from geographic proximity.

This would not be a precise estimate, but would provide an indication of the potential scale of local benefits.

Further Considerations

It should be noted that multipliers assume that there are no constraints to growth occurring where there is demand (i.e. they assume that both available sites / space and labour supply are unconstrained). While this may be a reasonable assumption at a national or regional level, it can affect the more localised distribution of employment. However, given the large population within a reasonable commute time of Thurrock, the labour market constraints are potentially less significant than for other parts of the country. Furthermore, by estimating the potential demand it does provide a guide to the potential level of demand for employment space.

Regarding induced employment, there is insufficient evidence to provide a reasonable estimate. It would be possible to undertake a similar exercise as the one proposed above based on the 12,000 jobs figure. However, as this appears to be a target, rather than a modelled estimate, such an estimate would need to be treated with caution.

Recommendation

Based on the research that has informed this study, it would be possible to provide a high level estimate of the indirect employment impact associated with the Thames Freeport. This would be based on the multiplier impacts derived from the Business Case and the further adjustments set out above. However, such an estimate would be at best indicative as it would be based on the assumed sector profile of employment at the point the business case was developed (in 2021) and the estimated distribution of indirect employment within Essex would be based on the existing profile of employment which may not be consistent with employment projections relied upon in the EDNA.

On this basis, we do not recommend that such an approach is taken forward given the high levels of uncertainty that would be associated with any estimate and the potential for the results to be challenged. Instead, the scale of indirect employment set out in the Freeport Business Case provides an indication of the potential impacts and can be considered by the EDNA on a more qualitative basis.