

## **Appendix 2**

### **Evidence Base Update**

#### **Forecasts of Job Growth**

Updated forecasts of employment growth in Colchester to 2033 were obtained from the 2019 release of the East of England Forecasting Model (EEFM), which takes into account recent regional and national macroeconomic assumptions. This version of the EEFM was developed before the Covid-19 pandemic. The forecasts do not include any Covid-19 specific assumptions or impacts.

The model does include a forecast formulated in May 2019 of the assumptions of the impacts of Brexit. This forecast focussed primarily on the macroeconomic effects of Brexit on exports, migration and investment.

It is important to note that there are inherent limitations to the use of economic forecasts of this type, particularly within the context of recent changes in the economy. National macroeconomic assumptions are taken as the starting point and then modelled down to the regional and local levels by reference to the existing economic profile and sectoral composition of an area. Local level data is less comprehensive and reliable than at national and regional levels, which can affect how the modelling is calibrated. Similarly, top-down forecasts do not take account of specific local factors that might influence employment growth. However forecasts are seen as a valuable input to indicate the broad scale and direction of future economic growth within different sectors, which helps assess the future land requirements of a local area.

Population projections are just one of several inputs used to produce economic forecasts both in terms of future changes in working-age population (ie: which directly impacts on the demand for jobs) and total population (ie: which create demand for consumption activities). The EEFM September 2019 uses both official projections of natural growth and forecast net migration levels produced by Oxford Economics.

It is important to note that populations, economic activity rates and national changes to the pension ages. The forecasts also assume existing patterns of commuting remain unchanged, which means that future updates to this study will need to take into account the changes to a commuting data as a result of changing

working patterns driven by the impact of Covid-19 when it is incorporated into the EEFM model.

In order to extend the employment growth projections up to 2033 to cover the period of the emerging Colchester Local Plan, the average annual job growth rates for the period 2014 to 2032 were used as a proxy to estimate employment levels in Colchester in 2033 on a total and sector basis using the 2019 EEFM. For consistency the 2019 model was used to revisit the 2014 figures rather than start afresh in 2019.

### Scenario 1: Baseline Job Growth

The forecasts of job growth by sector reflect recent trends and are based upon projections at the regional level and how sectors within Colchester have fared relative to historic growth in the region. For example, where particular sectors have performed well compared with the regional average (ie: East of England) the forecasts generally assume that these sectors will continue to drive growth within the Borough in the future. These projections also reflect the current post 2008 recession climate but have yet to feature the impacts of the Covid-19 pandemic.

These projections indicate an overall growth of 20,300 jobs for Colchester over the 18 year period 2014-2032 (table 6.2), equivalent to around 1127 jobs per year. Table 6.1 shows the fastest growing sectors under this scenario, alongside those that are expected to see a decline in employment. A full breakdown of baseline job growth by sector is provided in Table 6.1a from both the 2015 report and the 2020 revision.

*Update based on EEFM 2019*

*Table 6.1 Fastest Growing and Declining Employment Sectors in Colchester, 2014-2032.*

<b>Sector</b>	<b>Use Class (prior to recent revisions)</b>	<b>Additional Jobs 2014- 2032</b>	<b>% Change 2014-2032</b>
Retail		3600	37.1
Healthcare		3300	21.1
Education		2900	25.8
Construction		2500	50.0
Accommodation & Food Services		2500	40.3
Arts & Entertainment		1900	61.2
Real Estate		1600	123.0
Wholesale		1600	33.3

Employment Activities		1100	45.8
Business Services		700	22.6
Professional Services		700	8.9
Publishing & Broadcasting		-900	-40.9
Finance		-200	-7.4
Manufacturing		-200	-22.2

Source: EEFM 2019/CBC analysis, ranked by additional jobs/losses.

Key:

B class sector	Part B class sector	Non B class sector

## Original NLP 2015 Report

Table 6.1 Fastest Growing and Declining Employment Sectors in Colchester, 2014 - 2032

Sector	Use Class	Additional Jobs (2014 - 2032)	% Change (2014 - 2032)
Professional Services		+ 4,060	+ 39.9%
Health & Care		+ 2,120	+ 17.6%
Construction		+ 1,750	+ 32.2%
Business Services		+ 1,620	+ 40.0%
Education		+ 1,230	+ 11.6%
Real Estate		+ 1,200	+ 40.6%
Hotels & Restaurants		+ 1,150	+ 21.7%
Arts & Entertainment		+ 1,050	+ 34.6%
Public Admin & Defence		- 100	- 1.8%
Utilities		- 190	- 23.4%
Manufacturing		- 1,205	- 25.1%

Source: EEFM Spring 2013 / NLP analysis

Key: **YELLOW** = B class sector **ORANGE** = Part B class sector **RED** = Non B class sector

Comparing Table 6.1 with the original table in the 2015 NLP Report above there are some important differences

*Utilities* – although the model projects a zero figure this time, Colchester Borough Council's work on the installation of a new heat network and the further deployment of its Ultrafast fibre gigabit Broadband network means that its likely some sectoral development will take place. This can be seen in the table as the 2015 NLP report projected a loss of -190 jobs whereas the latest projection of zero represents some growth.

*Public Administration & Defence* – the last report was pre-referendum and saw a projection that this sector would be contracting by -100 jobs. However, the 2019 EEFM incorporates some consideration of Brexit impacts. As a military town Colchester could see some growth of employment in this sector of an estimated 500 jobs; a growth of 8.4%.

*Business Services (combined with Professional Services)* – came out strongest in terms of projected job growth in the 2015 report with an estimated additional 4060 jobs. However, the revised figure is 1400 jobs over the period so, even though it's still growing, it represents a significant contraction in this sector when both reports are compared.

*Wholesale* – a new sector this time possibly acknowledging the trend for online retail growth. Though the model is pre Covid-19 the pandemic is certainly accelerating the trend for online shopping which requires warehousing. Brexit is also a factor, so there is now a double source of demand for warehousing. Storage also might be a consideration to offset the trend for 'Just in Time' supply chains which have proven to be risky whereas stockpiling some goods in warehousing might be a prudent move. Consumers are demanding goods to be available so there's a need to keep stock somewhere and manufacturers need stocks of components to meet ongoing demand. Colchester is an obvious location because it's so close to Harwich and close enough to Felixstowe.

*Employment Activities* - will have more than doubled from the original 2015 projection.

*Publishing & Broadcasting* – another sector undergoing significant change from social media and online broadcasting (often the same thing using apps). Colchester's creative and digital sector is dual currently with published magazines in some cases being replicated with added value on websites. The need for content will remain but could be open sourced using freelancers and members of the public so jobs could be affected.

*Finance* – the contraction of this sector is not surprising given the changes in this sector. Increasingly online, increasingly condensing through mergers, increasing use of Artificial Intelligence.

*Manufacturing* – The contraction of this sector has been a long-term trend in the UK and is featuring in the modelling in line with the ongoing automation of traditional manufacturing and industrial processes. This is however, presenting

opportunities in the emergence of new forms of manufacturing which may be slowing the decline in the sector overall.

Just as in 2015 the analysis indicates that retail, healthcare, construction and tourism (accommodation and food services) are expected to be the key drivers of employment growth in the Borough over the period of the plan. In addition, business services, education and real estate are also expected to account for significant employment growth. Sector forecasts to incur the largest employment losses during this period include manufacturing, publishing and broadcasting and finance.

The EEFM baseline data also suggests that Colchester is anticipated to play a key role in accommodating employment growth within the South East LEP's (SELEP) key growth sectors. The SELEP is currently developing its Local Industrial Strategy which has been delayed due to Covid-19. Therefore, assuming the SELEP's Growth Deal and Strategic Economic Plan is still current as the Local Industrial Strategy process has been put on hold due to the pandemic, the sectors in Table 6.2 have been updated. It should be noted that data for the East of England in the EEFM 2019 has not yet been published.

It is important to note that the data and subsequent projections were pre-pandemic. The situation will be monitored when future editions of the EEFM are published. Some sectors which are currently affected by the pandemic such as travel, leisure, culture and entertainment will see demand return when movement restrictions are eased and these service industries will satisfy that demand with adapted models of operation. The information should accordingly be considered over the whole life of the projection to 2032-3.

*Update based on EEFM 2019*

*Table 6.2 Anticipated Employment Growth in the South East LEP Growth Sectors 2014-2032.*

<b>SELEP Growth Sector</b>	<b>EEFM Equivalent Sectors</b>	<b>Additional Jobs 2014-2032</b>	<b>% Change 2014-2032</b>
Advanced Manufacturing	Chemicals	-200	-22.2
	Pharmaceuticals		
	Electronics		
Transport & Logistics	Wholesale	1400	18.6
	Land Transport		
	Water & Air Transport		
	Pharma		

Life Sciences & Healthcare	Health & Care	3300	21
	R&D		
Environmental Technologies & Energy	Utilities	0	0
	Waste & Remediation		
	R&D		
Creative, Cultural & Media	Publishing & Broadcasting	1700	12.9
	Professional Services		
	Arts & Entertainment		
Visitor Economy	Hotels & Restaurants	4400	47.3
	Arts & Entertainment		
All Sectors		20300	21.4

Source: EEFM 2019/CBC analysis

### Original NLP 2015 Report

Table 6.2 Anticipated employment growth in South East LEP Growth Sectors

LEP Growth Sector	EEFM Equivalent Sectors	Colchester		East of England
		Additional Jobs (2014 - 2032)	% Change (2014 - 2032)	% Change (2014 - 2032)
Advanced Manufacturing	Chemicals	-300	-34%	-22.9%
	Pharma			
	Electronics			
Transport and Logistics	Wholesale	190	3%	11.2%
	Land Transport			
	Water and air transport			
Life Sciences and Healthcare	Pharma	2,130	18%	13.8%
	Health and care			
	R+D			
Environmental Technologies and Energy	Utilities	-180	-22%	9.0%
	Waste and remediation			
	R+D			
Creative, Cultural and Media	Publishing and broadcasting	4,310	32%	32.2%
	Professional services			
	Arts and entertainment			
Visitor Economy	Hotels and restaurants	2,210	26%	-22.9%
	Arts and entertainment			
All Sectors		14,530	16%	13.4%

Source: EEFM Spring 2013 / NLP analysis

The total employment change in Colchester resulting from these forecasts is shown in Table 6.3 alongside forecast job growth in the B class sectors. This includes an allowance for jobs in other non-B class sectors that generally use office or industrial space (Appendix 5).

*Update based on EEFM 2019*

*Table 6.3 Forecasted Employment Change in Colchester 2014-2032.*

	<b>Number of Jobs</b>		<b>Change (2014-2032)</b>
	<b>2014</b>	<b>2032</b>	
Offices (B1a/B1b)*	17,315	18,635	1,320
Manufacturing (B1c/B2)**	8,104	8,922	818
Distribution (B8)***	4,965	6,103	1,138
<b>Total B Class Jobs</b>	<b>30,834</b>	<b>33,660</b>	<b>3,276</b>
<b>Total jobs in all sectors</b>	<b>94,700</b>	<b>115,000</b>	<b>20,300</b>

*Source: EEFM 2019/CBC analysis*

\*Includes publishing and a proportion of Government offices

\*\*Includes vehicle repairs and some construction activities

\*\*\*Includes parts of transport and communication sectors that use industrial land

*Original NLP 2015 Report*

Table 6.3 Forecasted Employment Change in Colchester, 2006 - 2032

	<b>Number of Jobs</b>		<b>Change (2014 - 2032)</b>
	<b>2014</b>	<b>2032</b>	
Offices (B1a/B1b)*	22,995	29,865	6,870
Manufacturing (B1c/B2)**	7,910	7,070	- 840
Distribution (B8)***	4,810	4,925	115
<b>Total B Class Jobs</b>	<b>35,715</b>	<b>41,860</b>	<b>6,145</b>
<b>Total Jobs in All Sectors</b>	<b>92,300</b>	<b>106,830</b>	<b>14,530</b>

Source: EEFM Spring 2013 / NLP analysis

Note: \* Includes publishing and a proportion of government offices.

\*\* Includes vehicle repairs and some construction activities.

\*\*\* Includes parts of transport and communication sectors that use industrial land.

These figures indicate relatively high overall net job gains in B class sectors (3,276 jobs) within Colchester up to 2032, with stronger growth in office activities compared to manufacturing and distribution. Office jobs sees a significant fall from the 2015 estimate

however, the situation is reversed for distribution activities where there is significant growth now projected compared to the 2015 estimate. The projected decline in manufacturing jobs in 2015 now sees moderate growth as food and drink manufacturing for instance grows to meet a population growth.

This is within the context of total job growth of 20,300 jobs forecast for the Borough over the plan period, which outside of the B class sectors will be in retail, healthcare, construction and tourism. It should be noted that these key growth sectors will also require additional floorspace to accommodate an increase in employment over the period to 2032 (including some conventional office space) although as the spatial implications of this growth are considered using different methodologies and other forms of technical evidence.

The total GVA growth associated with the EEFM 2019 employment forecasts for Colchester equate to a 50.2% rise between 2014 and 2032, or 2.8% per year over the plan period. In absolute terms, this is equivalent to an increase of just over £1.9bn over the plan period.

This projected net increase of 3,276 B class jobs up to 2032, which underpins the estimate of future employment space needs, is equivalent to an average of 182 additional B class jobs each year.

The B class part of these employment growth forecasts have been converted to net future employment space requirements by applying the latest published density figures for employment space, which take account of recent trends in occupancy for the different B class uses. To estimate space requirements, the following average ratios have been applied to job forecasts:

**Offices:** 1 job per 12.5sqm for general office space

**Industrial:** 1 job per 43sqm as an average across B1 and B2 uses, and

**Warehousing:** 1 job per 65sqm for general, smaller scale warehousing (ie: assumed to account for 90% of total stock) and 1 job per 74sqm for large scale, lower density units (ie: assumed to account for 10% of total stock).

These assumptions are based on latest HCA/OffPAT guidance on employment densities published in 2010. The guidance takes into account recent trends in terms of the change uses of employment space, with the main change being the more efficient use of office space through flexible working and hot-desking.

An allowance of 10% is added to all floorspace requirements to reflect normal levels of market vacancy in employment space. Where a reduction in jobs is forecast (eg: manufacturing), the associated negative floorspace was halved. This reflects that while there may be ongoing manufacturing job losses (eg: as firms use more efficient production approaches), it doesn't automatically follow that all of the existing employment is lost.

*Update based on EEFM 2019*



Table 6.4 EEFM 2019 Job Growth Based Net Employment Space Requirements in Colchester, 2014-2032.

	<b>Floorspace (sq m)</b>
Offices (B1a/B1b)	18,150
Manufacturing (B1c/B2)	38,691
Distribution (B8)	82,485
<b>Total B Class Jobs</b>	<b>139,326</b>

*Original NLP 2015 Report*

Table 6.4 EEFM Job Growth Based Net Employment Space Requirements in Colchester, 2014 - 2032

	<b>Floorspace (sq.m)</b>
Offices (B1a/B1b)	94,480
Manufacturing (B1c/B2)	-18,090
Distribution (B8)	8,430
<b>Total B Class Jobs</b>	<b>84,820</b>

Source: NLP analysis

The changes in floorspace requirement unsurprisingly follow on from the changes in sectoral demand analysed above, including a decrease in office requirements and an increase in manufacturing and distribution floorspace. The overall result shows an increase in B Class floorspace from 84,820 sqm. in 2015 to 139,326 in 2019.

