# Employment Land Need Assessment - Update

October 2020

## Contents



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**For and on behalf of Avison Young (UK) Limited**

# 1. Introduction

1.1 Avison Young has been commissioned by the Gravesham Borough Council and Medway Council to undertake an update of their Employment Land Need Assessment (ELNA).

1.2 Avison Young produced an ELNA for both Councils (separately) in 2017 and 2015. This report is an update of the 2015Medway ELNA and provides a revision of the demand forecast for land requirement based on the latestset of Experian employment forecasts published in June 2020.

1.3 The previous ELNA represented a key element of the North Kent Strategic Housing and Economic Needs Assessment (SHENA) prepared by Avison Young on behalf of Gravesham Borough Council (GBC) andMedway Council (MC). The purpose of the SHENA is to identify the future growth needs of the two localauthority areas across housing, employment land and retail floorspace and also provide a strategic level spatial strategy to guide future site allocations and ensure the appropriate capacity is available in the most appropriate locations for all land uses. This is provided in the final document in the SHENA suite, the Integrated Growth Needs Assessment.

1.4 This Employment Land Needs Assessment (ELNA) report provides the technical assessment of the future demand for employment land within Medway. This report does not revise the supply of land within Medway, which we assume remains relatively unchanged since the last version of the ELNA was published in 2015.

1.5 This Employment Land Needs Assessment is intended to provide an understanding of the likely future commercial floorspace requirements (B-Use Class) within Medway based on the most up to date understanding of local and national economic trends, potential shifts in local demand drivers, population and demographic changes and changing market needs and performance.

1.6 Note that recent changes to the planning class order will have an impact on the Local Plan policies. In particular, policies which sought to manage retail, Class A, employment, Class B, and community/social infrastructure, Class D, uses.

1.7 Part A and Part D of the Schedule to the Use Classes Order 1987 are revoked and Part B has been modified. In summary, use classes A, D and B1 are now abolished as separate use classes and have been amalgamated into one use class. Use class D has been split between the three new use classes. This report is based on the previous format, reporting employment, floorspace and land by b-use class prior to the changes to the planning class order and introduction of Class E.

# 2. Employment Growth Forecast Scenarios

2.1 In understanding the range and portfolio of future employment land and floorspace need it is important to understand the potential nature of employment growth within Medway over the emerging plan period and beyond to 2040 to ensure sufficient provision is made and protected within the employment sites in Medway.

2.2 This section sets out the forecast scenarios used within this Study to understand the 'reasonable alternatives' for potential future growth, allowing a future strategy to move beyond Experian's trend-based modelling to understand the impact of other factors on growth. It provides a short description of the rationale for each scenario, the technical approach and the key outputs. It then goes on to identify a 'synthesis' forecast which should form the basis of future planning.

2.3 The testing of alternative scenarios is important in the development of policy. Medway is a dynamic location containing a number of sectors that have significant growth potential and influenced by a number of planned infrastructure interventions that will influence its economic future. The focus of policy should therefore be on maximising the opportunities presented, positively planning to manage growth and expansion.

2.4 Wider development and regeneration initiatives within Medway will help to raise the growth potential. Population and housing growth will increase the labour pool, town centre regeneration will upgrade stock and trading environments, the continued development of major waterfront sites in Chatham, Rochester and Gillingham will provide new high quality waterside employment and housing opportunities and the designation of Rochester Airfield as an Enterprise Zone orientated towards high value engineering will provide a new catalyst for economic activity.

2.5 Given this range of factors 'business as usual' is not an option for Medway. Change will happen and the employment growth forecast needs to interpret this in a meaningful way, guiding future policy decisions through an economic model that is tailored to local circumstances.

2.6 The forecast model is based on the employment growth projections provided by Experian Business Strategies, these were finalised and published in June 2020. The Experian forecast factors in demographic trends and future expectations and changes. It therefore allows for expected shifts in age profiles, economic activity rates and the impact of changes to the 'statutory' retirement age. The model uses a base population projection that is consistent with those used by DCLG/ONS and interprets their outputs to forecast the influence the complete 'basket' of demographic factors have on employment rates in any location.

2.7 The employment land requirement forecast delineates growth into major sectors which, in turn, are aggregated into land use types. This approach provides a land and floorspace requirement for office (B1a/b), industrial (B1c/B2) and warehousing (B8) activity. Whilst this approach aligns with the guidance provided by the NPPF and NPPG and provides a robust basis for planning purposes, it should be recognised that future delivery may not be as neatly categorised.

2.8 Increasingly, as business processes change, so do the nature of spaces business require to support their operation. For example, within the manufacturing sector a much more significant element of work is computer-based and there is a much larger servicing requirement, driving up office space within 'industrial buildings. Similarly, many small manufacturers will seek to distribute directly (via third party logistics operators) from their plant, therefore also increasing the need for storage and distribution space.

2.9 Given these more complex activities it is clear that there is a need for buildings and sites to be planned flexibly, that occupiers in a sector may not need an office or an industrial unit but require a building that can offer them both. As such, the forecasts consider floorspace within the three broad use classes but (within these) recognises that the actual type of space may be mixed. The use of appropriate employment densities seeks to model these changing space requirements.

2.10 In order to understand the relationship between this evidence base (and hence the SHENA more widely) and the Council's other priorities related to employment growth we have reviewed the sector definitions within the Kent and Medway Economic Partnership's Workforce Skills Evidence Base (WSEB). This document highlights 12 key sectors that it views as crucial to the future of Medway's economy and therefore should set the framework for future skills intervention.

2.11 It is not possible to directly align the forecast outputs for this study with the definitions within the WSEB for two reasons. Firstly, the WSEB considers sectors as economic activity groupings in a different way to the Experian forecast, which means it is not possible to isolate the potential growth pattern of specific sub-sectors. Secondly, it is important that sector definitions in this study align to land use classes to ensure appropriate future land provision is made. The WSEB analysis in some cases creates sectors that operate across use class groupings meaning they could not be used for forecast employment land need.

2.12 However, it is possible to align the WSEB sectors with those used within the forecast and hence the final floorspace requirements.

2.13 It should be noted that Experian's forecasts do not make an allowance for the re-provision of employment floorspace lost at key sites within Medway.

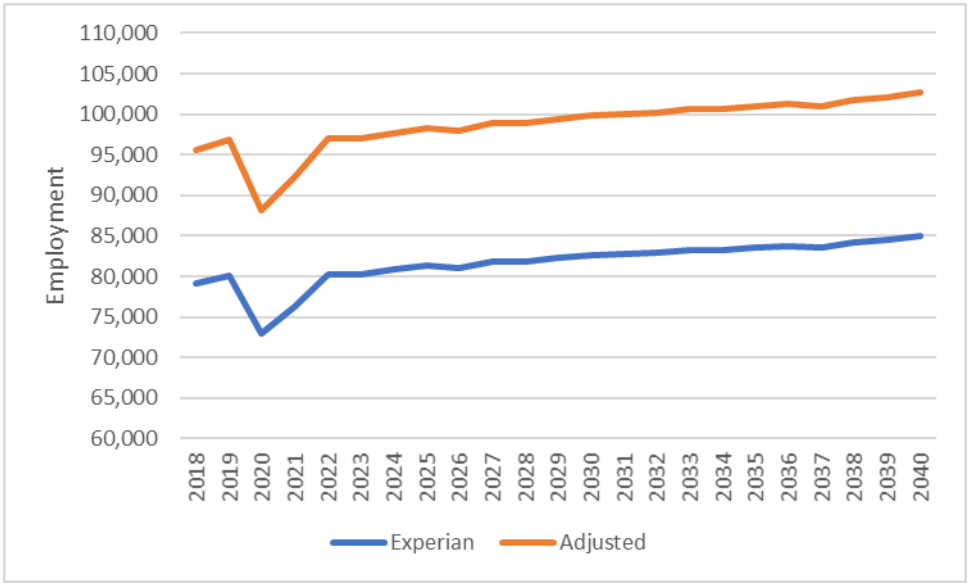
## Base Forecast

2.14 The base Experian forecast for Medway sets out the 'business as usual' employment growth scenario for Medway to 2040 across 38 economic sectors, figures are presented as Full Time Equivalent (FTE) to allowfor direct translation into floorspace needs.

2.15 It is to be noted that the Experian forecast figures for historical years differ widely from ONS data (Business Register and Employment Survey - BRES). BRES data for 2018 (latest year available) reports 95,580 jobs in Medway; whilst Experian reports 79,100 for the same year.

2.16 For this reason, the Experian data has been adjusted to take the BRES 2018 value as baseline position. This can be seen in Figure 1. This will have little impact on the results of this study, as the ELNA focuses on the change in employment (and translates it into floorspace and land requirement) between 2020 and 2040. The Experian growth has been applied to the adjusted baseline position.

**Figure 1 – Adjusted Baseline Position**



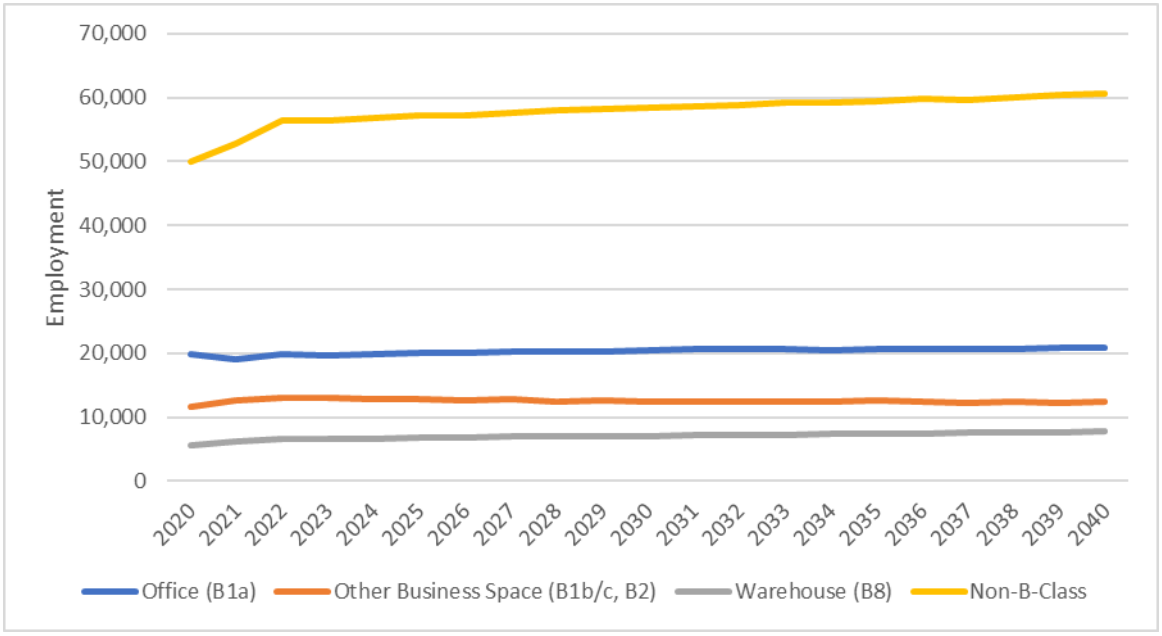

*Source: Experian employment forecast, June 2020; adjusted for BRES 2018 baseline position*

2.17 The (adjusted) baseline forecast employment growth would see a total of just over 14,700 new FTE jobs created within Medway over the period 2020-2040, an increase of 17%.

2.18 Translating this growth at a sector level into major use categories for planning purposes shows that the most significant level of growth proportionally is within 'non-B class' activities (such as retail and healthcare), which accounted for 12% of the 17% increase, or about 10,700 jobs of the total of 14,700 jobs to be created in Medway.

2.19 Data is presented to 2040, covering the full length of Experian employment forecast. The results by planning Use Class of the forecast are shown in Figure 2 bookmark1 and Table 1

**Figure 2 – Base Forecast Employment Growth**




*Source: Avison Young, based on Experian employment forecast, adjusted to BRES 2018 baseline position*

**Table 1 – Base Forecast Employment Growth**

| | Office (B1a) | Other Business Space (B1b/c, B2) | Warehouse (B8) | Non-B-Class |
|---|---|---|---|---|
| 2020 | 19,829 | 11,627 | 5,584 | 49,960 |
| 2021 | 19,148 | 12,706 | 6,193 | 52,820 |
| 2022 | 19,772 | 13,086 | 6,540 | 56,303 |
| 2023 | 19,734 | 12,965 | 6,581 | 56,420 |
| 2024 | 19,946 | 12,856 | 6,697 | 56,806 |
| 2025 | 20,098 | 12,743 | 6,814 | 57,254 |
| 2026 | 20,092 | 12,627 | 6,814 | 57,255 |
| 2027 | 20,266 | 12,755 | 6,930 | 57,684 |
| 2028 | 20,331 | 12,518 | 6,971 | 57,935 |
| 2029 | 20,294 | 12,637 | 7,086 | 58,222 |
| 2030 | 20,540 | 12,519 | 7,086 | 58,455 |
| 2031 | 20,651 | 12,404 | 7,212 | 58,696 |
| 2032 | 20,567 | 12,522 | 7,253 | 58,741 |
| 2033 | 20,598 | 12,531 | 7,295 | 59,144 |
| 2034 | 20,545 | 12,410 | 7,369 | 59,243 |
| 2035 | 20,655 | 12,534 | 7,410 | 59,332 |
| 2036 | 20,716 | 12,413 | 7,452 | 59,712 |
| 2037 | 20,617 | 12,292 | 7,526 | 59,616 |
| 2038 | 20,748 | 12,416 | 7,567 | 60,045 |
| 2039 | 20,811 | 12,295 | 7,682 | 60,351 |
| 2040 | 20,911 | 12,427 | 7,724 | 60,681 |

*Source: Avison Young, based on Experian employment forecast, adjusted to BRES 2018 baseline position*

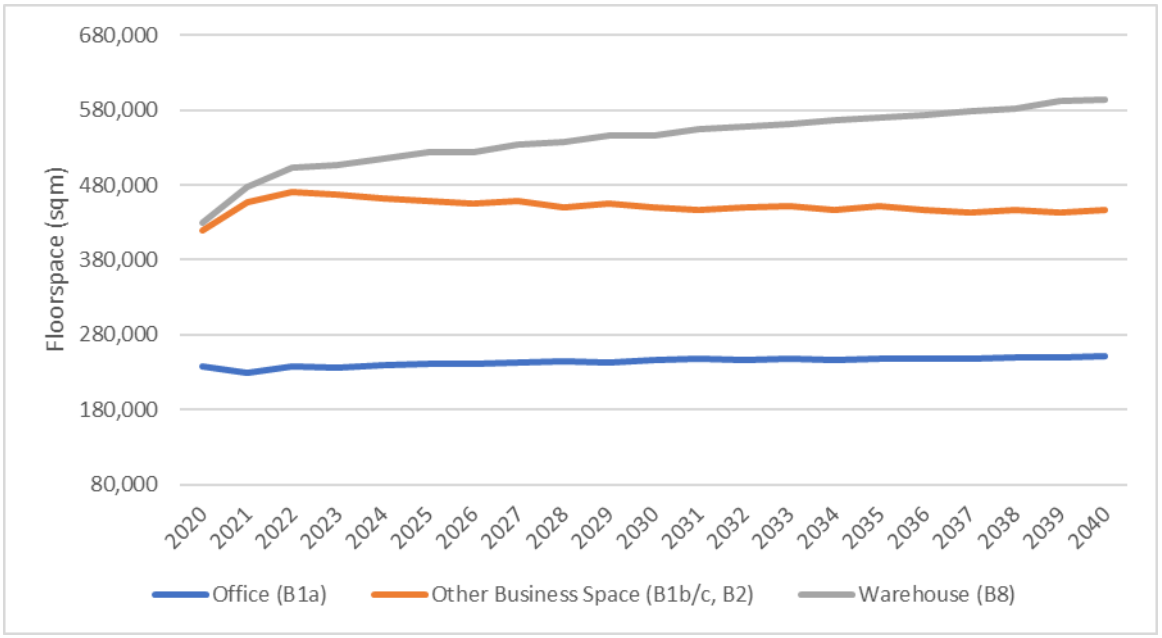
2.20 Within 'B class' activities the base forecast shows a significant increase in warehouse-based employment activities (+38%), an increase in employment in light industrial and manufacturing space (+7%) as well as an increase in office-based employment (+5%). As discussed previously these results are predicated on a combination of historic performance and national sector trends, alternative growth scenarios that draw on local characteristics are considered later in this section.

2.21 Using employment density assumptions, we can translate these job creation forecasts into additional floorspace requirements. As a base model we use the following employment densities, these are based on our understanding of the nature of economic activity within (and likely to be attracted) to the area, the subsequent occupier requirements within these activities, and the guidance provided by the HCA Density Guide Third Edition, 2015:

- B1a/b – 12 square metres per employee (NIA);
- B1c/B2 – 36 square metres per employee (GIA);
- B8 – 77 square metres per employee (GEA).

2.22 The floorspace requirements from the Base Forecast are shown below.

**Figure 3 – Base Forecast Floorspace Requirements**




*Source: Avison Young, 2020*

2.23 Figure 3 shows that there will be a requirement for additional floorspace across all B Use Classes over the next 20 years. However, whilst the demand for office (B1a) and industrial space (B1b/c, B2)increase slightly over the 2020-2040 period, the demand for warehouse floorspace (B8) increases rapidly and steadily over the assessment period.

2.24 It can be noted that the demand for B1b/c, B2 space for 2020-2040 decreases from the demand for 2020-2028. This is explained by a minor loss of employment in related industries between the 2028-2040 period. As seen in Table 1, employment relative to B1b/c, B2 space decreases from 12,518 in 2028 down to 12,427 in 2040.

2.25 The base forecast estimates overall additional demand for B Use Classes floorspace to 2028 and 2040 of at least:

**Table 2 – Base Forecast Floorspace Requirements to 2028 and 2040 (sqm)**

| | 2020-2028 | 2020-2040 |
|---|---|---|
| Office (B1a) | 6,019 | 12,973 |
| Other Business Space (B1b/c, B2) | 32,057 | 28,780 |
| Warehouse (B8) | 106,786 | 164,781 |
| Total B Use Classes | **144,862** | **206,533** |

*Source: Avison Young, 2020*

2.26 Floorspace requirements have finally been converted into land requirement based on the following plot ratios:

- B1a/b – plot ratio of 1;
- B1c/B2 – plot ratio of 0.4;
- B8 – plot ratio of 0.4.

2.27 The base forecast estimates overall additional demand for B Use Classes land to 2020 and 2040 of at least:

**Table 3 – Base Forecast Land Requirements to 2028 and 2040 (Ha)**

| | 2020-2028 | 2020-2040 |
|---|---|---|
| Office (B1a) | 0.6 | 1.3 |
| Other Business Space (B1b/c, B2) | 8.0 | 7.2 |
| Warehouse (B8) | 26.7 | 41.2 |
| Total B Use Classes | **35.3** | **49.7** |

*Source: Avison Young, 2020*

2.28 This provides the starting point for understanding how different policy, strategy or market influences could alter the balance and quantum of floorspace requirements for and between different B and non-B Use Classes. We consider the potentially relevant scenarios to test these influences in the next sections.

### *Contingency Allowance and Market 'Churn'*

2.29 In order for future employment forecasts to be based on more than economic growth 'predictions' and to better reflect the fluid nature of land allocations, the forecasting model makes two 'additional' allowances.

2.30 Firstly, a contingency allowance is made 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.

2.31 A significant part of the projected employment growth also arises from sectors which have traditionally not been located on B Class employment land such as healthcare, education, hotels and leisure.

2.32 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.

2.33 Further, with Permitted Development Rights making the conversion of office premises to residential use more straightforward, there is the potential for unexpected loss of employment floorspace.

2.34 To estimate the amount of land that may be used for non-B class activities, historic losses of employment land to other uses such as housing and leisure as reported in the Council's Authority Monitoring Report have been used[1].

**Table 4 – Allowance for Windfall Losses**

| | B-Use floorspace loss |
|---|---|
| 2014 | 1,858 |
| 2015 | 0 |
| 2016 | 0 |
| 2017 | 25,513 |
| 2018 | 0 |
| Average Annual Loss | **5,474** |

*Source: Medway Council Authority Monitoring Reports*

2.35 As there is no breakdown in the AMRs of the loss by specific B-Use Class (i.e. B1a vs B1b/c, B2 vs B8), we have applied the same repartition as in the 2015 ELNA (14% B1a, 37% B1b/c, B2, 49% B8).

2.36 As shown in table 4, there have been some significant losses of employment space to other uses ("Windfall Losses"). Much of the lost capacity has been as a result of the long-term planning and redevelopment approach to major brownfield sites.

2.37 As such, much of the lost capacity is likely to have been at the end of its usable life and not presented an offer to the market that would have been in demand. However, as is considered shortly, the regeneration process has also secured the delivery of new floorspace both in new locations and within existing sites.

2.38 Given the nature of these 'one off' losses within the area and their minimal impact on actual employment capacity it would be inappropriate to plan for the replacement of this stock on a like for like basis. Therefore, to allow for these one-off shocks to the supply we have based our allowance for windfall losses on half of the average annual loss replicated over the assessment period (2020-2040).

2.39 Projecting this adjusted average rate forward over the forecasting period (to 2040), we have identified an allowance for windfall of circa 54,750 sqm of floorspace.

2.40 This approach has its limitations principally because the information also only presents a quantitative assessment and does not allow for the analysis of the quality of premises and the level of occupancy prior to loss. This is a key consideration given the nature of Medway, with significant amounts of land previously in employment use being 'cleared' in preparation for major mixed-use development.

2.41 However, based on our understanding, it is likely that the majority of 'lost' floorspace was demolished prior to the period considered in our analysis (similarly to the assumption made in the previous ELNA). As such, whilst it should be treated with some caution, this approach provides the most robust assessment of what space may be required in the future to replace lost capacity.

[1] Authority Monitoring Report - Volume 1 2019
Authority Monitoring Report - Volume 1 2020

2.42 As well as making an allowance for unexpected losses of employment land, allowance is made for the fact that the needs of businesses (such as location or property specification) changes over time, requiring them to move. In other instances, 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 levels of available vacant land. This type of demand has been called 'churn' demand or 'frictional vacancy'.

2.43 An allowance for 'churn' is calculated from the average net take-up in employment floorspace within Medway as recorded by CoStar. This is shown in Table 5.

**Table 5 – Allowance for Churn**

| | Office (B1a) | Other Business Space (B1b/c, B2) | Warehouse (B8) |
|---|---|---|---|
| **2010** | 5,543 | 2,640 | 15,202 |
| **2011** | (20,325) | (4,613) | (12,402) |
| **2012** | (3,221) | (4,077) | (4,389) |
| **2013** | 12,409 | 14,124 | 9,444 |
| **2014** | 25,940 | 162 | 18,346 |
| **2015** | (16,271) | 2,830 | (5,852) |
| **2016** | 46,255 | 402 | 43,790 |
| **2017** | 6,122 | 1,006 | 6,286 |
| **2018** | 2,408 | 540 | (1,731) |
| **2019** | 5,836 | 3,907 | 8,869 |
| **Annual Average** | **6,470** | **1,692** | **7,756** |
| **Allowance for Churn** | **12,939** | **3,384** | **15,513** |

*Source: Avison Young, based on CoStar October 2020*

2.44 It typically takes two years to achieve a planning consent, site preparation and construction after a site has changed hands. For these reasons the annual net take-up of employment floorspace is multiplied by two to estimate the churn demand, reflected as 'allowance for churn'. This is, in effect, an allowance for the necessary frictional vacancy to allow the market and relocation chains to operate, taking into account commercial property market realities.

### *Forecasting Outputs*

2.45 Accounting for allowances for Windfall and Churn within the Base Forecast provides the following requirements:

**Table 6 – Baseline Forecast Requirements**

| Change 2020-2040 (B Class Only) | Base |
|---|---|
| **Employment** | **4,021** |
| Office (B1a) | 1,081 |
| Other Business Space (B1b/c, B2) | 799 |
| Warehouse (B8) | 2,140 |
| **Floorspace (sqm)** | **293,112** |
| Office (B1a) | 70,804 |
| Other Business Space (B1b/c, B2) | 37,376 |
| Warehouse (B8) | 184,932 |
| **Land (Ha)** | **62.7** |
| Office (B1a) | 7.1 |
| Other Business Space (B1b/c, B2) | 9.3 |
| Warehouse (B8) | 46.2 |

*Source: Avison Young, 2020*

2.46 The base forecast, after accounting for Windfall and Churn, identifies a requirement for a total of 293,112 sqm of employment floorspace, which translates into a requirement of 62.7 ha of additional employment land by 2040. This is a small increase from the previous ELNA (to 2037) which estimated the land requirement to 57 ha.

2.47 The breakdown of the base forecast shows that the majority of this requirement is for Warehouse space (B8) which will take 63% of the total floorspace requirement and 74% of the total land requirement. Office space (B1a) will take 24% of the floorspace and 11% of the land, whilst industrial space (B1b/c, B2) will take the remaining 13% of floorspace and 15% of land.

## Testing Alternative Demand Scenarios

2.48 Having reviewed the policy, market and strategy base for Medway alongside analysis of the existing employment floorspace and business stock we have identified the following scenarios as reflecting a suitable range of alternatives for considering the future shape of employment growth and the consequent employment floorspace and land requirements.

2.49 The scenarios focus on understanding the implications for local workforce jobs growth and then translate this into employment floorspace/land requirements (as per the base forecast above). Each forecast holds the same assumptions of employment density by particular Use Class.

### *Scenario 1: Manufacturing Growth*

2.50 The Baseline Assessment of Medway's economy highlights manufacturing as the key ongoing strength. Whilst the large scale, traditional manufacturing and production activity once synonymous with Medway has declined (often linked to its maritime heritage) a number of key technology-based engineering and manufacturing businesses remain in or have been attracted to the area.

2.51 Some traditional engineering activities can still be found within parts of Medway, but these have been joined by a range of advanced manufacturing and high technology product/systems development businesses with a strong association with the application of digital and computing technology. As a

'snapshot' of the sector locally, large employers such as BAE Systems and Veetee as well as small and growing businesses such as Wozair and Geku provide a basis for future growth in a range of manufacturing sectors. These are representative of a much larger base of advanced manufacturing businesses and activity within Medway.

2.52 Looking forward, a base of appropriately skilled workers, the good connections to key markets, the potential availability of land and the ability to service the Central London market alongside a refocusing of the South East/national economy towards higher value manufacturing, will all support the ongoing health and expansion of the sector locally.

2.53 Whilst the production of consumer goods has been in serious decline within the UK performance of value-added manufacturing has strengthened, particularly in the production of specialised components and materials. The national prospects for the growth of the sector, particularly for 'advanced' manufacturing, is particularly important, given other places are seeking to reduce their land capacity and focus on other markets.

2.54 More locally the growth and development Rochester Airfield as a new economic hub within the area provides a strategic driver for increased advanced manufacturing activity. The masterplan and strategy for the Airfield seeks to build from the existing cluster of advanced manufacturing activities within the area, BAE Systems and the success of Innovation Centre Medway (ICM) to grow the sector and provide capacity for new and larger businesses to come to the area. Its designation as part of the North Kent Innovation Zone will provide a range of benefits and incentives to attract new occupiers.

2.55 Manufacturing businesses already have a higher representation within the Medway business base than the wider South East average. The provision of focussed, well connected sites such as Rochester Airfield will serve to increase the presence and potential of the sector in the future.

### *Forecasting Approach*

2.56 The legacy of industrial and manufacturing activity within Medway provides the basis for future growth over and above the 'long term' trend for the area. To understand the potential scale of the opportunity and its implications on land needs we have looked into the national prospects for sector growth.

2.57 Research produced by RBS defines a broad range of activities that are captured within the "Advanced Manufacturing" sector including pharmaceuticals, metal products, rubber and plastics (including composites) and machinery and equipment, alongside automotive and ICT activities.

2.58 RBS recognised the strength of the UK sector, being the ninth largest manufacturing nation (by output) in the world and predicted that the sector will be at the forefront of economic growth over a five period from 2012. They forecast growth rates of between 1% and 3% per annum, up to double the rate they predicted for general economic growth.

2.59 Clearly not all of these sectors are relevant to the North Kent economy, however key components of the RBS definition relate to the existing and future make up of Medway's manufacturing sector. The following 5 digits SIC Code Industries have been assumed to benefit from an annual boost in growth:

- 24450: Other non-ferrous metal production
- 28302: Manufacture of agricultural and forestry machinery (other than agricultural tractors)
- 28930: Manufacture of machinery for food, beverage and tobacco processing
- 28990: Manufacture of other special-purpose machinery
- 32990: Other manufacturing
- 33130: Repair of electronic and optical equipment
- 33200: Installation of industrial machinery and equipment
- 45200: Maintenance and repair of motor vehicles
- 84130: Regulation of and contribution to more efficient operation of businesses

2.60 Historic growth within the sector suggests there is considerable potential for future growth and diversification. To test the implications of Medway growing in line with national forecasts we have applied the lower end of the RBS forecast range to the existing baseline forecast, creating an additional 1.1% growth per annum within the identified sectors from 2020 onwards.

*Forecasting Outputs*

2.61 Applying this approach to the baseline forecast increases the forecasted need for industrial space (B1b/c and B2) and land over the period to 2040, as shown in Table 7.

**Table 7 – Scenario 1 Forecast Requirements**

| Change 2020-2040 (B Class Only) | Base | Advanced Manufacturing |
|---|---|---|
| **Employment** | **4,021** | **4,131** |
| Office (B1a) | 1,081 | 1,129 |
| Other Business Space (B1b/c, B2) | 799 | 862 |
| Warehouse (B8) | 2,140 | 2,140 |
| **Floorspace (sqm)** | **293,112** | **295,941** |
| Office (B1a) | 70,804 | 71,385 |
| Other Business Space (B1b/c, B2) | 37,376 | 39,624 |
| Warehouse (B8) | 184,932 | 184,932 |
| **Land (Ha)** | **62.7** | **63.3** |
| Office (B1a) | 7.1 | 7.1 |
| Other Business Space (B1b/c, B2) | 9.3 | 9.9 |
| Warehouse (B8) | 46.2 | 46.2 |

*Source: Avison Young, 2020*

2.62 Under this scenario, an additional 2,300 sqm of industrial space would be delivered compared to the base forecast, translating into a requirement of an additional 0.6 ha of (industrial – B1b/c, B2) land.

*Scenario 2: Expansion of Logistics and Distribution*

2.63 The strategic logistics and distribution sectors have seen unprecedented growth over the past decades. Future prospects indicate this growth will continue, the sector has proved resilient during the 2008 financial

crisis and essential during the 2020 Coronavirus crisis and output growth is forecast to outpace the wider economy over the next two decades.

2.64 This shift from manufacturing to consumer-based demand has seen an increased focus on moving imported goods across the country or direct delivery to customers' doors, rather than more local component movements. As such, locations with good accessibility to ports, airports and freight hubs have become a key focus for operators and developers.

2.65 Medway lies within an area of significant interest for logistics operators, largely linked to the major food store retailers who seek to benefit from the area's access to the considerable concentration of population within the area and South East London. The nature of the local economy also drives demand for logistics activity, with the manufacturing sector requiring distribution support and the use of wharves and ports to import goods also attracting operators to the area.

2.66 Traditionally, activity within the sector has been accommodated on either side of the Thames Crossing within Thurrock and Dartford, and to the east within Swale where direct port accessibility and a large supply of land have attracted occupiers. Medway has experienced much lower levels of growth within the distribution sector. In part, this is likely to be a result of a lower availability of suitably located and sized sites but also demand for land and space from higher value activities.

2.67 However, there has been an expansion of the sector, with operators attracted to areas such as Medway City Estate (to link directly to other businesses), Lordswood and Laker Road/Medway Road. Recent development activity at the London Medway Commercial Park on the Hoo Peninsula is bringing forward a major new distribution facility with capacity for further units to be delivered, underlining the strategic potential of the area

2.68 The delivery of a new Thames Crossing within North Kent could provide a significant new driver to the market, providing enhanced links across the Thames into Essex and, importantly, a new connection to the London Gateway cargo port. Combined with potential enhancements to the A2/M2 and removal of the toll booths at the existing Dartford Crossing the improved accessibility will potentially support a new wave of demand. Similarly, the provision of new development land and the recent major investment in improving access to the Isle of Grain will create new opportunities for development with direct access to the M2.

2.69 The Lower Thames Crossing project is expected to deliver 22,000 construction jobs during the 6-year construction period and 5,000 permanent jobs nationally[2]. The analysis does not provide any details on locational and industry repartition of the permanent jobs, but it is reasonable to assume that Medway will attract a small proportion of those new jobs, particularly in the manufacturing and logistics sectors.

### *Forecasting Approach*

2.70 To understand the potential implications of growth within the sector, we have tested an alternative growth rate, based on the average for the more established market areas of Thurrock, Dartford and Swale within the Experian model. This projects an average annual growth rate of 1.25% within the wholesale and land transport, storage and post sectors.

[2] Lower Thames Crossing, Summary Business Case, Route Consultation 2016

2.71 This annual growth has therefore been applied to the following 2 digits SIC Code Industries:

- 45: Wholesale and retail trade and repair of motor vehicles and motorcycles
- 46: Wholesale trade, except of motor vehicles and motorcycles
- 49: Land transport and transport via pipelines

- 53: Postal and courier activities

2.72 The rate of 1.25% growth (or the Experian forecasted rate, whichever is the greatest) was applied for the first 5 years before returning to the Experian forecasted growth rate.

### *Forecasting Outputs*

2.73 Applying this approach to the baseline forecast substantially increases the forecast need for warehouse space (B8) and land over the period to 2040, as shown in Table 8.

**Table 8 – Scenario 2 Forecast Requirements**

| Change 2020-2040 (B Class Only) | Base | Transport & Logistics |
|---|---|---|
| **Employment** | **4,021** | **4,425** |
| Office (B1a) | 1,081 | 1,081 |
| Other Business Space (B1b/c, B2) | 799 | 799 |
| Warehouse (B8) | 2,140 | 2,544 |
| **Floorspace (sqm)** | **293,112** | **324,231** |
| Office (B1a) | 70,804 | 70,804 |
| Other Business Space (B1b/c, B2) | 37,376 | 37,376 |
| Warehouse (B8) | 184,932 | 216,051 |
| **Land (Ha)** | **62.7** | **70.4** |
| Office (B1a) | 7.1 | 7.1 |
| Other Business Space (B1b/c, B2) | 9.3 | 9.3 |
| Warehouse (B8) | 46.2 | 54.0 |

*Source: Avison Young, 2020*

2.74 An enhanced level of growth within the transport and logistics sectors could see the need for 324,000 sqm of employment floorspace by 2040, circa 31,000 sqm more than in the base forecast. This translates into minimal requirement for 70.4 ha of land by 2040, 7.7 ha above the base forecast.

2.75 The additional floorspace and land requirement is exclusively for B8 use space.

### *Scenario 3: Demographic Led Needs*

2.76 The regeneration agenda for Medway has sought to balance the delivery of jobs and homes, ensuring that as a minimum it retains a similar level of activity as today, retaining its critical mass of employment activity and therefore does not become solely a 'dormitory' location to London.

2.77 To understand the implications of providing sufficient employment to align with housing growth, Scenario 3 considers the potential local employment requirements arising from an initial assessment of future population growth driven by demographic factors.

### *Forecasting Approach*

2.78 Population growth published by the ONS were translated into a Medway level of employment forecast using the following steps:

- Establish the forecast annual increase in population (ONS);

- Calculate the proportion of this population that will be of 'working age' (based on breakdown by single age of ONS data);
- Calculate the number of working age that will be in employment based on the latest estimate for Medway (781.4%, ONS 2019);
- Calculate those that will work locally - i.e. the 'self-containment' rate for Medway (51%, source: Census 2011).

2.79 Having established the level of local employment growth we have then distributed this between the 38 Experian sectors based on the projected share of employment within each sector for each year of the forecast. These are applied to the 2020 total employment level as an annual level of growth.

2.80 ONS forecast a small growth of the working age population in Medway between 2020 and 2040, from 178,803 to 180,121. This results into an increase of the labour pool by 2040.

*Forecasting Outputs*

2.81 Applying this approach to the baseline forecast decreases the forecast need for all types of space and land over the period to 2040 compared to the base forecast, as shown in Table 9.

**Table 9 – Scenario 3 Forecast Requirements**

| Change 2020-2040 (B Class Only) | Base | Workforce |
|---|---|---|
| **Employment** | **4,021** | **216** |
| Office (B1a) | 1,081 | 110 |
| Other Business Space (B1b/c, B2) | 799 | 65 |
| Warehouse (B8) | 2,140 | 41 |
| **Floorspace (sqm)** | **293,112** | **93,388** |
| Office (B1a) | 70,804 | 59,152 |
| Other Business Space (B1b/c, B2) | 37,376 | 10,952 |
| Warehouse (B8) | 184,932 | 23,284 |
| **Land (Ha)** | **62.7** | **14.5** |
| Office (B1a) | 7.1 | 5.9 |
| Other Business Space (B1b/c, B2) | 9.3 | 2.7 |
| Warehouse (B8) | 46.2 | 5.8 |

*Source: Avison Young, 2020*

2.82 The small increase in workforce is well below the forecasted increase in employment in Medway, and therefore the requirement for floorspace and land under this scenario is a fraction of the requirement under the base forecast.

2.83 Under this scenario, there is a demand for office space (60,000 sqm, 5.9 ha), warehouse space (23,000 sqm, 5.8h) and a smaller demand for industrial space (11,000 sqm, 2,7ha).

*Scenario 4: Supply Chain Impact of London Resort*

2.84 The delivery of London Resort at Swanscombe Peninsula would have a major impact on the local economy. Not only will it provide a significant number of direct jobs within the resort itself but also support

the creation of a number of indirect (supply chain opportunities) and induced jobs (expenditure impact of additional workers).

### *Forecasting Approach*

2.85 Drawing on information published on the London Resort website (https://londonresort.info/) we developed an assessment of the potential impact these supply chain opportunities and expenditure impact could have on the need for employment land within Medway.

2.86 The London Resort website identifies that a total of 17,300 jobs will be created on-site by 2038, of which 6,500 will be full-time (6,500 FTEs); 3,700 will be part-time (1,850 FTEs) and 7,100 will be seasonal (3,550 FTEs). Overall, this represents a total of 11,900 FTEs.

2.87 The website also identifies that 8,700 jobs will be created from the year of opening in 2025. Applying the same allocation between full-time, part-time and seasonal jobs, a total of 5,984 FTEs should be created in 2025. We have assumed that the number of jobs at London Resort will increase gradually from 2025 to reach the figure of 17,300 figure jobs by 2038.

2.88 The website also mentions that 55% to 60% of employment from local people of Dartford, Gravesham and Thurrock. We have therefore assumed that the rest of the employment (40%) will be for residents of surrounding areas: Medway, Sevenoaks, Tonbridge, Brentwood, Basildon, Castle Point. We have therefore assumed that Medway will benefit from 6.7% of the jobs (40% divided by 6).

2.89 This means that by 2025, 399 residents of Medway could be directly employed at London Resort. This figure will increase annually to reach 793 by 2038.

2.90 Applying the Type 2 employment multiplier for SIC Code 93 (recreation) of 1.3814 (meaning that for every direct jobs, 0.3814 jobs indirect and induced jobs will be created), we have assessed that London Resort will create 152 indirect and induced jobs by 2025, increasing to 303 by 2038 in Medway alone.

2.91 There is no indication of the types of activities or sectors within which indirect and induced jobs will be generated. We have added those jobs proportionally through all the industries in the baseline forecast for Medway.

### *Forecasting Outputs*

2.92 Applying this approach to the baseline forecast slightly increases the forecast need for all types of space and land over the period to 2040, as shown in Table 10.

**Table 10 – Scenario 4 Forecast Requirements**

| Change 2020-2040 (B Class Only) | Base | London Resort |
|---|---|---|
| **Employment** | **4,021** | **4,143** |
| Office (B1a) | 1,081 | 1,143 |
| Other Business Space (B1b/c, B2) | 799 | 836 |
| Warehouse (B8) | 2,140 | 2,163 |
| **Floorspace (sqm)** | **293,112** | **296,957** |
| Office (B1a) | 70,804 | 71,550 |
| Other Business Space (B1b/c, B2) | 37,376 | 38,706 |
| Warehouse (B8) | 184,932 | 186,701 |
| **Land (Ha)** | **62.7** | **63.5** |
| Office (B1a) | 7.1 | 7.2 |
| Other Business Space (B1b/c, B2) | 9.3 | 9.7 |
| Warehouse (B8) | 46.2 | 46.7 |

*Source: Avison Young, 2020*

2.93 Under this scenario, floorspace requirement will increase under all Use Classes, to reach a total requirement of circa 297,000 sqm by 2040, an increase of almost than 4,000 sqm from the base forecast. This translates into a land requirement of 63.5 ha by 2040, an increase of 0.8 ha from the baseline forecast.

### *Scenario 5: Impact of Covid-19*

2.94 This scenario aims to assess the impact Covid-19 will have on the local economy of Medway. Whilst no specific studies have been published at the local level, and the impact of Covid-19 on employment remains uncertain, the pandemic is likely to have a negative impact on employment levels in the short and medium term.

2.95 The impact of Covid-19 has also contributed to an increase of employees working from home and could accelerate the flexibility in terms of working arrangement, with a higher proportion of employees working partially or permanently from home. This in turn could lead to a reduced demand for specific types of space, such as B1a (office space), which have successfully adapted to remote working requirements. This trend is less likely to impact production-based activities and related types of space due to the necessity of on-site staff.

2.96 However, there is not currently sufficient evidence to measure the long-term impact of Covid-19 on space requirement.

### *Forecasting Approach*

2.97 Drawing upon studies released by PwC and based on OBR and the Bank of England statistics (https://www.pwc.co.uk/premium/covid-19/uk-economic-update-covid-19.pdf), we have assessed the proportion of employment at risk for each of the 38 Experian Sectors.

2.98 This is based on the proportion of workforce by Experian Sector on furlough as of June 2020 and the % furloughed workforce at risk of redundancy by Experian Sector. The proportion of workforce at risk of redundancy is presented in Table 10.

2.99 The same study also indicates that Covid-19 will have a negative impact on the economy and that the UK GDP could drop by 1% to 6% by 2021 below its pre-pandemic predicted level. We have therefore modelled

two Covd-19 scenarios:

- Pessimistic: GDP drops by 6% and most jobs at risk would be lost (as per Table 11)
- Optimistic: GDP drops by 1% and only 1 in 6 jobs at risk would be lost

2.100 We have assumed that job losses would happen by the end of 2021 (as per PwC study) and that employment growth will then follow the base forecast growth going forward.

**Table 11 – Proportion of Workforce at Risk of Redundancy**

| | Workforce at risk |
|---|---|
| Accommodation & Food Services | 24.4% |
| Administrative & Supportive Services | 1.4% |
| Agriculture, Forestry & Fishing | 1.1% |
| Air & Water Transport | 10.4% |
| Chemicals (manufacture of) | 4.1% |
| Civil Engineering | 6.5% |
| Computer & Electronic Products (manufacture of) | 4.1% |
| Computing & Information Services | 3.0% |
| Construction of Buildings | 6.5% |
| Education | 2.5% |
| Extraction & Mining | 3.6% |
| Finance | 1.2% |
| Food, Drink & Tobacco (manufacture of) | 4.1% |
| Fuel Refining | 0.6% |
| Health | 0.0% |
| Insurance & Pensions | 1.2% |
| Land Transport, Storage & Post | 10.4% |
| Machinery & Equipment (manufacture of) | 4.1% |
| Media Activities | 3.0% |
| Metal Products (manufacture of) | 4.0% |
| Non-Metallic Products (manufacture of) | 4.1% |
| Other Manufacturing | 4.1% |
| Other Private Services | 13.9% |
| Pharmaceuticals (manufacture of) | 4.1% |
| Printing and Recorded Media (manufacture of) | 4.1% |
| Professional Services | 2.4% |
| Public Administration & Defence | 1.4% |
| Real Estate | 1.7% |
| Recreation | 19.1% |
| Residential Care & Social Work | 13.9% |
| Retail | 2.9% |
| Specialised Construction Activities | 6.5% |
| Telecoms | 3.0% |
| Textiles & Clothing (manufacture of) | 4.1% |
| Transport Equipment (manufacture of) | 4.1% |
| Utilities | 0.6% |
| Wholesale | 2.9% |
| Wood & Paper (manufacture of) | 4.1% |

*Source: Avison Young, based on PwC UK Economic Update Covid-19*

2.101 The number of jobs lost in Medway could range from circa 320 to circa 1,930 by 2040.

*Forecasting Outputs*

2.102 Applying this approach to the baseline forecast decreases the forecast need for all types of space and land over the period to 2040, as shown in Table 12.

**Table 12 – Scenario 5 Forecast Requirements**

| Change 2020-2040 (B Class Only) | Base | Covid-19 Low Impact | Covid-19 High Impact |
|---|---|---|---|
| **Employment** | **4,021** | **3,698** | **2,088** |
| Office (B1a) | 1,081 | 938 | 225 |
| Other Business Space (B1b/c, B2) | 799 | 695 | 171 |
| Warehouse (B8) | 2,140 | 2,065 | 1,692 |
| **Floorspace (sqm)** | **293,112** | **281,883** | **225,739** |
| Office (B1a) | 70,804 | 69,092 | 60,532 |
| Other Business Space (B1b/c, B2) | 37,376 | 33,602 | 14,736 |
| Warehouse (B8) | 184,932 | 179,189 | 150,471 |
| **Land (Ha)** | **62.7** | **60.1** | **47.4** |
| Office (B1a) | 7.1 | 6.9 | 6.1 |
| Other Business Space (B1b/c, B2) | 9.3 | 8.4 | 3.7 |
| Warehouse (B8) | 46.2 | 44.8 | 37.6 |

*Source: Avison Young, 2020*

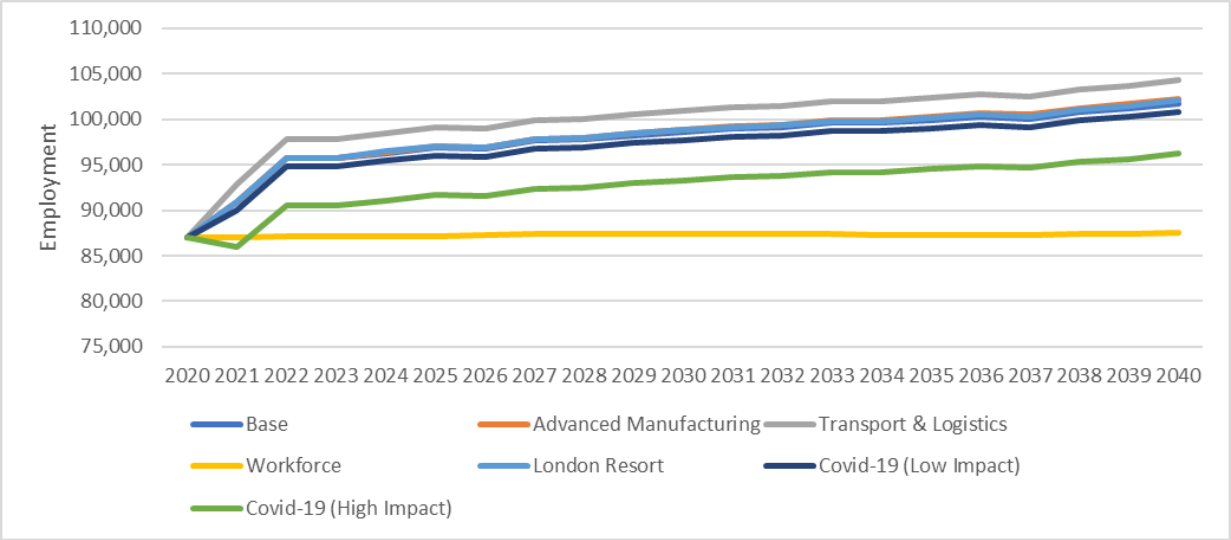
2.103 Under the Covid-19 scenario, floorspace requirement by 2040 could be between 225,700 sqm and 285,900 sqm, translated into a need for 47.4.1 ha to 60.17 ha of employment land. This is below the base line forecast of 293,000 sqm of B-class employment floorspace and 62.7 ha of land.

# 3. Comparison of Growth and Space Requirements

3.1 The employment projections presented under each scenario above consider the employment prospects within B class sectors only. However, the Medway economy contains a much wider range of employment activity and it is worthwhile understanding the relationship between B and non-B class activity within each scenario.

3.2 The total employment growth projection for each of the scenarios is shown in the following chart:

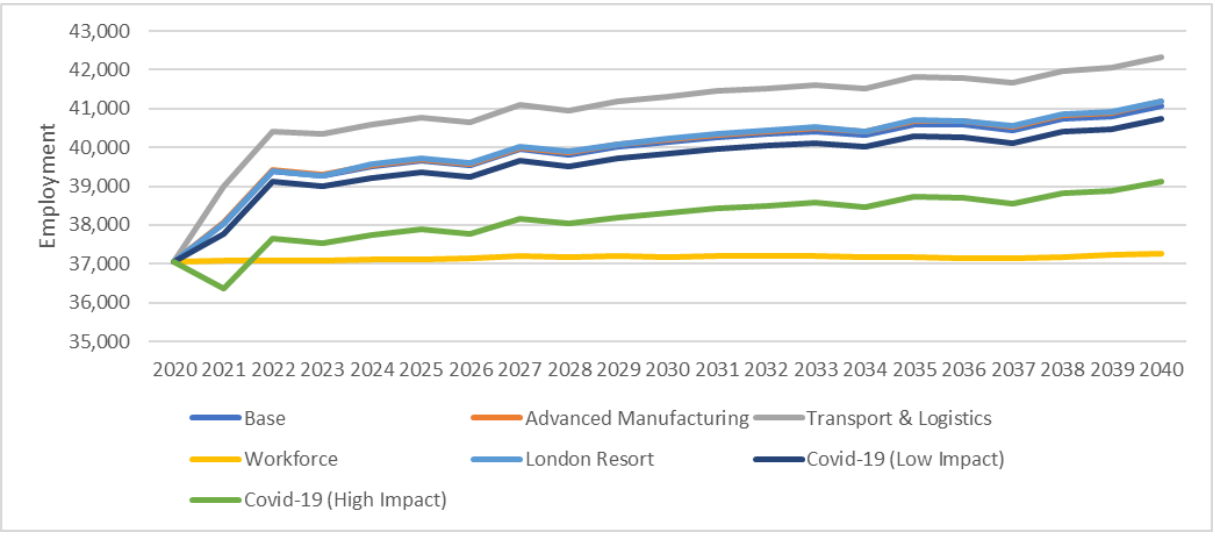
**Figure 4 – Total FTE Employment Forecast**




*Source: Avison Young, 2020*

3.3 B-Class employment only is presented in the following chart:

**Figure 5 – B-Use Class FTE Employment Forecast**




*Source: Avison Young, 2020*

3.4 As shown in the graphs above, the majority of scenarios produce a relatively similar scale and trajectory of growth, with the exception of the Workforce scenario (scenario 3).

3.5 Excluding scenario 3, additional employment (all types of employment, including non-B Class) ranges between 13,800 FTEs and 15,500 FTEs by 2040. However, the number of additional B-Use Class only FTEs ranges only between 3,700 FTEs and 4,400 FTEs.

3.6 Looking in more detail we can see the share of employment growth by Use Class (B-Use Class only) in Table 13.

**Table 13 – Summary of Employment Growth Forecasts, change 2020-2040**

| Change 2020-2040 (B Class Only) | Office (B1a) | Other Business Space (B1b/c, B2) | Warehouse (B8) | TOTAL |
|---|---|---|---|---|
| Base | 1,081 | 799 | 2,140 | **4,021** |
| Advanced Manufacturing | 1,129 | 862 | 2,140 | **4,131** |
| Transport & Logistics | 1,081 | 799 | 2,544 | **4,425** |
| Workforce | 110 | 65 | 41 | **216** |
| London Resort | 1,143 | 836 | 2,163 | **4,143** |
| Covid-19 (Low Impact) | 938 | 695 | 2,065 | **3,698** |
| Covid-19 (High Impact) | 225 | 171 | 1,692 | **2,088** |

*Source: Avison Young, 2020*

**Table 14 – Summary of Floorspace requirement to 2040 (including Windfall and Churn), sqm**

| Change 2020-2040 (B Class Only) | Office (B1a) | Other Business Space (B1b/c, B2) | Warehouse (B8) | TOTAL |
|---|---|---|---|---|
| Base | 70,804 | 37,376 | 184,932 | **293,112** |
| Advanced Manufacturing | 71,385 | 39,624 | 184,932 | **295,941** |
| Transport & Logistics | 70,804 | 37,376 | 216,051 | **324,231** |
| Workforce | 59,152 | 10,952 | 23,284 | **93,388** |
| London Resort | 71,550 | 38,706 | 186,701 | **296,957** |
| Covid-19 (Low Impact) | 69,092 | 33,602 | 179,189 | **281,883** |
| Covid-19 (High Impact) | 60,532 | 14,736 | 150,471 | **225,739** |

*Source: Avison Young, 2020*

**Table 15 – Summary of Land requirement to 2040 (including Windfall and Churn), Ha**

| Change 2020-2040 (B Class Only) | Office (B1a) | Other Business Space (B1b/c, B2) | Warehouse (B8) | TOTAL |
|---|---|---|---|---|
| Base | 7.1 | 9.3 | 46.2 | **62.7** |
| Advanced Manufacturing | 7.1 | 9.9 | 46.2 | **63.3** |
| Transport & Logistics | 7.1 | 9.3 | 54.0 | **70.4** |
| Workforce | 5.9 | 2.7 | 5.8 | **14.5** |
| London Resort | 7.2 | 9.7 | 46.7 | **63.5** |
| Covid-19 (Low Impact) | 6.9 | 8.4 | 44.8 | **60.1** |
| Covid-19 (High Impact) | 6.1 | 3.7 | 37.6 | **47.4** |

*Source: Avison Young, 2020*

# 4. Synthesis Forecasts

4.1 Each scenario above has explored in turn the impact and effect of one particular change in the economic performance of the Medway economy. To arrive at a robust and locally relevant assessment of B class employment floorspace need, it is important to draw together the findings of the most locally relevant scenario tests, creating a 'synthesis forecast'.

4.2 However, given the forecasts projected from the demographic led scenario (scenario 3), we find sensible to exclude this scenario from the synthesis forecast. Experian forecast factors in demographic trends and therefore we believe that the analysis would not suffer from this exclusion.

4.3 Due to the uncertainty around the impact of Covid-19 on employment, we have modelled two synthesis forecasts, providing a range covering the low and high impact of Covid-19.

## Synthesis Forecast 1: Low Covid-19 Impact

4.4 This synthesis forecast includes:

- The base forecast;
- The additional impact from the sectoral growth ("advanced manufacturing" scenario and "transport and Logistics");
- The impact of London Resort on the Supply Chain (indirect and induced jobs);
- An "optimistic" impact of Covid-19

**Table 16 – Synthesis Forecast 1 (including Windfall and Churn)**

| Change from 2020 to … (B Class Only) | Synthesis Forecast 1 (to 2040) | Synthesis Forecast 1 (to 2037) |
|---|---|---|
| **Employment** | **4,336** | **3,667** |
| Office (B1a) | 1,049 | 751 |
| Other Business Space (B1b/c, B2) | 794 | 649 |
| Warehouse (B8) | 2,493 | 2,267 |
| **Floorspace (sqm)** | **319,677** | **285,279** |
| Office (B1a) | 70,419 | 60,107 |
| Other Business Space (B1b/c, B2) | 37,181 | 31,178 |
| Warehouse (B8) | 212,076 | 193,994 |
| **Land (Ha)** | **69.4** | **62.3** |
| Office (B1a) | 7.0 | 6.0 |
| Other Business Space (B1b/c, B2) | 9.3 | 7.8 |
| Warehouse (B8) | 53.0 | 48.5 |

*Source: Avison Young, 2020*

4.5 This synthesis would generate an additional 4,350 jobs by 2040, with a requirement for:

- A total of 320,000 sqm of B-Use Class employment floorspace, of which 66% would be warehouse space (B8); 22% office space (B1a); and the remaining 12% would be industrial space (B1b/c, B2);
- This translates into 69.4 Ha of employment land, of which 76% would be warehouse space (B8); 13% industrial space (B1b/c, B2); and the remaining 10% would be office space (B1a).

## Synthesis Forecast 2: High Covid-19 Impact

4.6 This synthesis forecast includes:

- The base forecast;
- The additional impact from the sectoral growth ("advanced manufacturing" scenario and "transport and Logistics");
- The impact of London Resort on the Supply Chain (indirect and induced jobs);
- A "pessimistic" impact of Covid-19

**Table 17 – Synthesis Forecast 2 (including Windfall and Churn)**

| Change from 2020 to … (B Class Only) | Synthesis Forecast 2 (to 2040) | Synthesis Forecast 2 (to 2037) |
|---|---|---|
| **Employment** | **2,725** | **2,101** |
| Office (B1a) | 336 | 61 |
| Other Business Space (B1b/c, B2) | 270 | 134 |
| Warehouse (B8) | 2,120 | 1,906 |
| **Floorspace (sqm)** | **263,533** | **230,700** |
| Office (B1a) | 61,859 | 51,823 |
| Other Business Space (B1b/c, B2) | 18,315 | 12,639 |
| Warehouse (B8) | 183,359 | 166,238 |
| **Land (Ha)** | **56.6** | **49.9** |
| Office (B1a) | 6.2 | 5.2 |
| Other Business Space (B1b/c, B2) | 4.6 | 3.2 |
| Warehouse (B8) | 45.8 | 41.6 |

*Source: Avison Young, 2020*

4.7 This synthesis would generate an additional 2,750 jobs by 2040, with a requirement for:

- A total of 263,500 sqm of B-Use Class employment floorspace, of which 70% would be warehouse space (B8); 23% office space (B1a); and the remaining 7% would be industrial space (B1b/c, B2);
- This translates into 45.8 Ha of employment land, of which 81% would be warehouse space (B8); 11% office space (B1a); and the remaining 8% would be industrial space (B1b/c, B2).

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