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Runnymede Housing and Economic Development Needs Assessment

Economy Workstream:
Appendix 5 Replacement Analysis

Runnymede Borough Council

March 2026

Appendix 5. Replacement Analysis

A5.1 Appendix 5 sets out the approach to estimating future employment premises replacement requirements in Runnymede.

A5.2 The approach is predicated on estimating an annual replacement rate, which can then be applied to Runnymede's existing employment stocks to determine replacement requirements over the Plan period.

A5.3 To begin with, a **default replacement allowance** is estimated based on industry standards and best practice guidance.

A5.4 This is followed by a consideration of the following interrelated drivers of replacement demand within the applied context of Runnymede:

- **Market conditions**: stakeholder consultation inputs and agent's assessment of commercial property market conditions, and the demand for employment premises.
- **Age of stock**: older premises are more likely to become functionally or physically obsolete.
- **Heritage**: development constraints associated with conservation areas and listed status.
- **Quality of stock**: lower quality premises are more likely to become functionally or physically obsolete.

Default Replacement Allowance

A5.5 The RICS guide to life cycle costing sets a lower threshold of 30 years as the age at which a building is likely to become functionally obsolete without investment to upgrade or refit the building. A 30-year replacement rate equates to replacing 3.3% of the total employment stock on a rolling annual basis, or effectively replacing 100% of the total employment stock every 30 years[1].

A5.6 Based on DESNZ (2023) data set out in this appendix, it is evident the significant majority of office (72%), factory (81%), and warehouse (70%) floorspace is aged over 30 years. Therefore, it is clear that many buildings have a lifetime beyond 30 years, and it is unfeasible to assume a 30-year replacement rate as standard for the purposes of this assessment.

A5.7 *British Standard EN 1990:2002, Eurocode – Basis of structural design (Eurocode 0)* states that building structures should be designed to last 50 years. A 50-year replacement rate equates to

[1] Acknowledging that some premises will not be replaced at all, whilst other may be replaced more than once.

replacing 2% of the total employment stock on a rolling annual basis, or effectively replacing 100% of the total employment stock every 50 years.

A5.8 DESNZ (2023) data does not provide a building age breakdown which allows for separate consideration of office, factory, and warehouse uses. However, the generalised non-domestic premises data indicates that around 39% of all commercial floorspace was constructed over 50 years ago.

A5.9 *Building Research Establishment Environmental Assessment Method* (BREEAM) life cycle assessments indicate the service life of a building is considered to be 60 years. A 60-year replacement equates to replacing 1.67% of the total employment stock on a rolling annual basis, or effectively replacing 100% of the total employment stock every 60 years.

A5.10 The generalised non-domestic premises data indicates that around 31% of all commercial floorspace was constructed over 60 years ago.

A5.11 Based on the DESNZ (2023) data considered thus far, a replacement rate between 50 and 60 years is a reasonable standard assumption. Local areas with strong demand for new premises should be assumed to require the higher 50-year replacement rate (2% per annum), whereas local areas with lower demand for new premises should be assumed to require the lower 60-year replacement rate (1.67% per annum). Areas where there is no evidence of especially high or low demand should be assumed to require the mid-point rate (1.82% per annum).

A5.12 The difference between the two standard rates should be considered when adjusting local area assumptions – there is 0.33% percentage points (pp) between both positions. As such, increments of ±0.1% pp are considered suitable for local area adjustments.

Market Conditions

Offices

A5.13 Whilst Runnymede retains a number of key HQ operations for technology companies as well as other blue chip occupiers such as Netflix, the general picture presented by commercial agents active in the market is of a weakening office market. This is heavily influenced by much wider market trends (accelerated by the COVID-19 pandemic) pushing office occupiers towards larger city locations, and areas that can offer Grade A space alongside excellent amenities.

A5.14 Coupled with this, Runnymede has been subject to significant pressures through the Permitted Development rights regime which has resulted from policy decisions made a Government level. This has reduced the level of office stock in Runnymede towns and is reported to have removed the critical mass required to effectively compete. When set against

a very challenging development viability context, agents see the future focus for office activities as retaining, refurbishing and incremental growth, rather than large scale development opportunities.

> Given the reported falling demand for office space, and the overall requirement for less office space, a lower replacement rate of **1.67%** is most appropriate.

Industrial

A5.15 Whilst Runnymede is not recognised as a primary industrial or logistics location this market segment is performing more strongly nationally, regionally and locally than the office market. This is leading to some former office locations to be repurposed for industrial and warehousing. There are also potential opportunities arising from London occupiers moving outwards to find more affordable space and the planned expansion of Heathrow airport. Commercial agents have indicated potential opportunities to provide some expansion to existing strongly performing industrial areas where policy and environmental constraints allow.

> Given the reported opportunities for development in the industrial market, balanced with Runnymede's traditional position of serving more of a local market, a medium replacement rate of **1.83%** is most appropriate.

Age of Stock

A5.16 Life cycle costings in the commercial real estate sector are designed to consider the entire cost of owning and operating a commercial building over its economic lifespan. The Royal Institute for Chartered Surveyors (RICS) guide to life cycle costing[2] considers that appraisals of greater than 30 years should involve "consideration for possible technological, commercial and legal changes" (pg. 7). This indicates that premises over 30 years old have a higher probability of becoming functionally obsolete without investment to upgrade or refit the building.

A5.17 *British Standard EN 1990:2002, Eurocode – Basis of structural design (Eurocode 0)* states that building structures should be designed to last 50 years. It states that, for the duration of this period, any deterioration in the structure should not impair the use of the building for its intended purpose.

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[2] Royal Institution of Chartered Surveyors (RICS). 2016. RCIS Guidance Note. RICS Professional Guidance, UK: Life Cycle Costings. 1st ed.

A5.18 *Building Research Establishment Environmental Assessment Method* (BREEAM) life cycle assessments indicate the service life of a building is considered to be 60 years. This is in-line with British Standards for the design life of components and assemblies of the main structural elements of a building (BS 7543: 1992 and BS ISO 15686-1: 2000, respectively).

A5.19 To understand the age of active commercial floorspace in England, UK Government data[3] on the age of commercial stocks has been considered.

A5.20 Firstly, the Department for Energy Security & Net Zero (DESNZ) is currently developing a National Buildings Database. This will be a detailed inventory of all the buildings in Great Britain. This will include all domestic and non-domestic buildings. The database will include information such as the size, age, construction, and energy performance of each building.

A5.21 Phase 1 of the research has been completed, and findings were published in 2023. The Non-Domestic Building Stock in England and Wales (Part 1: Stock Description) research paper brings together existing, previously used and new data to develop a comprehensive and uniquely structured model in which every non-domestic building is represented in detail.

A5.22 The DESNZ research paper provides data on the share of floorspace by building age from pre-1900 until 2020. A summary of the findings is set out in Table A5.1.

Table A5.1: Percentage of VOA floorspace by building age, England and Wales

Building age	Share of floorspace
Pre-1900	11%
1900–1918	4%
1919–1939	5%
1940–1954	4%
1955–1964	7%
1965–1970	8%
1971–1980	11%
1981–1990	14%
1991–2000	13%
2001–2010	14%
2011–2020	7%

Source: DESNZ (2023)

[3] Department for Communities & Local Government Archive (2005) Total Floorspace by LAD and age.

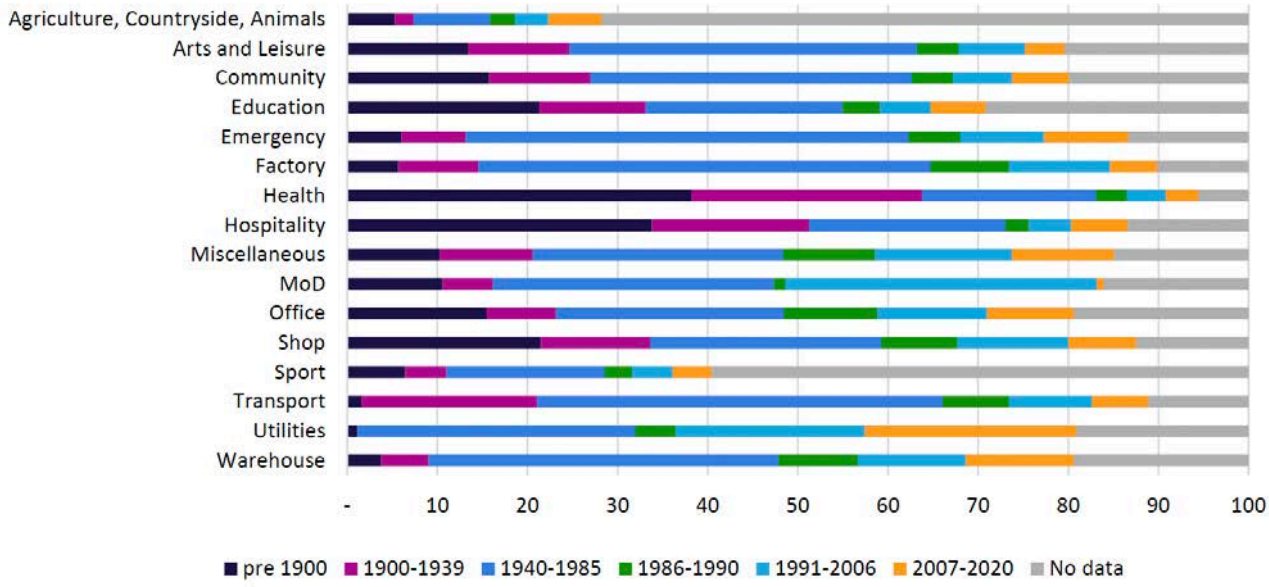
A5.23 In terms of buildings constructed since 1981 (i.e. ~50 years old or less), around 61% of commercial floorspace falls within this category.

A5.24 In terms of buildings constructed since 1971 (i.e. ~60 years old or less), around 69% of commercial floorspace falls within this category.

A5.25 The DESNZ research paper also sets out the share of floorspace on the basis of both activity and building age. The paper uses Carbon Reduction in Buildings (CaRB) classifications to categorise activities – this includes 'Factory', 'Office', and 'Warehouse' activities. For the purposes of this assessment, these classifications are treated as proxies for the employment uses under consideration.

A5.26 The data underlying the research paper is not publicly available, and therefore cannot be analysed in bespoke ways to inform this assessment. As such, the data presented in the research paper is included here in its original form, as shown in Figure A5.1.

Figure A5.1: Percentage distribution of floor area by activity and building age, England and Wales (2020)



Source: DESNZ (2023)

A5.27 Drawing on the data in Figure A5.1, Table A5.2 presents estimates of the building age distribution of the classifications relevant to this assessment, re-weighted to remove the 'no data' building age category.

Table A5.2: Percentage distribution of floor area by employment activity and building age (2020)

Use	Pre 1900	1900 1939	1940 1985	1986 1990	1991 2006	2007 2020
Office	19%	10%	31%	12%	16%	12%
Factory	6%	10%	56%	9%	13%	6%
Warehouse	5%	6%	48%	11%	14%	16%

Source: Hardisty Jones analysis of DESNZ (2023)

A5.28 In terms of buildings constructed since 1991 (i.e. ~30 years old or less), around 28% of office, 19% of factory, and 30% of warehouse floorspace falls within this category.

A5.29 Table A5.3 summarises the national average age of existing employment premises stock, according to the industry standard thresholds set out previously, based on the evidence presented in Table A5.1 and Table A5.2.

Table A5.3: Age of current stock according to industry standards, England and Wales (2020)

Use	Age of stock		
	>30 years	>50 years	>60 years
Office	72%	39%	31%
Factory	81%		
Warehouse	70%		

Source: DESNZ (2023)

A5.30 Some data is available at local authority level to inform consideration of the age of commercial floorspace in Runnymede – the data was published in 2005, and due to its age is treated as indicative only.

A5.31 Table A5.4 sets out a summary of the age profile of commercial floorspace in Runnymede, and how this compares to the England average (based on the same dataset).

Table A5.4: Age of commercial floorspace stocks, Runnymede compared to England

Use	Pre 1940	1940 1970	1971 1980	1981 1990	1991 2000
Offices	26% (-2%)	10% (–8%)	2% (–9%)	26% (+8%)	24% (+9%)
Factory	22% (-2%)	41% (+9%)	*	16% (+3%)	14% (+7%)
Warehouse	8% (-8%)	26% (+1%)	28% (+10%)	19% (+2%)	18% (+3%)
Total	**22% (-1%)**	**18% (-9%)**	**7% (–8%)**	**23% (+8%)**	**21% (+10%)**

Source: Department for Communities & Local Government Archive (2005)

Note: Difference between Runnymede and the England average is shown in parentheses, * = Missing data.

A5.32 Within the data periods recorded, the period from 1981-onwards and 1991-onward are useful, as some of the buildings built during these time periods will not be over 60 years old and 50 years old (respectively) by the end of the Plan period. Specifically, buildings built from 1985 will be less than 60 years old, and buildings built from 1995 will be less than 50 years old. Given their age, a proportion of these buildings are assumed not to have become obsolete by the end the Plan period, and would therefore not be subject to replacement under each scenario. The majority of buildings constructed before these periods are assumed to have become functionally obsolete by the end of the Plan period, and would be subject to replacement.

A5.33 Due to the age of the data, definitive assumptions cannot be drawn from it. However, the following broad characteristics can be observed:

Offices: Runnymede has a relatively newer stock of office floorspace. It has a lower proportion of office floorspace built pre-1940 than the England and Wales average and it has a greater proportion of office floorspace constructed in the period from 1981–onwards. This indicates that office stock may be subject to relatively lower replacement rates. Therefore, an adjustment of -0.1% is made to account for potentially lower rates of replacing older stock.

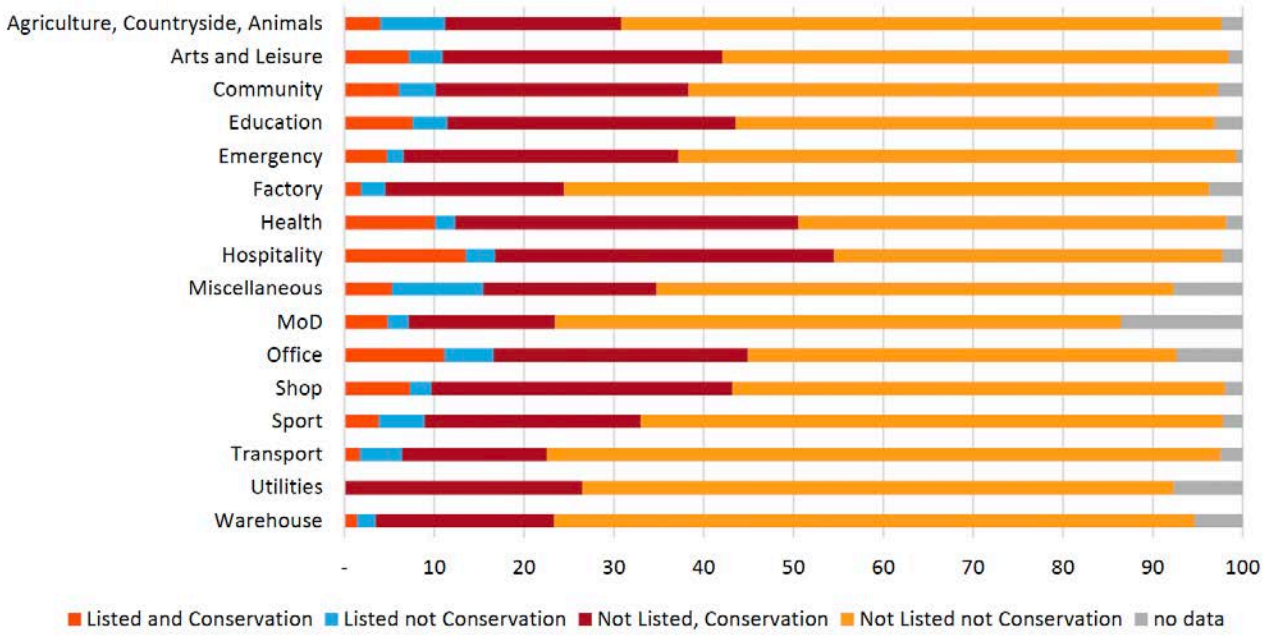
Factories: The data suggests that Runnymede has relatively newer factory floorspace. It has a lower proportion of office floorspace built pre-1940 and it has a higher proportion of office floorspace built post 1980 in comparison to the England average. This indicates that Runnymede's factory stock may be subject to relatively lower replacement rates. Therefore, an adjustment of -0.1% is made to account for potentially lower rates of replacing older stock.

Warehouses: Runnymede has a relatively newer stock of warehouse floorspace, with a lower proportion than the national average constructed pre-1940 and a greater proportion constructed after 1980. This indicates that Runnymede's warehouse stock may be subject to lower replacement rates. Therefore, an adjustment of -0.1% is made to account for potentially lower rates of replacing older stock.

Heritage

A5.34 DESNZ (2023) research provides data on the heritage status of non-domestic floorspace, recording where buildings are located within Conservation Areas or have listed status. This is useful to understand the extent to which employment premises may be more or less constrained with regards to redevelopment and retrofit.

Figure A5.2: Percentage distribution of floor area by activity and heritage, England and Wales (2020)



Source: DESNZ (2023)

A5.35 Drawing on the data in Figure A5.2, Table A5.5 presents estimates of the heritage distribution of the classifications relevant to this assessment, re-weighted to remove the 'no data' category.

Table A5.5: Percentage distribution of floor area by employment activity and heritage status, England and Wales (2020)

Use	Conservation Area and Listed	Listed only	Conservation Area only	No heritage constraint
Office	12%	5%	32%	51%
Factory	2%	3%	21%	74%
Warehouse	1%	3%	20%	76%

Source: Hardisty Jones analysis of DESNZ (2023)

A5.36 This data suggests that office activities tend to occupy a substantial amount floorspace (49%) in buildings that are subject to one or more heritage constraints – almost half of office floorspace falls within this category. The share of factory (26%) and warehouse (24%) uses in the same category is much lower.

A5.37 Where heritage constraints exist, in the event that employment floorspace becomes functionally obsolete, it is more likely that a new site would be required for the provision of replacement floorspace, as redevelopment or retrofit of the existing site would be constrained. This will increase off-site replacement demand.

A5.38 Therefore, in local areas where heritage constraints exist to a greater extent than the national average indicated by DESNZ (2023) data, the replacement rate assumption should be increased to accommodate a higher level of replacement.

A5.39 There are a few Conservation Areas in Runnymede. However, all Conservation Areas are small, and none cover large areas. Runnymede accounts for 0.06% of the total land area of England, but accounts for only 0.01% of land area covered by a Conservation Area (Historic England, 2024).

A5.40 As such, where employment premises become functionally or physically obsolete, Conservation Area status is unlikely to present a constraint to on-site replacement in most cases. Therefore, no local adjustment is made to the replacement rate to account for Conservation Area Status.

A5.41 There are approximately 306 listed buildings in Runnymede (Historic England, 2025). Building use types are not provided within the data – it is therefore not possible to determine precisely how many listed buildings are occupied for commercial uses.

> Given the small number of listed buildings and the few conservation areas in Runnymede, these factors are unlikely to present a constraint. Therefore, a local adjustment factor of -0.1% is made to account for potentially lower rates of off-site replacement.

Quality of Stock

A5.42 Occupiers' focus on the Environmental, Social and Governance (ESG) credentials of office space has increased substantially over the period since the COVID-19 pandemic, with occupiers placing far greater emphasis on building credentials such as Energy Performance Certification (EPC) ratings, Building Research Establishment Environmental Assessment Method (BREEAM) rating, and other measures such as wellness and energy efficiency.

A5.43 As a result, many occupiers are now looking at new or newly refurbished space which can offer such credentials at the right level. This has the potential to increase replacement demand where a growing proportion of existing premises fall beneath the required standards, becoming functionally obsolete.

A5.44 Data on EPC by building count has been gathered to assess any potential impact of Minimum Energy Efficiency Standards on replacement rates.

A5.45 Since 1 April 2018, EPC standards have meant it has not been possible to grant a new tenancy to new or existing tenants where a non-domestic property has an EPC rating lower than E (with limited exceptions).

A5.46 The proportion of England's commercial building stock (where an EPC has been obtained) that falls below the current requirements is 10%.

A5.47 The previous UK Government's Energy White Paper (2020) set a target for all rented non-domestic buildings in the UK to be rated EPC band B or above by 2030, with the caveat that it will be done "where cost-effective". The delivery of this target is yet to be road mapped.

A5.48 The proportion of England's commercial building stock that falls below the 2030 requirement is 83%.

A5.49 The proportion of Runnymede commercial building stock (where an EPC has been obtained) that falls below the current requirements is 6% (-3% compared to England).

A5.50 The proportion of Runnymede's commercial building stock that falls below the 2030 requirement is 77% (–6% compared to England).

> Given that Runnymede has a higher quality of stock in comparison to the national average, it is unlikely that energy efficiency standards will present a constraint. Therefore, a local adjustment of -0.1% is made to account for potentially lower replacement rates due to quality of stock.

Current Stock

A5.51 To obtain an estimate of existing floorspace by employment Use Classes in Runnymede, analysis of detailed VOA data for the county has been undertaken.

A5.52 The VOA provides headline data on business floorspace by local authority, categorised by retail, office, industrial, and 'other sector' uses. This data does not allow for the disaggregation of general and light industrial uses (B2 and E(g)(iii)) from warehousing and logistics (B8) uses and is therefore unsuitable for analysis of replacement requirements.

A5.53 The VOA is required by law to periodically compile and maintain a local rating list for each local authority. The current rating list was compiled on 1 April 2023 (the next is due to be compiled in April 2026).

A5.54 VOA ratings lists[4] include records of commercial premises floorspace and use by Special Category (SCat). This assessment converts VOA SCat codes to Use Classes to provide an indicative breakdown of the stock of floorspace across the office (E(g)(i) and E(g)(ii)), general and light industrial (B2 and E(g)(iii)) and warehousing and logistics (B8) uses, ultimately making the categorisations more useful for analysing replacement requirements. Further data cleaning has been carried out to remove erroneous entries on the basis of duplicates, obsolescence, use description, and incorrect geography.

A5.55 The analysis of detailed VOA ratings set out above has been tested against data on business floorspace to ensure alignment at the headline level. The testing identifies an error margin of 0.6% for office floorspace data, and 1.3% for industrial floorspace data. These error margins are considered tolerable for the purposes of analysing replacement requirements.

[4] Source: VOA rating list downloads. Available at: https://voaratinglists.blob.core.windows.net/html/rlidata.htm [Accessed May 2025]

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