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# Review of Coventry's Local Housing Need

## Final Report

Iceni Projects Limited on behalf of  
Coventry City Council

June 2024

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ICENI PROJECTS LIMITED  
ON BEHALF OF COVENTRY  
CITY COUNCIL

Review of Coventry's Local Housing  
Need

FINAL REPORT



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# 1. EXECUTIVE SUMMARY

- 1.1 This report reviews the housing needs position in Coventry taking account of the latest demographic and affordability data.
- 1.2 The 2021 Coventry & Warwickshire HEDNA found that there had been notable issues with historical ONS population estimates for Coventry, with the 2021 Census indicating that the ONS had been substantially over-estimating growth in the City's population. It considered that exceptional circumstances exist to justify an alternative approach to calculating housing need, taking account of the initial Census data. It developed revised projections based on 10 year migration trends (2011-21) using the demographic data available at that time, and then overlaid adjustments for affordability to generate an initial need for 1455 dpa. Applying the 35% City's uplift, as set out in the PPG, resulted in a need for 1964 dpa.
- 1.3 ONS has since revised its back series of Mid-Year Population Estimates (MYEs) and released further data for 2021-22 which suggest a sharp increase in population growth. However the evidence points to continuing issues with the reliability of demographic data from ONS for Coventry and suggests that MYE data could still be over-estimating growth in the City's population.
- 1.4 On this basis the report concludes that the 2011-21 period informed by the Census data points, as used in the HEDNA, continue to represent the most the most robust and reliable basis for appraising the City's housing needs. It supports the HEDNA findings on housing need, which provide a consistent position across the Housing Market Area, as continuing to provide a reliable and coordinated basis for plan-making at the current time.
- 1.5 Given the interactions between the local authorities within the Coventry & Warwickshire Housing Market Area, a consistent approach as provided for by the HEDNA to considering demographic analysis and overall housing need remains important.

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## 2. INTRODUCTION

- 2.1 The Coventry & Warwickshire Housing and Economic Development Needs Assessment (HEDNA) identified a housing need for Coventry City of 1964 dwellings per annum (dpa). It found that Coventry's population had been over-estimated by ONS in its Mid Year Estimates, and historical ONS demographic projections; and that there were exceptional circumstances to adopt alternative demographic projections, taking account of the release of 2021 Census data.
- 2.2 There has been further demographic data released since the HEDNA's preparation. Coventry City Council has therefore commissioned this report to test whether this has any implications on the calculation of the City's housing need.
- 2.3 This report therefore considers up-to-date evidence around demographic growth in Coventry to test the validity of the analysis and projections developed as part of the HEDNA. In particular there is a focus on taking account of the latest information – including:
- ONS 2022 mid-year population estimates (MYE), released in November 2023;
  - ONS revised back series of MYE data for the 2011-21 period (to align with 2021 Census data), which were also released in November 2023;
  - ONS 'admin-based' population estimates, which ONS has started to release in part in response to the concerns over MYEs in areas such as Coventry; and
  - ONS latest national population projections – the 2021-based interim projections – which were released in January 2024.
- 2.4 The report seeks to interrogate not just ONS data, but other data – including administrative data – to interrogate population changes in Coventry, in full recognition that there has been shown to be inaccuracies with ONS data for the City's population historically. In addition, the report considers the latest affordability data, as released by ONS in March 2024.

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### 3. HEDNA FINDINGS

- 3.1 The commentary below considers the analysis carried out in the 2021 HEDNA and the conclusions drawn on housing need in Coventry. This provides a context to considering more recent demographic data in later sections.

#### **Standard Method Starting Point**

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- 3.2 The HEDNA initially sets out a calculation of the Standard Method as set out by Government in the Planning Practice Guidance. The standard method has four steps: first a baseline of household growth over the next 10 years is drawn from 2014-based Household Projections. Then a percentage uplift is applied based on the latest published median house price to income ratio. The uplift is then capped in some circumstances. Then for the 20 largest cities and urban areas, a further 35% uplift is applied – with the aim to promote housing delivery in areas with existing infrastructure.
- 3.3 For Coventry the HEDNA standard method calculations were based on household growth of 2,104 per annum in the 2022-32 period, drawn from 2014-based Household Projections, with a 12% affordability uplift based on the 2021 affordability ratio (giving a need for 2,362 dwellings per annum). This was then increased by a further 35% to 3,168 dwellings per annum to take account of the urban areas uplift.

#### **Interrogating Demographic Trends**

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- 3.4 The HEDNA report then considered the issue of whether there were ‘exceptional circumstances’ to justify the use of an alternative approach to calculating housing need. This exceptional circumstances test is set out in the NPPF (now in Para 61). It noted that such a circumstance might exist where there are either demonstrable errors in the data used in the 2014-based subnational household projections (SNHP) or where trends have changed so much that a set of projections based on trends to 2014 are no longer reliable. Whilst the HEDNA considered all six authorities in the Coventry and Warwickshire Housing Market Area, as there are important interactions in demographic terms between authorities and therefore a consistent approach is important, the discussion below focusses on the HEDNA analysis for Coventry as this is the focus for this report.
- 3.5 At the time of the HEDNA, the latest MYE data was for 2020, and this put the population of Coventry at 379,400 persons. The 2021 Census had recently been published, and the initial 2021 Census results available when the HEDNA was prepared showed a much lower population (for a year later) in Coventry of just 345,300. There was clearly a substantial difference between ONS population estimates for the City and the 2021 Census results.

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- 3.6 The HEDNA then continued to consider the accuracy of ONS population estimates, as these feed into the ONS population and household projections, and will therefore have an impact on estimates of housing need.
- 3.7 The report noted criticisms of ONS estimates for Coventry's population from CPRE and correspondence between the Office for Statistical Regulation (OSR) and ONS. In May 2021, the OSR published a '*Review of population estimates and projections produced by the Office for National Statistics*' which recommended that ONS needed to do more to investigate issues associated with student movements and the recording of outward migration which particularly affected cities with large student population; to collaborate with others to incorporate local insight and carry out sensitivity analysis; to be more open and provide guidance on interpreting uncertainty; and to take a more open and constructive approach to responding to user feedback and challenge.
- 3.8 In its reply, ONS recognised concerns about population estimates and projections (including specifically mentioning Coventry) and set out eight recommendations to improve the transparency of the approach used -these recommendations were summarised in the HEDNA. The HEDNA did however note that despite recognition of issues by ONS, no attempt had been made at that time to amend population estimates and projections. Icenii would however note that in June 2023, ONS has published experimental 'admin-based population estimates' for local authorities for 2022; with further data for mid 2023 published in December 2023. These are considered later in this report.
- 3.9 Recognising the historical issues with ONS data, the HEDNA sought to consider the issue of population change and the impact this might have on projections. In doing so it drew on a range of administrative data sources and the initial 2021 Census results – noting that the Census was one of the most comprehensive data sources. In doing so the analysis was mindful of analysis previously carried out by CPRE which also looked at many of the sources considered in the HEDNA.
- 3.10 The HEDNA noted that, according to ONS MYE data, Coventry had the sixth highest estimated population growth of any local authority in the country over the 2011-20 period; and the highest growth excluding Central London authorities. It was also noted that virtually all of the growth was in the population aged from about 18 up to mid-30s – the HEDNA suggested the possibility (as noted by CPRE) that ONS may have recorded students moving into the City, but not recorded them leaving.
- 3.11 The analysis then compared Coventry with other similar authorities (as defined by ONS and mainly consisting of other cities with notable student populations). This analysis indicated that Coventry was very much an outlier in terms of the estimated change to the population age structure: all other areas having broadly seen a consistent number of people in the 18-35 age groups in both 2011 and 2020. It also noted population growth in Coventry to be substantially higher than other areas (nearly three times greater than the second highest (Sheffield)) but at the same time dwelling growth was, if

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- anything, relatively low in comparison with other locations. that the evidence clearly indicated that the data for Coventry was an outlier when compared with other locations.
- 3.12 A comparison between population growth and dwelling completions and population growth between Coventry and the Warwickshire local authorities within the Housing Market Area also indicated that the relationship for Coventry was not consistent with the wider evidence.
- 3.13 Other data was then considered. The HEDNA looked at Electoral Register data which showed a fall in the number of people registered in Coventry between 2011 and 2020: this was in contrast to increases in numbers across both Warwickshire and nationally. Whilst it is difficult to be definitive from this data (the Electoral Commission does highlight groups such as younger people and those born outside the UK as being less likely to be registered), it is a clear pointer to there *not* having been the very substantial population growth as estimated by ONS.
- 3.14 The HEDNA also looked at NHS Patient Register (PR) data. This is information which has traditionally been published alongside mid-year population estimates by way of a quality check on the data. ONS notes that the PR data should not be used as a measure of population size (due to the way GP records are kept), but it is a good source to look at relative population change. For every area considered in the HEDNA, the proportionate growth of population on the Patient Register was in excess of that shown in the MYE. The only exception was for Coventry where the opposite patterns emerged - once again, this pointed to issues with the MYE for Coventry.
- 3.15 The HEDNA also briefly considered some other factors. This included looking at potential corrections to MYEs which were likely (in due course) to be made by ONS in the 2001-11 period following the publication of 2021 Census results. This data, generally known as Unattributable Population Change (UPC), is now available for the 2011-21 period and discussed below.
- 3.16 The wider HEDNA analysis also showed no exceptional changes in house prices which might be expected if there was strong population growth and therefore a greater demand for homes (as against a constrained supply). Similarly Coventry's Housing Register showed no notable change over the period to 2020; and trends in benefit claimants also followed trends in other locations. Had population growth been comparatively stronger than other areas (as ONS data was suggesting), the number of claimants might have been expected to have increased at a greater rate than other locations. These data sources thus provided supporting evidence that ONS was likely to have over-estimated population growth.
- 3.17 The HEDNA concluded that **a range of different data sets all pointed to ONS population estimates having significantly over-estimating population growth in Coventry. This was then confirmed by the Census** showing a smaller population in the City in 2021 than had even been
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estimated by ONS for a year earlier. This formed the basis of concluding that there were exceptional circumstances related to the City for using an alternative approach.

- 3.18 IcenI would note that **the Government’s December 2023 amendments to the NPPF now include specific recognition that there may be exceptional circumstances related to the particular demographic characteristics of an area which justify an alternative approach to assessing housing need.** It the consultation feeding into these changes, the Government referenced areas with large student populations, implicitly recognising the issues identified by the Statistics Regulator (OSR) and identified for Coventry within the HEDNA.
- 3.19 Having identified that there were significant issues with ONS data, the HEDNA then sought to draw the evidence together to provide an adjusted population projection for Coventry which better reflected local evidence of population trends including the 2021 Census results.
- 3.20 The HEDNA first sought to independently estimate the population of Coventry (and authorities across Warwickshire) in 2020, as a comparison with the MYE and carried out based on the sources discussed above and independently of the 2021 Census. The HEDNA estimated the population of Coventry to be 347,000 in 2020. Interestingly ONS has since reviewed their own population estimates and actually put the revised estimate of Coventry’s population in 2020 at 344,700. These revised ONS Mid-Year Estimates were published in November 2023. They suggest that the HEDNA may have (slightly) over-estimated the figure for Coventry’s population in 2020 – although they are far closer than the original ONS estimate of 379,400. To some extent this finding is irrelevant given a rebasing of the HEDNA projections to 2021 using the 2021 Census data, but there can be some comfort that the independent HEDNA analysis did produce an estimate that looks reasonably realistic.
- 3.21 The HEDNA continued by interrogating initial Census data available at the time of the HEDNA’s preparation. ONS had only published initial high-level population and household data at the point of the HEDNA’s preparation (mid 2022). Prior to the Census data release, IcenI had also made our own estimates of population in 2021. Generally, there was a good agreement between these sources (the IcenI HEDNA estimates and the 2021 Census), although it was highlighted that some of the larger differences were in Coventry and Warwick (areas with large student populations). Analysis of students, including conversations with Warwick and Coventry Universities suggested it was possible for some students to have been missed by the Census (in particular given the effects of Covid-19 restrictions) but for the purposes of analysis, the Census population was taken to be the best base data from which to project forward future population trends.

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## HEDNA Demographic Projections

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- 3.22 Given the issues with ONS population estimates, the HEDNA concluded that the most robust approach to project future population would be based on trends over the 2011-21 period – as the data points in 2011 and 2021 were informed by Census data. To inform the assessment of housing need, the HEDNA developed trend-based projections of both population and household growth. The analysis made estimates of birth and death rates (using the rebased Census population in 2021) and also estimated likely migration given the differences between MYE population and the Census and the components of population change as recorded by ONS in the period to 2020.
- 3.23 For migration, a ‘base’ start point was established with in- and out-migration then projected to vary over time as the population of each area changes (and also the population more widely who could be in-migrant to the area). For Coventry, it was estimated the base migration position was around 1,200 people (net) moving into the City each year.
- 3.24 In converting population growth into household projections, the data was again rebased to the 2021 Census estimate of households with data about household representative rates (HRRs) being drawn from the 2014-based SNHP. This ensured assumptions on age/sex-specific household formation were consistent to those endorsed for use in the Standard Method (and based on trends looking back to 1971), recognising that Government has been implicitly critical of more recent ONS household projections, which are based on more recent trends (2001-21) as building in constraints to household formation.
- 3.25 The HEDNA projections were developed for the 2022-32 period – a 10-year period to align with the Standard Method. This also recognises that there are increasing potential uncertainty on outcomes over the longer-term.
- 3.26 For Coventry, the HEDNA trend-based projection developed pointed to an annual household growth of 1,296 per annum. With a 12% affordability uplift applied (based on the 2021 affordability ratio), this led to a need for 1,455 dwellings per annum. With the further 35% urban uplift then applied, the overall need shown was for 1,964 dwellings per annum.
- 3.27 Recognising that the HEDNA was informed by Census data and there have been further demographic data releases since, the analysis in this report reviews the latest data as at Spring 2024 and tests the validity of the HEDNA findings. It also considers the latest affordability data released by ONS in March 2024.

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## 4. REVIEWING DEMOGRAPHIC DYNAMICS

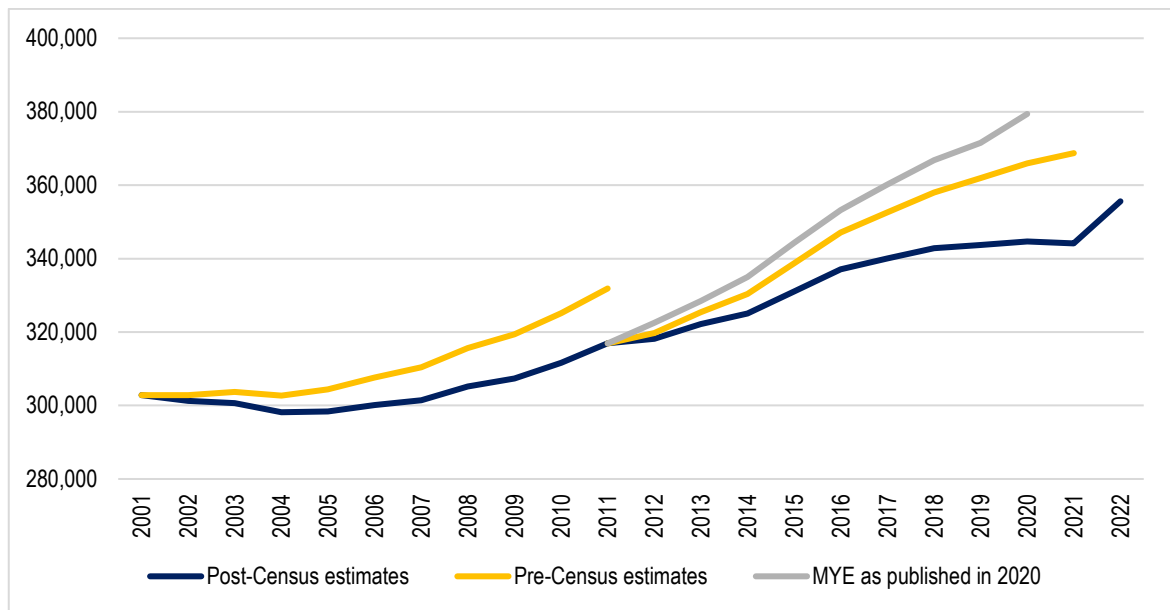
- 4.1 Since the HEDNA was published, a range of data has been released which can be considered to look at the validity of analysis and projections in the HEDNA. The key additional data are ONS 2022 Mid-Year Population Estimates (MYE) with a revised back series of MYE data for the 2011-21 period (to align with 2021 Census data). These were both published in November 2023.

### Reviewing Population Trends

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- 4.2 The figure below shows population growth as now estimated by ONS (termed 'trend'), along with previous estimates. The estimates are based on MYE releases which have not been rebased for census data. The figure shows some interesting features as described below.
- 4.3 Between both 2001-11 and 2011-21 ONS estimated a population growth that was subsequently reduced significantly once Census data was published (as shown by the difference between the 'pre Census trend' and the 'trend' in the chart below). A full components of population change is shown in a table below, but in summary **between 2001-11 ONS reduced its population estimate by 14,900 people, whilst for 2011-21 this reduction was 24,600.**
- 4.4 Interestingly, prior to publishing 2022 MYE, ONS had been publishing annual MYE data from 2012 onwards. In mid-2020 (as used in the HEDNA) ONS had originally put the population of Coventry at 379,400, but the 2022 MYE puts the implied figure for this date at around 366,000 (based on the published estimate by ONS and the corrections made 2011-20\_). ONS now estimates the population to have been 344,700, with a UPC of in excess of 21,000 for the 2011-20 period. Looking in detail, it appears as if ONS has made some notable changes to its back series of data, particularly in relation to migration.
- 4.5 There is a big jump in the estimated population for the one year since the Census (2021-22), with the population estimated to have increased from 344,200 to 355,600, which represents notably larger growth compared past trend estimates for any year back to at least 2001. We consider this further later in this section.

**Figure 4.1: Population trends in Coventry – ONS estimates and revised trends**



Source: ONS

- 4.6 The table below shows the revised components of population change as published by ONS in November 2022 – this includes MYE data for 2022 and revised past figures back to 2001. The main components of change are natural change (births minus deaths) and net migration (internal/domestic and international). There is also an Unattributable Population Change (UPC) which is a correction made by ONS upon publication of Census data, if population has been under- or over-estimated (this is only calculated for the period to 2021). There are also ‘Other Changes’, which for Coventry are relatively low and in both an upward and downward direction – these changes are often related to changes in resident armed forces personnel or boarding school pupils.
- 4.7 The data shows natural change to generally be dropping in Coventry since about 2011, although there continue to be more births than deaths in the City. This is common for larger urban areas, reflecting their younger age structure.
- 4.8 Internal (domestic) migration is generally negative (people moving from the City to elsewhere in the UK) with international migration being strongly positive. Again, this is common for larger urban areas. International migration is recorded as generally increasing over recent years, with the opposite being true for domestic migration.
- 4.9 The analysis also shows a notable negative level of UPC (totalling around 24,600 people over the 10-year period 2011-21). As discussed, the UPC reflects the difference between ONS MYE timeseries and the Census 2021 and indicates either errors in the Census returns or (more likely) that ONS had previously over-estimated population change.

**Table 4.1 Revised ONS Components of Population Change data, mid-2001 to mid-2022 – Coventry**

	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2001/2	707	-2,566	1,887	-23	-1,514	-1,509
2002/3	672	-1,899	2,109	-14	-1,498	-630
2003/4	847	-2,861	1,005	28	-1,510	-2,491
2004/5	910	-2,280	3,093	-13	-1,498	212
2005/6	1,153	-1,732	3,825	-19	-1,484	1,743
2006/7	1,388	-2,775	4,206	-25	-1,494	1,300
2007/8	1,735	-1,487	4,994	-4	-1,481	3,757
2008/9	1,691	-1,355	3,376	-16	-1,489	2,207
2009/10	2,079	-946	4,668	-33	-1,487	4,281
2010/11	2,252	-774	5,206	48	-1,491	5,241
2011/12	2,067	-2,426	3,164	-5	-1,574	1,226
2012/13	1,869	-714	4,513	59	-1,722	4,005
2013/14	1,925	-1,082	4,016	36	-1,975	2,920
2014/15	1,732	-421	7,080	-3	-2,342	6,046
2015/16	1,781	-533	7,173	-26	-2,443	5,952
2016/17	1,652	-1,131	4,930	-3	-2,478	2,970
2017/18	1,444	-1,653	5,845	-191	-2,668	2,777
2018/19	1,456	-4,379	6,916	-61	-3,028	904
2019/20	1,023	-2,563	5,458	96	-3,027	987
2020/21	955	-6,456	8,773	-516	-3,307	-551
2021/22	1,047	-7,093	17,474	21	-	11,449

Source: ONS revised MYEs (Nov 2023)

4.10 For completeness, Table 3.2 shows the MYE data (2011-20) as it was published at the time of the HEDNA and the differences from data now published (see Table 3.3).

**Table 4.2 Components of Population Change, mid-2011 to mid-2020 – Coventry – ONS data prior to Census rebase**

	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2011/12	2,078	-992	4,474	29	-	5,589
2012/13	1,872	-596	4,593	50	-	5,919
2013/14	1,929	-264	4,938	-8	-	6,595
2014/15	1,737	-379	7,912	0	-	9,270
2015/16	1,800	-501	7,652	-24	-	8,927
2016/17	1,667	-1,014	6,306	-25	-	6,934
2017/18	1,470	-2,273	7,630	-191	-	6,636
2018/19	1,451	-4,241	7,577	-51	-	4,736
2019/20	1,013	-3,036	9,780	109	-	7,866

Source: ONS

4.11 The difference between the sources is stark, with **ONS appearing to have reduced estimates of international migration notably from the 2020 MYE data release to the latest revised (2022) version** – modest changes have been made to natural change and other changes; **with larger changes (but in both an upward and downward direction in individual years) being seen for domestic migration**. Given the inclusion of the UPC category, ONS has revised down its estimate of population change in the 2011-20 period by a total of 34,700 people, including 6,900 just for 2019/20 alone. **These are very significant changes which do cast doubt on the accuracy of ONS modelling / estimates.**

**Table 4.3 Difference between components of population change, mid-2011 to mid-2020 – ONS data prior and since Census rebase**

	Natural change	Net internal migration	Net international migration	Other changes	Other (unattributable)	Total change
2011/12	-11	-1,434	-1,310	-34	-1,574	-4,363
2012/13	-3	-118	-80	9	-1,722	-1,914
2013/14	-4	-818	-922	44	-1,975	-3,675
2014/15	-5	-42	-832	-3	-2,342	-3,224
2015/16	-19	-32	-479	-2	-2,443	-2,975
2016/17	-15	-117	-1,376	22	-2,478	-3,964
2017/18	-26	620	-1,785	0	-2,668	-3,859
2018/19	5	-138	-661	-10	-3,028	-3,832
2019/20	10	473	-4,322	-13	-3,027	-6,879

Source: ONS

4.12 To some extent the analysis above, whilst interesting and highlighting serious issues with population estimates for Coventry does clearly indicate what a reasonable trend and projection might be for the City's population. The updated information does however allow us to provide a check on the assumptions used in the Coventry & Warwickshire HEDNA 2022 against the latest data.

4.13 As noted previously, data from the 2020 MYE release along with 2021 Census figures and an independent estimate of population change allowed for an estimate of a base migration position to be established. The same process can be carried out on the information now published.

4.14 Initially, and for consistency with the HEDNA, the analysis looks at a 10-year period from 2011 to 2021. However, we would note that ONS typically looks at a 5-year period when developing population projections, whilst we do now also have data for 2021/22 which also warrants consideration.

4.15 The table below shows our estimates of net migration including an adjustment for UPC (and the small other changes). This approach is consistent with the HEDNA which sought to estimate implied levels of net migration based on population change and knowledge of the amount of this attributable to

natural change (births minus deaths). The table also shows averages for a number of different time periods (including 2011-21 to be consistent with the HEDNA).

- 4.16 The data shows an average of net migration for the 2011-21 period of 1,133 persons per annum, which is slightly below, but close to, the figure estimated in the HEDNA (1,197 per annum) and **would point to the HEDNA figure as being broadly realistic**. Interestingly, if a 5-year period to 2021 is used, this drops notably to just 111 persons per annum. The use of a 5-year period is typical in ONS projections (including the 2014-based projections used in the Standard Method). A five year figure was not used in the HEDNA particularly due to the data available and concerns over robustness. A longer time period was considered to generate more stable projections and be based on the most reliable (Census) data.
- 4.17 If figures are rolled forward so the 5- and 10-year periods include data for 2021/22 it can be seen the averages increase significantly (from 1,113 to 2,258 persons per annum over 10-years; and from 111 to 1,928 persons per annum over 5-years). It does have to be noted that the 2022 data does not have any adjustment applied for potential over-estimation of population growth. We consider 2021-22 data further, including the ONS alternative admin-based population estimates, later in this section.

**Table 4.4 Net migration and other changes – Coventry (2011-22)**

	Net migration and other changes
2011/12	-841
2012/13	2,136
2013/14	995
2014/15	4,314
2015/16	4,171
2016/17	1,318
2017/18	1,333
2018/19	-552
2019/20	-36
2020/21	-1,506
2021/22	10,402
10-to 2021	1,133
10-to 2022	2,258
5-to 2021	111
5-to 2022	1,928

Source: ONS

#### Age structure of UPC

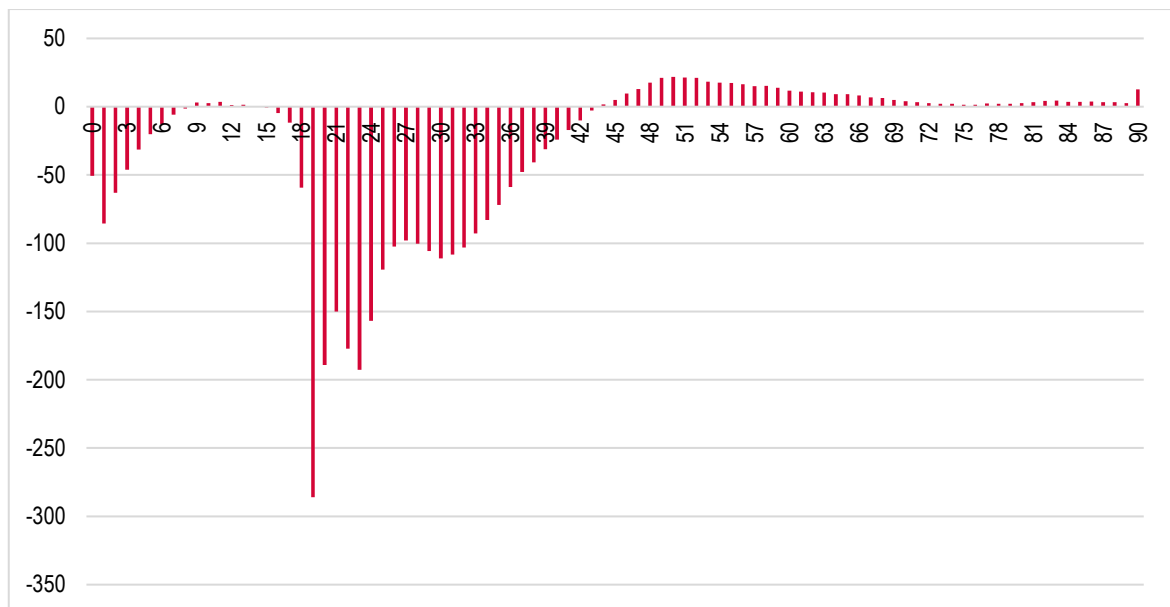
- 4.18 The analysis above points to ONS consistently over-estimating the population of the City and in the previous HEDNA it was suggested that at least part of the reason for this is ONS tracking students into the City but not capturing them as they move out following completion of studies. One way to briefly study this is to consider the age structure of the UPC in the 2011-21 period – i.e. to look at

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which age groups ONS have had to make the largest adjustments to bring post-Census population estimates in-line with the data as monitored over time.

4.19 The figure below shows the main groups where adjustments were made were for people in their late teens and right through people in their 30s. This does support the notion that despite the methodological revisions implemented by ONS, **students leaving the City might not be properly captured by the ONS MYE data**. This is a continuation of the issue with the demographic data for the City recognised by the Statistics Regulator. It is also interesting that for some age groups after about 45 there is actually a positive UPC, suggesting ONS had slightly under-estimated the population in these ages.

**Figure 4.2: UPC Coventry (2011-21 average)**



Source: ONS

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### Interrogating the Data for 2021-22

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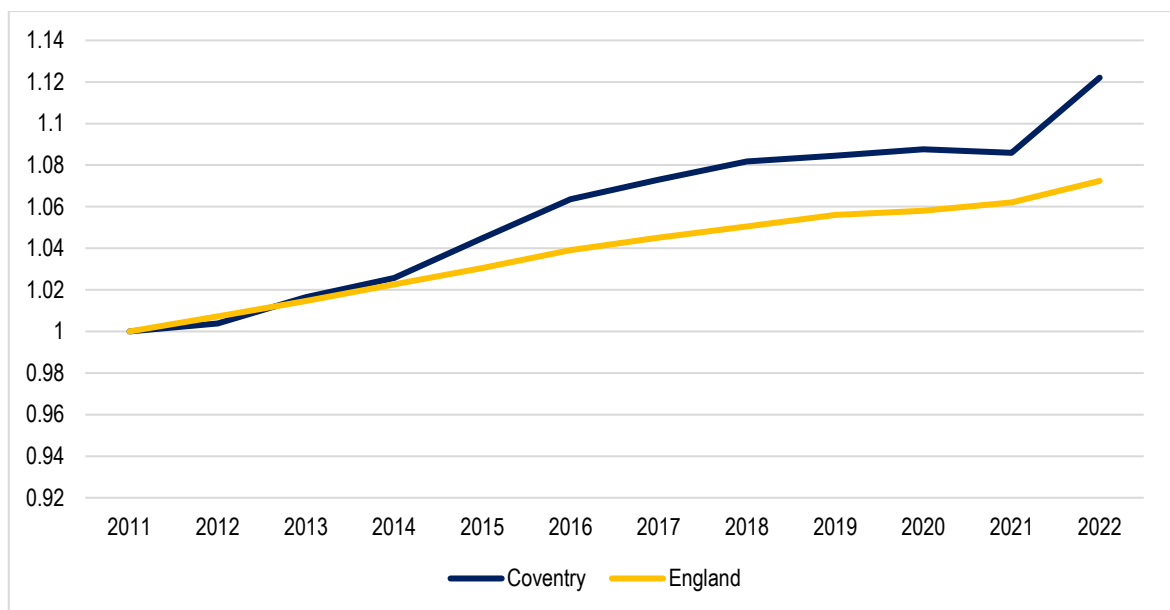
4.20 Clearly, one issue arising from the most recent data is an suggested sharp increase in population growth in 2021/22. According to ONS estimates (see above) the population of Coventry grew by 11,449 in this one year alone; whereas in the previous decade total growth is put at around 27,200 (just 2,720 people per annum on average).

4.21 It is therefore relevant to consider whether the 2021/22 figure can be relied on, particularly given the history of ONS over-estimating population growth in the City, only to reduce figures once Census data is published. The analysis below therefore seeks to test the data for 2021/22, although it should be noted that it is difficult to give significant weight to a single year of data.



4.22 Firstly the analysis below looks at how the population of the City is estimated to have changed compared to national data (for England) – figures are based at 1 in 2011. The data shows the population of the City generally increasing at a rate slightly above that for England but with a notable jump in 2021/22 shown for Coventry in the 2022 MYE. For England there was also an uplift from typical trends in 2021/22 but nowhere near as marked, or of the scale, as for Coventry. Whilst there is no direct reason why population growth in Coventry should follow national trends, this difference does look to be quite stark, particularly knowing the background of ONS continually over-estimating the population of the City. For reference, in the 2021 to 2022 period, ONS puts population growth in Coventry at 3.3% with the figure for England being 1.0%.

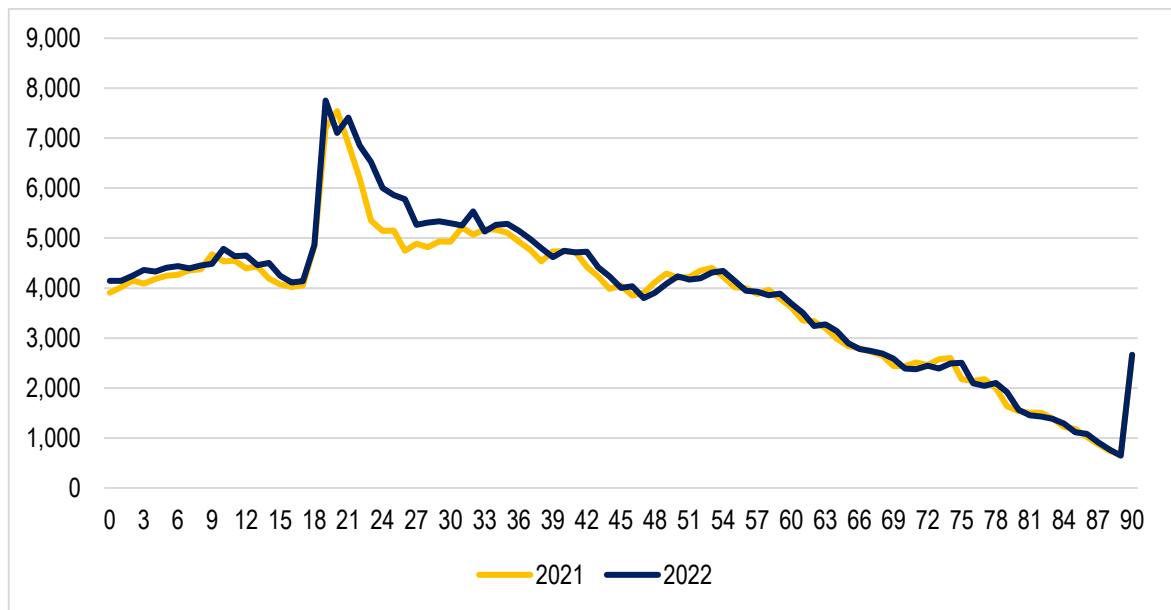
**Figure 4.3: Indexed Population Growth (2011-22) – Coventry and England**



Source: ONS

4.23 Given the sharp estimated increase in population from 2021 to 2022 it is worth briefly reflecting on how the age structure changed in this one year with the figure below showing this data for single-year of age.

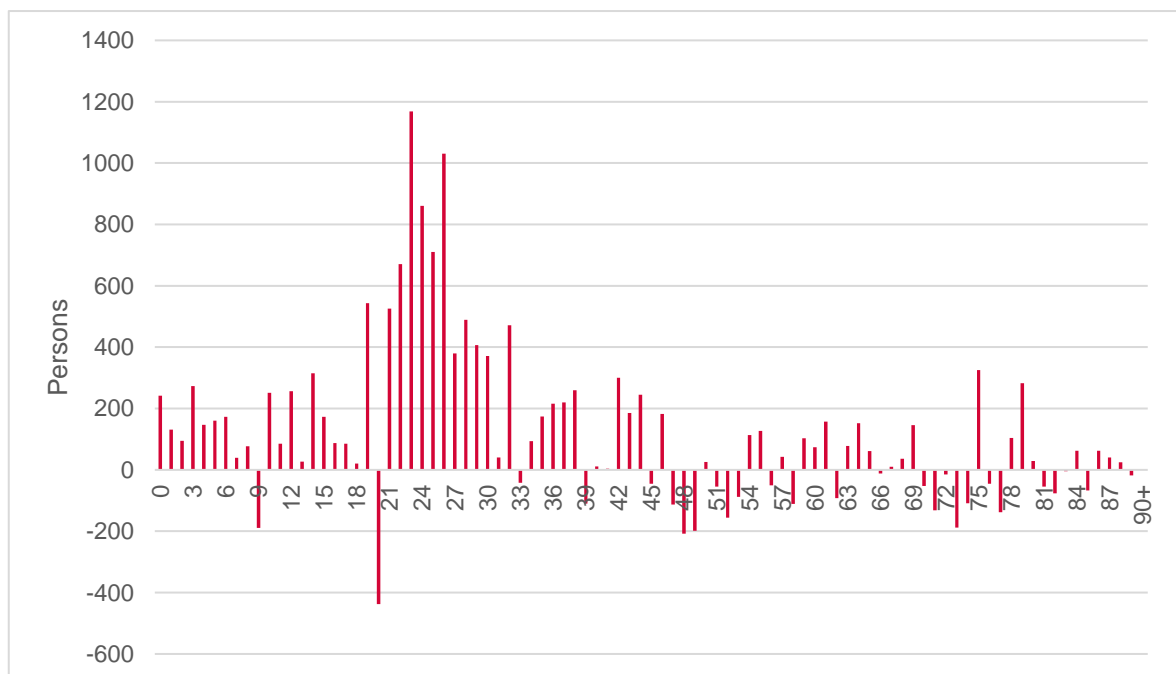
Figure 4.4: Estimated population age structure in 2021 and 2022



Source: ONS

4.24 The chart below shows how the changes in the population between 2021-22 in Coventry using ONS data are distributed by age group. The population growth was focused in those aged between 21-32 (and in particular those aged 23-26).

Figure 4.5: ONS Estimates of Population Change in Coventry, 2021-22



Source: ONS

4.25 This is interesting as it shows **the majority of growth has been in age groups from mid-20s to early 30s** – these are the age groups who may previously have been students and it does point to

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the possibility (as highlighted in the HEDNA) that **a key problem with ONS MYE data is a failure to pick up students leaving the City following the completion of their studies.**

- 4.26 To some extent the observation of increased population in post-student age groups, rather than student age groups, can be confirmed with Higher Education Statistics Authority (HESA) data which shows virtually no change in the number of full-time students at Warwick and Coventry Universities between 2021 and 2022 (with a minor reduction of 140 FT students).

**Table 4.5 Estimated Number of Full-Time Students by Establishment**

	2021	2022
Coventry	32,810	31,910
Warwick	23,925	24,685
Total	56,735	56,595

Source: HESA

- 4.27 The analysis below seeks to consider other data to see if a view can be formed about the apparent sharp increase in population for 2021/22 compared with previous years. This draws on similar sources to the HEDNA, where up-to-date information is available.

#### **Patient Register**

- 4.28 Up to the 2020 MYE, ONS published data from the Patient Register (PR) alongside the mid-year estimates are part of the quality checking process. Since 2020, ONS no longer uses the PR data and so the analysis below has drawn from a download of this data direct from NHS digital. In interpreting PR data caution always needs to be used in looking at actual numbers, with the source most typically used to look at relative growth across areas (the PR traditionally shows higher population estimates than the MYE and generally stronger growth since 2011).

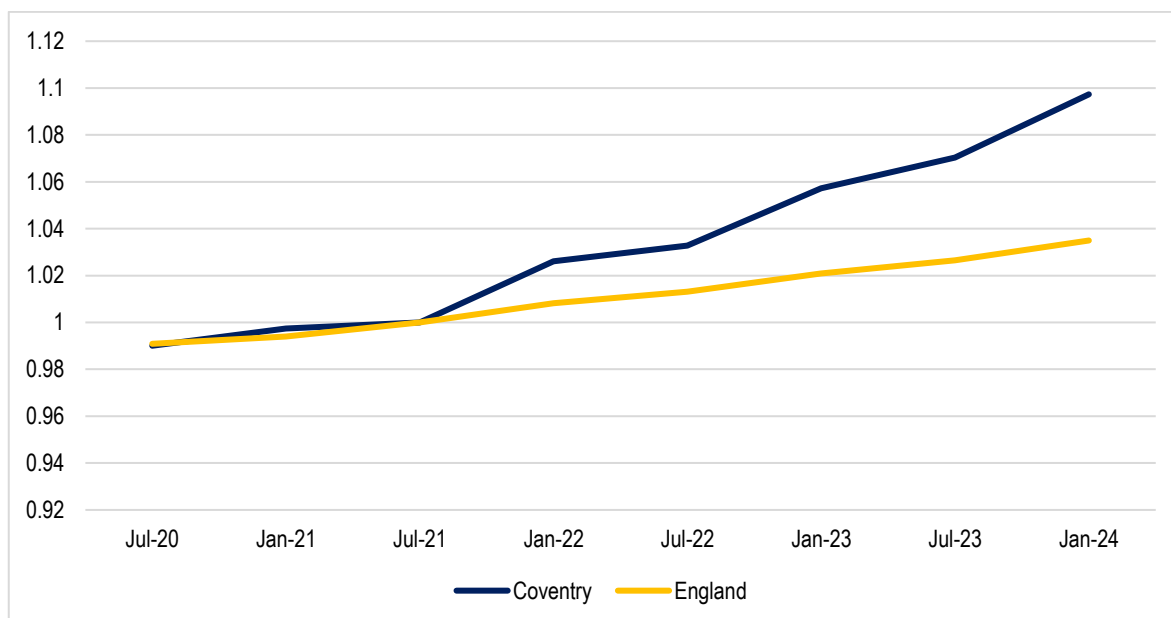
- 4.29 The table below shows the number of people registered with a GP for Coventry and England with the data looks at six month intervals with a mid-year estimate being drawn from July of each year (data from July 2020 to January 2024). The figure below indexes this data to July 2021 and shows between July 2021 and July 2022 an estimated 3.3% increase for Coventry and a 1.3% increase for England. The increase for Coventry is the same as suggested by the MYE, whilst for England the PR is slightly higher (which is the trend normally expected). **This analysis would suggest population growth in Coventry probably has been stronger in the 2021-22 period than in previous years, but probably not as strong as suggested by the MYE.**

**Table 4.6 Number of People on Patient Register**

	Coventry	England
July-2020	394,086	60,413,787
January-2021	396,985	60,606,345
July-2021	398,041	60,970,002
January-2022	408,431	61,469,262
July-2022	411,088	61,768,942
January-2023	420,808	62,241,689
July-2023	426,018	62,581,556
January-2024	436,781	63,101,030
Change (Jul-20 to Jan-24)	10.8%	4.4%

Source: NHS Digital

**Figure 4.6: Indexed Number of People on Patient Register (July 2021=1)**



Source: NHS Digital

### Electoral Register

4.30 Another source is to look at the number of people on the Electoral Register. Data from this source is typically published for December each year and so a mid-year comparison is difficult. The table below shows data for each of 2020, 2021 and 2022 for Coventry and England. Interestingly, the number of people registered to vote nationally has fallen slightly over this period, whilst there has been little change for Coventry (although an increase from December 2021 to December 2022 following a decline in the previous period). On balance this data would again suggest the potential for stronger population growth in Coventry than seen nationally, but arguably not at over three times the rate as shown by the MYE. Again, it suggests issues with the reliability of the ONS estimates for 2021-22.

**Table 4.7 Number of people in Electoral Register – December 2020 to December 2022**

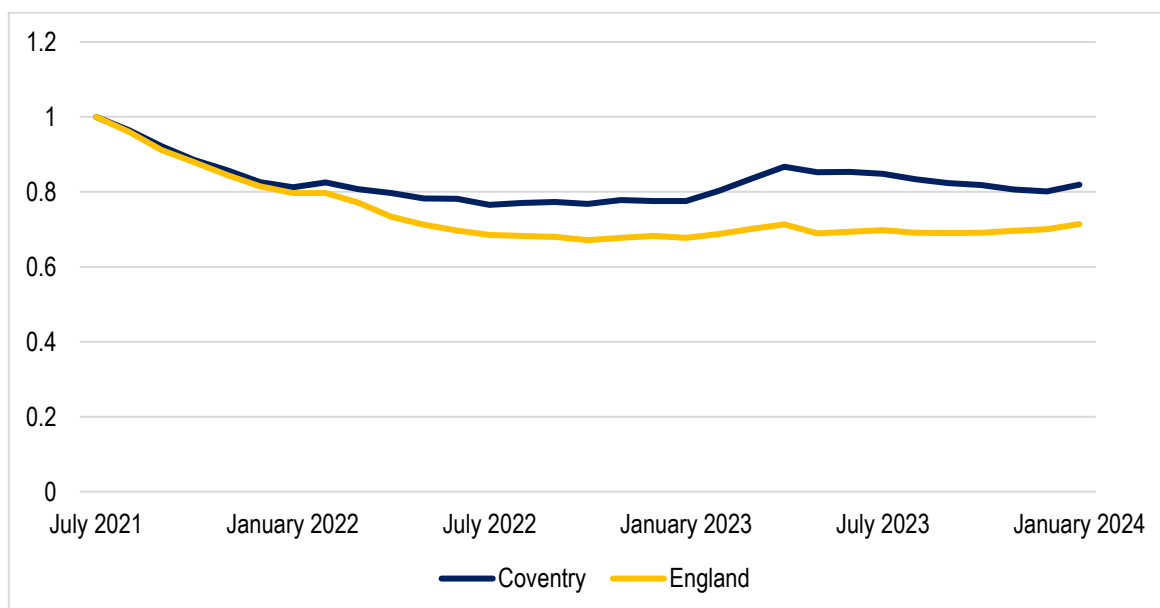
	Coventry	England
December 2020	233,153	41,186,293
December 2021	229,085	40,882,721
December 2022	233,493	40,845,079
% change 2020-22	0.1%	-0.8%

Source: ONS

### Claimant Count

- 4.31 The analysis below looks at Claimant Count data (the number of people claiming Jobseeker’s Allowance plus those on Universal Credit who are out of work). Data has been standardised to July 2021 and shows for both Coventry and England a fall in the number of claimants. It is however notable that the reduction for Coventry is not as strong as seen nationally. Between 2021 and 2022 the number of claimants in Coventry falls by 22%, compared with a 30% reduction nationally. It is difficult to confirm what (if anything) this analysis says about overall population growth and we would note that the claimant count will be influenced by relative economic performance/ job creation (including recovery from Covid-19), but it could suggest population change in the City may have been stronger than seen nationally, but three times the rate would be difficult to confirm.

**Figure 4.7: Standardised number of out-of-work benefit claimants (July 2021=1)**



Source: NOMIS

### Other Data

- 4.32 Consistent with the HEDNA, other data can be sourced and considered as well. Firstly we have looked at the number of people on the Council’s Housing Register – this shows a notable drop from 13,338 to 4,851 from 2021 to 2022 (before rising again to 7,469 by April 2023). Fluctuations on the Register are likely to be due to administrative reasons rather than any underlying demand for housing from a growing population and so nothing specific can really be drawn from this source.

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- 4.33 Analysis of house price data does suggest a modest increase in median prices between 2021 and 2022, whereas nationally there was a small decline. However, it is not clear that much can be read into one year of data and it can also be observed that prices seem to have been stronger nationally since mid-2022 than seen in Coventry.
- 4.34 Finally, we can consider dwelling completions (as more homes delivered potentially provide opportunities for people to move to and live in the City). According to DLUHC data, a total of 1,851 dwellings were completed in 2021-22 (net) which is a 1.3% increase on the dwelling stock as of 2021. For England there was a 0.9% increase in stock over the period. However the Council's Authority Monitoring Report identifies net completions in 2021/22 of 3,818 dwellings; which would be equivalent to c. 2.7% growth in the dwelling stock. However breaking down this figure, it includes 2,261 dwellings equivalents from the delivery of Purpose-built Student Accommodation (c. 5,660 bedspaces), an increase of 73 HMOs and 1,233 conventional residential properties (with a net reduction of 109 care dwellings). Note that the housing monitoring relates to the year from April to end of March; whilst the ONS data relates to a mid-year to mid-year period.
- 4.35 Comparing the completions figure with the population growth in the MYE data would have required an average of 3 additional people per additional dwelling. An as alternative, if we notionally assumed an increase of 1 person in each PBSA bedspace, 6 per additional HMO and 2.2 per conventional residential property, the additional housing delivery could notionally support population growth in 2021/22 of up to 8,800. This is substantially below the 11,450 population growth suggested by the MYEs.
- 4.36 **The evidence would again suggest population growth in the City may have been stronger than nationally in 2021/22, and stronger than in previous years, but probably not three times as strong (as shown in the 2022 MYE data).** It points to clear ongoing reliability issues associated with ONS MYE data for the City, which does not therefore provide a strong basis for development of new demographic projections.

#### **Other New Data Since the HEDNA**

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##### **2021 Census**

- 4.37 Although not necessarily directly related to estimating population trends in Coventry, there is some additional data from the Census which was not available at the time of the HEDNA that is of interest. This includes data looking at households trends (including overcrowding) and estimates of the number of vacant homes.
- 4.38 The first analysis shows the number of dwellings and households shown in the 2011 and 2021 Census. By subtracting households from dwellings an estimate of vacant homes (as well as second/holiday homes) can be made and an implied vacancy rate. Across the City the data points to a

notable increase in the proportion of vacant homes. However alternative data sources do not corroborate this, with for instance Council Tax data pointing to c. 4,100 vacants and a vacancy rate of 2.8% in 2021. We would typically expect 2.5-3.0% vacant homes within a functioning market. The number of vacant homes according to Census data has however increased by nearly 5,000. This doesn't however look realistic when considered alongside other data sources.

**Table 4.8 Number of Dwellings, households and implied vacancy rate (2011 and 2021) - Coventry**

	Dwellings	Households	Implied vacant
2011	132,891	128,592	3.2%
2021	143,408	134,138	6.5%

Source: ONS (Census)

- 4.39 Aligned to the increased number of vacant homes and overall population growth, the Census data indicated that number of overcrowded households has increase by around 13% - 892 additional overcrowded households.

**Table 4.9 Change in overcrowding and under-occupation (2011-21) – Coventry**

	2011	2021	Change	% change
+2 or more	40,626	43,201	2,575	6.3%
+1 or more	45,231	45,083	-148	-0.3%
0	35,848	38,080	2,232	6.2%
-1 or less	6,887	7,779	892	13.0%
TOTAL	128,592	134,143	5,551	4.3%

Source: ONS (Census)

- 4.40 One consequence of seeing strong population growth and a more modest growth in households has been to see household formation fall. The table below showing all age groups up to age 49 are less likely to be a head of household than was the case in 2011. It is however also possible that the reduction in these figures have been driven by an over-estimate of population growth between 2011 and 2021 or possibly an under-estimation in household change. It is important that calculations on future housing need do not build on constraints on new household formation.

**Table 4.10 Household Representative Rates by age (2011 and 2021) – Coventry**

	2011	2021	Change
16-24	18.9%	15.0%	-3.9%
25-34	47.4%	41.6%	-5.8%
35-49	60.4%	57.2%	-3.2%
50-64	62.5%	63.9%	1.4%
65+	68.9%	67.5%	-1.4%

Source: ONS (Census)

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## ONS Admin-based Population Estimates

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4.41 Over the last couple of years ONS has been developing new ‘admin based’ population estimates with data now available for mid-2021 to mid-2023 – the latter date therefore being since the most recent MYE. It is therefore of interest to look at population estimates from this source, although we would point out that ONS note the following on their website:

*‘These are official statistics in development because we continue to refine our methods. They do not replace official mid-year population and international migration estimates and should not be used for decision making’.*

4.42 The table below shows population estimates from the admin-based data and also the MYE. For 2021-22 the admin-based figures to show very slightly lower population growth than the MYE; but they also show a high estimated level of growth for the 2022-23 period. As with previous analysis it is difficult to have full confidence in this data given past issues and the lack of consistency between the trends shown and other data sources.

**Table 4.11 ONS admin-based population estimates (2021-23) and comparison with MYE - Coventry**

	ONS MYE	Change	ONS Admin-based Estimate	Change
2021	344,151	-	344,429	-
2022	355,600	11,449	354,803	10,374
2023	-	-	368,483	13,680

Source: ONS

4.43 The continuing strong population growth shown in the ONS admin-based estimates 2022-23 does not correlate with the lower housing delivery (1674 dwellings) in 2022/23, which was notably down on the 3651 dwellings in 2021/22. It represents a scale of population growth which would have implied the equivalent of an additional 8 persons for each dwelling/ dwelling equivalent.<sup>1</sup>

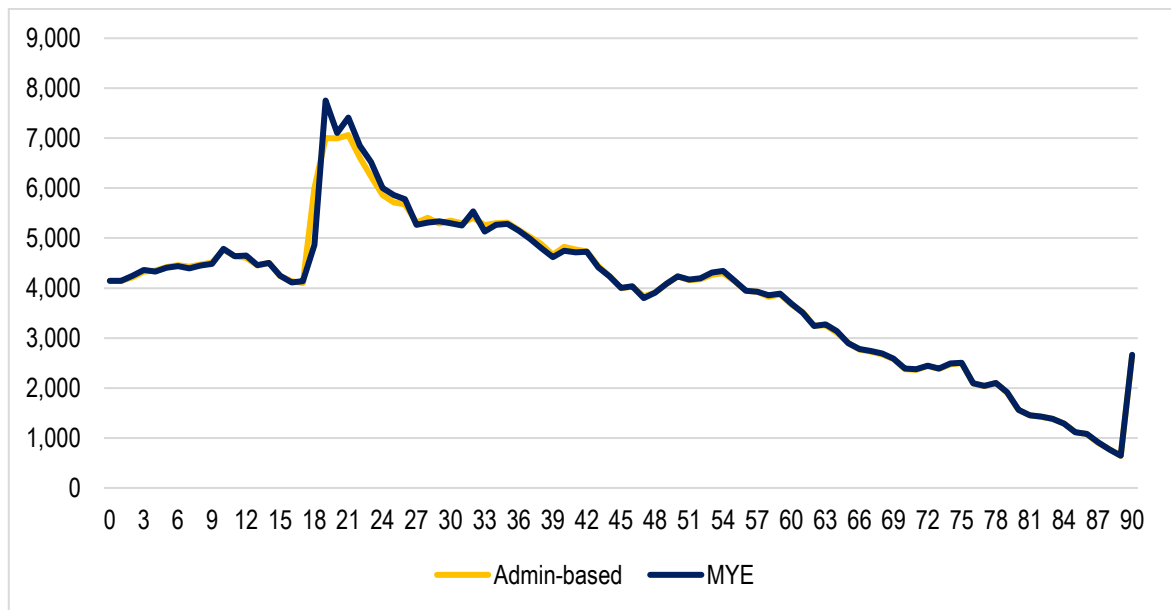
4.44 It is also possible to compare the age structure from these two sources, with the figure below showing this data for 2022. For virtually all age groups the two sources are broadly identical, with differences only really being seen for people in their late teens and early 20s – likely to be related to the student population of the City.

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<sup>1</sup> With the caveat that there are some differences between the timeframes considered with the MYEs measured from mid year whereas the housing delivery is measured from 1<sup>st</sup> April



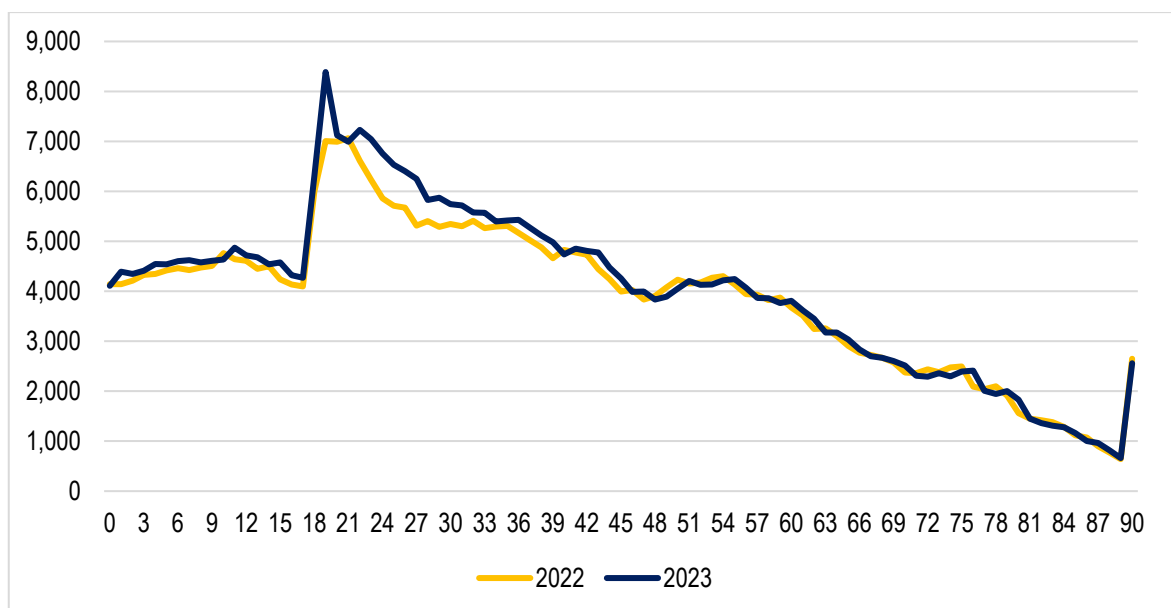
**Figure 4.8: Estimated population age structure in 2022 (MYE and admin-based)**



Source: ONS

4.45 Finally, it is possible to see how this source has estimated the population to have changed from 2022 to 2023 (a similar analysis to that carried out above with regard to the MYE from 2021 to 2022). This is interesting in showing some quite notable differences in just a single year. For an individual age group the key finding is an increase of nearly 1,400 people aged 19 and also an increase of 6,600 people aged 22 to 31. This latter group is a typical cohort who may have been students and not picked up as having moved from the City and it does seem as if the admin-based data could suffer from some of the same issues that typically point to the MYE over-estimating population growth in the City.

**Figure 4.9: Estimated population age structure in 2022 and 2023 from admin-based data**



Source: ONS

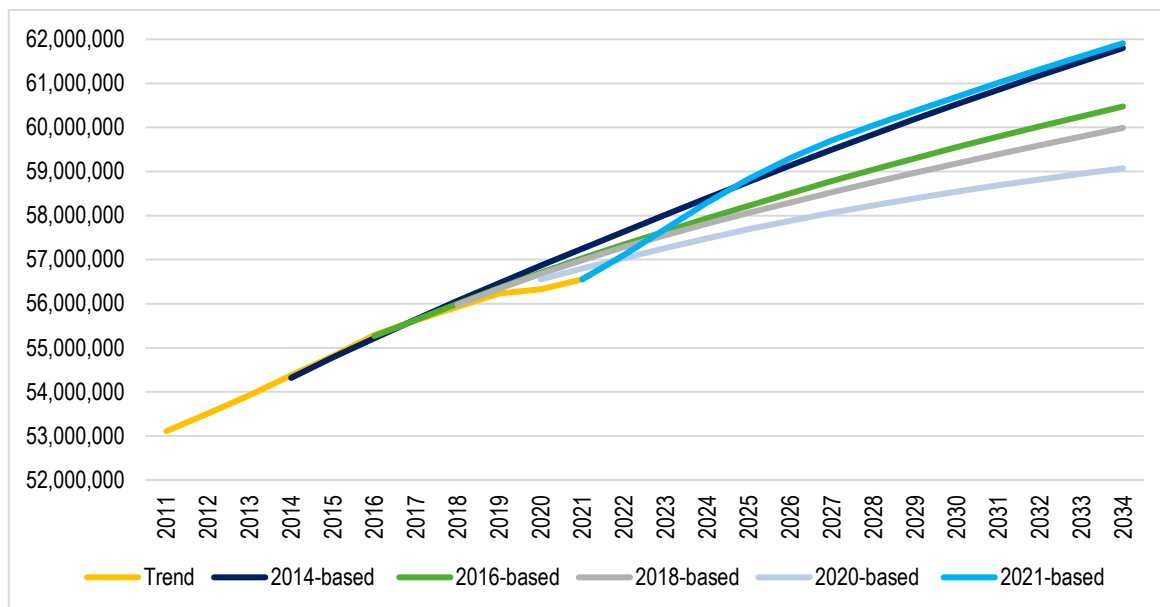
- 
- 4.46 Overall, an analysis of ONS admin-based population estimates is interesting. It points to there having been stronger population growth in 2021-22 and 2022-23 than the trends from the previous decade (2011-21). However, looking at the age structure changes does point to the possibility of the MYE data not picking up people moving from the City (typically after finishing studies). This has been a typical criticism of MYE data in the past.
- 4.47 We would however suggest that this source (like the MYE) does point to stronger growth in the recent past, but that the exact scale of this growth is quite difficult to precisely quantify.

### **2021-based National Population Projections**

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- 4.48 A final consideration is the publication of new national population projections by ONS in January 2024. The projections are 2021-based 'Interim Projections'. Despite taking a 2021 base it is notable that figures to 2023 are actually based on observed trends, including of international migration, although data for 2022-23 was provisional at the time of publication. Of the projections ONS notes:
- 'National population projections are not forecasts and do not attempt to predict potential changes in international migration. There is uncertainty over future directions and levels of international migration'.*
- 4.49 One notable feature of the projections is a much higher projected population growth than in any set of projections since the 2014-based release. The figure below shows the projected population gross across England, with the 2021-based interim projections now projecting for population by 2034 to be very slightly higher than was projected back in the 2014-based projections.

**Figure 4.10: Past trends and projected population growth (range of projection releases) – England**



Source: ONS

4.50 Although the 2014- and 2021-based projections show a similar level of population growth, it needs to be noted that this is as a result of some quite different components of population change. The latest national projections expect a substantially higher level of migration than any previous release, whilst natural change is quite low. The table below summarises this data for a 10-year period (2024-34) and shows the very substantial difference between the components of different projection releases.

**Table 4.12 Natural change and net migration assumptions in a range of national projection releases for England (per annum)**

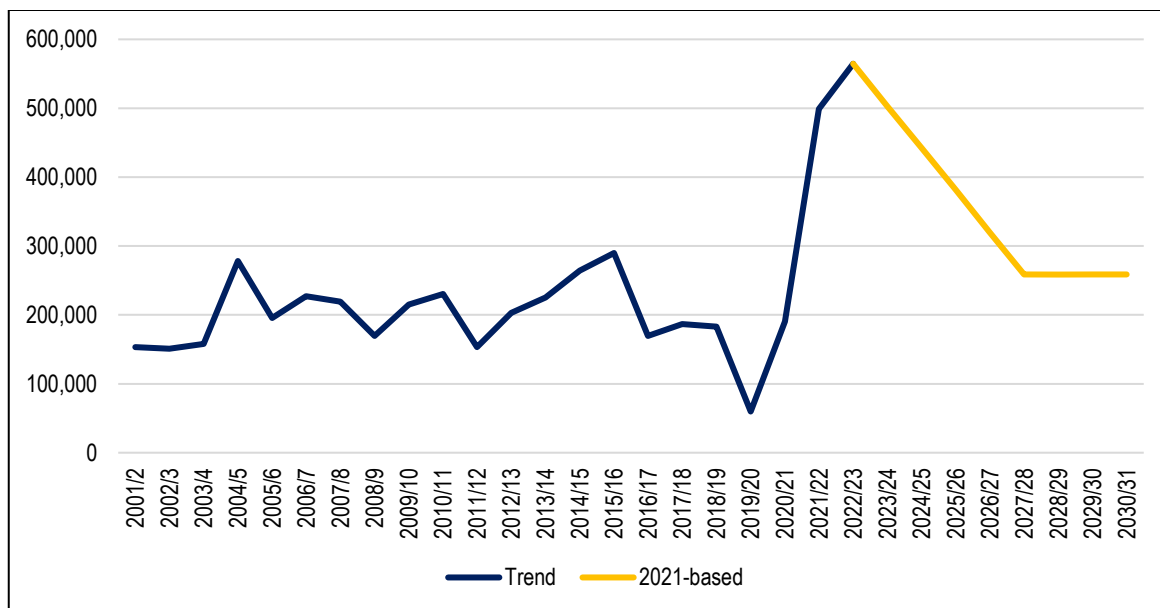
	Natural change	Net migration	Total change
2014-based	176,000	163,000	339,000
2016-based	110,000	143,000	253,000
2018-based	50,000	166,000	216,000
2020-based	-12,000	171,000	159,000
2021-based	66,000	295,000	361,000

Source: ONS

4.51 The much higher migration in the 2021-based projections looks to have been influenced by observations of high international migration in 2021-22 and 2022-23 with the figure below showing net migration trends to England back to 2001 and how these have been projected in the 2021-based national projections. The projections themselves take account of 10 year trends and the view of an Expert Panel.

4.52 The figure shows the high levels of migration recorded by ONS for the last two years and shows moving forward the figures are projected to decline, to settle at a long-term net figure of around 259,000 per annum. Whilst such a figure does not look unreasonable in the context of the recent trends, it is notable that a long-term figure of 259,000 is actually higher than virtually any year over a two decade period from 2001-21. This analysis does support the caution exercised by ONS about uncertainties with future projections of international migration.

**Figure 4.11: Past trends in net migration to England and 2021-based projections**



Source: ONS

4.53 ONS has yet to produce related demographic projections at a local level which set out how this translates into projections for different local authorities.

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## 5. BRINGING THE EVIDENCE TOGETHER

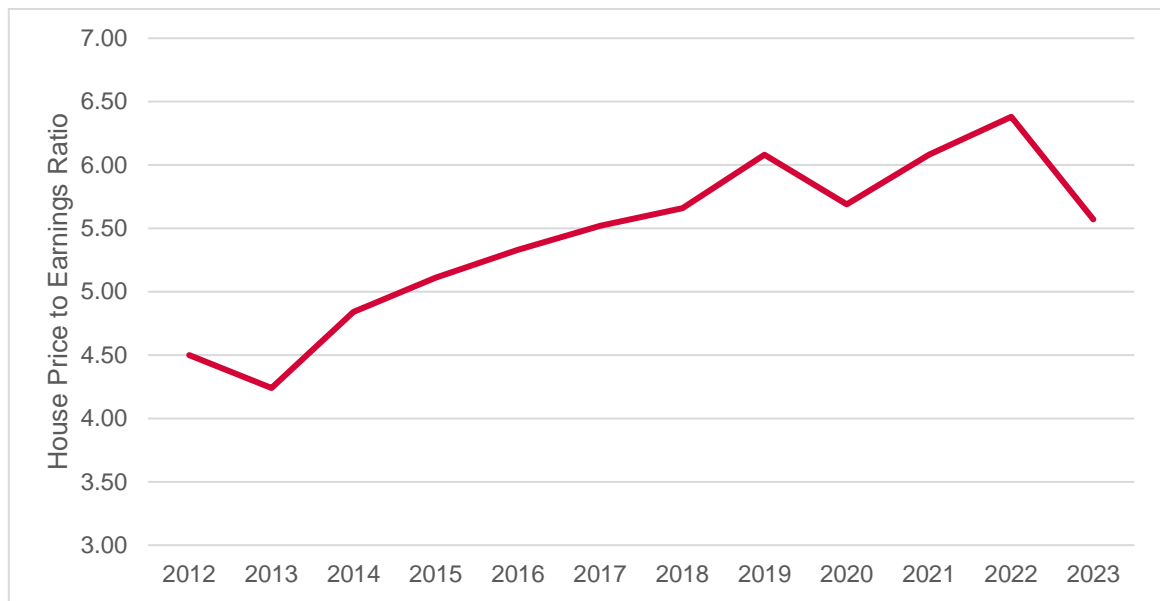
- 5.1 Overall the evidence points to continuing ongoing issues with the accuracy and reliability of ONS Mid-Year Estimate data for Coventry. This issue has been recognised by the Statistics Regulator, but appears as yet unresolved.
- 5.2 The data points to some evidence that population growth in Coventry may have been stronger in the 2021-22 year, but it is difficult to come to a clear and accurate position regarding how the City's population has grown since 2021 given ongoing issues with the quality of the data. Furthermore an accurate trend position cannot be established based on very short-term data. On this basis, IcenI conclude that the Census data used in the HEDNA to project growth in the City's population remains appropriate and uses the best information available.
- 5.3 The NPPF in Para 61 now sets out that there may be exceptional circumstances, including related to the **particular demographic characteristics of an area**, which justify an alternative approach to the standard method to calculating housing needs. Any alternative approach also needs to reflect current and future demographic trends and market signals. This supports the approach adopted to using alternative demographic projections in the HEDNA.
- 5.4 In Para 62 the NPPF in addition outlines that "*the standard method incorporates an uplift which applies to certain cities and urban centres, as set out in national planning guidance. This uplift should be accommodated within those cities and urban centres themselves except where there are voluntary cross boundary redistribution agreements in place, or where it would conflict with the policies in this Framework.*" There is no specific guidance as to whether it is necessary to apply the 'cities and urban areas uplift' when using an alternative approach.

### **Latest Affordability Evidence**

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- 5.5 The affordability uplift is calculated based on the extent to which the latest median (workplace-based) house price-to-income ratio is above 4. The latest published data for Coventry, for 2023, shows a ratio of 5.57 (i.e. the average house price is 5.57 times the average income of FT workers in the City).

**Figure 6.1: Median House Price to Earnings Ratio, Coventry**



Source: ONS House price to workplace-based earnings ratio

5.6 The affordability ratio is based on the median house price over the year to September 2023 and the average earnings of full-time workers. The median house price over this period for the City was £220,000. The ONS Annual Survey of Hours and Earnings (ASHE) points to an average income of almost £39,500 generating an affordability ratio of 5.57, which is lower than that the previous year.

**Table 5.1 2023 Affordability Ratio**

	Coventry
Median House Price	£220,000
Median Earnings, FT Workers	£39,491
House Price-to-Income Ratio	5.57
Affordability Uplift	9.8%

### Standard Method Calculation

5.7 We have set out below the latest standard method figures for local housing need using the 2014-based Household Projections and applying the latest data. However for the reasons set out in the HEDNA, the 2014-based demographic projections are not appropriate for the City and over-estimate potential demographic growth.

**Table 5.2 Standard Method Calculations – Coventry**

	Coventry
Households, 2024	158,929
Households, 2034	179,714
Change in Households	20,785
Annual Change in Households	2079
Affordability Ratio	5.57
Affordability Uplift	9.8%
Stage 2 Housing Need	2,282
Cities' Uplift	35%
Local Housing Need	3,081

### Sensitivity Testing the HEDNA Projections

- 5.8 Finally we provide a sensitivity analysis considering the implications of applying the latest affordability ratios to the demographic projections in the HEDNA, which our analysis indicates remain robust.
- 5.9 The analysis indicates that the updated affordability ratio would see the Stage 2 need drop by 2% which we consider is *de minimus*; whilst the housing need figure including the urban uplift would fall from 1964 dpa to 1921 dpa, which represents a similar 2% fall. Overall the HEDNA conclusions on the local housing need are considered to remain robust.

**Table 5.3 Housing Need Calculations – 2021 and 2023 Affordability Ratio**

	2021 Affordability Ratio	2023 Affordability Ratio
Households, 2022	141,244	141,244
Households, 2032	154,202	154,202
Change in Households	12,958	12,958
Annual Change in H'holds	1,296	1,296
Affordability Ratio	5.96	5.57
Affordability Uplift	12%	9.8%
Stage 2 Housing Need	1,455	1,423
Cities' Uplift	35%	35%
Local Housing Need	1,964	1,921