A02 (a)

2016 Mid-Year Estimate revised

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March 2018



Summary

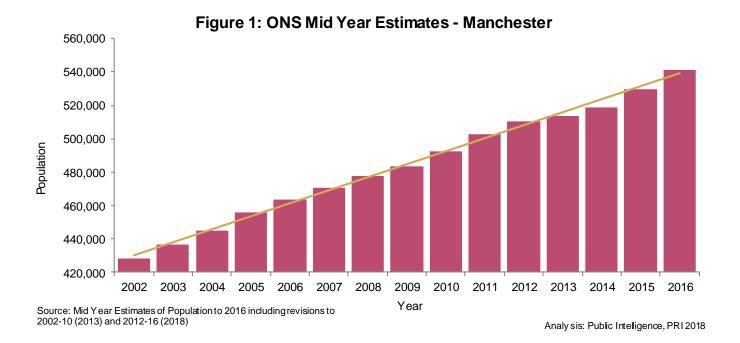
- 1.1 The revised Mid-Year Estimate (MYE) for 2016, released on 22nd March 2018 by the Office for National Statistics (ONS), estimates Manchester's 2016 mid-year population at 541,319.
- 1.2 This is an increase of 11,510 residents, or 2.2% growth, on the revised 2015 MYE, which is an rise on the revised 2014-2015 estimated growth of 2.1%.
- 1.3 This is an improvement on the growth between 2015 and 2016 in the original estimate which was 10,971 residents, equating to 2.1% growth.
- 1.3 There were 4,571 more births than deaths in the twelve months up to 30th June 2016.
- 1.4 Migration (internal and international) and other changes accounted for a net increase of 6,939 residents in the twelve months to the end of June 2016, higher than the original increase of 6,400 residents.
- 1.5 Population growth between 2015 and 2016 is back in line with the annual growth pattern seen before ONS changed their methodology in 2010 suggesting that statistical issues arising in Manchester estimates have been addressed. The additional methodology change used in these latest revisions has not adversely affected the growth.
- 1.6 The 2016 Mid-Year Estimate for Manchester is 6,381 people higher than predicted for mid-2016 by ONS in their current 2014-based subnational population projections and 56 people higher than the original 2016 Mid-Year Estimate published in 2017.
- 1.7 This estimate elevates the low level growth trajectory created by the three years of estimates for 2012 to 2014. Because of these low earlier estimates, the total estimate for 2016 is still likely to be around 7,500 residents fewer than it should be.
- 1.8 Manchester's growth of 2.2% for the year to mid-2016 is much higher than that seen nationally, with England estimated to have grown by 0.9%.
- 1.9 Manchester's population exceeded the Community Strategy target of 480,000 residents by more than 50,000 in 2015 and continues to grow strongly. Since 2011, the revised estimated population has grown by 38,417 (7.6%) and by 118,404 (28.0%) since 2001.

The Office for National Statistics <u>Population Estimates Analysis Tool</u> can be downloaded to view the revised Mid-2016 population estimate in full, along with revised estimates for 2012 to 2015. All data are Crown copyright ONS. The download includes single year of age by sex at district, county and country level (England and Wales). Revised estimates for smaller areas have not been issued yet.

Manchester City Council has been in consultation with ONS about the methodology being used to calculate Mid-Year Estimates and Projections regarding potential underestimating of Manchester's population. An alternative population estimate using additional administrative data to enhance ONS estimates done by Public Intelligence, PRI puts the mid-2016 population at 548,775.

2016 Mid-Year Estimate

2.1 **Figure 1** highlights the strong growth in Manchester's population, from 428,221 in 2002 to 541,319 in 2016, a 28% net increase over fifteen years, representing 118,404 people.



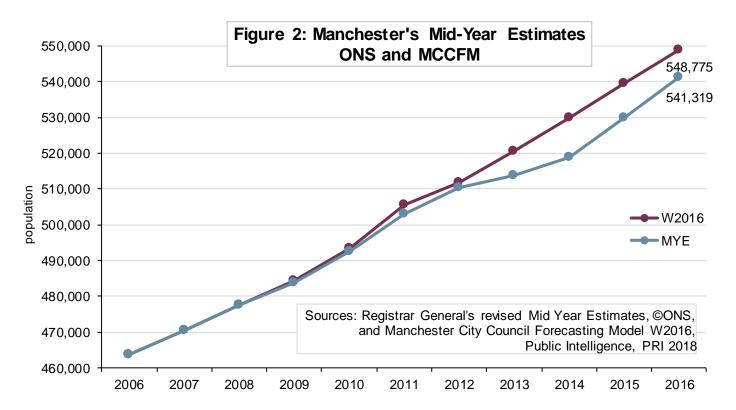
2.2 The trendline in **Table 1** shows that annual growth after 2014 is back to expected levels and more in line with growth published before the methodology changes introduced by ONS in 2010. This methodology has had a marked negative effect on Manchester's population growth, specifically relating to migration. Following the 2011 Census, 2002-2010 figures, which had been adjusted downwards retrospectively in 2010 using the new methodology, had to be revised back up again, but the methodology remained and 2012-2014 figures were lower than anticipated locally. This subsequently affected the current 2014-based subnational population projections (SNPP) resulting in a low future growth trajectory. Manchester City Council has been in consultation with ONS about this and it is encouraging that 2015 and now 2016's revised mid-year estimates are showing strong growth due to migration. Adjustments to the projections, however, will not be available until summer 2018 so the council has developed an alternative forecast, MCCFM. MCCFM has higher past

Table 1: ONS revised Mid-Year Estimates for Manchester, 2002 to 2016 (in thousands)															
(rounded)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Population	428.2	436.7	444.9	455.7	463.7	470.5	477.4	483.8	492.6	502.9	510.5	513.7	518.8	529.8	541.3
Annual change	5.3	8.5	8.2	10.8	8.0	6.8	6.9	6.4	8.8	10.3	7.6	3.2	5.1	11.0	11.5
% change	1.3	2.0	1.9	2.4	1.8	1.5	1.5	1.3	1.8	2.1	1.5	0.6	1.0	2.1	2.2
Source: revised MYE, ONS ©2018 (2002-10 revised 2013, 2012-16 revised 2018) Public Intelligence, PRI 20														1 2018	

growth due to migration and from 2019 whereas SNPP has annual losses from 2019.

2.3 Various data sources suggest that Manchester's growth between 2011 and 2014 was higher than the rates seen in Table 1. This information has been fed into MCCFM so totals are higher than ONS Mid-Year Estimates (MYEs) for these years, which in turn results in higher subsequent estimates. MCCFM predicts a figure of 548,775 for 2016, with growth of 1.7% between mid-2015 and mid-2016. The population growth published by ONS in this revised mid-year estimate is actually higher than MCCFM (9,173 people compared to ONS' 11,510) and this has offset some of the probable undercount of previous years, closing the gap between the two lines of growth shown in Figure 2.

2.4 Figure 2 compares the MYEs from ONS with Manchester's MCCFM¹. MCCFM uses ONS MYEs as a base but has then adjusted them retrospectively to 2001 using a wide range of small area data (often address level), building up from the smallest geographies to district level. MCCFM is based on pre-revised estimates from 2012.



2.5 MCCFM is not to be confused with the Greater Manchester Forecasting Model² - this is a different model, building economic factors into its population projections whereas MCCFM builds in housing strategy. GMFM has a 2016-based population figure for Manchester of 538,200 (rounded to nearest hundred) by mid-2016, which is lower than the ONS figure and significantly lower than MCCFM's.

Components of change

- 3.1 **Figure 3** shows the broad components of change used in the calculation of the 2016 revised mid-year ONS estimate for Manchester, namely births, deaths and migration. Live births (8,069) exceed deaths (3,498) by 4,571 (natural change), higher than the year before. This is due to a very small increase in the annual birth count and almost one hundred fewer deaths than by mid-2015.
- 3.2 The overall loss to internal migration (to the rest of the UK) is the lowest seen in recent years, with a gap of just 210 more residents moving out than moving in from elsewhere in the UK. This is in line with local expectations as Manchester has become a city that not only draws people in but also offers an increasingly attractive place to settle. Based on the age profile of people choosing to stay, this suggests Manchester is managing to retain young adults, probably from graduate retention. No changes have been made to the internal migration figures in the 2012 to 2016 revisions released in March 2018.

¹MCCFM W2016 2016-based figures issued Spring 2017, Public Intelligence, PRI, Manchester City Council

² issued by Oxford Economics, 2017

- 3.3 Net international migration gain (from abroad) is also back to pre-methodology change levels, following the pattern expected for Manchester. In terms of total international migration, the improved revised figures lead to a strong net gain of 7,145 more residents living in Manchester, either because they are new residents or because existing residents have chosen to stay in the city rather than go abroad.
- 3.4 Population growth due to migration is 6,939 which is 5,039 higher than projected by ONS in the 2014-based subnational population projections for 2016 (projected a 1,900 net gain). It is more in line with that forecast by Manchester City Council's MCCFM (4,965 gain).

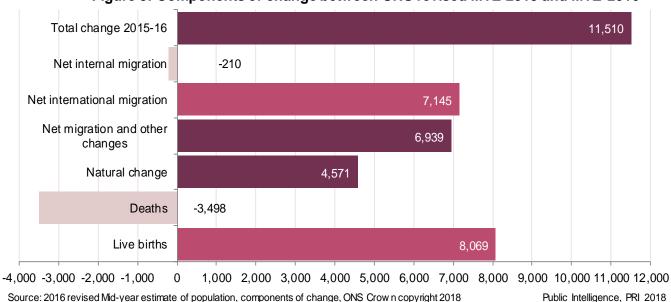
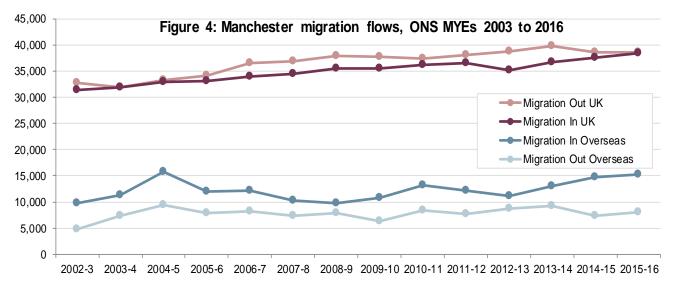


Figure 3: Components of change between ONS revised MYE 2015 and MYE 2016

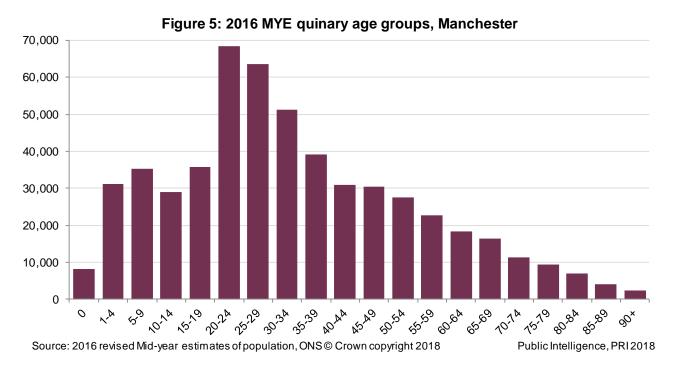
3.5 **Figure 4** shows the estimated migration numbers from ONS from the year to mid-2003 onwards, split between internal and international migration inflows and outflows (revised from 2012). The latest flows indicate a similar number of residents choosing to leave Manchester to live elsewhere in the UK as seen in the previous period, but more people being attracted to the city from both the UK and abroad. The small increase in people entering Manchester from overseas compared to the previous period is matched by a similar increase in people leaving Manchester to go abroad so a similar net result.



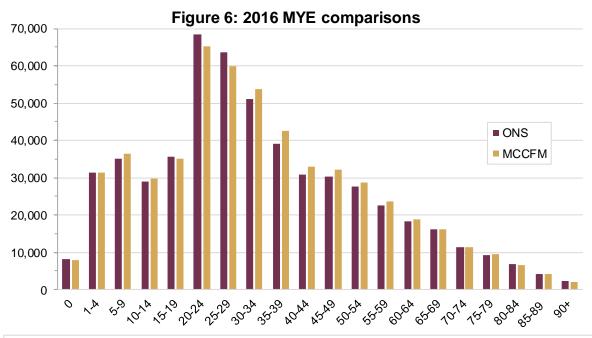
Source: 2016 revised Mid-year estimate of population, components of change, ONS. Crown copyright 2018 Public Intelligence, PRI 2018

2016 Mid-Year Estimate by age

4.1 The population, broadly split into 5-year agebands, is shown in **Figure 5**, illustrating the young profile of the city. The high number of university students and young foreign workers boost the number of residents aged in their twenties and thirties. This is the standard pattern for Manchester but the population aged 25-39 is increasing (although at a slightly lower rate in the revised estimates) particularly for the 25-29 age group, which suggests Manchester is retaining more graduates. For the first time in recent history, this moves the modal average age in the city from 24 to 25, but lowers the median age to 29 from 30. This is likely marking a change in the city's traditional structure, reducing the gap between the 20-24 and 25-29 agebands and losing the pronounced spike in the student ageband.

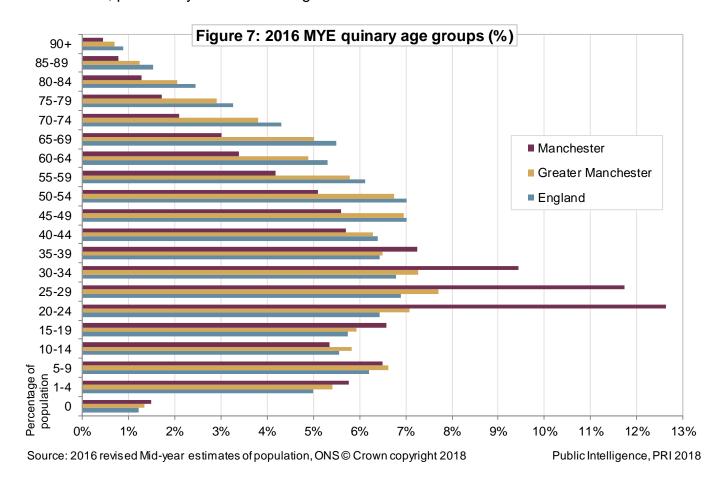


4.2 **Figure 6** compares the revised mid-year estimate from ONS with MCCFM W2016 figures. This shows small differences between the number of 5-14 year olds, as well as higher numbers of 20-29 year olds but lower numbers of 30-64 year olds.



Sources: Mid Year Estimates ©ONS and Manchester City Council Forecasting Model MCCFM, W2016 Public Intelligence, PRI 2018

4.3 The proportions of Manchester residents by ageband is shown in **Figure 7**, compared against Greater Manchester and England's proportions. It shows that Manchester has a younger population than its wider area and nationally, with higher proportions of underfives and 15 to 39 year olds. Conversely, Manchester has much lower proportions of older residents, particularly at retirement age.



Current population

5.1 Due to the differences between ONS mid-year estimates and the MCCFM, it is recommended that MCCFM is used for population estimates, particularly as a 2018 estimate is available at ward level and single year of age (it will be October 2018 before ward estimates are available for 2017 from ONS). The MCCFM mid-year estimate for 2018 is 572,500. However, these are not officially recognised statistics, and this needs to be mentioned if used and attributed to Public Intelligence, PRI. Alternatively, use the revised 2016 mid-year estimate from ONS and include the MCCFM 2016 figure to indicate that the population may be higher than official figures suggest. MCCFM only relates to Manchester so if a comparison is being done with other districts, the ONS figures must be used.