West Midlands Futures

Demographic dividend, diversity and dilemmas:

Population change in the WMCA area

April 2025

West Midlands Combined Authority | Research and Insights

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Executive summary

The West Midlands Combined Authority (WMCA) area, comprising seven metropolitan districts, is characterised by one of Europe's youngest and most ethnically diverse populations. This report investigates the dynamics of population change and projections within the WMCA area. It outlines historical population trends and future projections, providing an evidence base to inform the *West Midlands Futures* work.

The population projections show that our population is set to grow significantly over the next twenty years. Indeed, the growth in our population from 2021 to 2043 will be equivalent to welcoming in the current population of the city of Leicester (368,581).

By creating the right conditions, the city-region can harness the potential of its young population over the next 10-15 years, and the expected ageing demographic over the longer term.

Background

The West Midlands Combined Authority (WMCA) area, made up of the seven metropolitan districts of Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall, and Wolverhampton, is home to one of Europe's youngest and most ethnically diverse population. In Birmingham, some 28% of the population is under the age of 20, and 36% is under the age of 25. Its youthful population is expected to continue to rise over the next decade; and peak in the next 10-15 years; before being outpaced by the over 65s. This is the case not only in Birmingham, but right across all seven districts of the West Midlands metropolitan area.

The United Nations Population Fund notes that places *"with the greatest demographic opportunity for development are those entering a period in which the working-age population has good health, quality education, decent employment and a lower proportion of young dependents. Smaller numbers of children per household generally lead to larger investments per child, more freedom for women to enter the formal workforce and more household savings for old age. When this happens, the national economic payoff can be substantial. This is a demographic dividend."*[1]

As home to amongst the UK's largest young population, a highly educated, healthy workforce with fewer than average young or old dependents should enable the WMCA area to benefit from a "demographic dividend" whereby its economic performance takes off. However, this is not currently the case. Consequently, the WMCA is interested in understanding how to create the conditions so that it can benefit from a demographic dividend – and, as the population matures, how the WMCA area may deal with the impact and opportunities of an ageing population.

Consequently, the WMCA is interested in:

- **Population change**: how has the population of the WMCA area changed over the past decades?
- **Population projections:** how is the population of the WMCA area expected to change in the coming decades?

The intention is that this provides an evidence base towards the *West Midlands Futures* work, by which the potential impacts of these changes on our economy, in particular, our labour market, and on wider society at large can be explored and considered in further detail.

[1] United Nations Population Fund (2025) Demographic dividend https://www.unfpa.org/demographic-dividend

Evidence base

How has the WMCA area population changed over the past decades?

The WMCA's latest population estimate, as of 2023, is 2,980,936 people. This has increased by 2.1% from 2,918,251 on census day 2021; which has in turn increased from 2,739,733 on census day 2011 (up 6.5%) and 2,568,015 on census day 2001 (up 6.7%).[2]

Area	2001	2011	2021	2023
Birmingham	984,642	1,074,283	1,143,285	1,166,049
Coventry	302,804	316,915	344,151	360,702
Dudley	305,052	313,261	323,591	326,680
Sandwell	284,594	309,042	341,895	347,551
Solihull	199,574	206,856	216,677	218,793
Walsall	253,333	269,524	284,392	288,736
Wolverhampton	238,016	249,852	264,260	272,425
WMCA	2,568,015	2,739,733	2,918,251	2,980,936
West Midlands Region	5,280,727	5,608,667	5,956,226	6,085,687

Between 2001 and 2023, the population in the WMCA has grown by 16%, slightly higher than the regional growth of 15%. The population has grown quickest in Sandwell (22%), Coventry (19%) and Birmingham (18%); and more slowly in Walsall and Wolverhampton (both 14%), Solihull (10%) and Dudley (7%).

	Change from 2001-2011	Change from 2011-2021	Change from 2021-2023
Birmingham	9.1%	6.4%	2.0%
Coventry	4.7%	8.6%	4.8%
Dudley	2.7%	3.3%	1.0%
Sandwell	8.6%	10.6%	1.7%
Solihull	3.6%	4.7%	1.0%
Walsall	6.4%	5.5%	1.5%
Wolverhampton	5.0%	5.8%	3.1%
WMCA	6.7%	6.5%	2.1%
West Midlands Region	6.2%	6.2%	2.2%

Note that these figures depend on census population, as well as population estimates which provide an indication of population change in-between the census years.

In 2020, concerns about Coventry's population estimates figures[3] identified some challenges that the ONS faced: particularly, in how the ONS dealt with cities with large student populations and the challenges with the quality of internal and international

[2] Office for National Statistics (2024) ONS mid-year population estimates for multiple years via LGInform+ data tool https://developertools.esd.org.uk/data?value.valueType=raw&metricType=3281&area=E47000007%3ALA%2CE47000007%2CE12000005&period=latest%3A23&rowGrouping=area

[3] Office for Statistical Regulation (2021) Review of population estimates and projections produced by the Office for National Statistics https://osr.statisticsauthority.gov.uk/publication/review-of-population-estimates-and-projections-produced-by-the-office-for-national-statistics/pages/2/

migration data. The ONS has since taken steps to address these issues, and continue to communicate[4] the work it is doing as it moves towards population estimates based on administrative data[5]. The subsequent difference between the 2016-based and 2018-based population projections for Coventry and the census 2021 population figure for 2021, however, did validate some long-standing concerns[6] about the accuracy of the figures. The ONS is now working on a new dynamic population model which will provide near real-time estimates of population size[7].

While the differences in figures in Coventry were particularly egregious, this is not unique to Coventry, as across the WMCA area, there are areas with higher-than-average levels of migration, transient and international communities, and large numbers of internal and international migration from students studying in our universities. However, given that 2021 census is relatively recent, the effect is likely to be smaller than it was by 2019/2020.

[4] ONS (2021) Ensuring our population statistics meet the needs of everyone
https://blog.ons.gov.uk/2021/07/29/ensuring-our-population-statistics-meet-the-needs-of-everyone/

[5] ONS (2024) Admin-based population estimates: local authority case studies, England and Wales, mid-2023
https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/articles/adminbasedpopulationestimates/localauthoritycasestudiesenglandandwalesmid2023

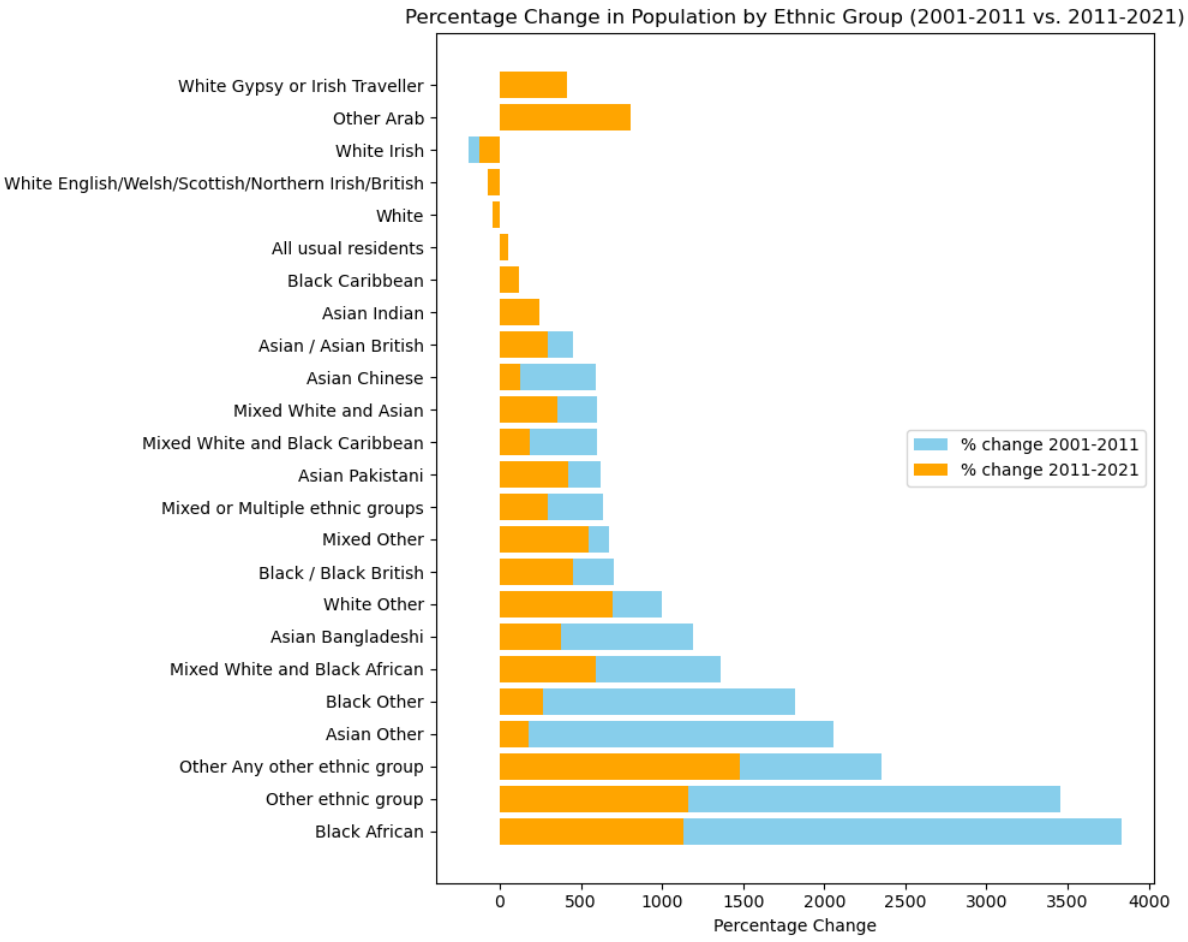
[6] ONS (2022) Internal OSR correspondence regarding OSR investigation into Mid Year Estimates and Projections for Coventry
https://www.ons.gov.uk/aboutus/transparencyandgovernance/freedomofinformationfoi/internalosrcorrespondenceregardingosrinvestigationintomidyearestimatesandprojectionsforcoventry

[7] ONS (2022) Dynamic population model for England and Wales: July 2022
https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/articles/dynamicpopulationmodelforenglandandwales/2022-07-14

How has the diversity of the city-region changed over time?

According to the 2021 Census, out of the 19 ethnic groups, white British people made up the largest percentage of the population (74.4%) followed by white 'other' (6.2%) and Indian (3.1%). Between 2011 and 2021, the percentage of people in the white British ethnic group went down from 80.5% to 74.4%; while the biggest increase were seen in the white 'other' ethnic group, from 4.4% to 6.2%.

Data on ethnicity in the census is available in table KS006 for Census 2001[8], QS211EW for Census 2011[9], and TS022 for Census 2021[10].



Between 2001 and 2021, there was a 12% decrease in the population identifying as "White". There was an absolute decline from 2,043,231 people in 2001 to 1,793,173

[8] NomisWeb (2001) Ethnic group 2001 Census Table KS006
https://www.nomisweb.co.uk/census/2001/ks006

[9] NomisWeb (2011) Ethnic group 2011 Census Table QS211EW
https://www.nomisweb.co.uk/census/2011/qs211ew

[10] NomisWeb (2021) Ethnic group 2021 Census Table TS022
https://www.nomisweb.co.uk/datasets/c2021ts022

people by 2021. The biggest increase is in the "Other" ethnic group, from 10,082 in 2001 to 101,435 by 2021, an increase of 906%.

In terms of specific ethnic groups, some of the biggest percentage growth has been in the Black African population, from 10,000 people in 2001, to 55,557 by 2011, and 126,041 by 2021; a growth of 1,160%. Between 2011 and 2021, while the overall population grew by 7%, there has been a 7% decrease in the White population, and a 141% in the Other ethnic group. The biggest percentage increases are in the Other (182%), Black African (127% growth) and the White Other (73%) groups.

Further detail on how the WMCA population will change over time by ethnic group is set out in the appendix entitled *Population change* on page 19.

How might the WMCA area population change in the future?

The main source of information available are the ONS 2018-based subnational population projections for local authorities. The 2018-based subnational population projections (SNPPs) were published on 24 March 2020, before the latest census in 2021. The next release is expected in February to March 2025, and this will reflect and incorporate the 2021 census data and rebased population data[11].

A number of different projections[12] are produced, all covering the period 2018 to 2043:

- The **principal projections**, from the 2018-based edition of this dataset;
- An alternative, 2018 based **10-year migration variant** edition;
- A **high international migration variant** edition;
- A **low international migration variant** edition; and
- An **alternative internal migration variant** edition.

Importantly, SNPPs only considers observed data – they are *projections* and are **not** *forecasts*. For example, if a particular place has seen a big increase in the available housing stock during the last five years, the SNPP projections for that particular place might not be realistic if that increase does not persist. Similarly, the SNPPs do not consider things such as plans that a local authority might have to build 30,000 in the next decade.

[11] ONS (2020) Population projections for local authorities https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2

[12] ONS (2021) Variant national population projections for the UK and subnational population projections and household projections for England: user guide https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/methodologies/variantnationalpopulationprojectionsfortheukandsubnationalpopulationprojectionsandhouseholdprojectionsforenglanduserguide

Alternative sources of population data

The Greater London Authority (GLA) is one place where they produce their own population estimates, the modelled population backseries[13], building upon the ONS's mid-year population estimates. While the GLA publishes this series for all local authority areas, their London data is augmented with household data, household formation rates, and small area migration flows – and early indications suggest that the backseries by and large aligns with the emerging ONS dynamic population model. As the name suggests, the backseries is looking backwards – it is not a forecasting model.

The GLA produces its own estimates because the choice of estimates can have a huge impact on our understanding of past trends[14]. For instance, our understanding of people's health and wellbeing as measured through life expectancy, or our economic prosperity as measured through labour productivity per capita are all dependent on denominator figures that are derived from population figures.

The devolved administration in Scotland[15] and Wales[16] also produce their own population estimates.

Alternative population projections are available – for example, the Oxford Economics Model[17] builds on the ONS population projections by making a different set of assumptions; whereas the ONS figures projects forward from existing trends assuming long-term net international migration of 340,000 per year from 2028 onwards (and 205,000 at the moment), the Oxford Economics has assumed an average figure of 150,000; and takes into account employment rate forecasts; for instance, if employment rate is falling rather quickly in an area, it assumes that people would be less likely to migrate to an area, given that they are unlikely to secure jobs there.

There are other, administrative sources of data by which population figures can be derived – but none of these are fit for purpose. For example, local authorities have information about voter registration[18] (but this does not cover people not eligible to vote) and about Council Tax[19] (but these are household-level rather than population level); while NHS will have information about patients registered at GP registrations[20] (but

[13] Greater London Authority (2023) Modelled population backseries https://data.london.gov.uk/dataset/modelled-population-backseries?q=modelled
[14] Greater London Authority (2023) Comparison of available population estimates https://data.london.gov.uk/dataset/comparison-of-available-population-estimates
[15] National Records of Scotland (2024) Mid-2023 population estimates https://www.nrscotland.gov.uk/publications/mid-2023-population-estimates/
[16] Welsh Government (2025) National population projections: 2022-based https://www.gov.wales/national-population-projections-2022-based
[17] Oxford Economics (2023) Midlands Economic Forecasting Model Technical Report December 2023 (Unpublished)
[18] ONS (2022) Electoral statistics, UK: December 2021 https://www.ons.gov.uk/peoplepopulationandcommunity/elections/electoralregistration/bulletins/electoralstatisticsforuk/december2021
[19] MHCLG (2025) Council Tax statistics https://www.gov.uk/government/collections/council-tax-statistics
[20] NHS (2025) Patients Registered at a GP Practice https://digital.nhs.uk/data-and-information/publications/statistical/patients-registered-at-a-gp-practice

typically, these over-estimate population as people who have moved out of area and/or abroad do not typically deregister from a practice).

What may be some of the impact of our changing population?

The WMCA shared its findings with heads of research, insights and intelligence across the seven local authorities for comment. Local authorities expressed specific interest in understanding the impacts on:

- adult social care as a result of the projected future increases in elderly population;
- the impact of migration and refugee resettlement schemes; and
- the interplay between demographics and skills; for instance, whether WMCA are projected to be attracting or losing skilled people, which would be important in relation to understanding GVA per capita, and in targeting future skills provision.

In particular, refugee resettlement schemes have had a disproportionate impact on local demographics in parts of the WMCA area. In Solihull, Hongkongers with British Nationality (Overseas) status resettling have been especially significant and are showing up in local administrative operational and service delivery data (e.g. school placement planning). This does not seem to have been reflected in official figures such as in the 2021 census population data – as much of the migration happened after the census day (consequently making the 2018-based projections, and census 2021 figures unreliable as a basis to project future populations). Consequently, understanding the impact of these schemes on our future demography (both in terms of age profile and ethnicity) are essential, as is making sure that future projections capturing the impact of such schemes.

Population projections

The following sets out the ONS population projections for the WMCA area. The principal and the variant projections were combined using Microsoft Power Query enabling the five projections to be displayed in one chart and table, using Microsoft Power BI.

Principal projections

The following table sets out the **principal projections** in selected years (2018, 2030, 2035, 2043), with the census 2021 population and the population estimate for 2023 published 15 July 2024[21].

Place	2018	2021	2023	2030	2035	2043		2021 Census	2023 Estimate
WMCA	2,916,458	2,976,057	3,009,000	3,113,260	3,185,049	3,298,614		2,919,654	2,980,936
Birmingham	1,141,374	1,157,285	1,165,531	1,194,894	1,217,164	1,251,689		1,144,919	1,166,049
Coventry	366,785	383,820	392,539	419,366	435,501	456,405		345,324	360,702
Dudley	320,626	325,147	327,914	336,516	342,824	354,730		323,488	326,680
Sandwell	327,378	333,731	337,366	347,891	355,488	369,065		341,832	347,551
Solihull	214,909	219,139	221,879	230,362	235,927	245,342		216,240	218,793
Walsall	283,378	289,405	293,095	304,384	312,180	325,281		284,124	288,736
Wolverhampton	262,008	267,530	270,677	279,846	285,965	296,102		263,727	272,425
West Midlands Region	5,900,757	6,024,811	6,097,976	6,325,594	6,474,685	6,708,180		5,950,757	6,085,687
England	55,977,178	56,989,570	57,557,521	59,181,798	60,183,914	61,744,098		56,490,048	57,690,323

By and large, the 2018-based population projections are within approximate 1% of the census and population estimates – with the exception of Coventry, where there is a variation of around 10% between the 2018-based projection and the 2021 census population figure; and to a lesser extent, Sandwell, where the projections around 2.4% lower.

The population projections show that our population is set to grow significantly over the next twenty years. Indeed, the growth in our population from the 2021 population to the 2043 principal projection (3,298,614) – a growth of around 380,000 people – will be equivalent to welcoming in the current population of the city of Leicester (368,581).

In developmental economics, typically a consideration of *demographic dividend* will consider the impact of improved healthcare and reduced mortality resulting in families facing fewer births (and hence, a lower dependency ratio), a bulge in the working aged population (typically defined as the population aged 15 to 64) – before the improvement in healthcare leading to longer lifespans and hence, an increase in older people (and, a resulting increase in the dependency ratio).

In the case of a developed economy like England's, this does not apply in quite the same way. In the WMCA area, just under 30% of the WMCA area working aged

[21] ONS (2024) Estimates of the population for England and Wales https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/estimatesofthepopulationforenglandandwales

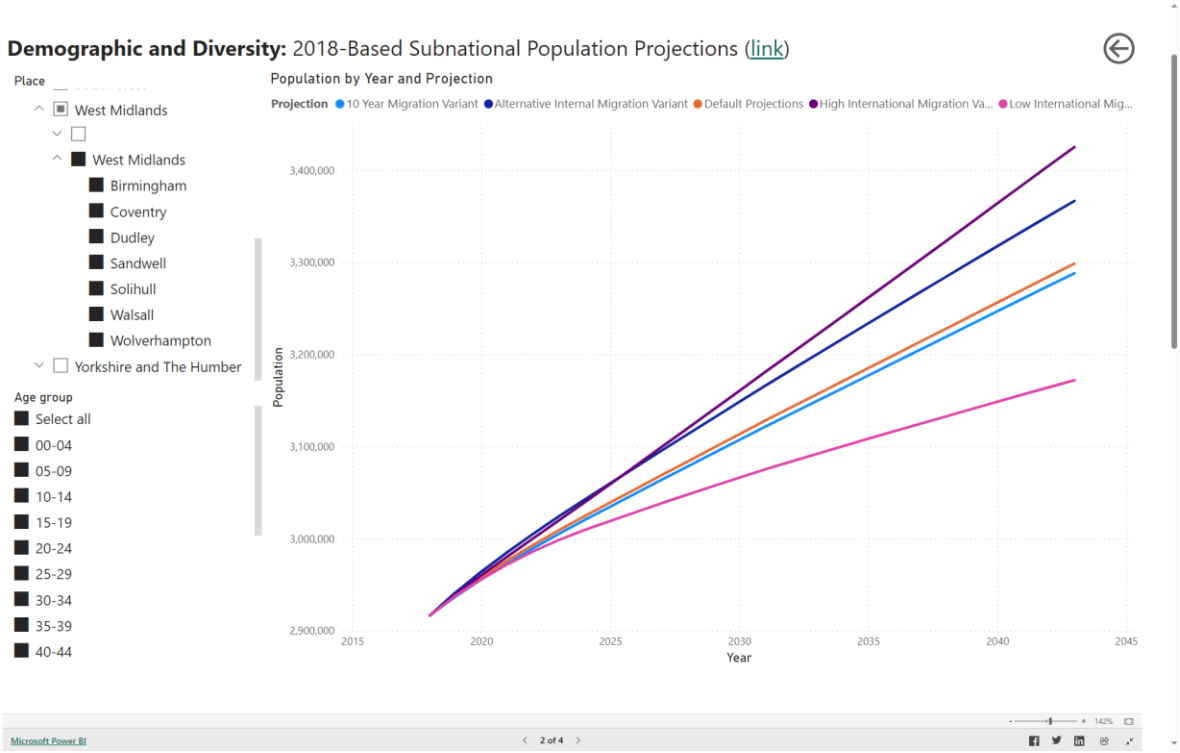
population are students[22]. Many of these will be young people continuing in some form of education, employment and training.

Consequently, a decision was taken to look at projections for the following age groups:

- **All ages**
- **Under 20s** – dependent population
- **Aged 15-34** – 'core' emergent workforce population
- **Aged 20-64** – 'core' working aged population
- **Aged 65 and over** – dependent population

WMCA projections

All ages



WMCA	2018	2021	2023	2030	2035	2043
Census and Population Estimates		2,919,654	2,980,936			
10 Year Migration Variant		2,972,887	3,005,076	3,107,079	3,177,106	3,288,131
Alternative Internal Migration Variant		2,985,090	3,024,003	3,148,372	3,233,679	3,366,710
Principal projections	2,916,458	2,976,057	3,009,000	3,113,260	3,185,049	3,298,614
High International Migration Variant		2,980,245	3,019,552	3,160,334	3,261,613	3,425,216

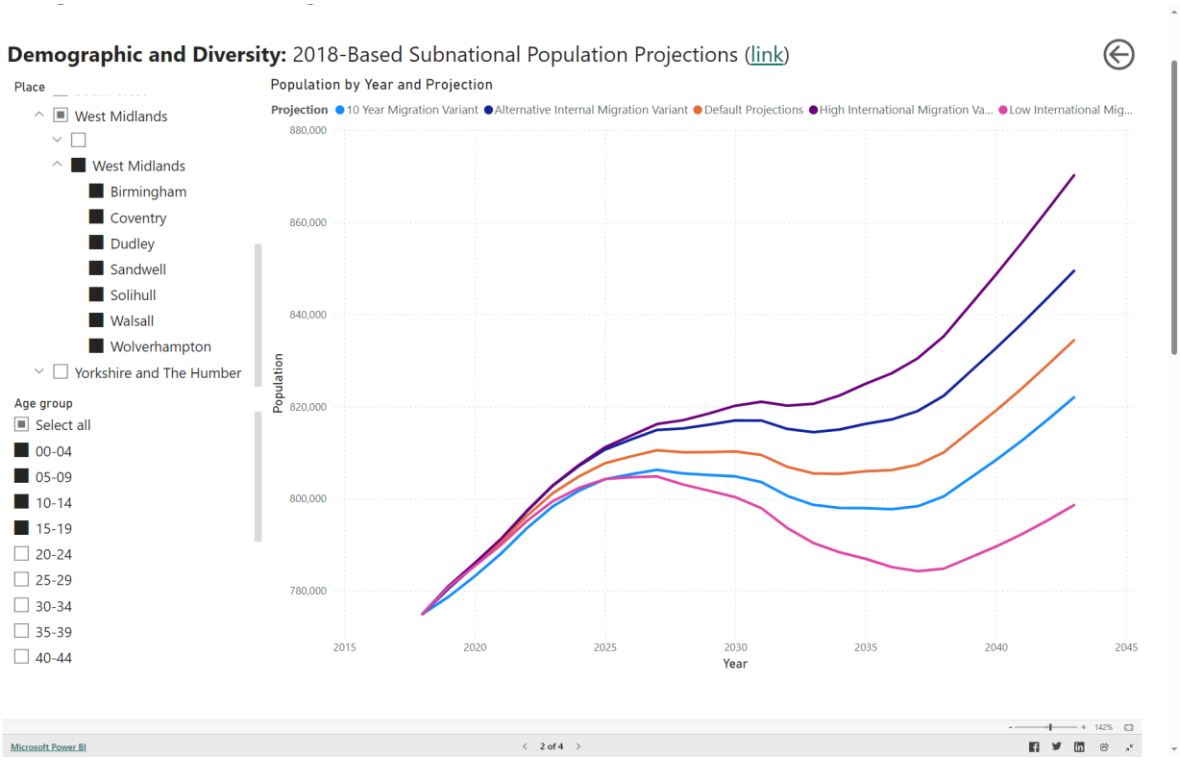
[22] NomisWeb (2025) Labour Market Profile for the West Midlands Combined Authority https://www.nomisweb.co.uk/reports/lmp/comb/1853882375/report.aspx#tabempocc:~:text=21.4-,Student,-149%2C200

Low International Migration Variant	2,971,869	2,998,394	3,066,126	3,108,415	3,171,933

Assumptions in population growth are based on a five-year trend in local fertility rates. Up to the 2018-based SNPPs, fertility has been declining for a number of years; and the level of international migration became an increasingly important driver of population growth. It is also important to recognise the interconnectivity between migration and fertility, with increase in migration expected to indirectly increase population growth through births because of increases in the number of women. Consequently, population is expected to grow under all models, with the level of international migration and changes in fertility rates having a huge impact on the rate of growth.

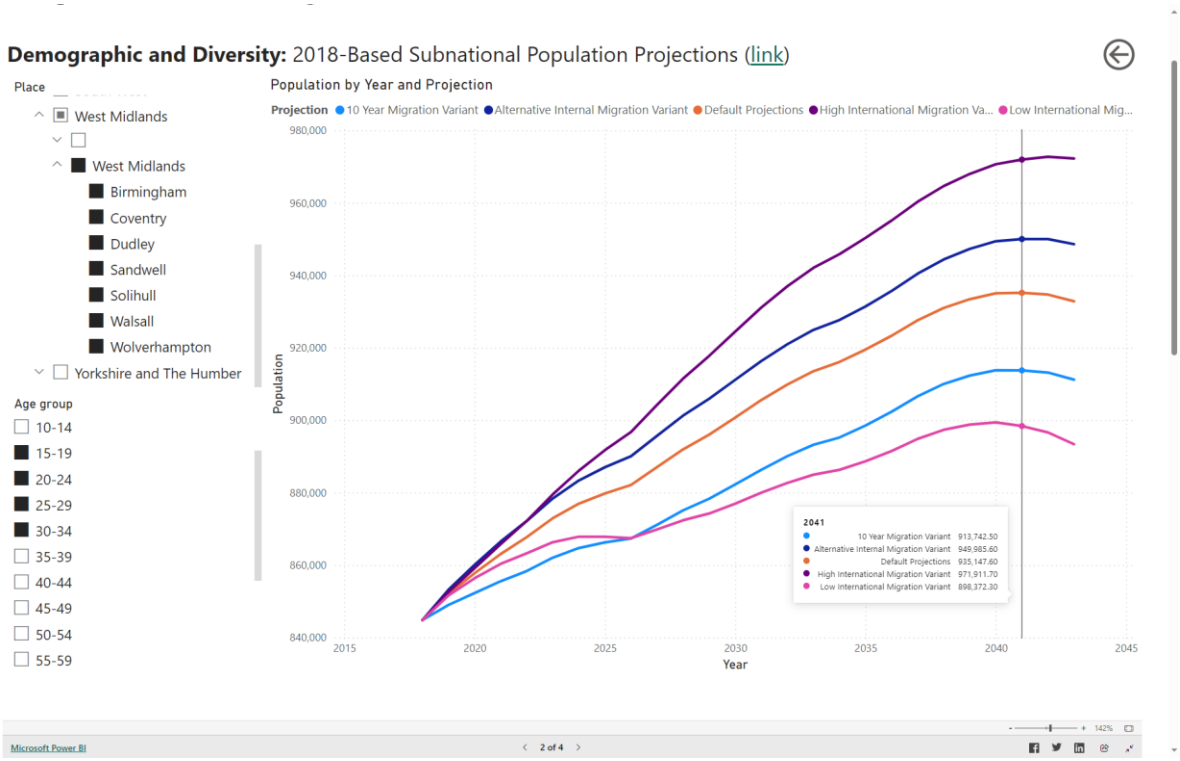
Over the life course, people are more likely to migrate (whether internally, within the UK, or internationally) as younger adults. Hence, the 65 and over age group is less sensitive to migration and this is seen in differences in the *variant* projections.

Under 20s



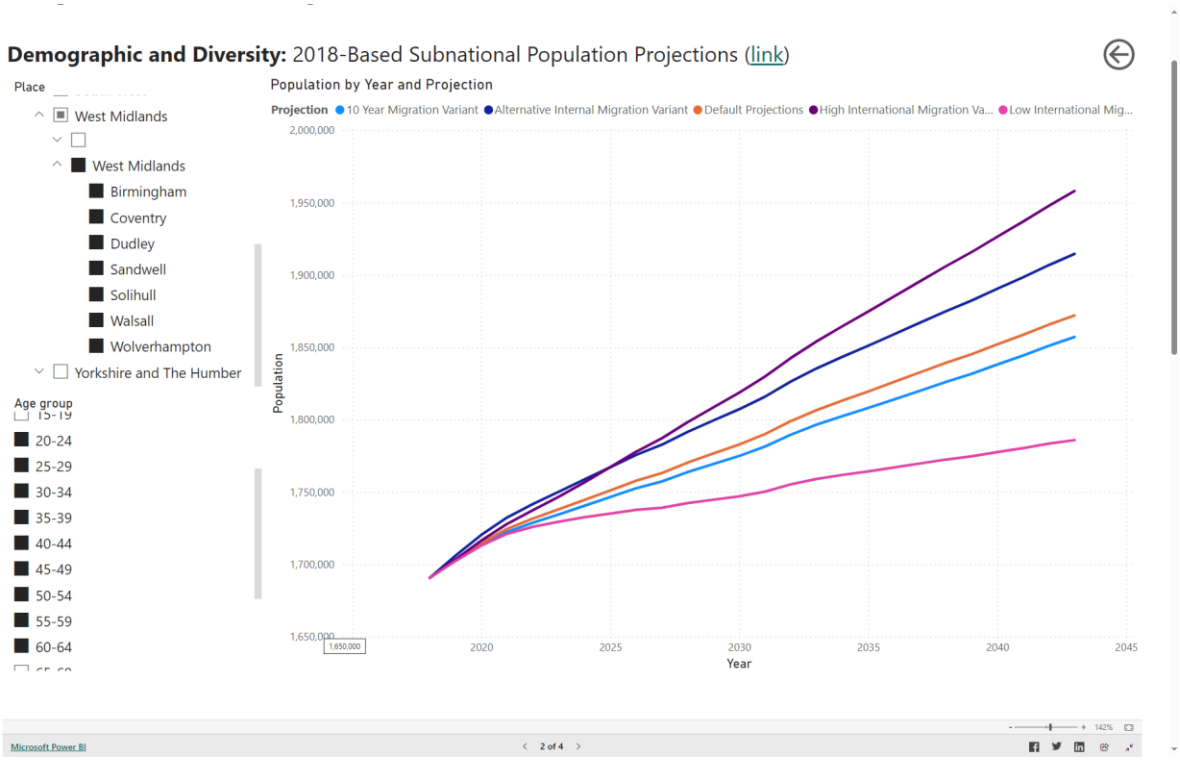
Under 20s are expected to peak and then stall by the late 2020s/early 2030s; but expected to grow once again in the 2040s.

Aged 15 to 34



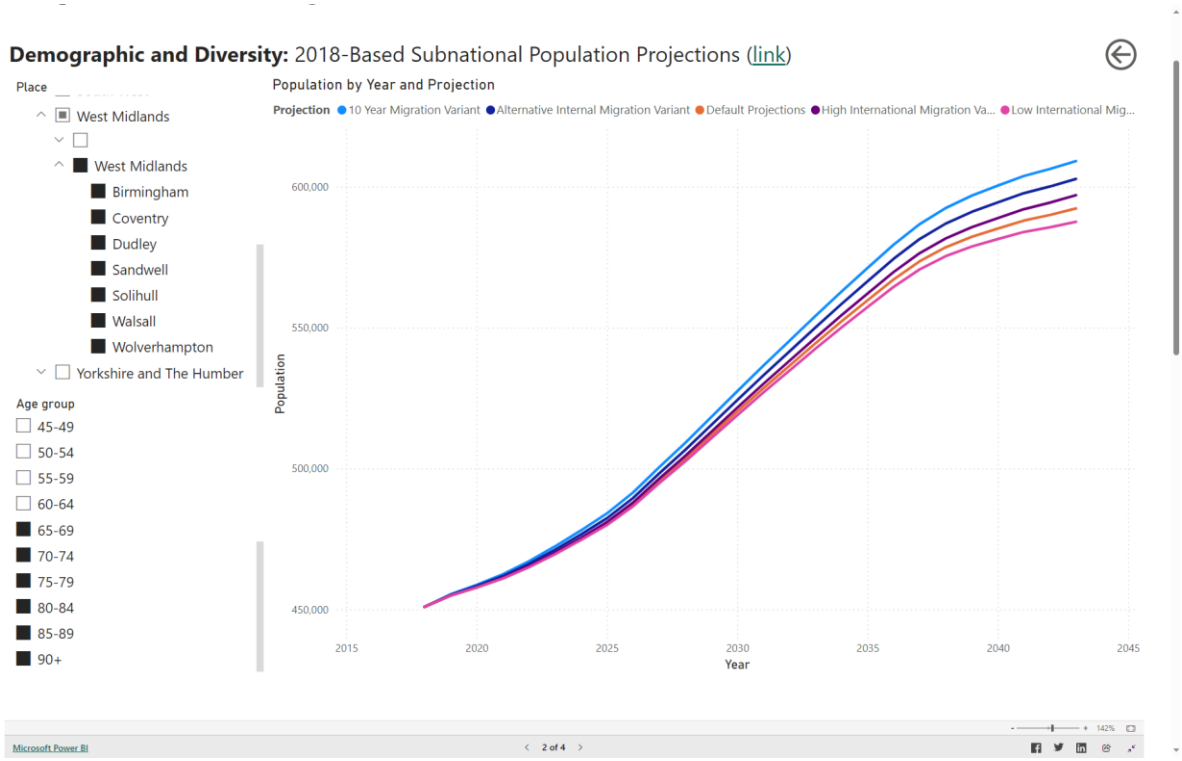
The emergent workforce population is expected to continue to increase, and peak by 2041, which should be an opportunity for the region over the 2020s and 2030s.

Aged 20 to 64



The overall working aged population is expected to grow under all scenarios, but the rate of growth is highly dependent on international migration.

Aged 65 and over



By far the fastest growing segment of the population will be the over 65s.

A more in-depth comparison setting out population projections for each local authority area is set out in the appendix entitled

Population projections by WMCA local authorities on page 44 onwards; as well as the National and regional population projections, and technical information relating to the Power Query M functions and Power BI Model used for this report.

Comparisons to other city-regions and strategic authority areas

The following sets out how the changes in the WMCA area population compares to other combined authority city-regions.

The overall WMCA population is projected to grow by over 380,000 people between 2021 and 2043, a growth of 11.5%. This is joint second with South Yorkshire; only West of England is expected to grow faster (14%).

	Nomis 2021 all ages	Principal Projection 2035 all ages	Principal Projection 2043 all ages	Growth 2021-2035 all ages	Growth % 2021-2035	Growth 2021-2043 all ages	Growth % 2021-2043
Cambridgeshire and Peterborough	897,217	914,614	934,531	17,397	1.9%	37,314	4.0%
East Midlands	2,204,080	2,400,159	2,470,912	196,079	8.2%	266,832	10.8%
Greater London	8,804,769	9,559,243	9,814,027	754,474	7.9%	1,009,258	10.3%
Greater Manchester	2,869,531	3,011,171	3,097,333	141,640	4.7%	227,802	7.4%
Liverpool City Region	1,552,288	1,647,684	1,683,262	95,396	5.8%	130,974	7.8%
North East	1,969,128	2,063,029	2,083,308	93,901	4.6%	114,180	5.5%
South Yorkshire	1,374,792	1,511,302	1,553,548	136,510	9.0%	178,756	11.5%
Tees Valley	678,365	681,899	683,833	3,534	0.5%	5,468	0.8%
West Midlands	**2,918,251**	**3,185,049**	**3,298,614**	**266,798**	**8.4%**	**380,363**	**11.5%**
West of England	954,590	1,063,185	1,110,010	108,595	10.2%	155,420	14.0%
West Yorkshire	2,350,407	2,456,592	2,509,379	106,185	4.3%	158,972	6.3%
York and North Yorkshire	820,478	857,956	868,117	37,478	4.4%	47,639	5.5%

In terms of the working-aged population, the West Midlands is projected to grow by 236,000 people, or 11.3%. Only West of England is expected to grow faster (13%). In terms of the number of people, only London is expected to welcome more people (337,000). In contrast, Greater Manchester's projected increase of 118,000 is barely half of the increase projected for the West Midlands.

	Nomis 2021 aged 16-64	Principal Projection 2035 aged 15-64	Principal Projection 2043 aged 15-64	Growth 2021-2035	Growth % 2021-2035	Growth 2021-2043	Growth % 2021-2043
Cambridgeshire and Peterborough	571,300	557,336	555,864	- 13,964	-2.5%	- 15,436	-2.8%
East Midlands	1,378,000	1,455,411	1,480,952	77,411	5.3%	102,952	7.0%
Greater London	6,062,210	6,406,379	6,399,534	344,169	5.4%	337,324	5.3%
Greater Manchester	1,828,900	1,912,256	1,946,882	83,356	4.4%	117,982	6.1%
Liverpool City Region	977,600	1,003,753	1,021,603	26,153	2.6%	44,003	4.3%
North East	1,221,400	1,233,269	1,245,835	11,869	1.0%	24,435	2.0%
South Yorkshire	866,600	941,918	961,148	75,318	8.0%	94,548	9.8%
Tees Valley	414,000	401,764	398,928	- 12,236	-3.0%	- 15,072	-3.8%
West Midlands	**1,844,300**	**2,032,817**	**2,080,203**	**188,517**	**9.3%**	**235,903**	**11.3%**
West of England	634,100	702,190	728,740	68,090	9.7%	94,640	13.0%
West Yorkshire	1,485,600	1,526,185	1,534,202	40,585	2.7%	48,602	3.2%
York and North Yorkshire	496,600	486,163	483,707	- 10,437	-2.1%	- 12,893	-2.7%

Next steps

As part of the development of the West Midlands Theory of Growth and West Midlands Futures Green Paper, issues around our population and demographics will be explored in further detail to better understand the potential impacts of these changes on our economy, in particular, our labour market, and on wider society at large. By creating the right conditions, the city-region can harness the potential of its young population over the next 10-15 years, and the expected ageing demographic over the longer term.

Author(s)
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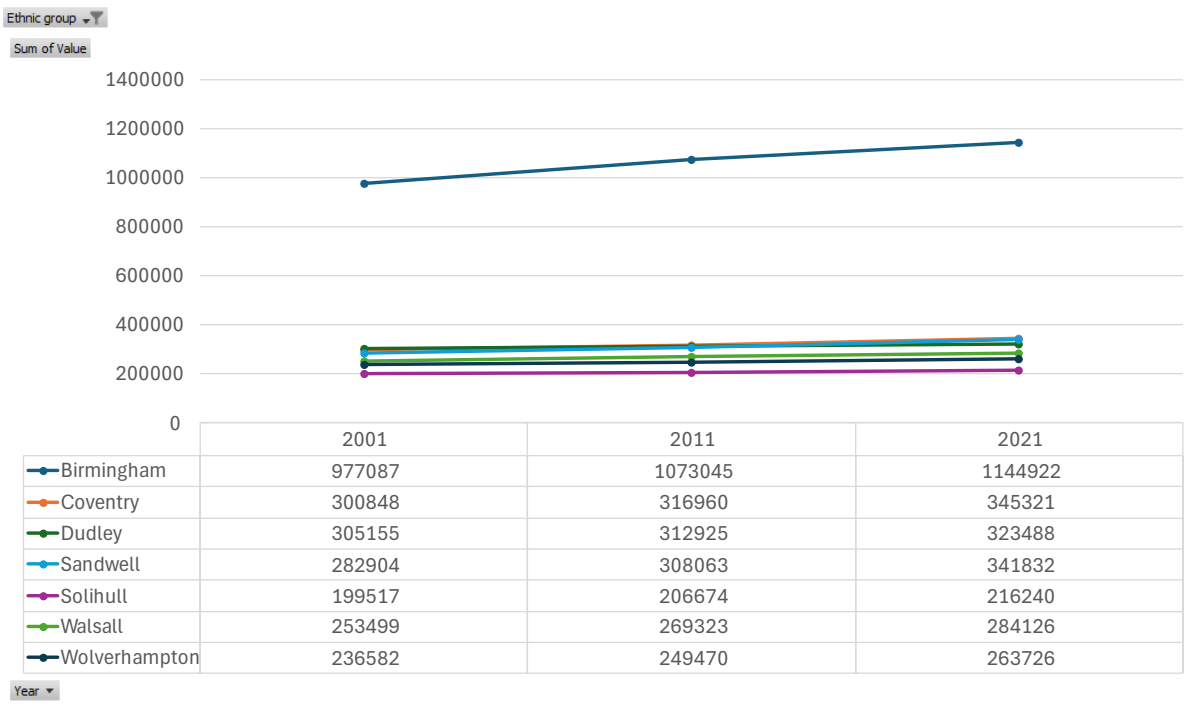
Appendices

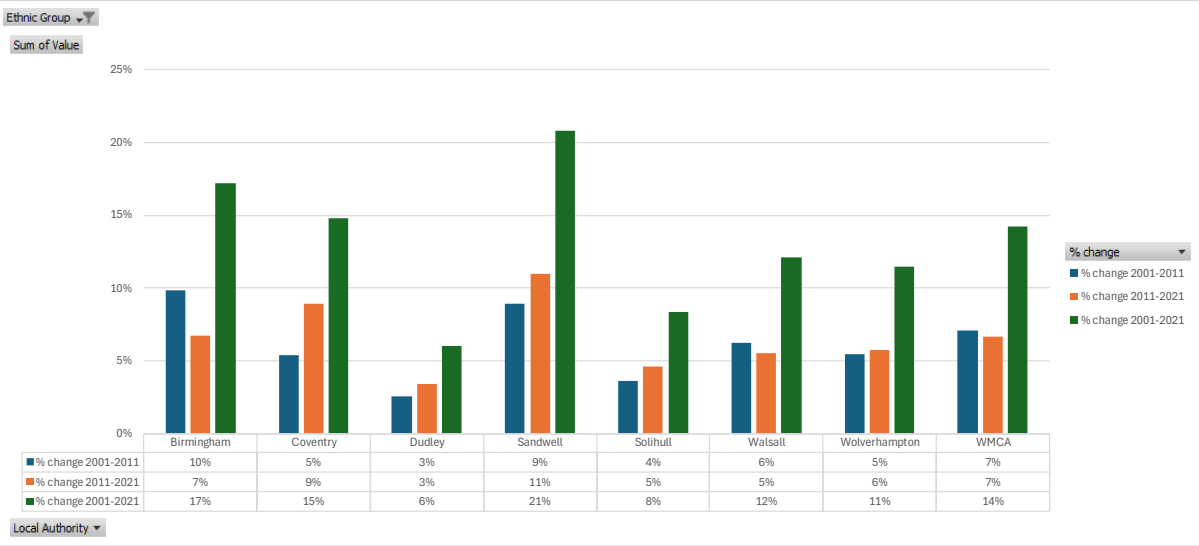
Population change

The following sets out the number and percentage change in population from 2001 to 2011 and to 2021.

All usual residents



	2001	2011	2021
Birmingham	977087	1073045	1144922
Coventry	300848	316960	345321
Dudley	305155	312925	323488
Sandwell	282904	308063	341832
Solihull	199517	206674	216240
Walsall	253499	269323	284126
Wolverhampton	236582	249470	263726

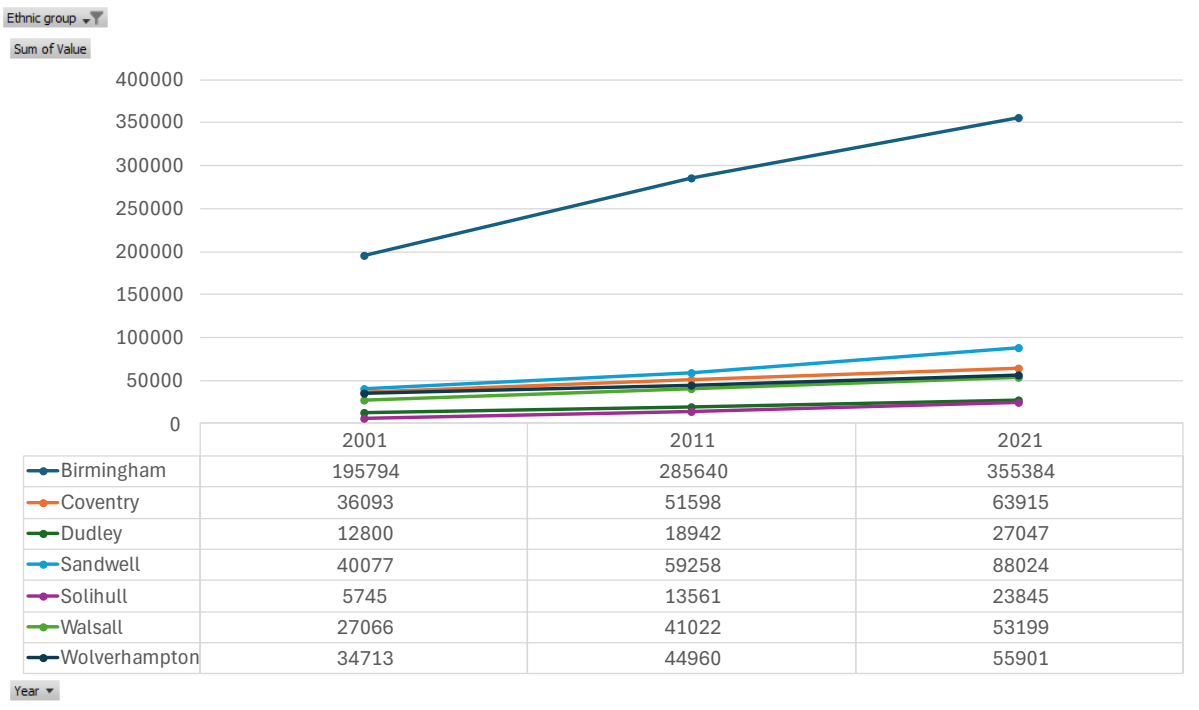


	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	10%	5%	3%	9%	4%	6%	5%	7%
% change 2011-2021	7%	9%	3%	11%	5%	5%	6%	7%
% change 2001-2021	17%	15%	6%	21%	8%	12%	11%	14%

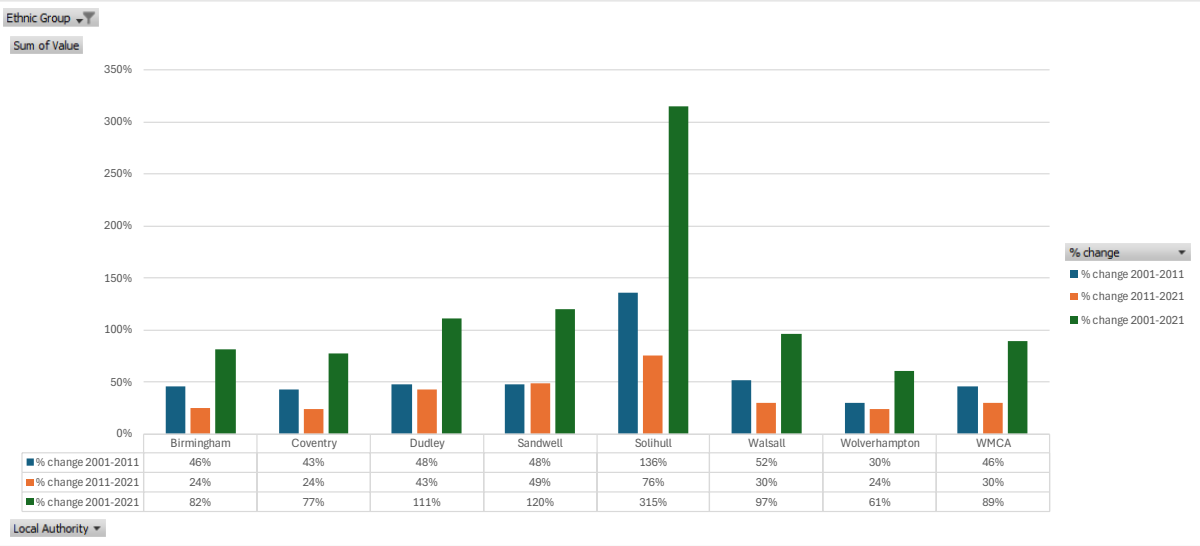
- The WMCA saw a consistent rate of population growth of around 7% between both 2001-2011, and 2011-2021.

- However, the rate of population growth is different between our local authorities, with Birmingham, Coventry, and Sandwell seeing above average growth rates, and Dudley, Solihull, Walsall and Wolverhampton seeing below average growth rates.
- National data suggests net migration under the post-Brexit regime in 2021 and 2022 is significantly higher than in the 2000s or 2010s. This data does not capture the increase post-Brexit.

Asian/Asian British



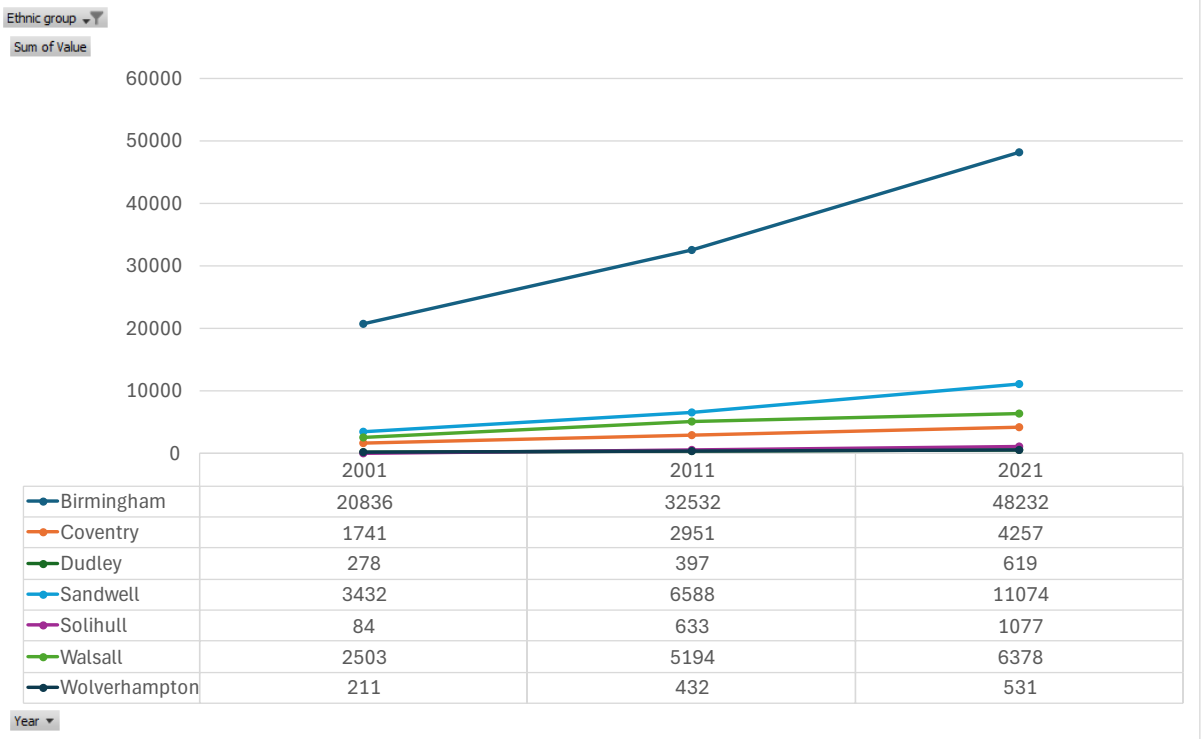
	2001	2011	2021
Birmingham	195794	285640	355384
Coventry	36093	51598	63915
Dudley	12800	18942	27047
Sandwell	40077	59258	88024
Solihull	5745	13561	23845
Walsall	27066	41022	53199
Wolverhampton	34713	44960	55901



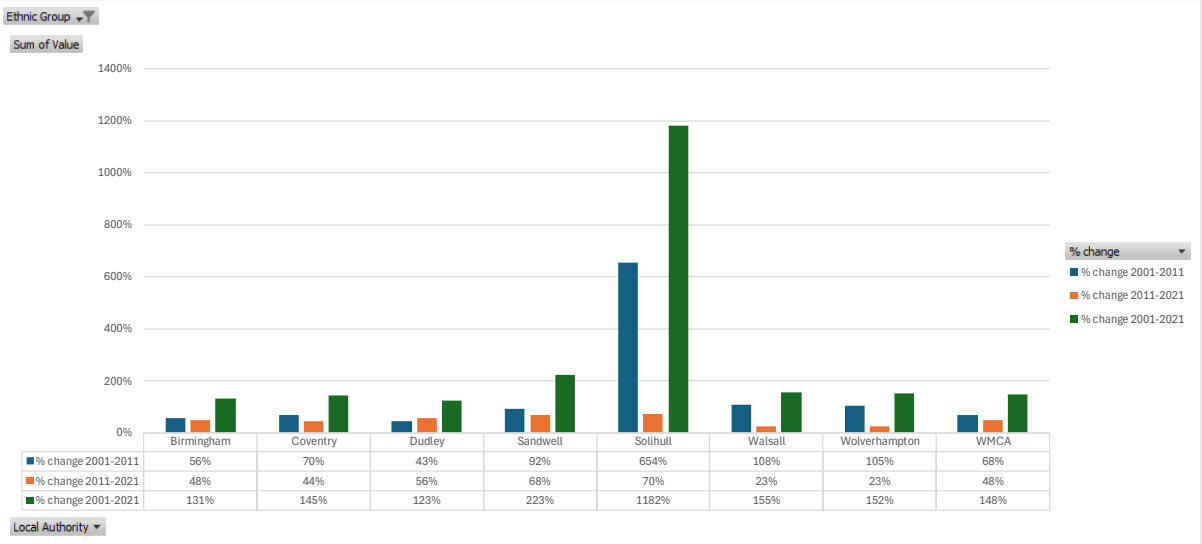
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	46%	43%	48%	48%	136%	52%	30%	46%
% change 2011-2021	24%	24%	43%	49%	76%	30%	24%	30%
% change 2001-2021	82%	77%	111%	120%	315%	97%	61%	89%

- As a percentage, Solihull saw the highest increase in its Asian/Asian British population; however the greatest rate of growth was in 2001-2011, and it has slowed considerably in 2011-2021.

Asian Bangladeshi



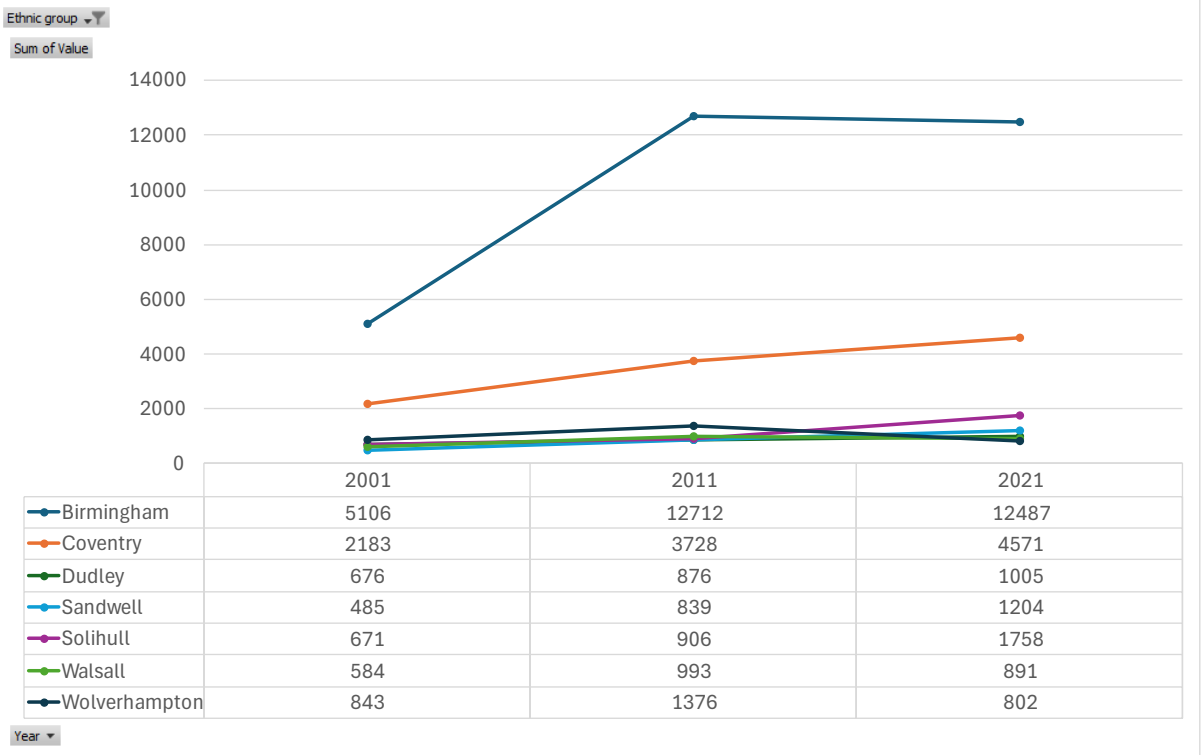
	2001	2011	2021
Birmingham	20836	32532	48232
Coventry	1741	2951	4257
Dudley	278	397	619
Sandwell	3432	6588	11074
Solihull	84	633	1077
Walsall	2503	5194	6378
Wolverhampton	211	432	531



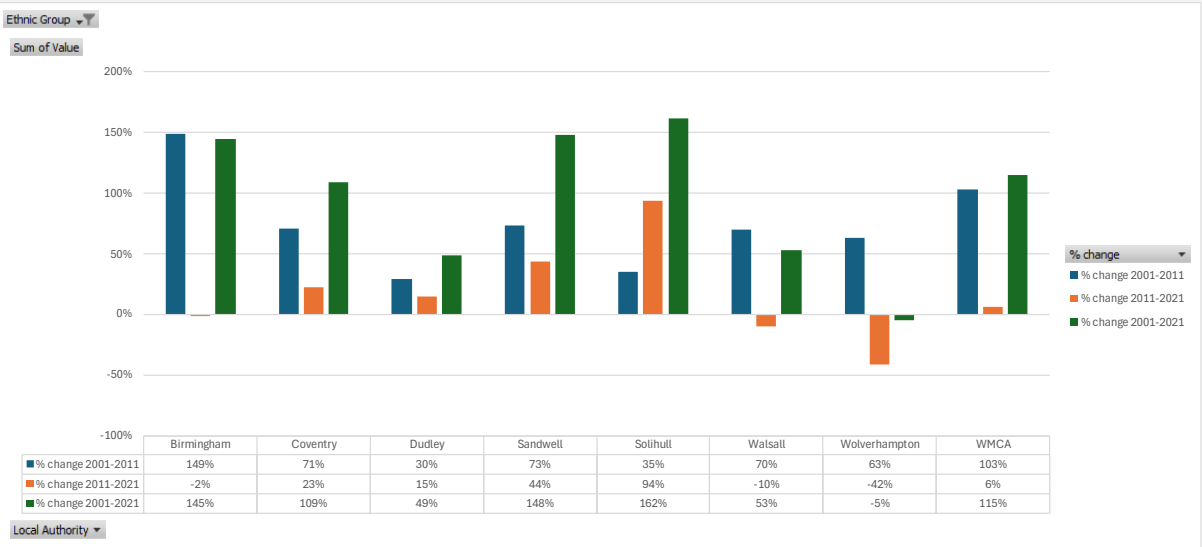
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	56%	70%	43%	92%	654%	108%	105%	68%
% change 2011-2021	48%	44%	56%	68%	70%	23%	23%	48%
% change 2001-2021	131%	145%	123%	223%	1182%	155%	152%	148%

- Across the WMCA area, the Asian Bangladeshi population has more than doubled in-between 2001 and 2021.
- The growth in Solihull's Asian Bangladeshi population is highest of the seven mets – with the highest rate of growth seen between 2001-2011.

Asian Chinese



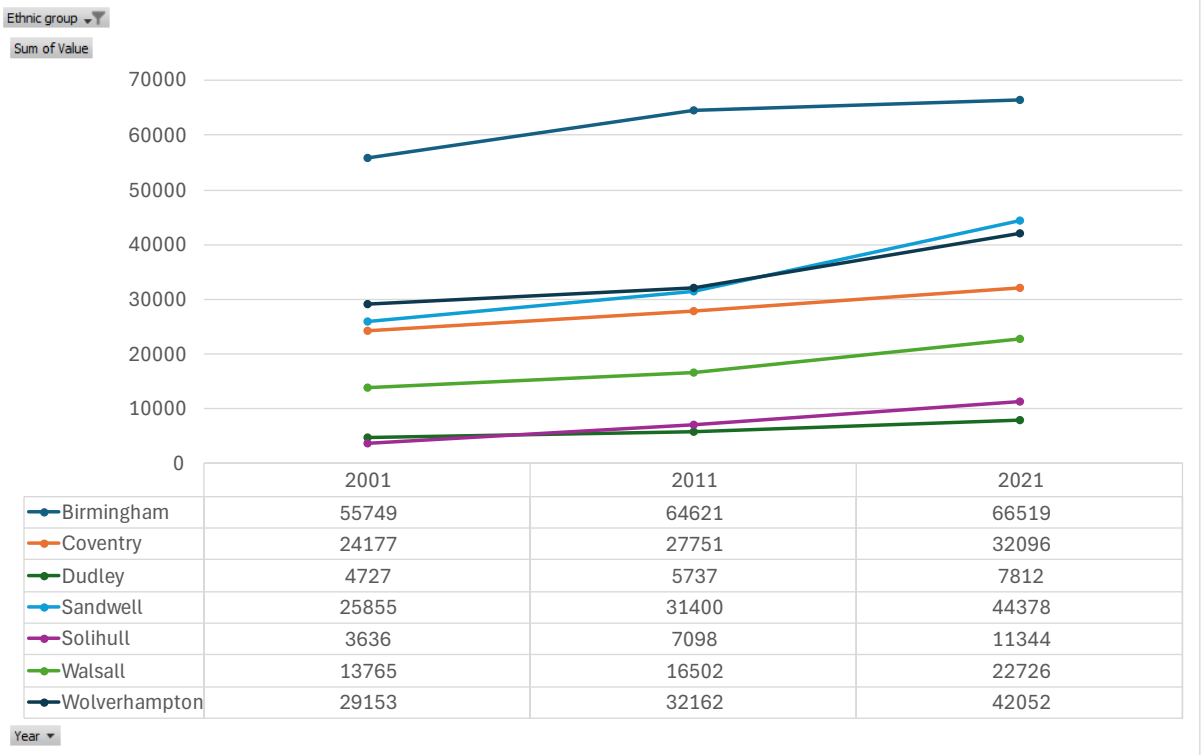
	2001	2011	2021
Birmingham	5106	12712	12487
Coventry	2183	3728	4571
Dudley	676	876	1005
Sandwell	485	839	1204
Solihull	671	906	1758
Walsall	584	993	891
Wolverhampton	843	1376	802



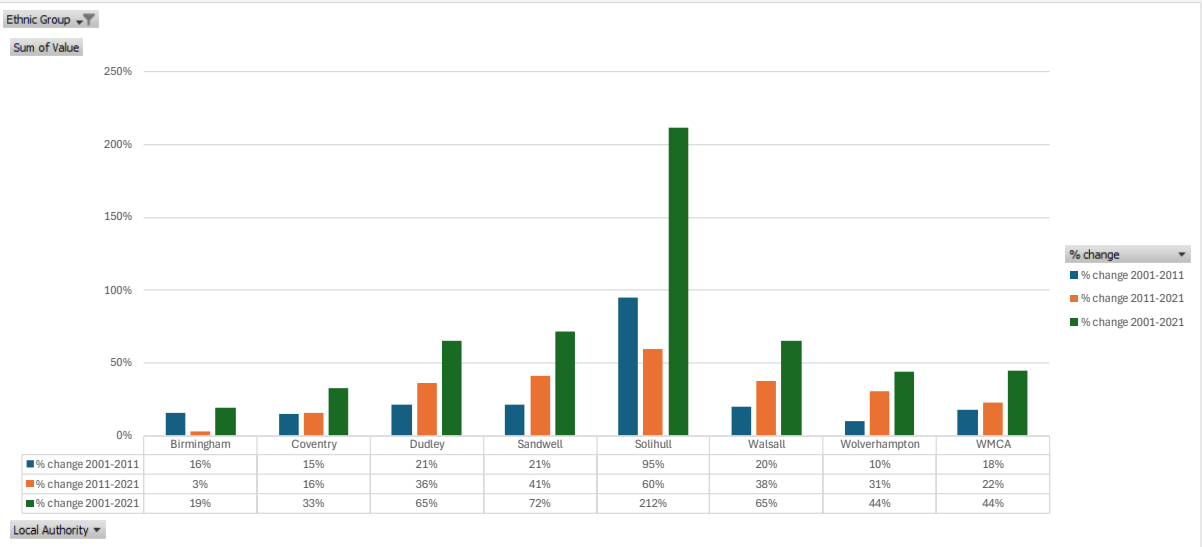
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	149%	71%	30%	73%	35%	70%	63%	103%
% change 2011-2021	-2%	23%	15%	44%	94%	-10%	-42%	6%
% change 2001-2021	145%	109%	49%	148%	162%	53%	-5%	115%

- The percentage of residents who are of Asian Chinese ethnicity has doubled between 2001 and 2021. The rate of growth is higher in 2001 to 2011 than between 2011 and 2021, with the exception of Solihull where the rate of growth has accelerated in 2011 and 2021.
- There are data limitations as the Census data does not capture the impact of the increase in British National (Overseas) population which is mostly post-2021. It is, however, unclear whether they will self-identify as Asian-Chinese or Asian-Other.

Asian Indian



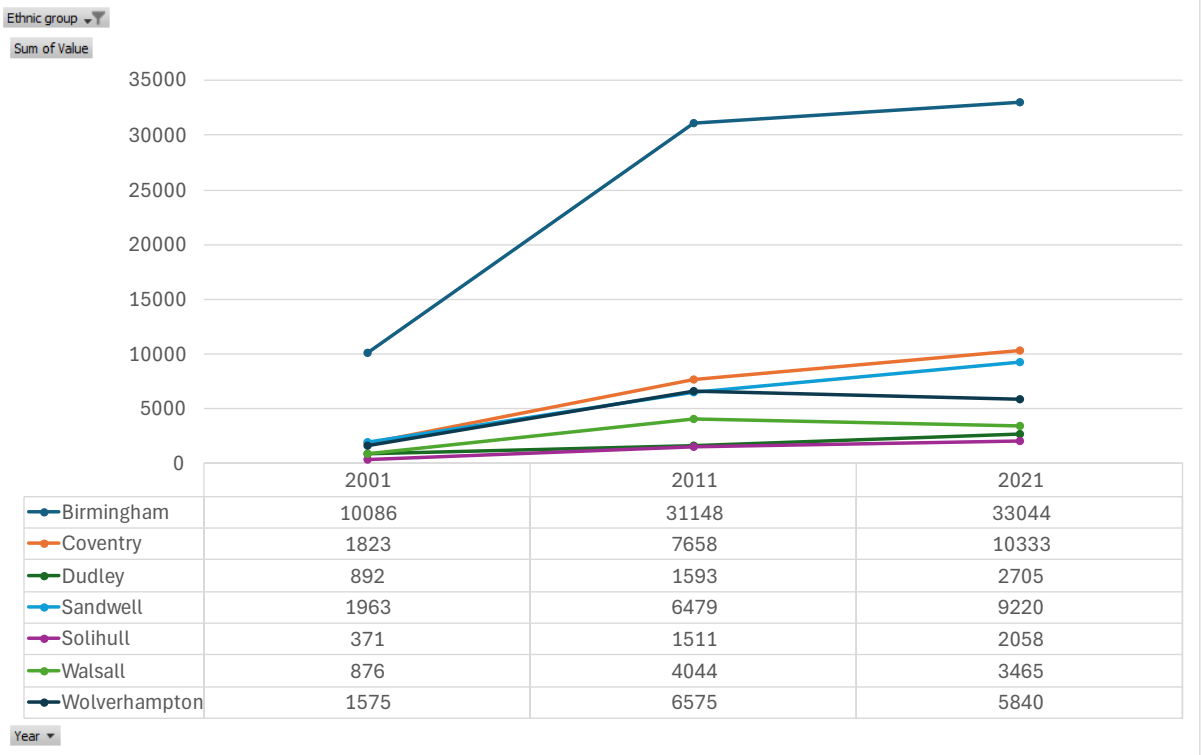
	2001	2011	2021
Birmingham	55749	64621	66519
Coventry	24177	27751	32096
Dudley	4727	5737	7812
Sandwell	25855	31400	44378
Solihull	3636	7098	11344
Walsall	13765	16502	22726
Wolverhampton	29153	32162	42052



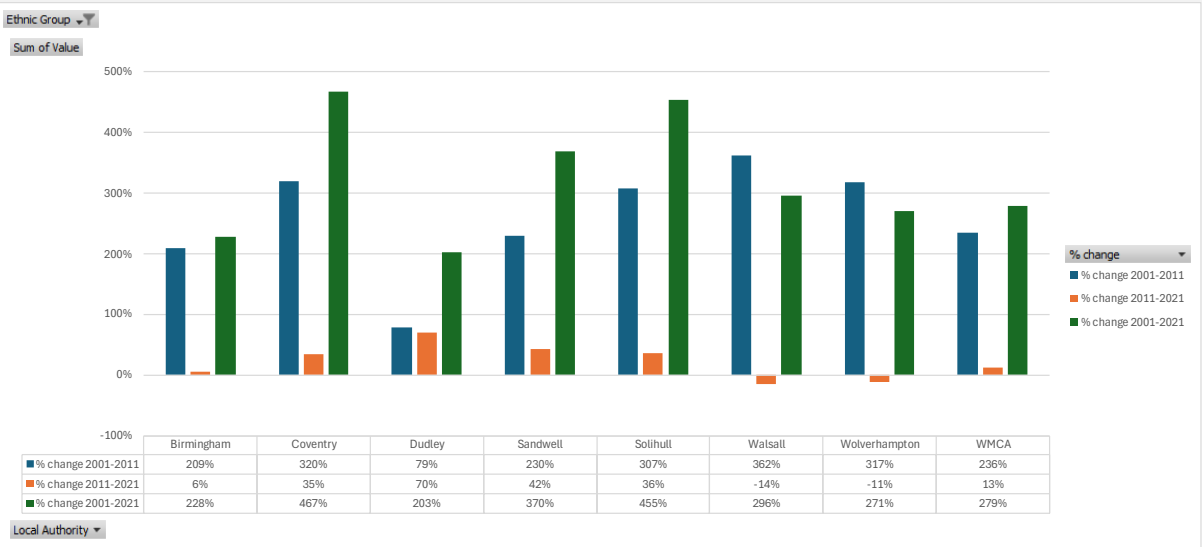
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	16%	15%	21%	21%	95%	20%	10%	18%
% change 2011-2021	3%	16%	36%	41%	60%	38%	31%	22%
% change 2001-2021	19%	33%	65%	72%	212%	65%	44%	44%

- Across the WMCA area, the Asian Indian ethnicity population has increased.
- The growth in Solihull's Asian Indian population is highest of the seven mets – with the highest rate of growth seen between 2001-2011.

Asian Other



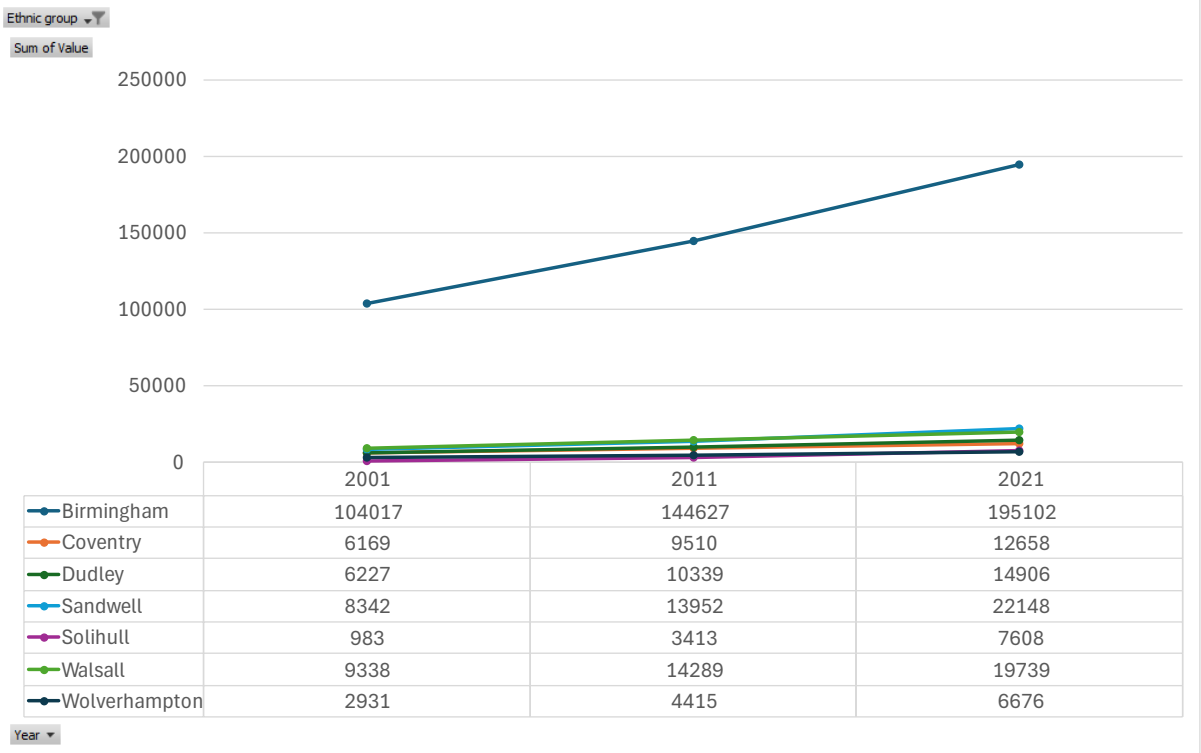
	2001	2011	2021
Birmingham	10086	31148	33044
Coventry	1823	7658	10333
Dudley	892	1593	2705
Sandwell	1963	6479	9220
Solihull	371	1511	2058
Walsall	876	4044	3465
Wolverhampton	1575	6575	5840



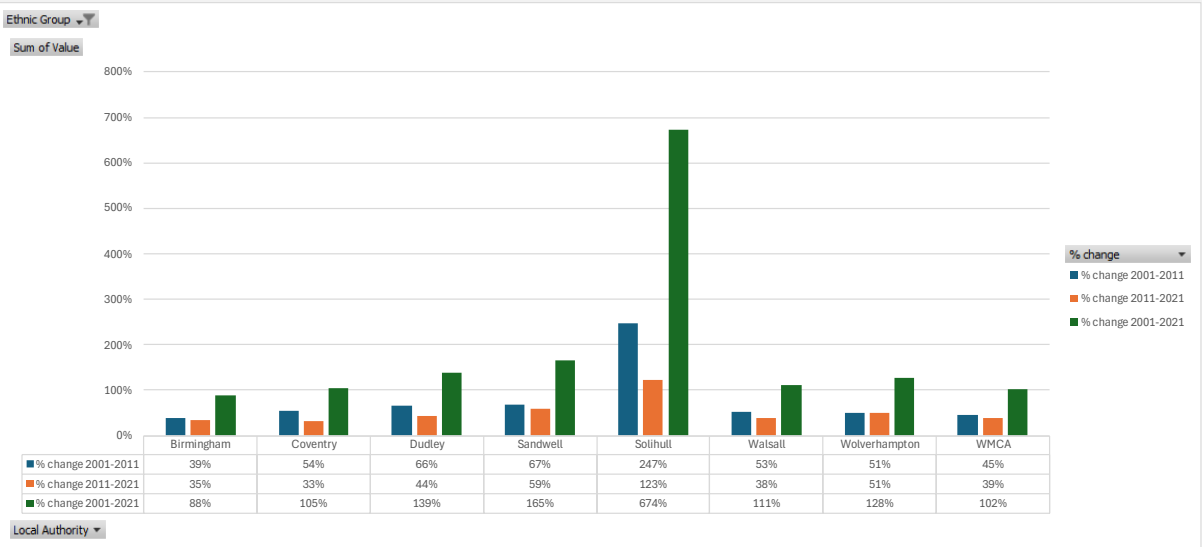
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	209%	320%	79%	230%	307%	362%	317%	236%
% change 2011-2021	6%	35%	70%	42%	36%	-14%	-11%	13%
% change 2001-2021	228%	467%	203%	370%	455%	296%	271%	279%

- Across the WMCA area, the growth in the Asian Other ethnicity population is mostly in 2001 to 2011, with a much smaller increase in 2011 to 2021. However, even that much smaller increase, at 13%, is larger than the overall population increase (7%).

Asian Pakistani



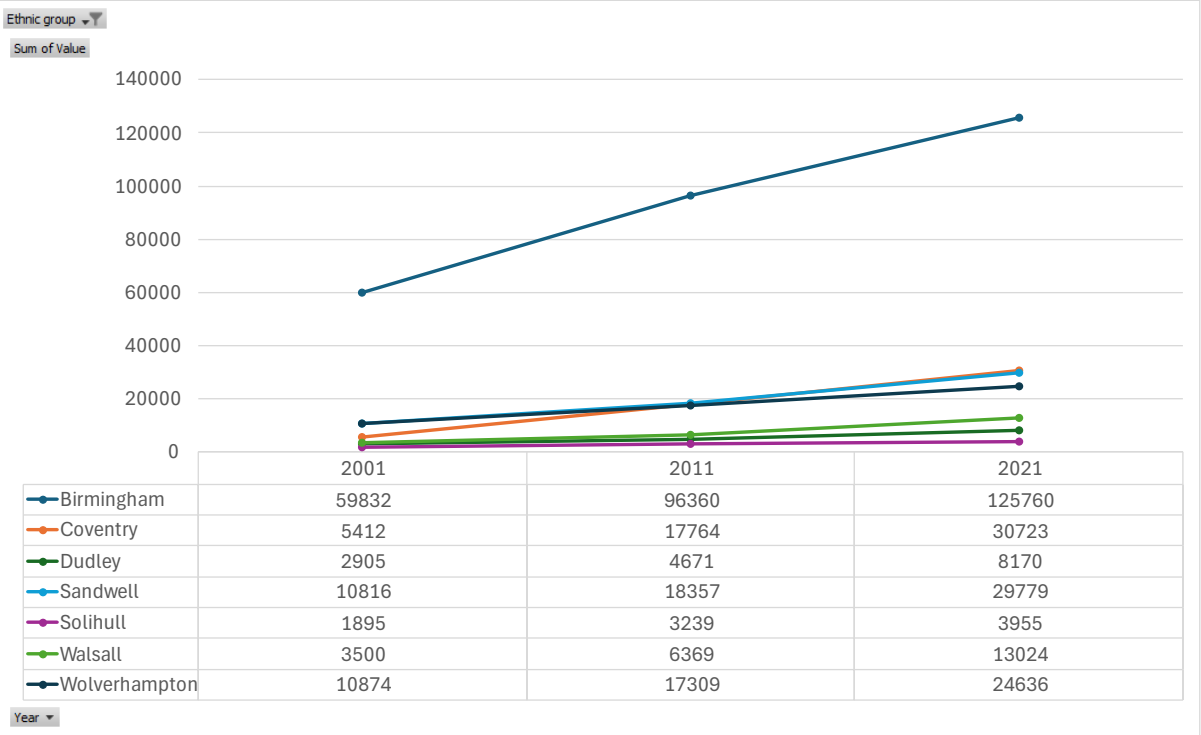
	2001	2011	2021
Birmingham	104017	144627	195102
Coventry	6169	9510	12658
Dudley	6227	10339	14906
Sandwell	8342	13952	22148
Solihull	983	3413	7608
Walsall	9338	14289	19739
Wolverhampton	2931	4415	6676



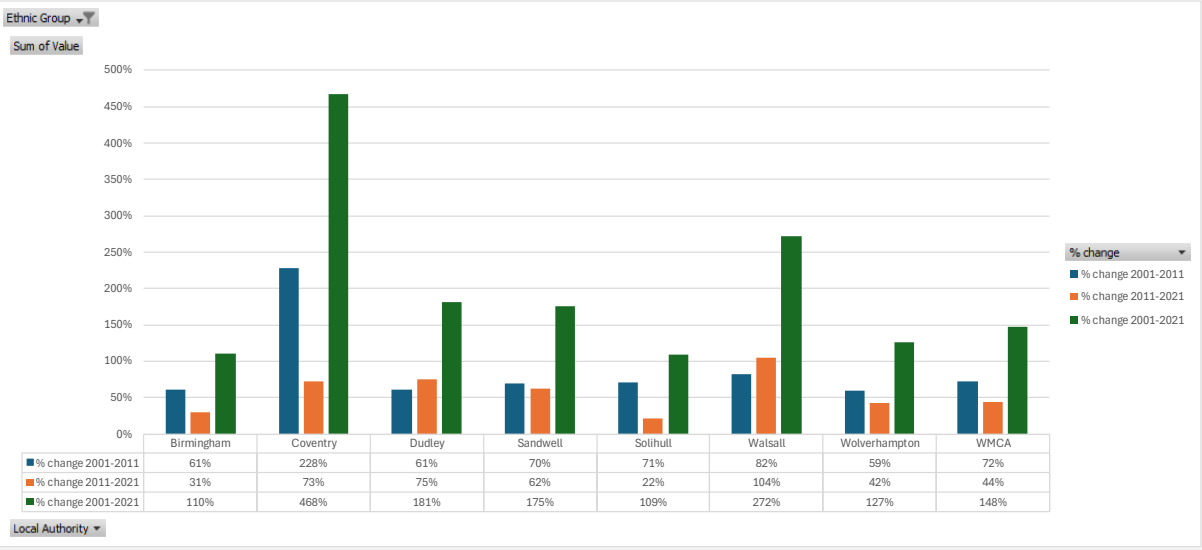
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	39%	54%	66%	67%	247%	53%	51%	45%
% change 2011-2021	35%	33%	44%	59%	123%	38%	51%	39%
% change 2001-2021	88%	105%	139%	165%	674%	111%	128%	102%

- Across the WMCA area, the Asian Pakistani ethnicity population has increased. This is especially true in Solihull.
- The growth in Solihull's Asian Pakistani population is mostly in 2001 to 2011, however even between 2011 and 2021, it has more than doubled.

Black/Black British



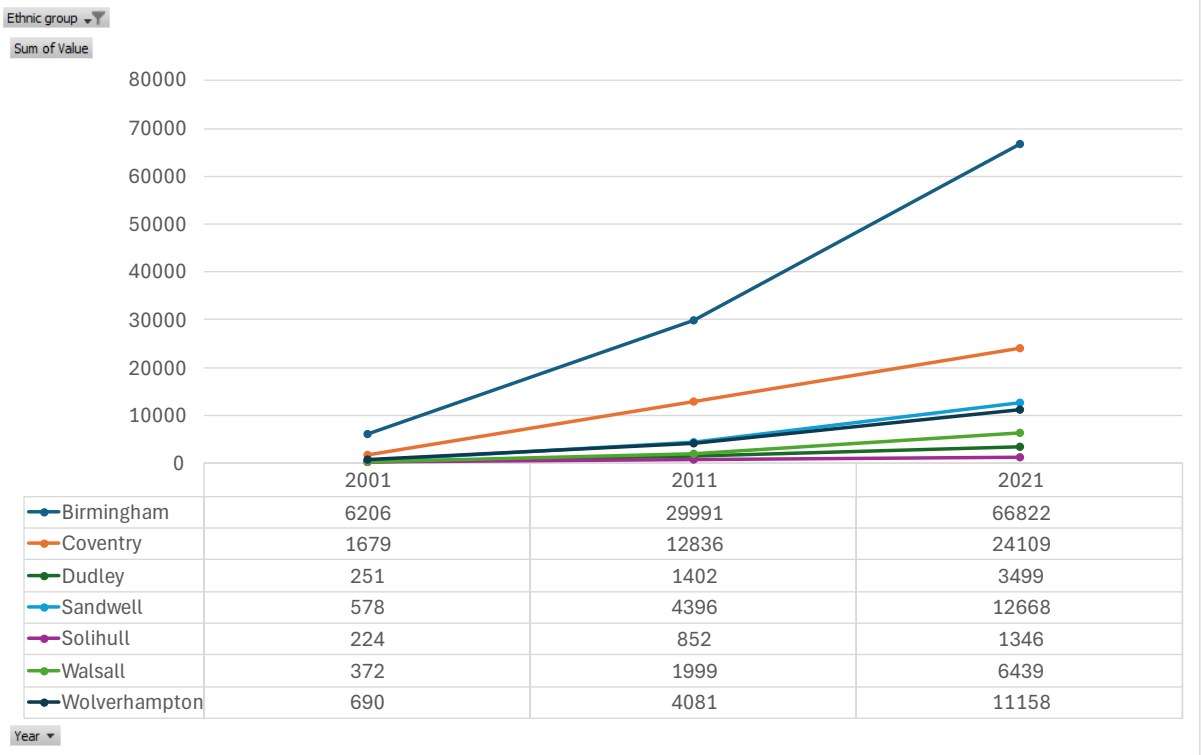
	2001	2011	2021
Birmingham	59832	96360	125760
Coventry	5412	17764	30723
Dudley	2905	4671	8170
Sandwell	10816	18357	29779
Solihull	1895	3239	3955
Walsall	3500	6369	13024
Wolverhampton	10874	17309	24636



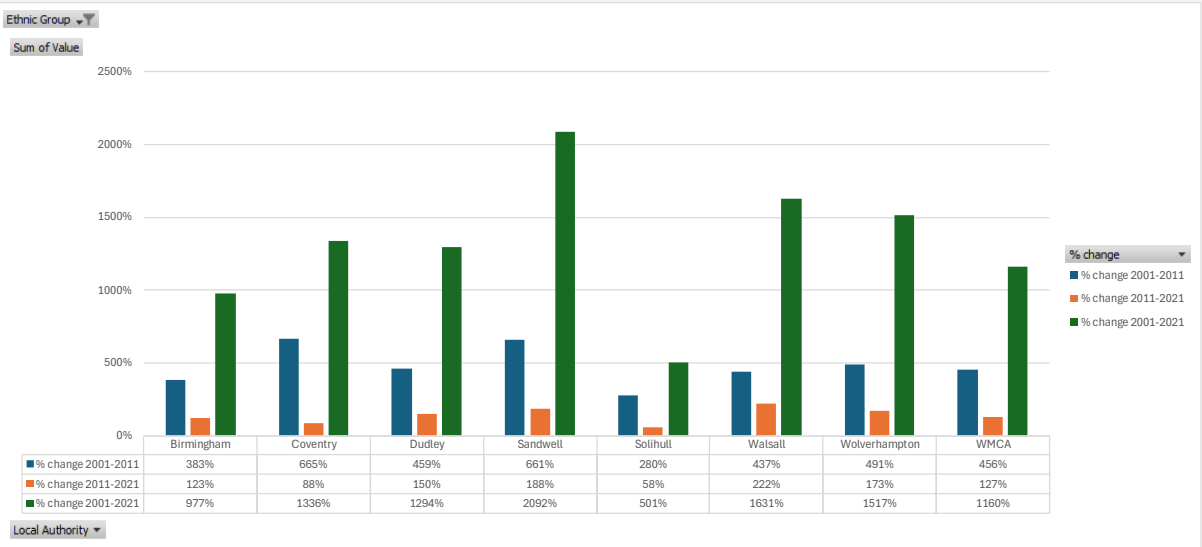
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	61%	228%	61%	70%	71%	82%	59%	72%
% change 2011-2021	31%	73%	75%	62%	22%	104%	42%	44%
% change 2001-2021	110%	468%	181%	175%	109%	272%	127%	148%

- The Black/Black British population has increased most in Coventry and Walsall.

Black African



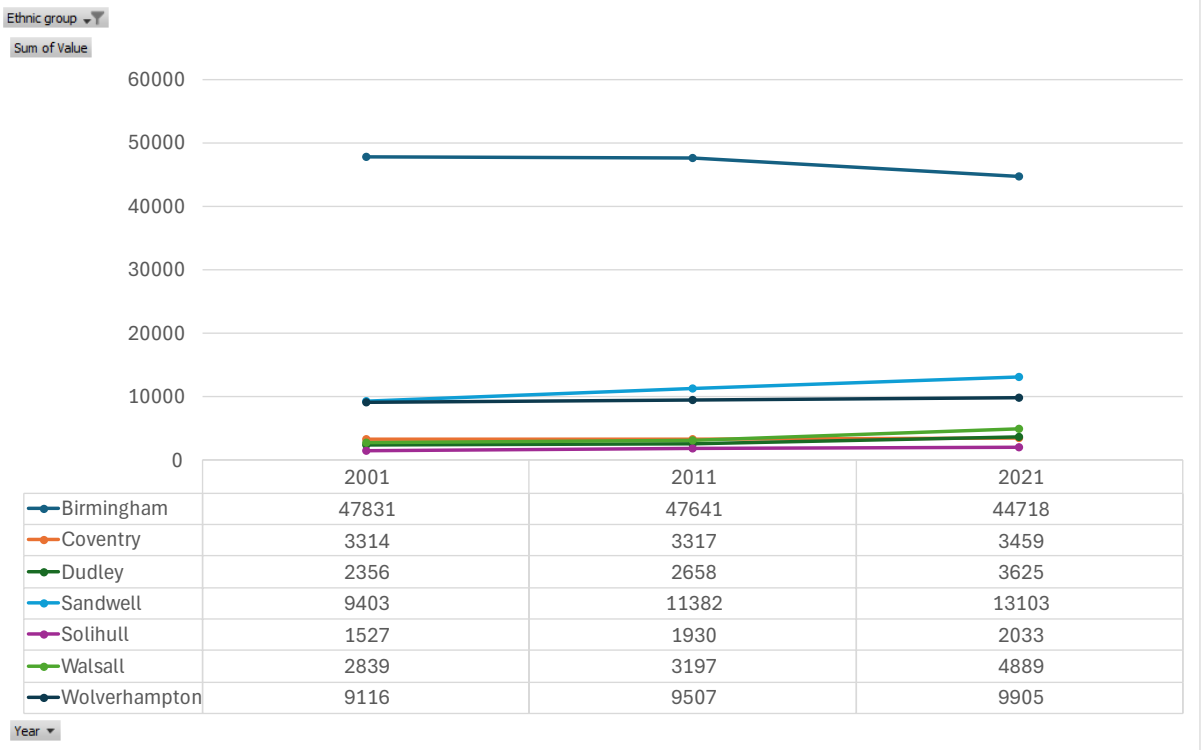
	2001	2011	2021
Birmingham	6206	29991	66822
Coventry	1679	12836	24109
Dudley	251	1402	3499
Sandwell	578	4396	12668
Solihull	224	852	1346
Walsall	372	1999	6439
Wolverhampton	690	4081	11158



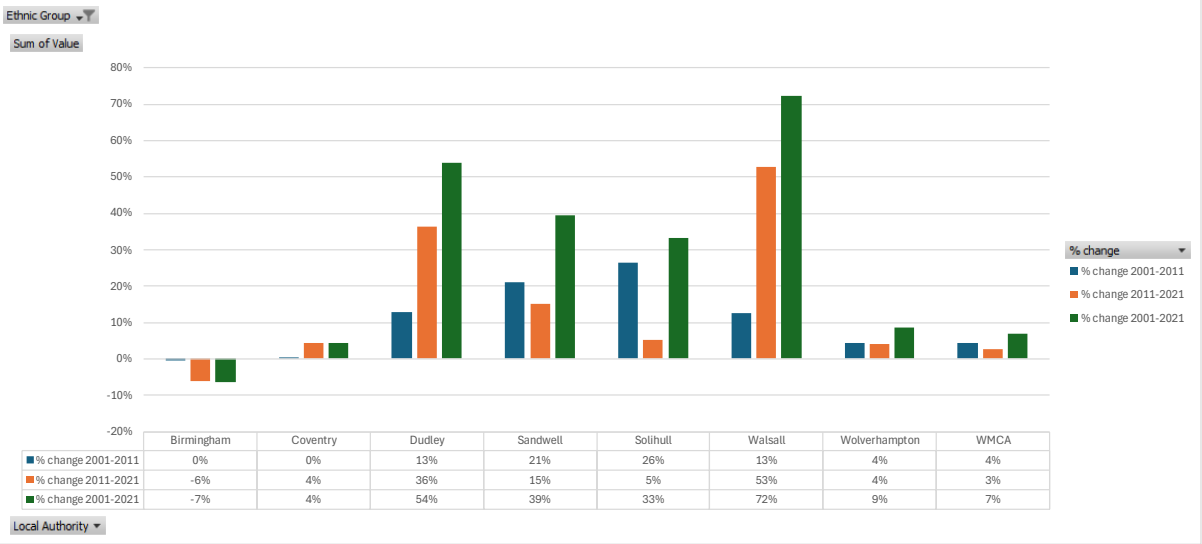
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	383%	665%	459%	661%	280%	437%	491%	456%
% change 2011-2021	123%	88%	150%	188%	58%	222%	173%	127%
% change 2001-2021	977%	1336%	1294%	2092%	501%	1631%	1517%	1160%

- The Black African ethnicity population has seen significant increases in all areas – a 1,160% increase across the WMCA area.

Black Caribbean



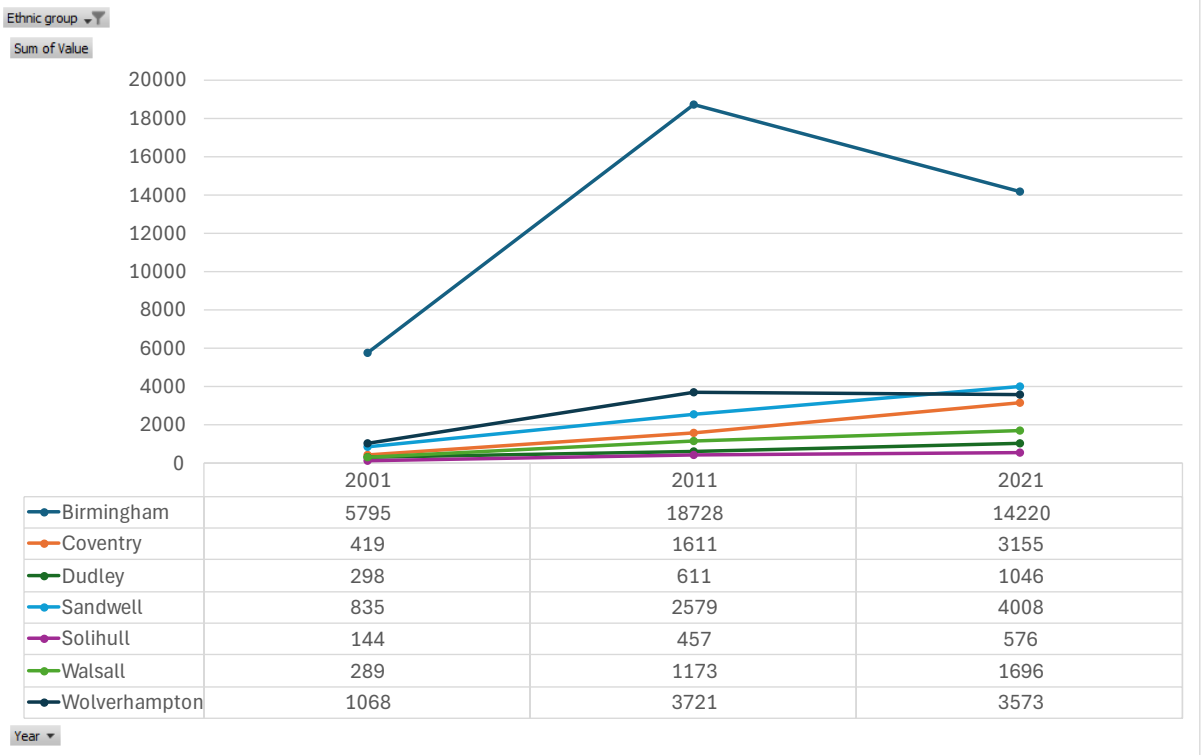
	2001	2011	2021
Birmingham	47831	47641	44718
Coventry	3314	3317	3459
Dudley	2356	2658	3625
Sandwell	9403	11382	13103
Solihull	1527	1930	2033
Walsall	2839	3197	4889
Wolverhampton	9116	9507	9905



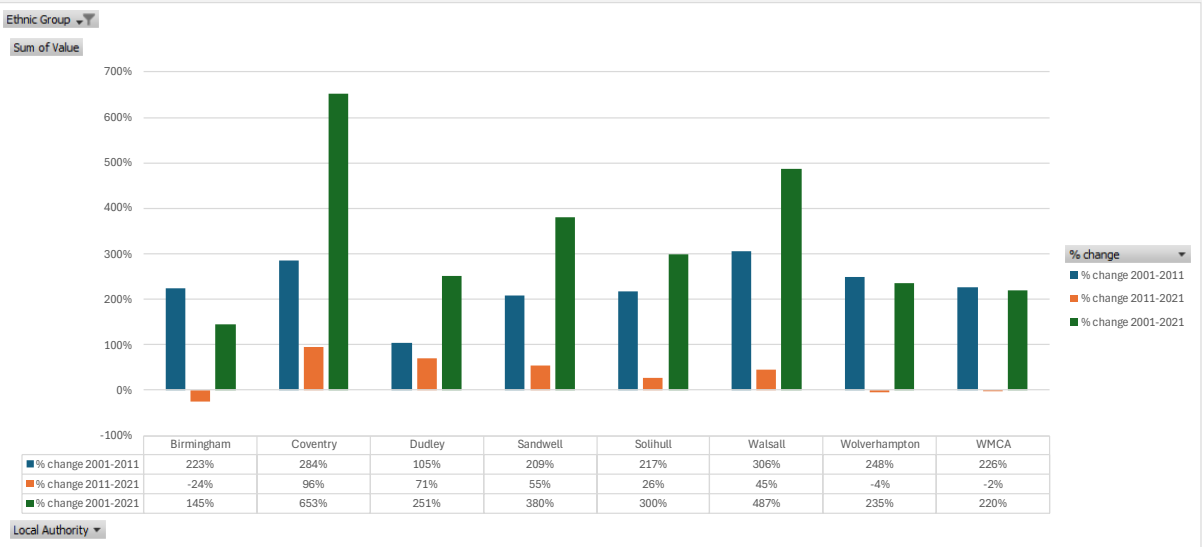
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	0%	0%	13%	21%	26%	13%	4%	4%
% change 2011-2021	-6%	4%	36%	15%	5%	53%	4%	3%
% change 2001-2021	-7%	4%	54%	39%	33%	72%	9%	7%

- Overall, the Black Caribbean ethnicity population has seen below average increases.
- There are changes in the Black Caribbean population, with decreases in Birmingham, below-average increase in Coventry and Wolverhampton; larger increases in Dudley, Sandwell, Solihull and Walsall.

Black Other



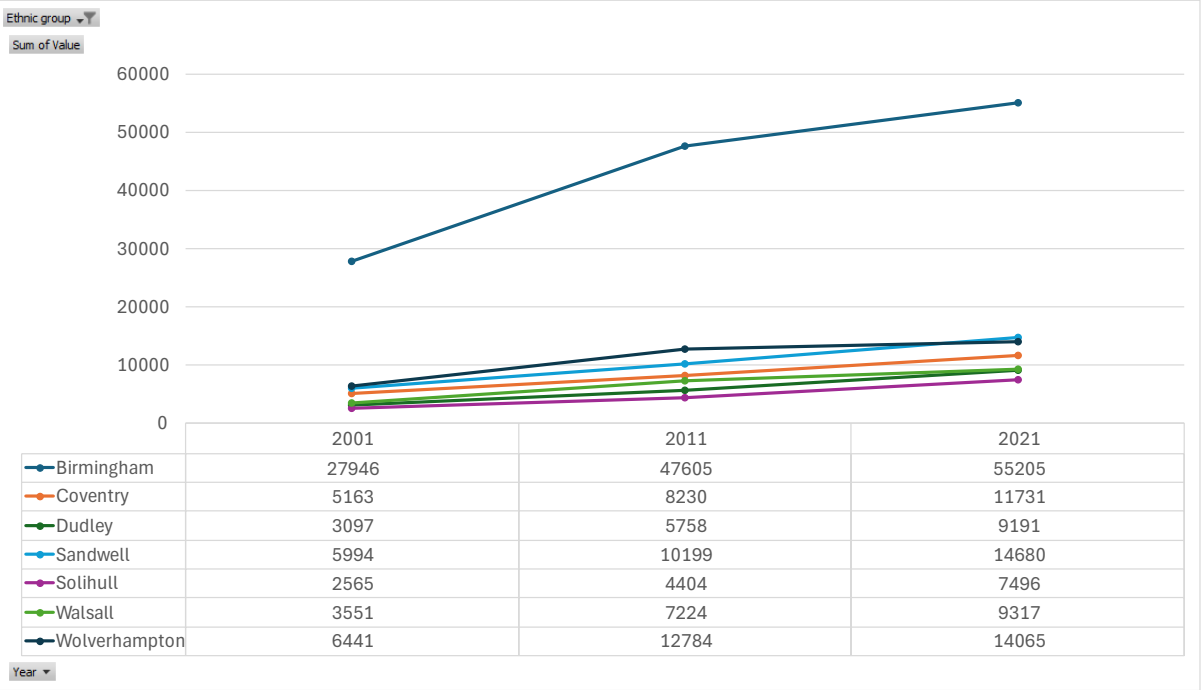
	2001	2011	2021
Birmingham	5795	18728	14220
Coventry	419	1611	3155
Dudley	298	611	1046
Sandwell	835	2579	4008
Solihull	144	457	576
Walsall	289	1173	1696
Wolverhampton	1068	3721	3573



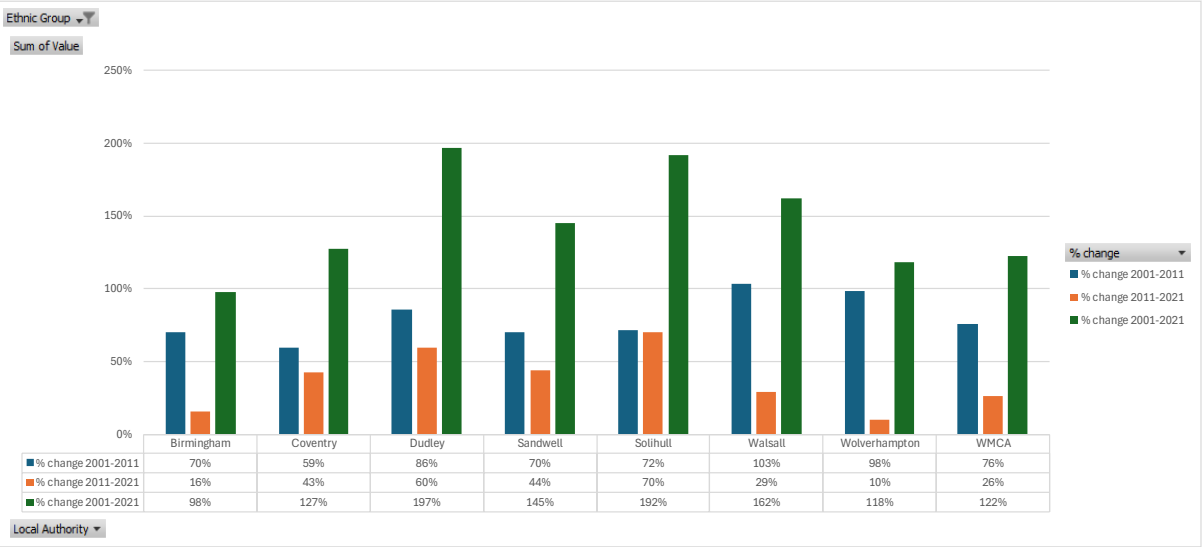
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	223%	284%	105%	209%	217%	306%	248%	226%
% change 2011-2021	-24%	96%	71%	55%	26%	45%	-4%	-2%
% change 2001-2021	145%	653%	251%	380%	300%	487%	235%	220%

- The Black Other ethnicity population has increased above the average population increase in 2001-2021 – however this is almost entirely explained in the 2001-2011 period, with a much smaller rate of increase in 2011-2021.

Mixed or Multiple ethnic groups



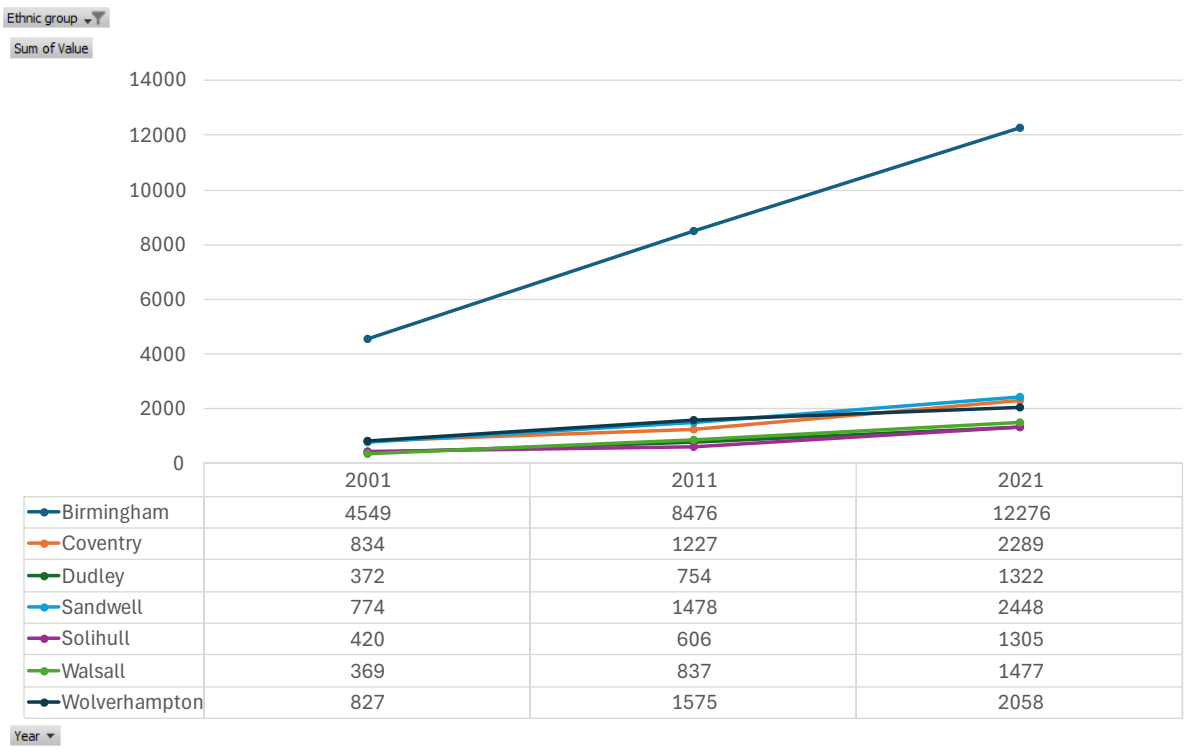
	2001	2011	2021
Birmingham	27946	47605	55205
Coventry	5163	8230	11731
Dudley	3097	5758	9191
Sandwell	5994	10199	14680
Solihull	2565	4404	7496
Walsall	3551	7224	9317
Wolverhampton	6441	12784	14065



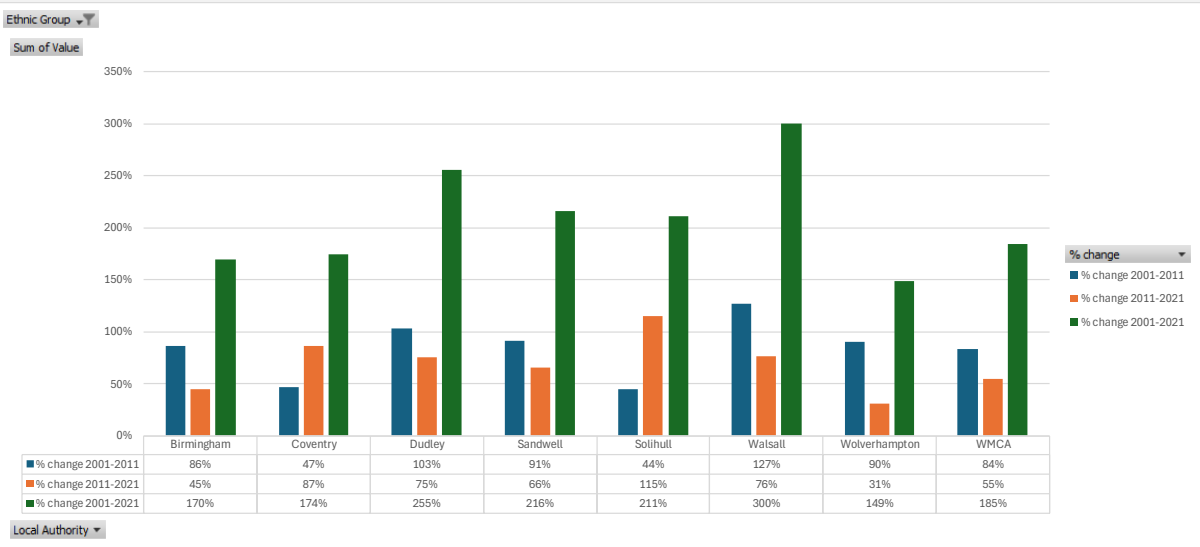
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	70%	59%	86%	70%	72%	103%	98%	76%
% change 2011-2021	16%	43%	60%	44%	70%	29%	10%	26%
% change 2001-2021	98%	127%	197%	145%	192%	162%	118%	122%

- The Mixed or Multiple ethnic groups population has increased above the average population increase in 2001-2021 – but the rate of growth has slowed in 2011-2021 compared to 2001-2011.

Mixed Other



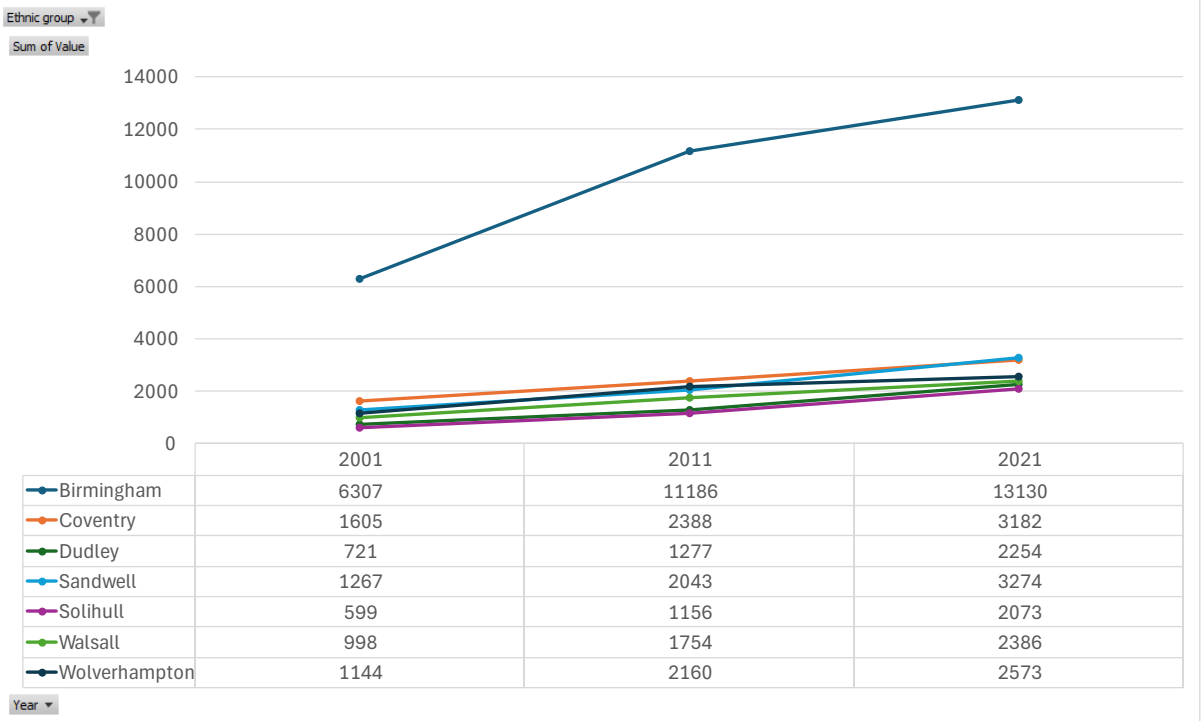
	2001	2011	2021
Birmingham	4549	8476	12276
Coventry	834	1227	2289
Dudley	372	754	1322
Sandwell	774	1478	2448
Solihull	420	606	1305
Walsall	369	837	1477
Wolverhampton	827	1575	2058



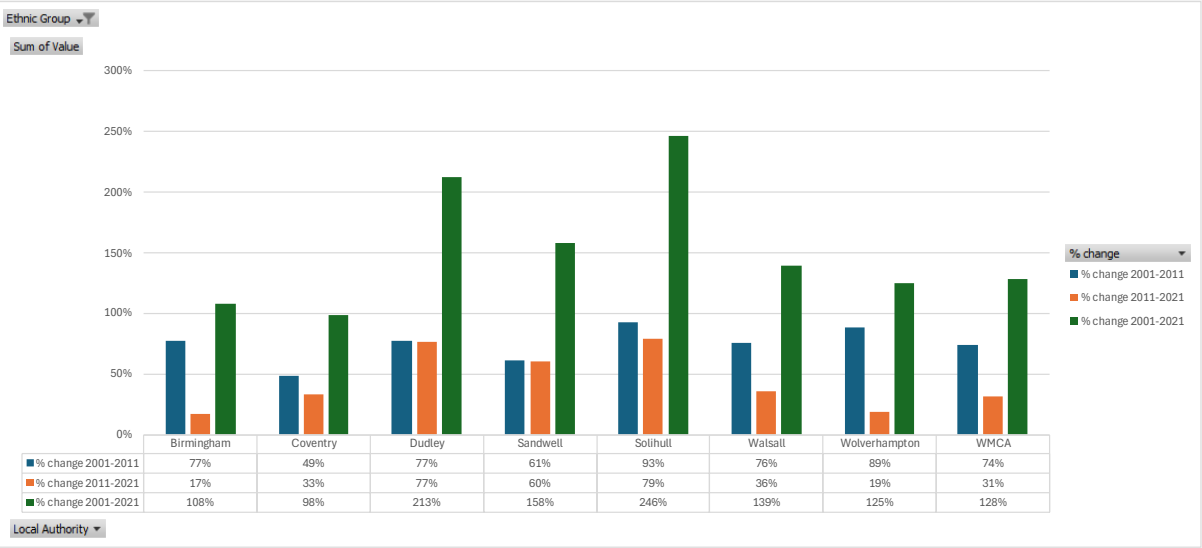
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	86%	47%	103%	91%	44%	127%	90%	84%
% change 2011-2021	45%	87%	75%	66%	115%	76%	31%	55%
% change 2001-2021	170%	174%	255%	216%	211%	300%	149%	185%

- The Mixed Other ethnicity population has increased above the average population increase in 2001-2021 – but the rate of growth has slowed in 2011-2021 compared to 2001-2011.

Mixed White and Asian



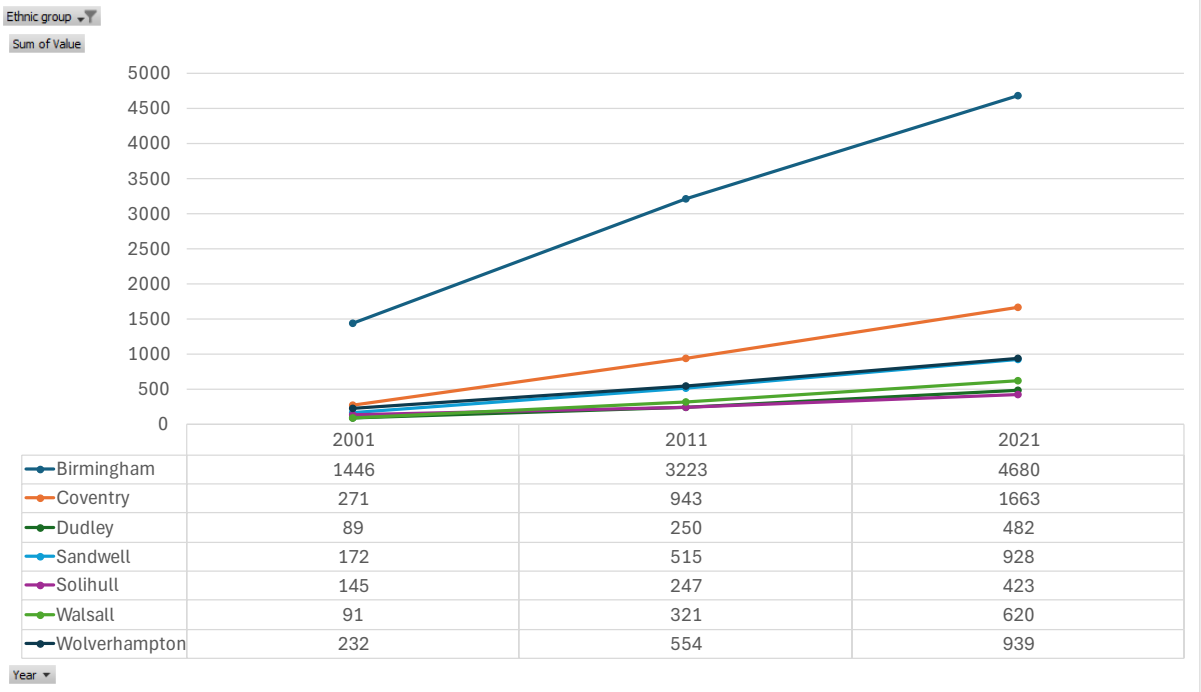
	2001	2011	2021
Birmingham	6307	11186	13130
Coventry	1605	2388	3182
Dudley	721	1277	2254
Sandwell	1267	2043	3274
Solihull	599	1156	2073
Walsall	998	1754	2386
Wolverhampton	1144	2160	2573



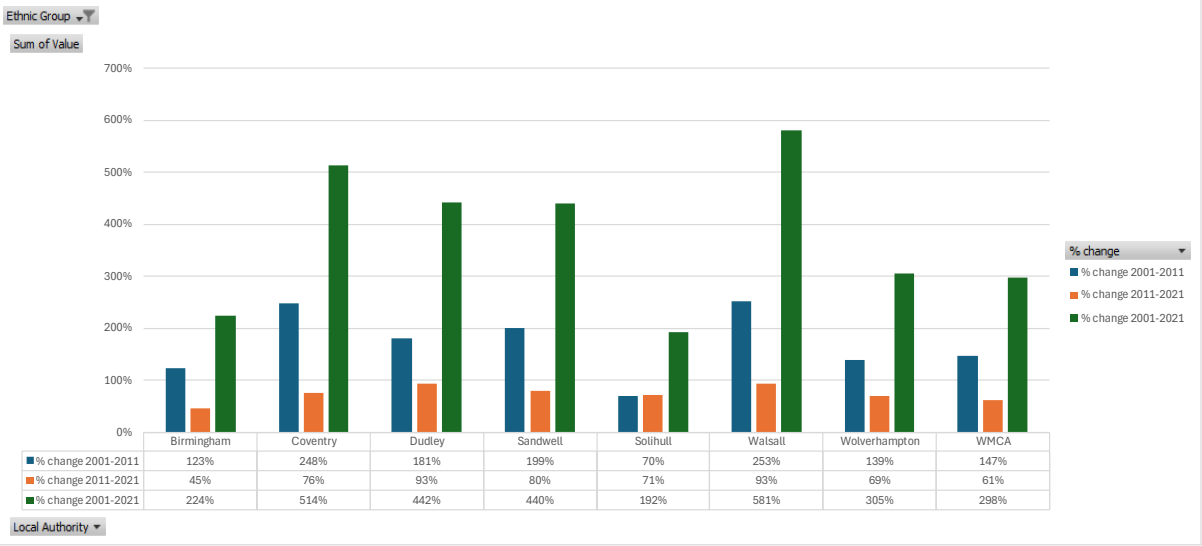
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	77%	49%	77%	61%	93%	76%	89%	74%
% change 2011-2021	17%	33%	77%	60%	79%	36%	19%	31%
% change 2001-2021	108%	98%	213%	158%	246%	139%	125%	128%

- The Mixed White and Asian ethnicity population has increased above the average population increase in 2001-2021 – but the rate of growth has slowed in 2011-2021 compared to 2001-2011.

Mixed White and Black African



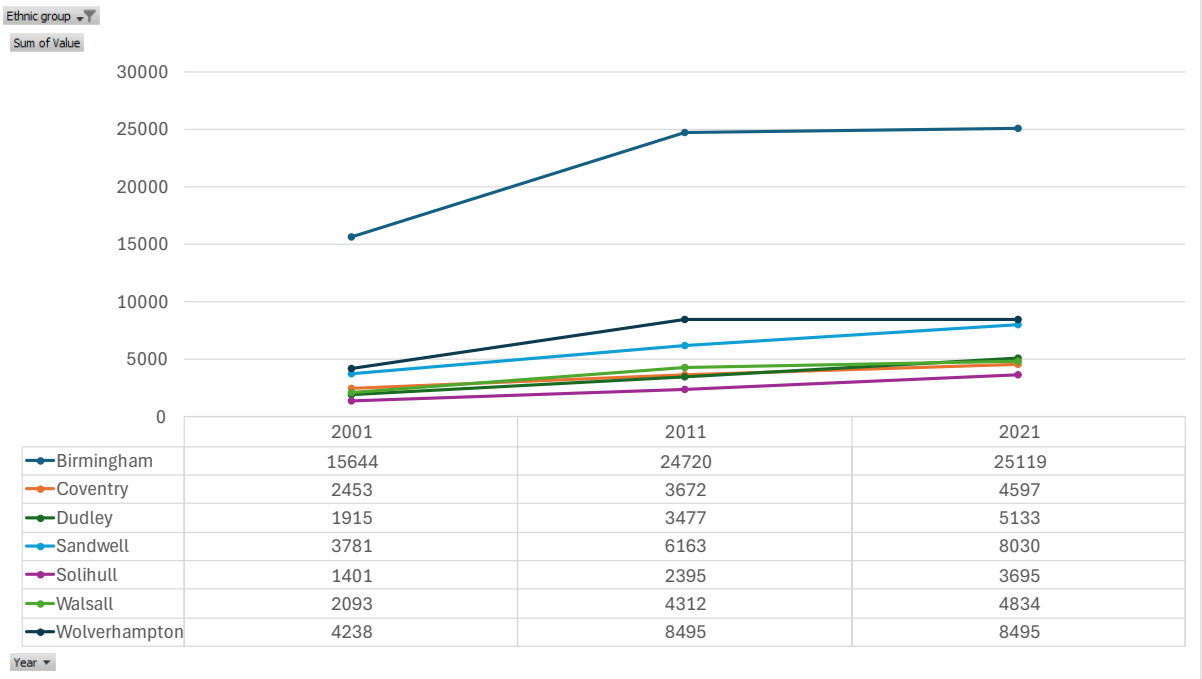
	2001	2011	2021
Birmingham	1446	3223	4680
Coventry	271	943	1663
Dudley	89	250	482
Sandwell	172	515	928
Solihull	145	247	423
Walsall	91	321	620
Wolverhampton	232	554	939



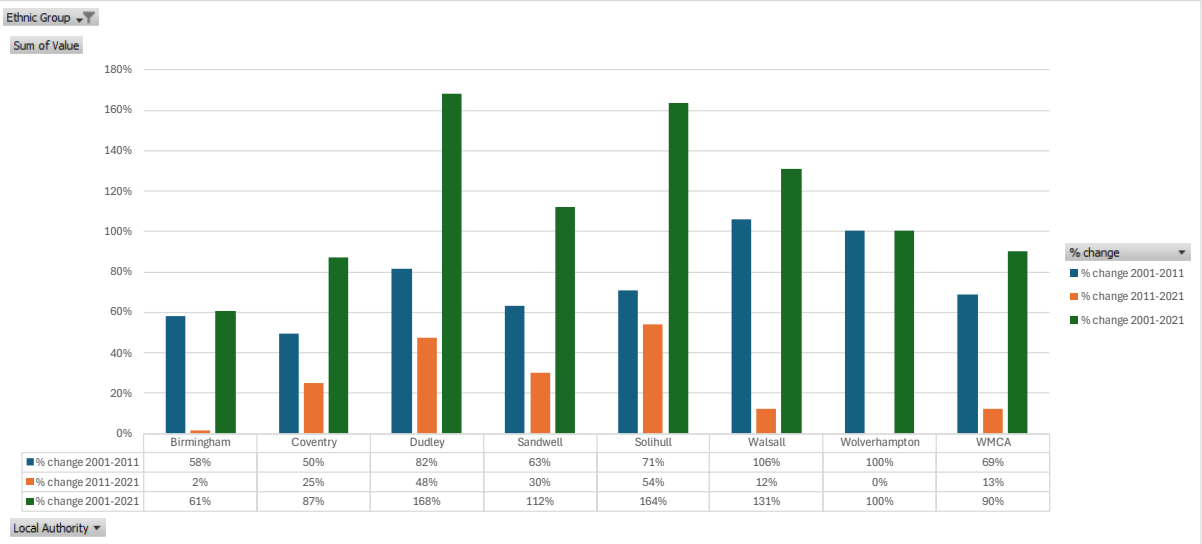
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	123%	248%	181%	199%	70%	253%	139%	147%
% change 2011-2021	45%	76%	93%	80%	71%	93%	69%	61%
% change 2001-2021	224%	514%	442%	440%	192%	581%	305%	298%

- The Mixed White and Asian ethnicity population has increased above the average population increase in 2001-2021 – but the rate of growth has slowed in 2011-2021 compared to 2001-2011.

Mixed White and Black Caribbean



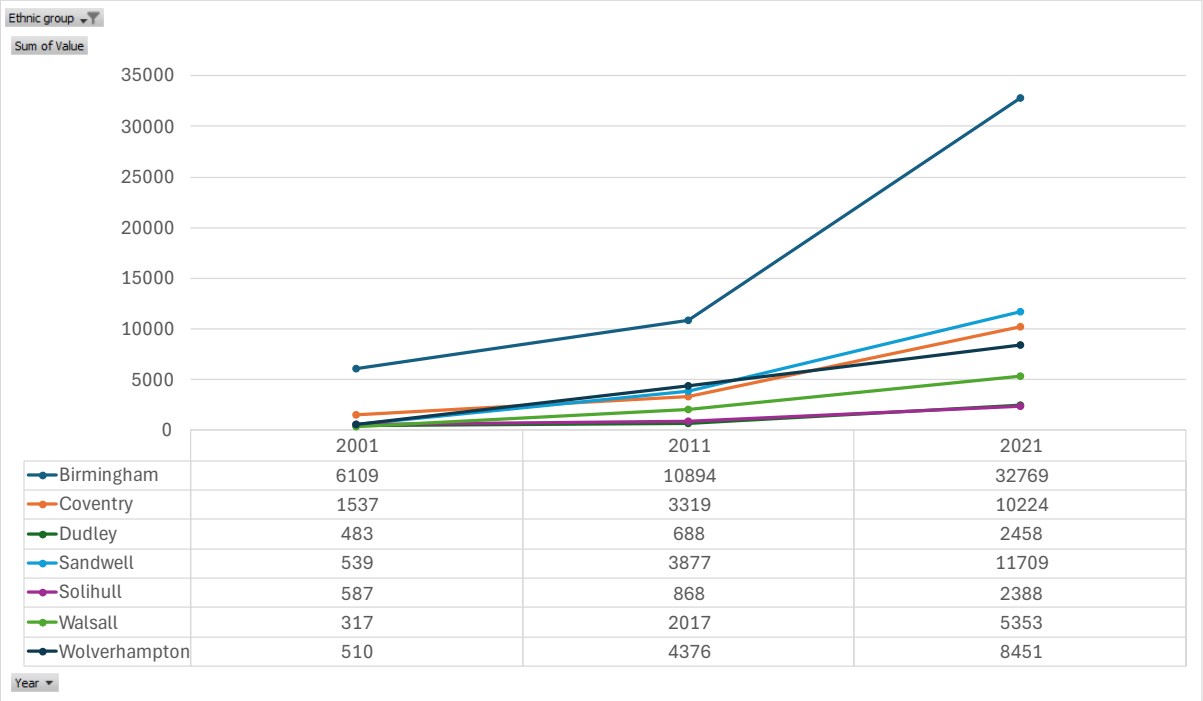
	2001	2011	2021
Birmingham	15644	24720	25119
Coventry	2453	3672	4597
Dudley	1915	3477	5133
Sandwell	3781	6163	8030
Solihull	1401	2395	3695
Walsall	2093	4312	4834
Wolverhampton	4238	8495	8495



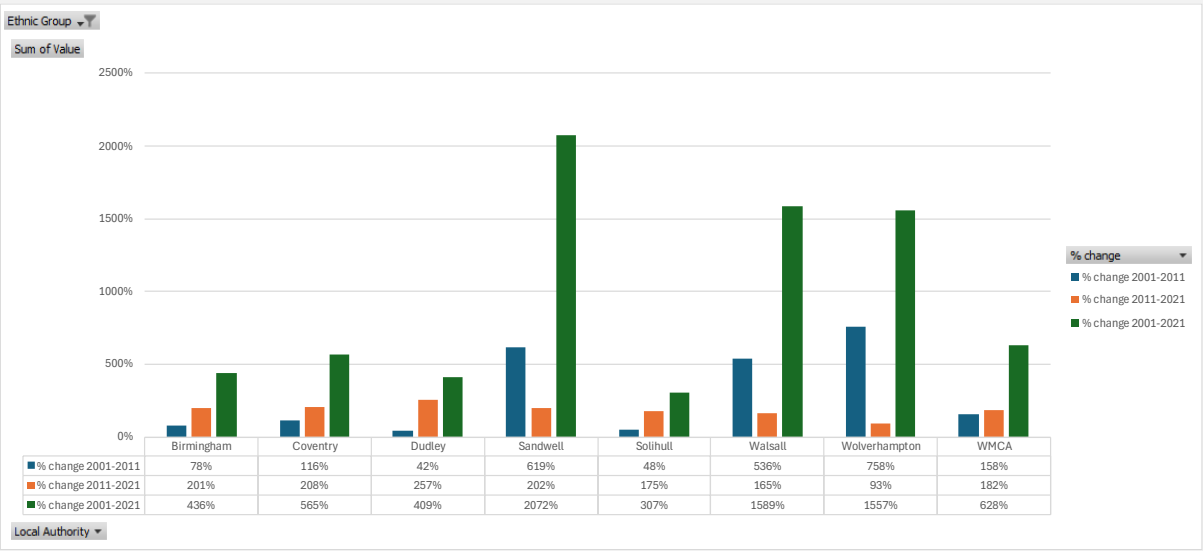
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	58%	50%	82%	63%	71%	106%	100%	69%
% change 2011-2021	2%	25%	48%	30%	54%	12%	0%	13%
% change 2001-2021	61%	87%	168%	112%	164%	131%	100%	90%

- The Mixed White and Black Caribbean ethnicity population has increased above the average population increase in 2001-2021 – but the rate of growth has slowed in 2011-2021 compared to 2001-2011.

Other Any other ethnic group



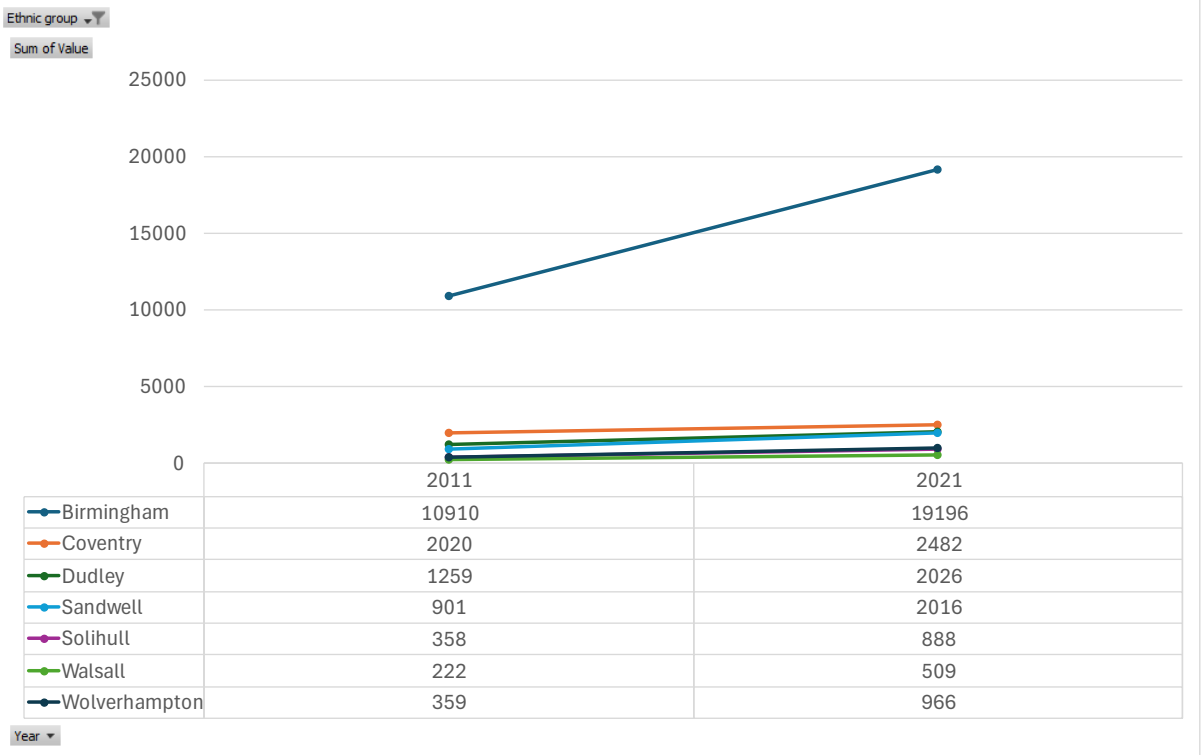
	2001	2011	2021
Birmingham	6109	10894	32769
Coventry	1537	3319	10224
Dudley	483	688	2458
Sandwell	539	3877	11709
Solihull	587	868	2388
Walsall	317	2017	5353
Wolverhampton	510	4376	8451



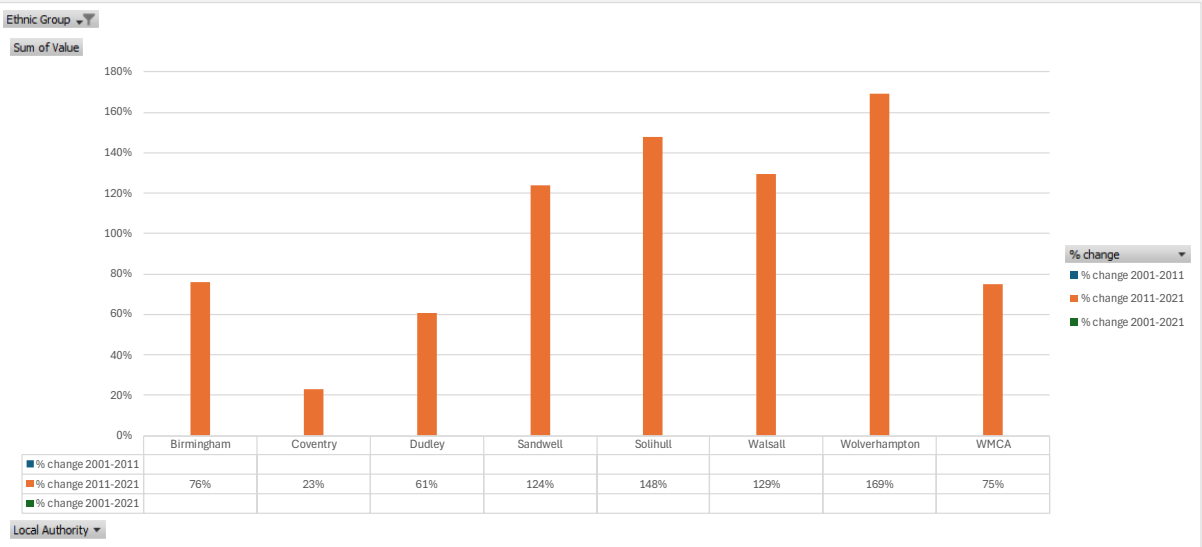
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	78%	116%	42%	619%	48%	536%	758%	158%
% change 2011-2021	201%	208%	257%	202%	175%	165%	93%	182%
% change 2001-2021	436%	565%	409%	2072%	307%	1589%	1557%	628%

The Other Any other ethnic group population has increased notably everywhere, with the highest percentage increases in Sandwell, Walsall and Wolverhampton.

Other Arab



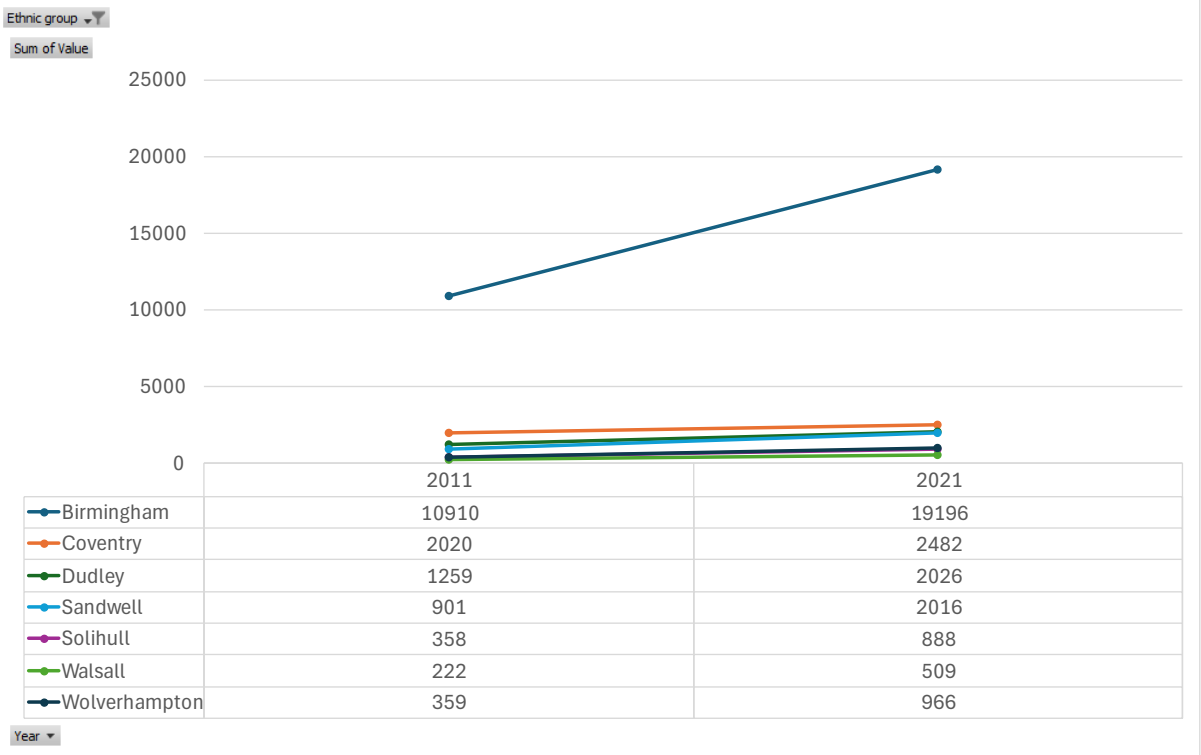
	2011	2021
Birmingham	10910	19196
Coventry	2020	2482
Dudley	1259	2026
Sandwell	901	2016
Solihull	358	888
Walsall	222	509
Wolverhampton	359	966



	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011								
% change 2011-2021	76%	23%	61%	124%	148%	129%	169%	75%
% change 2001-2021								

- Data on the Arab ethnicity population was collected only in 2011 and 2021 census. Previously, this was collected as “Any other ethnic group”. There has been an increase everywhere.

Other ethnic group



	2011	2021
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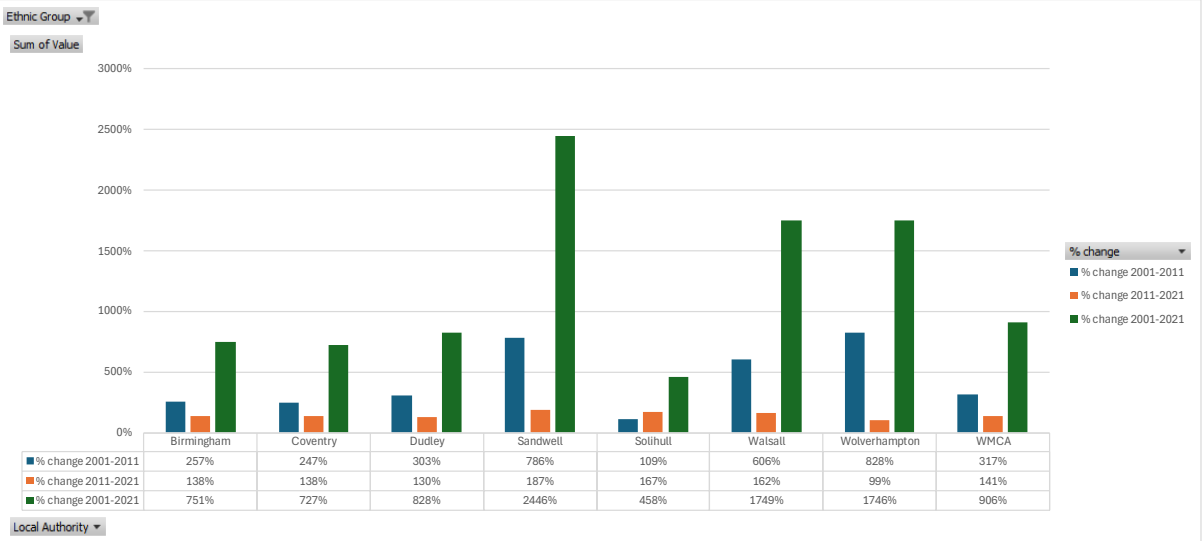
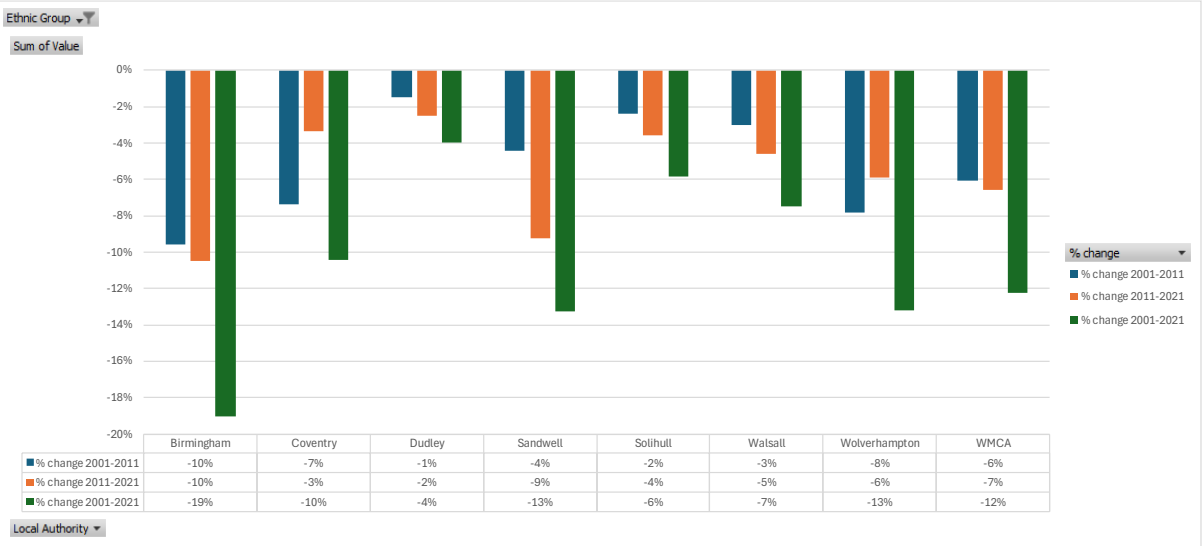


	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	257%	247%	303%	786%	109%	606%	828%	317%
% change 2011-2021	138%	138%	130%	187%	167%	162%	99%	141%
% change 2001-2021	751%	727%	828%	2446%	458%	1749%	1746%	906%

- The Other ethnic group population has increased above the average population increase in 2001-2021 – but the rate of growth has slowed in 2011-2021 compared to 2001-2011.

White

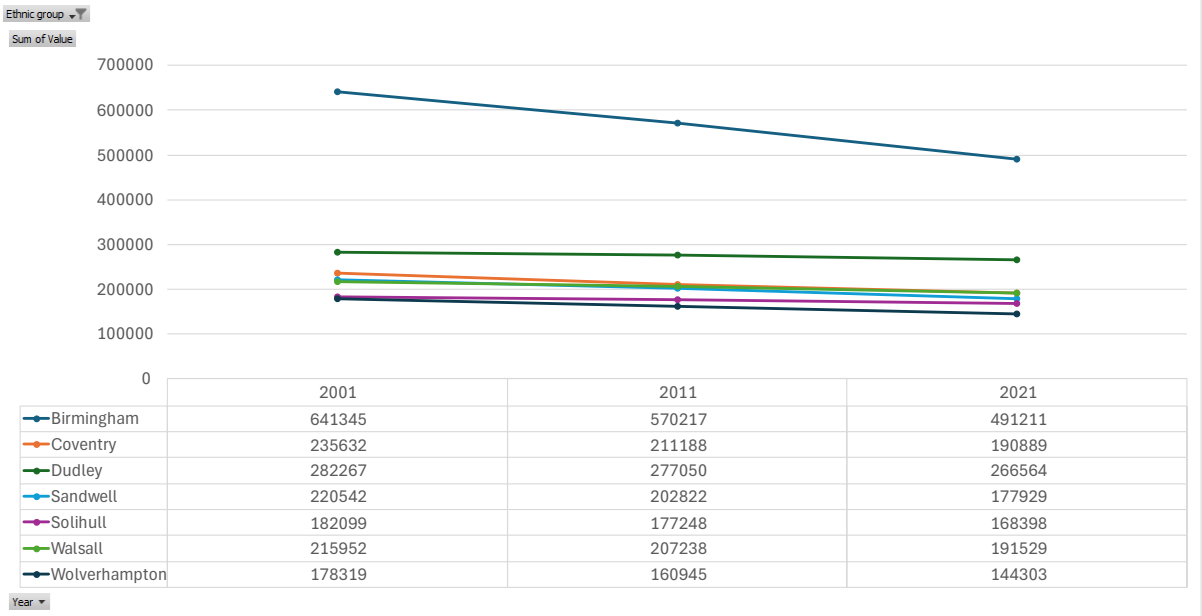
	2001	2011	2021
Birmingham	687406	621636	556608
Coventry	252643	234029	226246
Dudley	285870	281607	274596
Sandwell	225478	215471	195624
Solihull	188725	184244	177668
Walsall	219065	212469	202724
Wolverhampton	184044	169682	159707



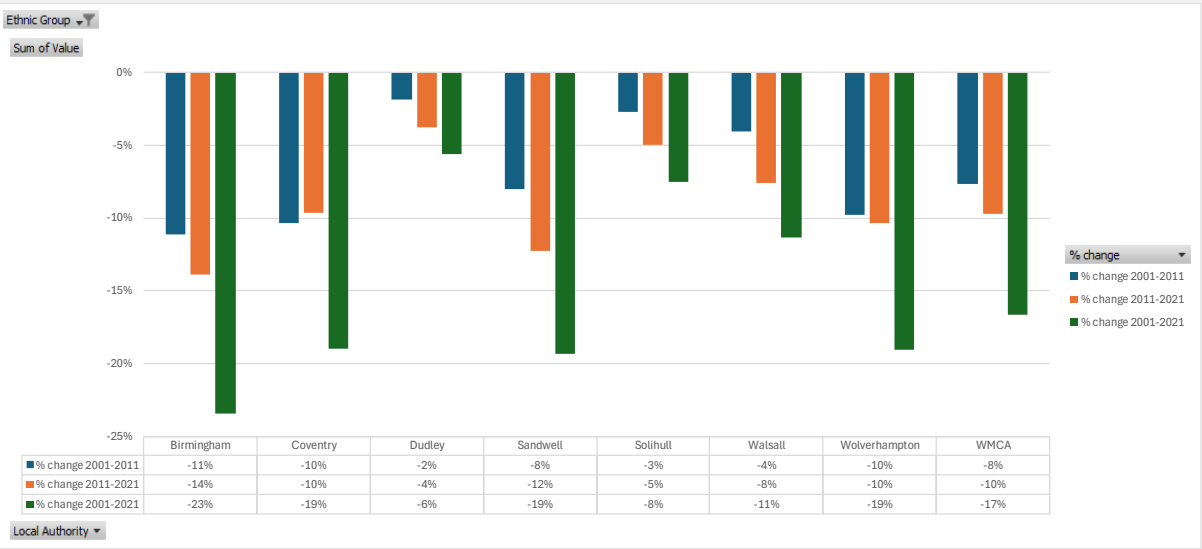
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	-10%	-7%	-1%	-4%	-2%	-3%	-8%	-6%
% change 2011-2021	-10%	-3%	-2%	-9%	-4%	-5%	-6%	-7%
% change 2001-2021	-19%	-10%	-4%	-13%	-6%	-7%	-13%	-12%

- The White ethnic group population has decreased in the WMCA area – and the rate of decrease has sped up in 2011-2021 compared to 2001-2011.

White English/Welsh/Scottish/Northern Irish/British



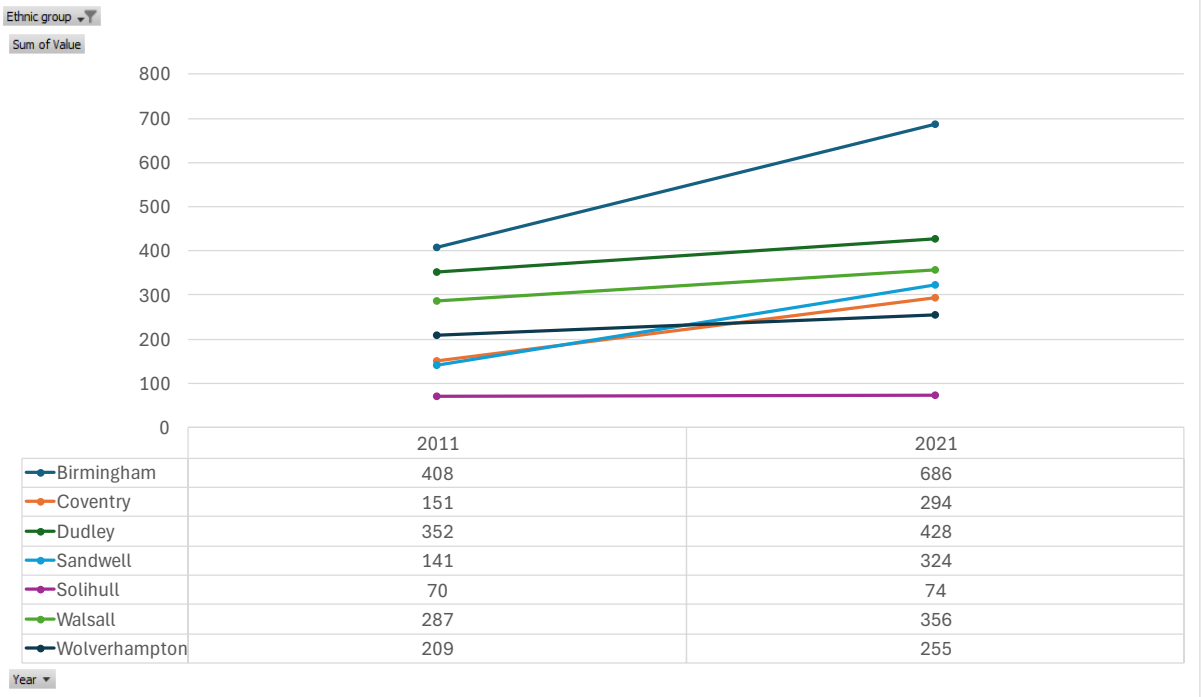
	2001	2011	2021
Birmingham	641345	570217	491211
Coventry	235632	211188	190889
Dudley	282267	277050	266564
Sandwell	220542	202822	177929
Solihull	182099	177248	168398
Walsall	215952	207238	191529
Wolverhampton	178319	160945	144303



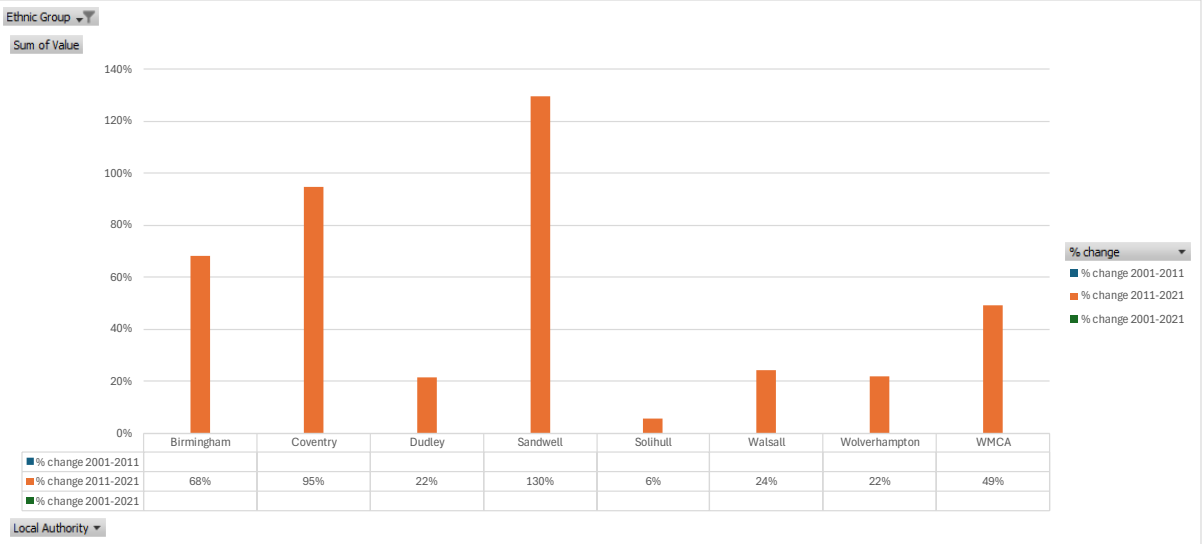
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	-11%	-10%	-2%	-8%	-3%	-4%	-10%	-8%
% change 2011-2021	-14%	-10%	-4%	-12%	-5%	-8%	-10%	-10%
% change 2001-2021	-23%	-19%	-6%	-19%	-8%	-11%	-19%	-17%

- The White British ethnicity population has decreased in the WMCA area – and the rate of decrease has sped up in 2011-2021 compared to 2001-2011.

White Gypsy or Irish Traveller



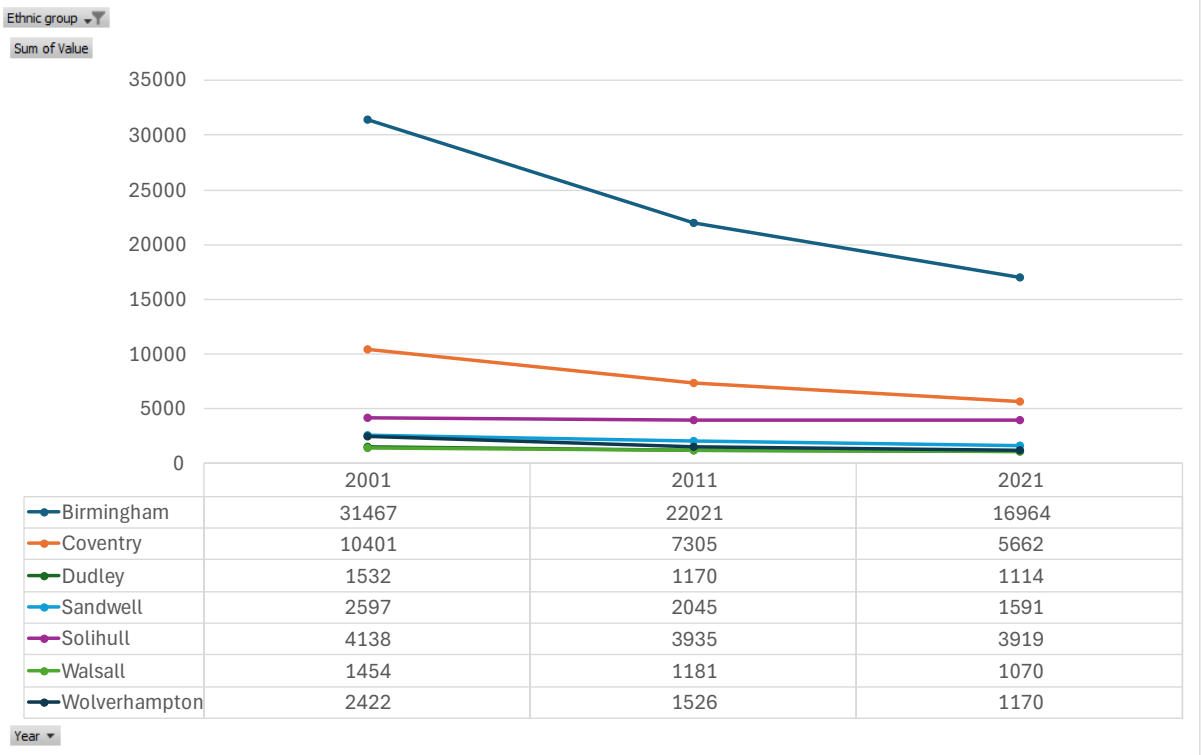
	2011	2021
Birmingham	408	686
Coventry	151	294
Dudley	352	428
Sandwell	141	324
Solihull	70	74
Walsall	287	356
Wolverhampton	209	255



	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011								
% change 2011-2021	68%	95%	22%	130%	6%	24%	22%	49%
% change 2001-2021								

- Data on the White Gypsy or Irish ethnicity population was collected only in 2011 and 2021 census. Previously, this was collected as “Any other ethnic group”. There has been an increase everywhere.

White Irish

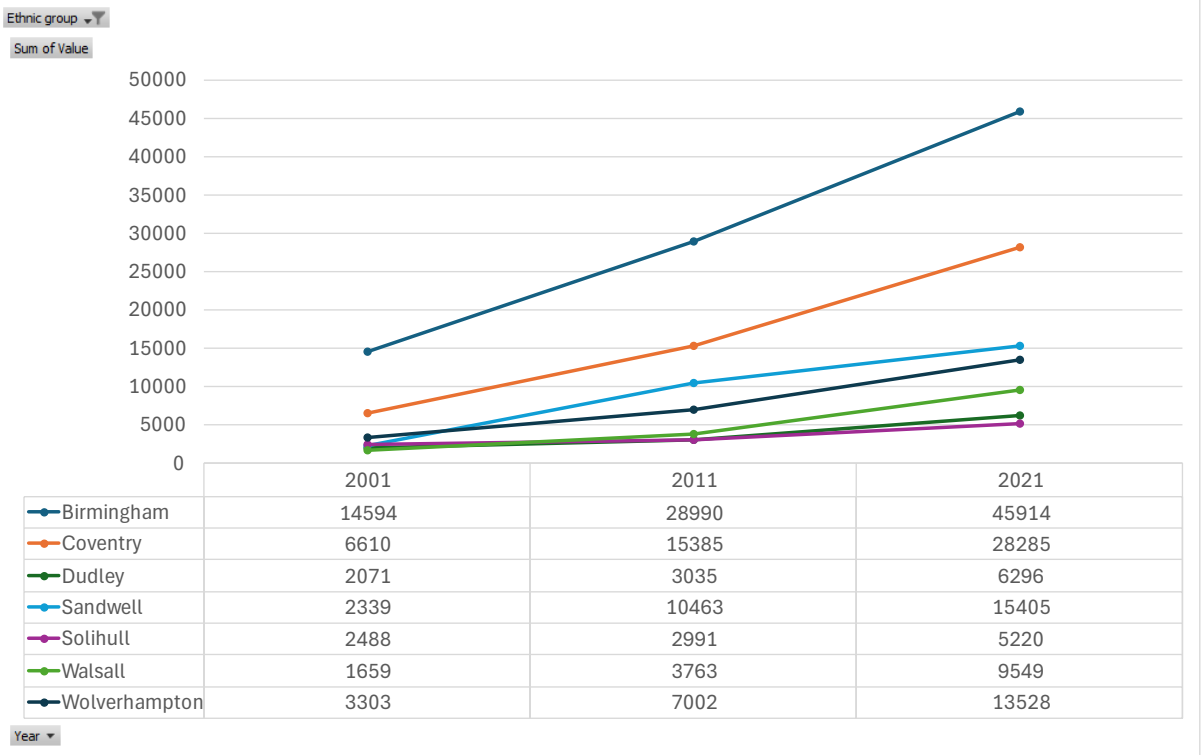


	2001	2011	2021
Birmingham	31467	22021	16964
Coventry	10401	7305	5662
Dudley	1532	1170	1114
Sandwell	2597	2045	1591
Solihull	4138	3935	3919
Walsall	1454	1181	1070
Wolverhampton	2422	1526	1170

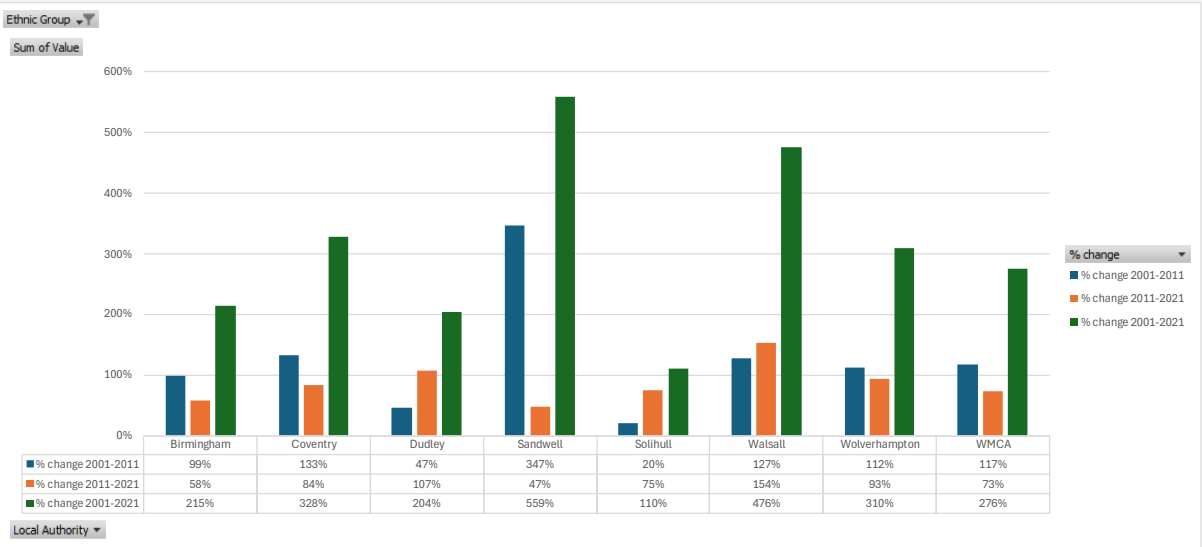
	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	-30%	-30%	-24%	-21%	-5%	-19%	-37%	-27%
% change 2011-2021	-23%	-22%	-5%	-22%	0%	-9%	-23%	-20%
% change 2001-2021	-46%	-46%	-27%	-39%	-5%	-26%	-52%	-42%

- The White Irish ethnicity population has decreased in the WMCA area – although the rate of decrease has slowed down in 2011-2021 compared to 2001-2011.

White Other

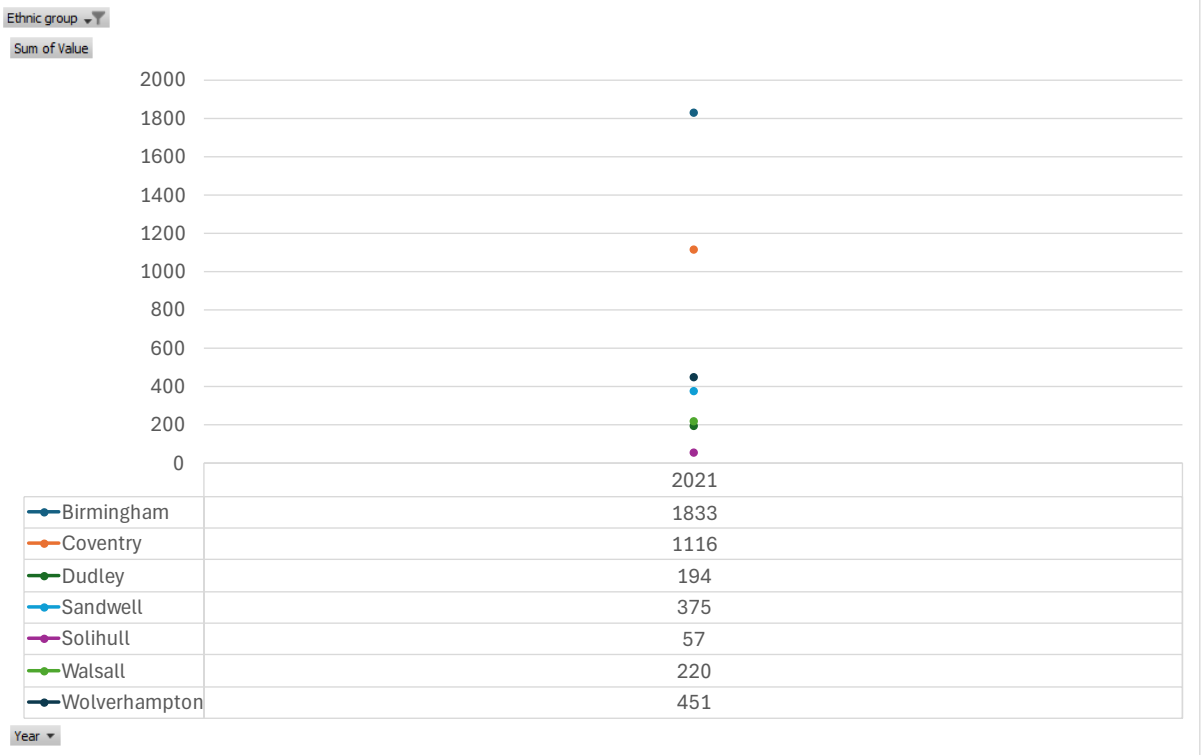


	2001	2011	2021
Birmingham	14594	28990	45914
Coventry	6610	15385	28285
Dudley	2071	3035	6296
Sandwell	2339	10463	15405
Solihull	2488	2991	5220
Walsall	1659	3763	9549
Wolverhampton	3303	7002	13528



	Birmingham	Coventry	Dudley	Sandwell	Solihull	Walsall	Wolverhampton	WMCA
% change 2001-2011	99%	133%	47%	347%	20%	127%	112%	117%
% change 2011-2021	58%	84%	107%	47%	75%	154%	93%	73%
% change 2001-2021	215%	328%	204%	559%	110%	476%	310%	276%

White Roma



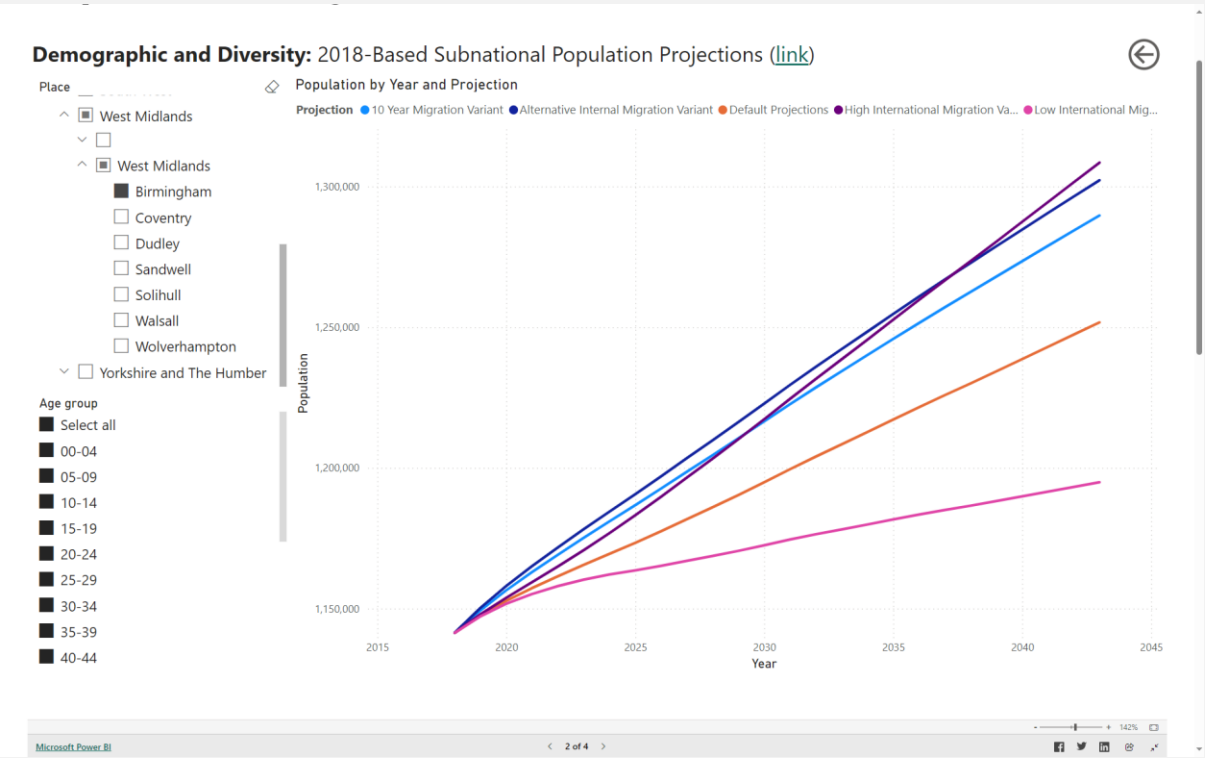
- Data on the White Roma ethnicity population was only collected in 2021, and previous years comparisons are not available.

Population projections by WMCA local authorities

An interactive version of the Power BI report can be found at https://sichunlam.github.io/population/.

Birmingham projections

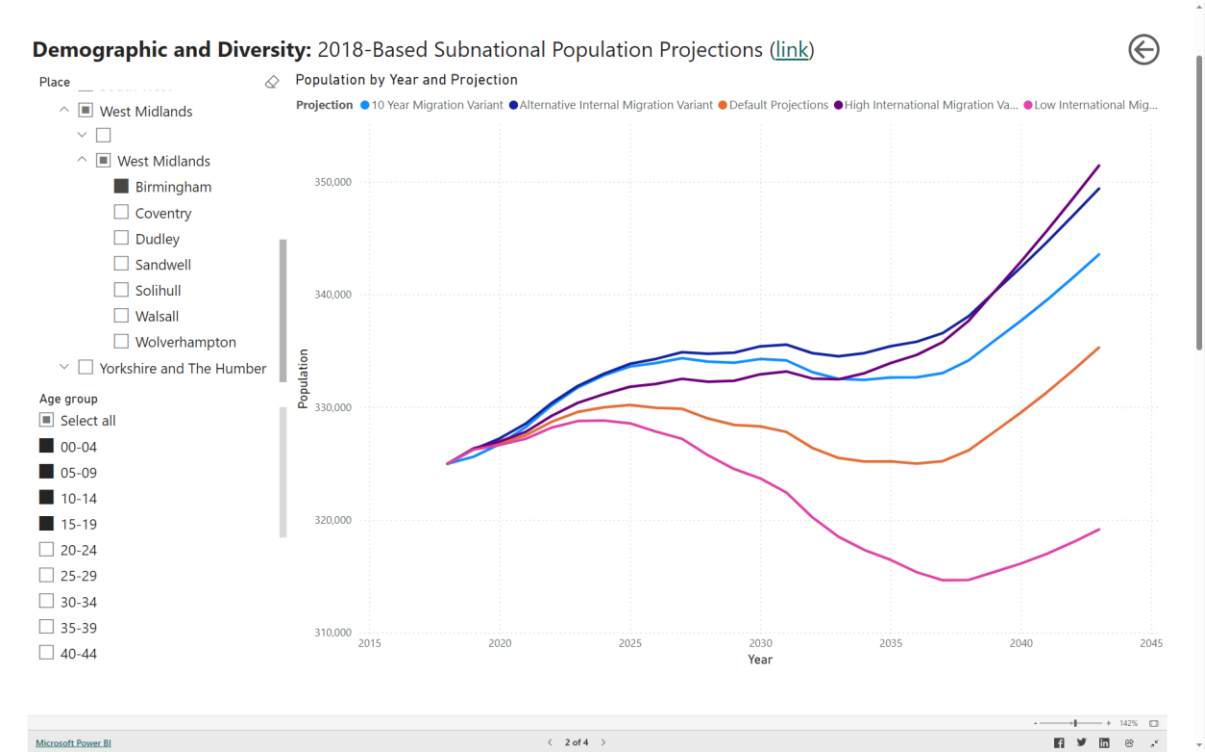
All ages



Birmingham	2018	2021	2023	2030	2035	2043
Census and Population Estimates		1,144,919	1,166,049			
10 Year Migration Variant		1,162,967	1,175,148	1,216,553	1,245,807	1,289,680
Alternative Internal Migration Variant		1,165,087	1,178,187	1,222,833	1,254,681	1,302,192
Principal projections	1,141,374	1,157,285	1,165,531	1,194,894	1,217,164	1,251,689
High International Migration Variant		1,159,378	1,170,753	1,217,294	1,252,636	1,308,470
Low International Migration Variant		1,155,192	1,160,285	1,172,473	1,181,671	1,194,888

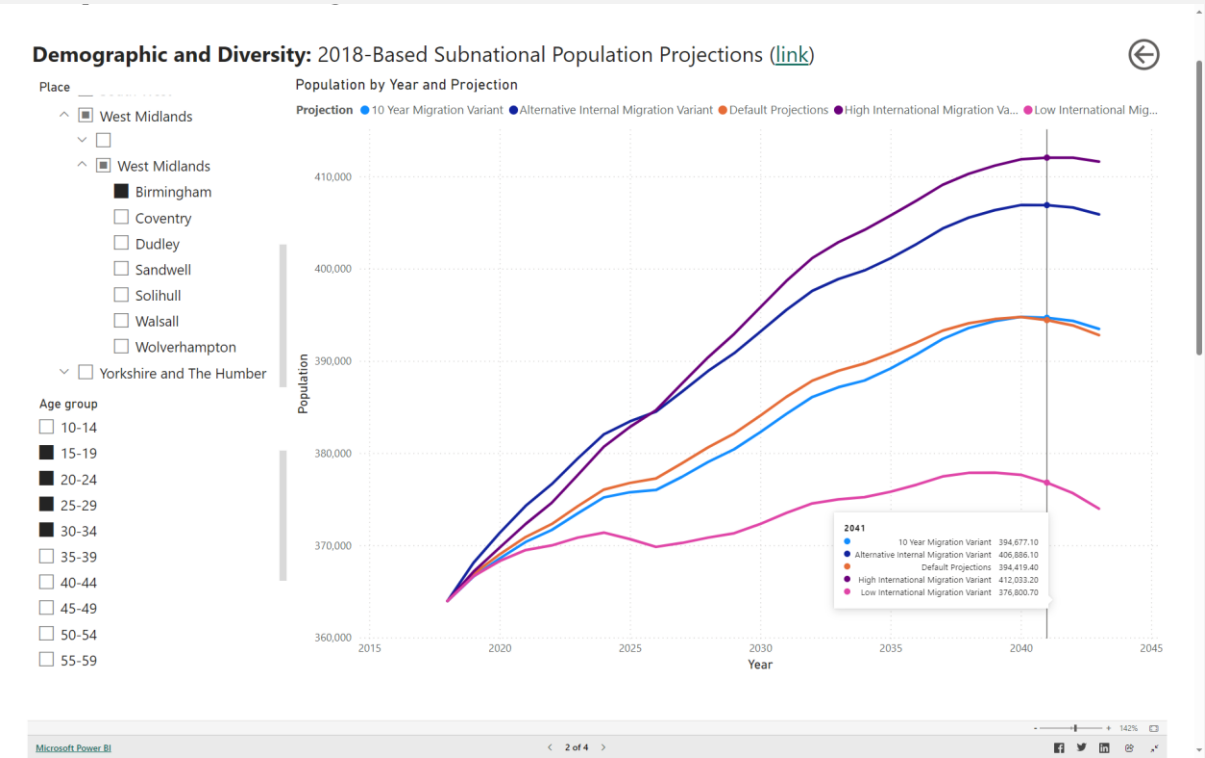
There is a divergence between the principal projections and the high and low international migration variants for Birmingham.

Under 20s



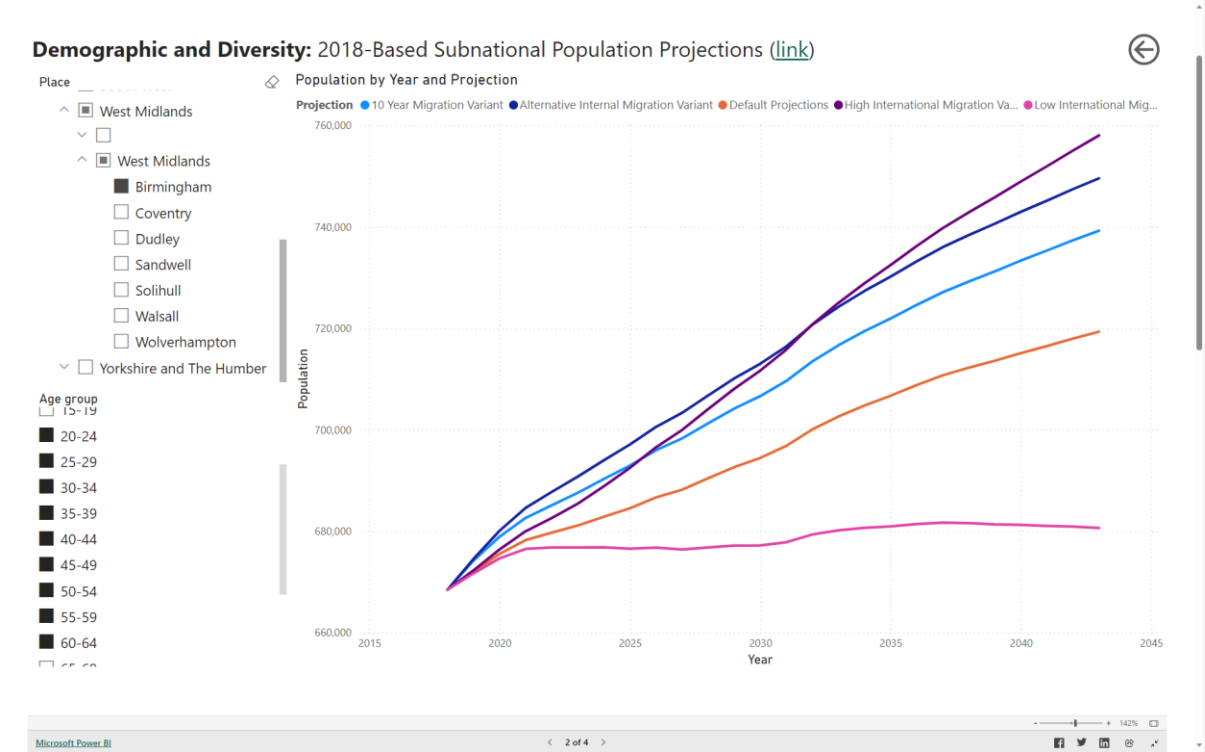
Birmingham's under 20s population is expected to remain stagnant or even decrease over 2025-2035, potentially creating a situation with a lower dependency ratio. This is, however, dependent on the level of international migration.

Aged 15 to 34



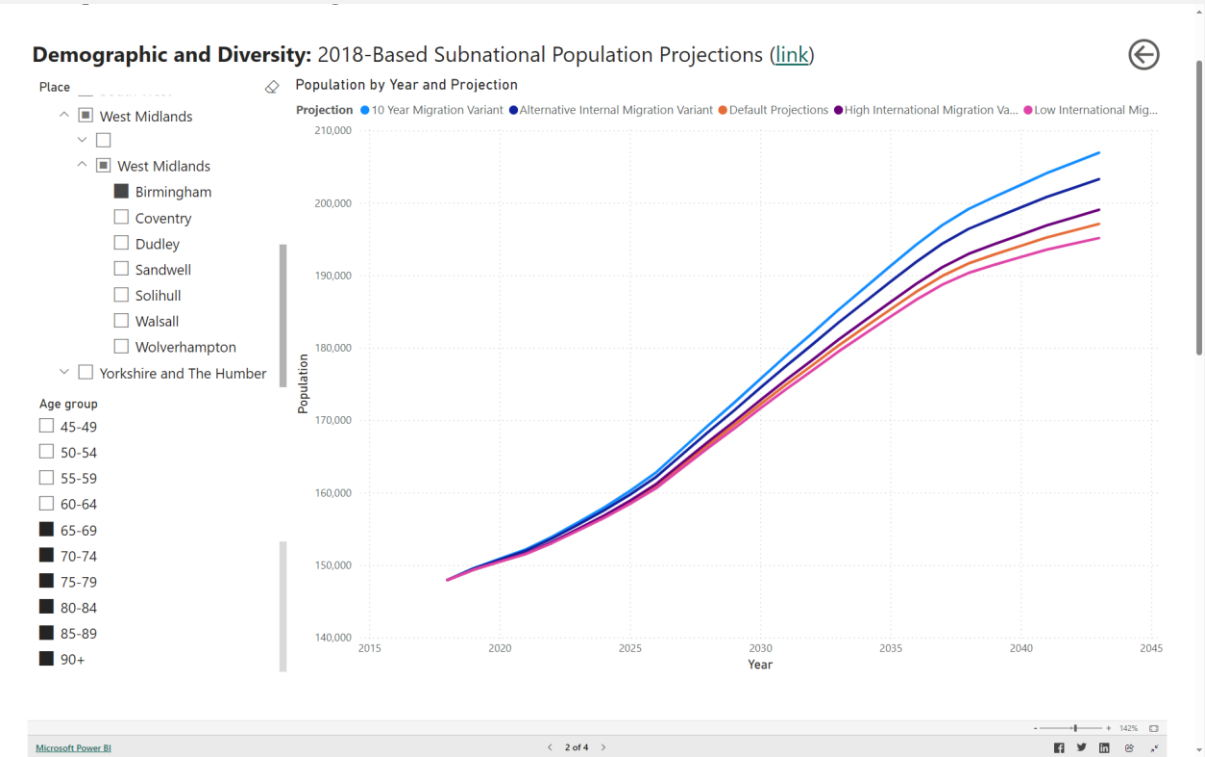
The emergent workforce population is expected to peak by 2041.

Aged 20 to 64



The working aged population is expected to grow throughout the 2020s to 2040s, under most scenarios except one of low international migration.

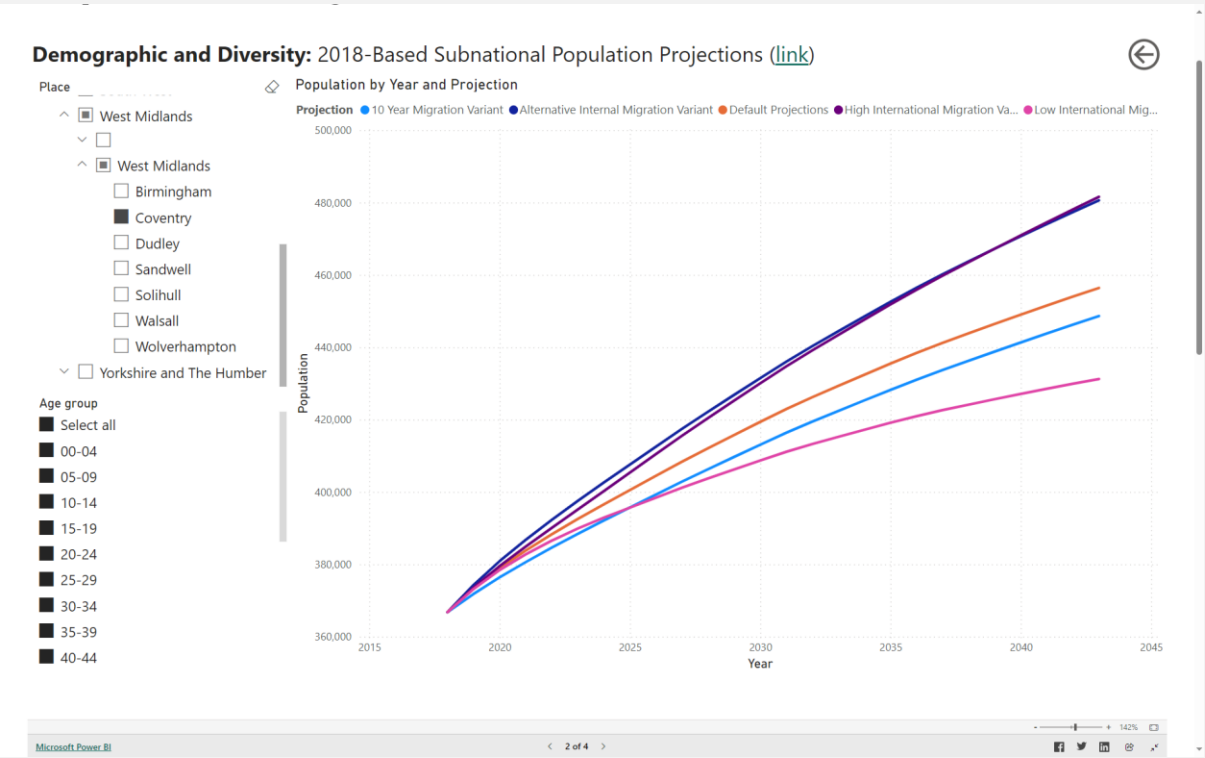
Aged 65 and over



However, the fastest growth in population is also the over 65s dependent population.

Coventry projections

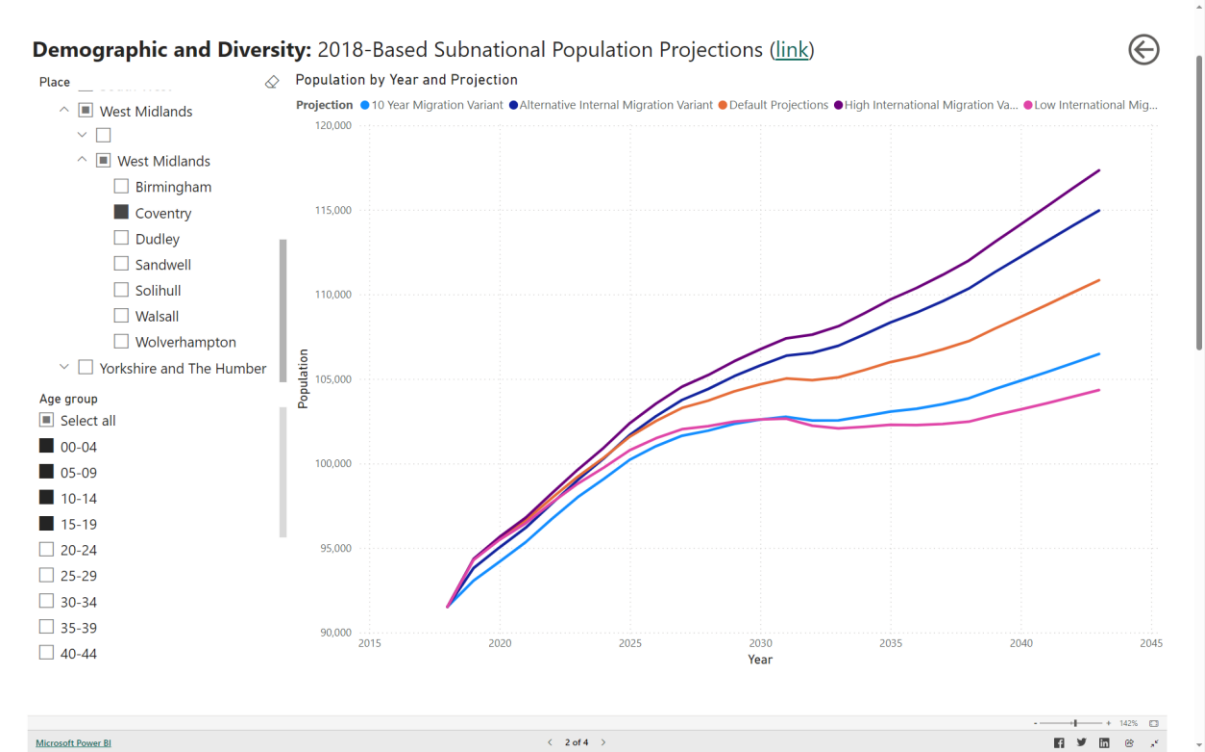
All ages



Coventry	2018	2021	2023	2030	2035	2043
Census and Population Estimates		345,324	360,702			
10 Year Migration Variant		380,606	388,451	413,063	428,220	448,632
Alternative Internal Migration Variant		386,766	397,556	431,454	452,549	480,597
Principal projections	366,785	383,820	392,539	419,366	435,501	456,405
High International Migration Variant		384,887	395,153	430,018	451,846	481,578
Low International Migration Variant		382,754	389,907	408,702	419,145	431,225

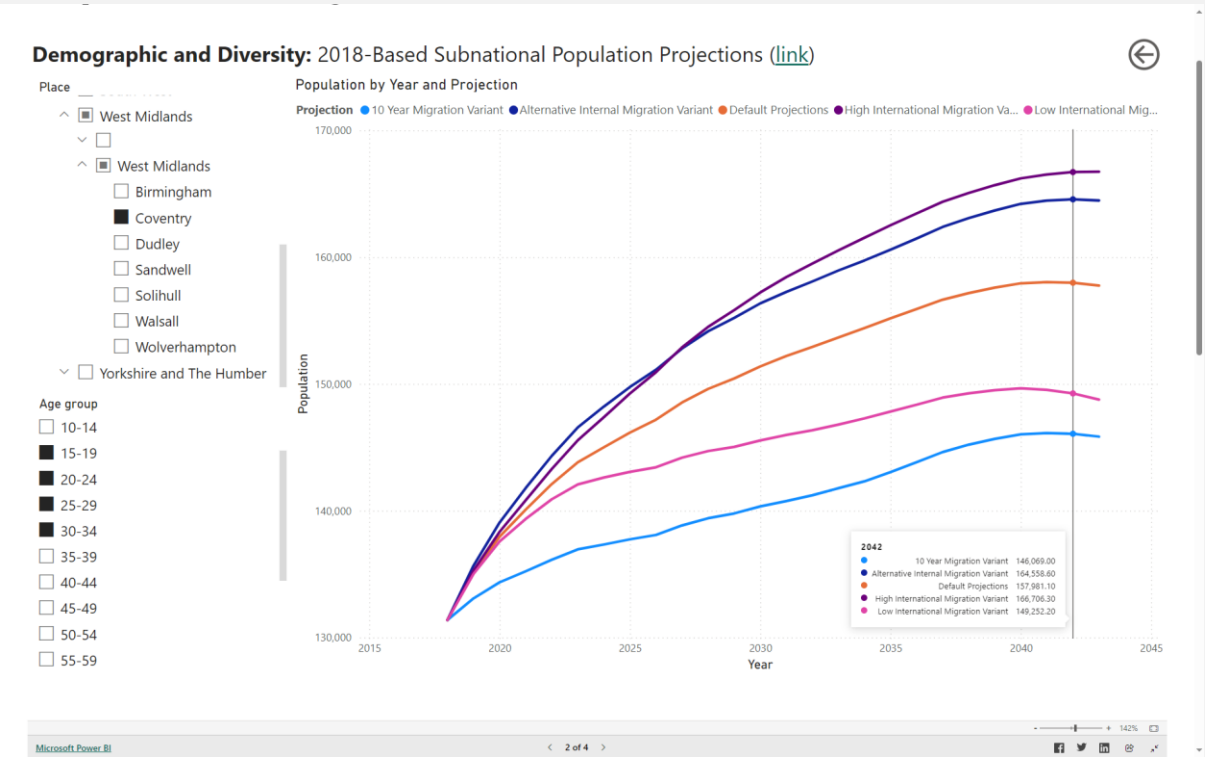
Coventry's census population in 2021 and population estimate for 2023 are much lower than the projections using the 2018-based model, so the projections for Coventry should be treated with caution.

Under 20s

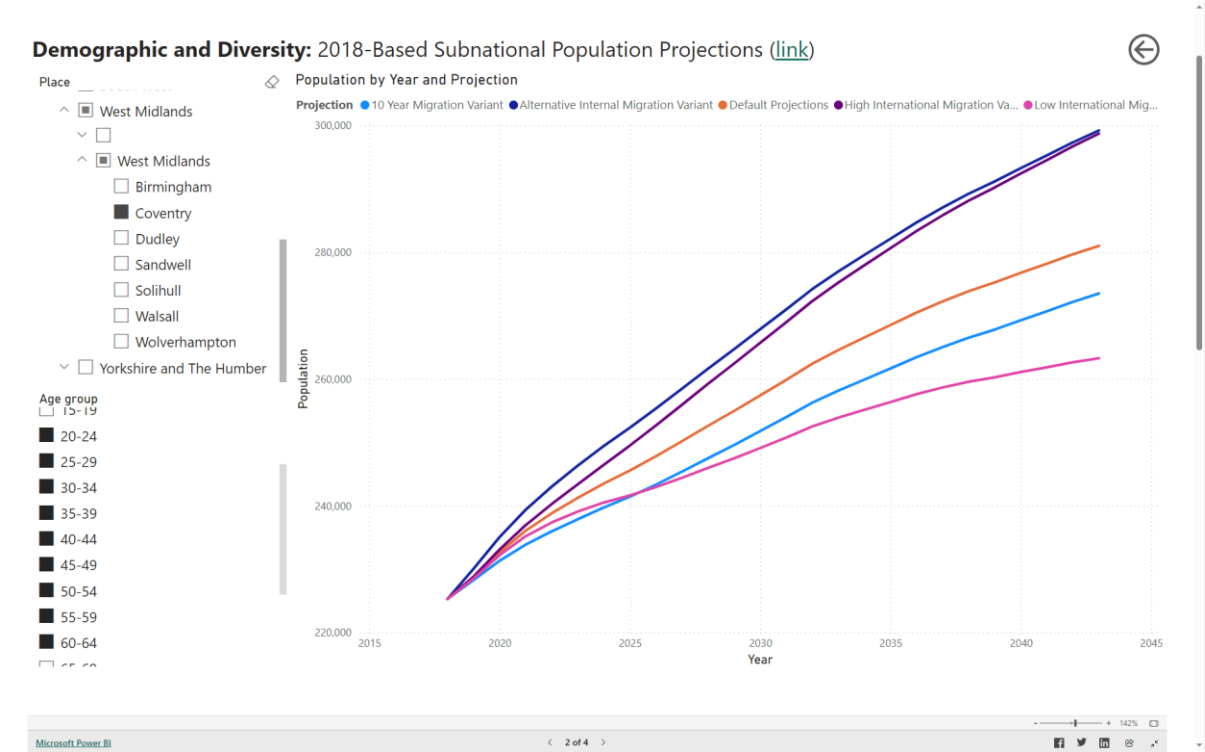


Coventry's under 20s dependent population is expected to grow more slowly in the mid 2020s to mid 2040s than it has done so previously.

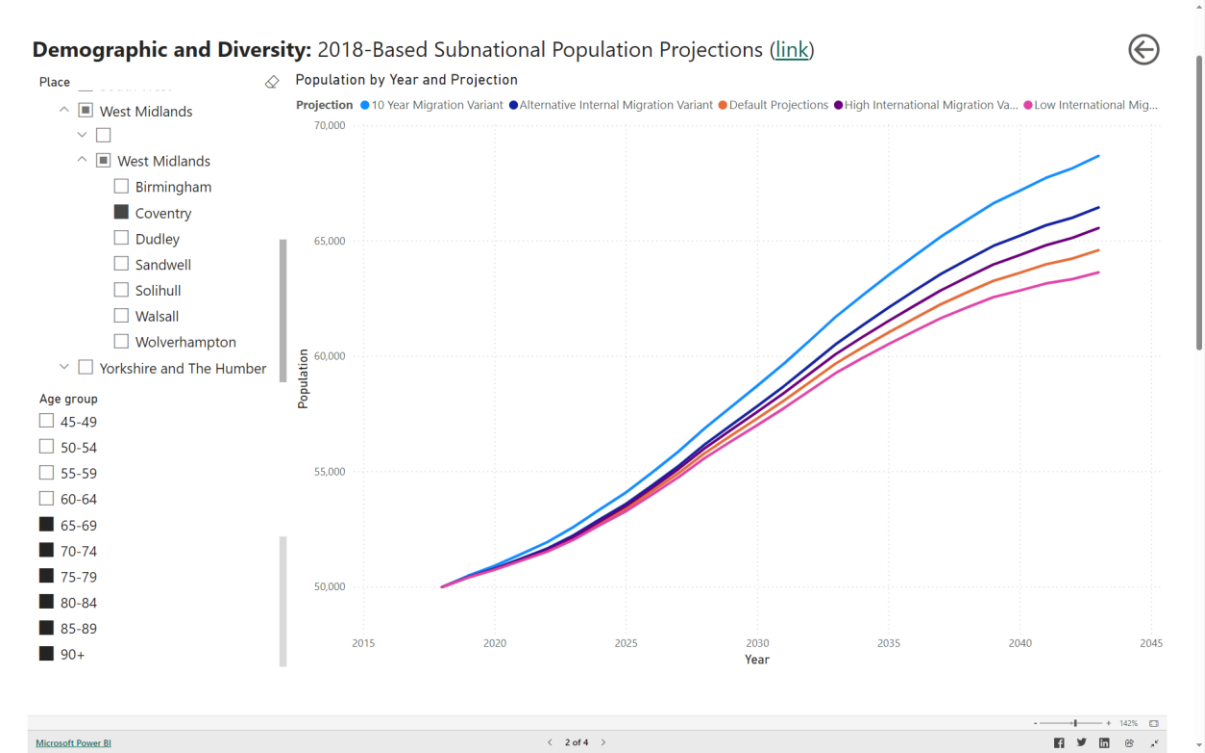
Aged 15 to 34



Aged 20 to 64

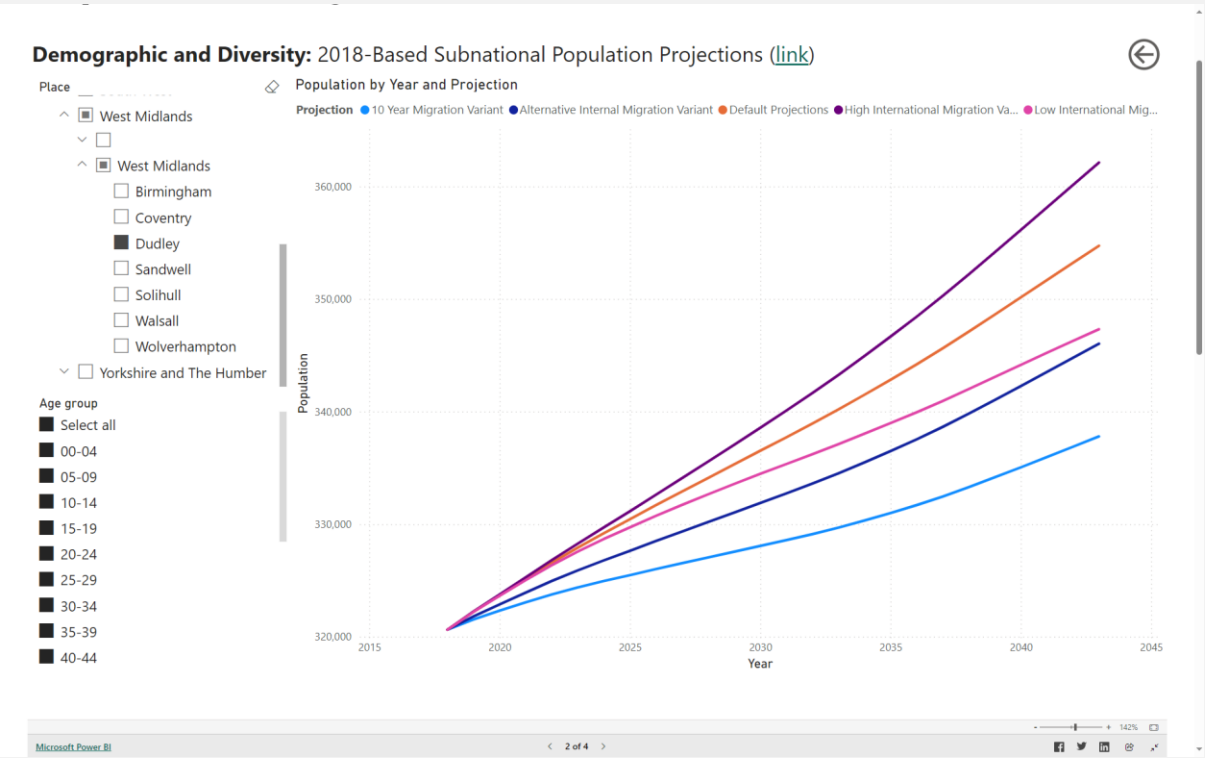


Aged 65 and over



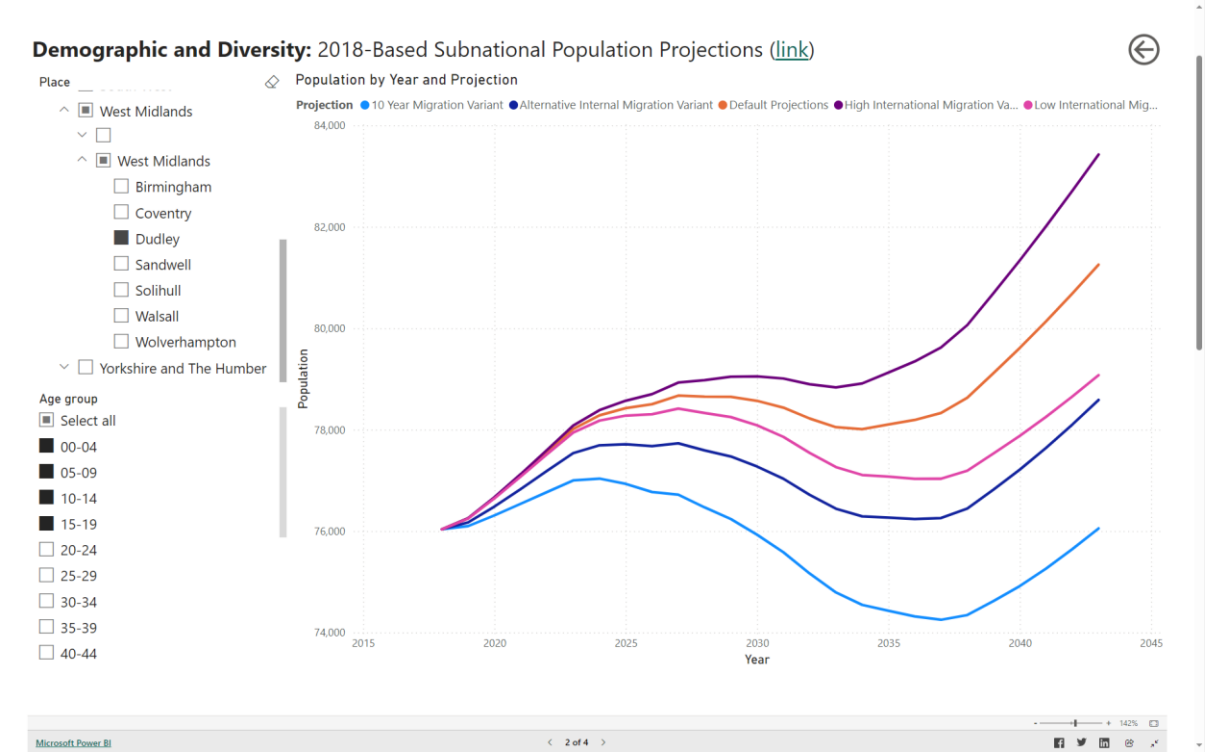
Dudley projections

All ages

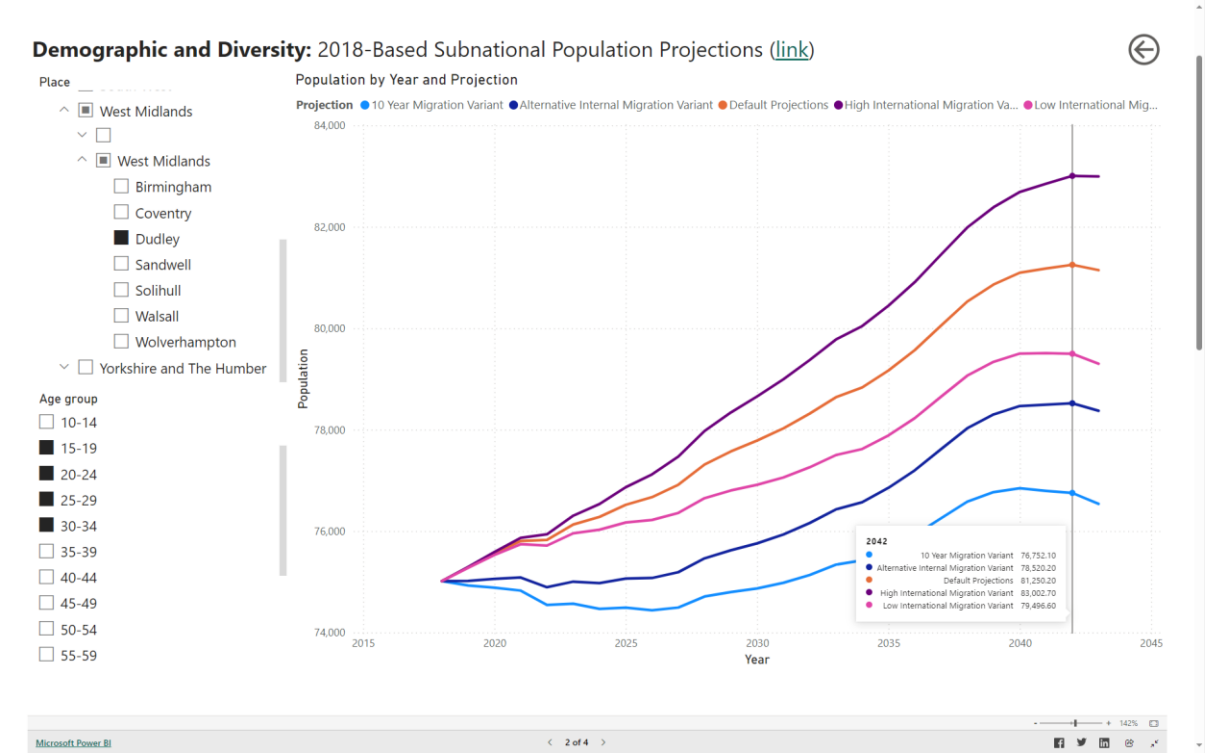


Dudley	2018	2021	2023	2030	2035	2043
Census and Population Estimates		323,488	326,680			
10 Year Migration Variant		323,056	324,380	328,069	330,985	337,794
Alternative Internal Migration Variant		323,922	325,890	331,882	336,490	346,030
Principal projections	320,626	325,147	327,914	336,516	342,824	354,730
High International Migration Variant		325,274	328,263	338,560	346,662	362,128
Low International Migration Variant		325,021	327,563	334,467	338,977	347,317

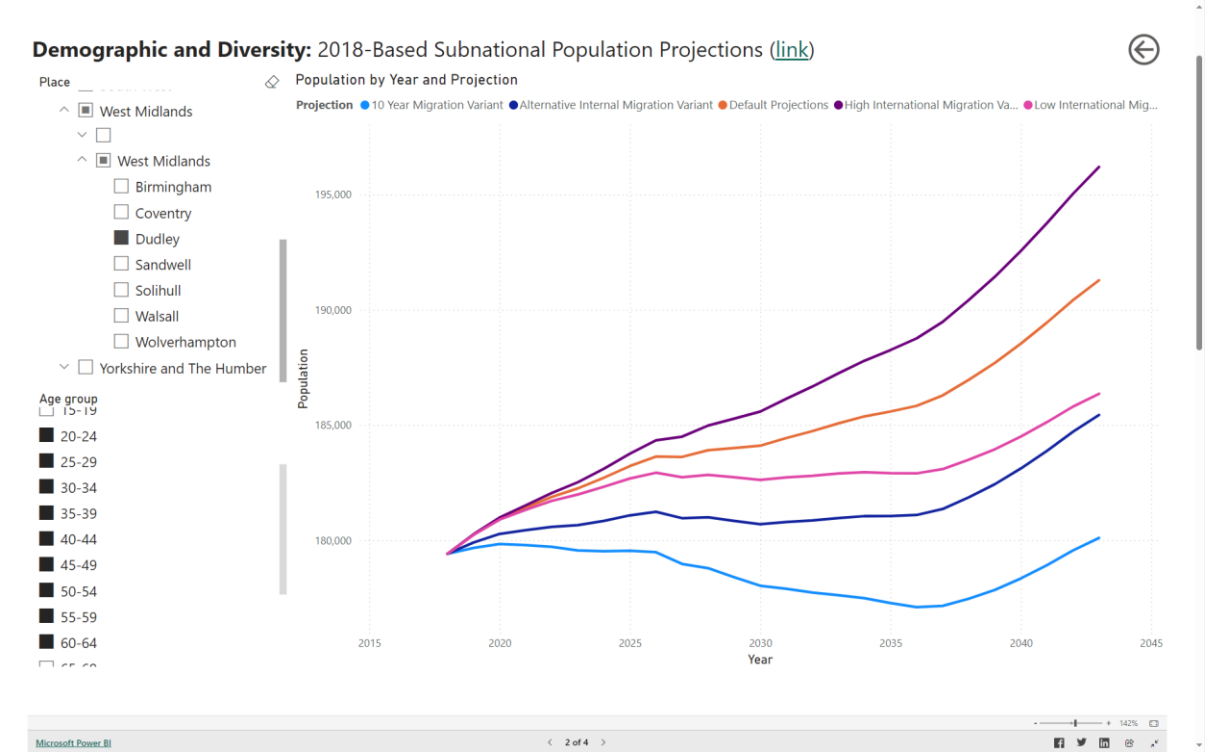
Under 20s



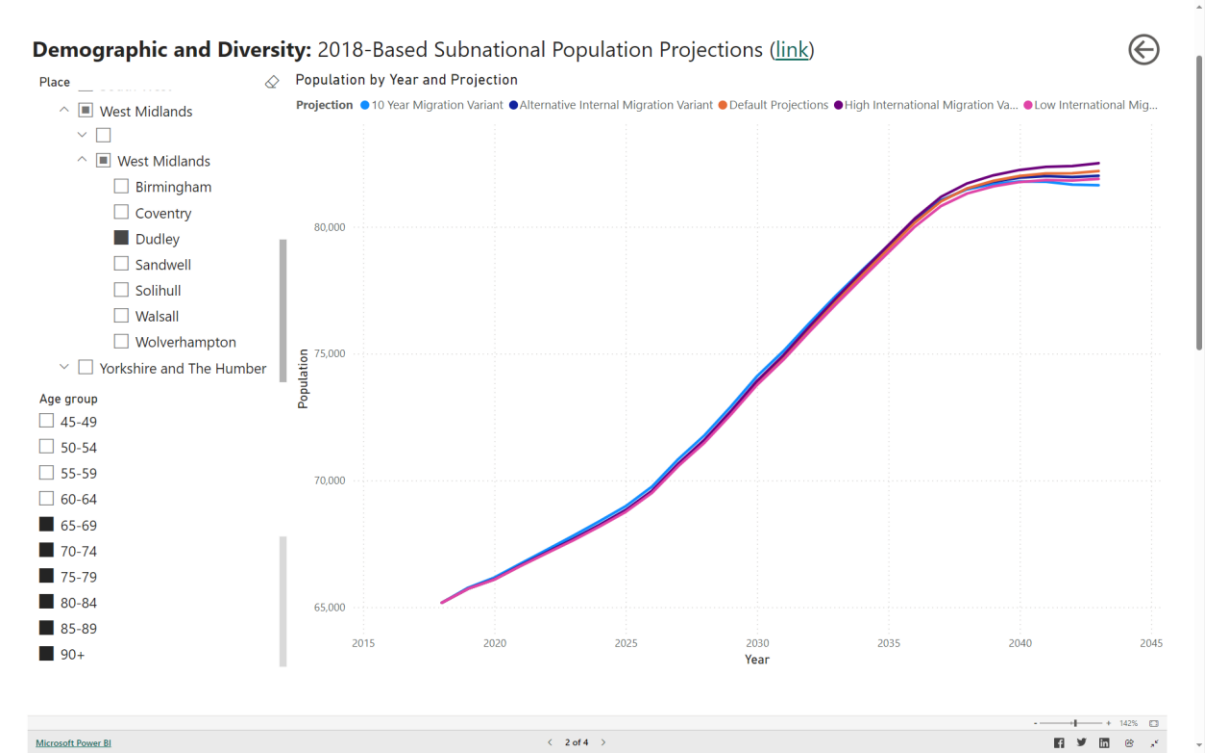
Aged 15 to 34



Aged 20 to 64



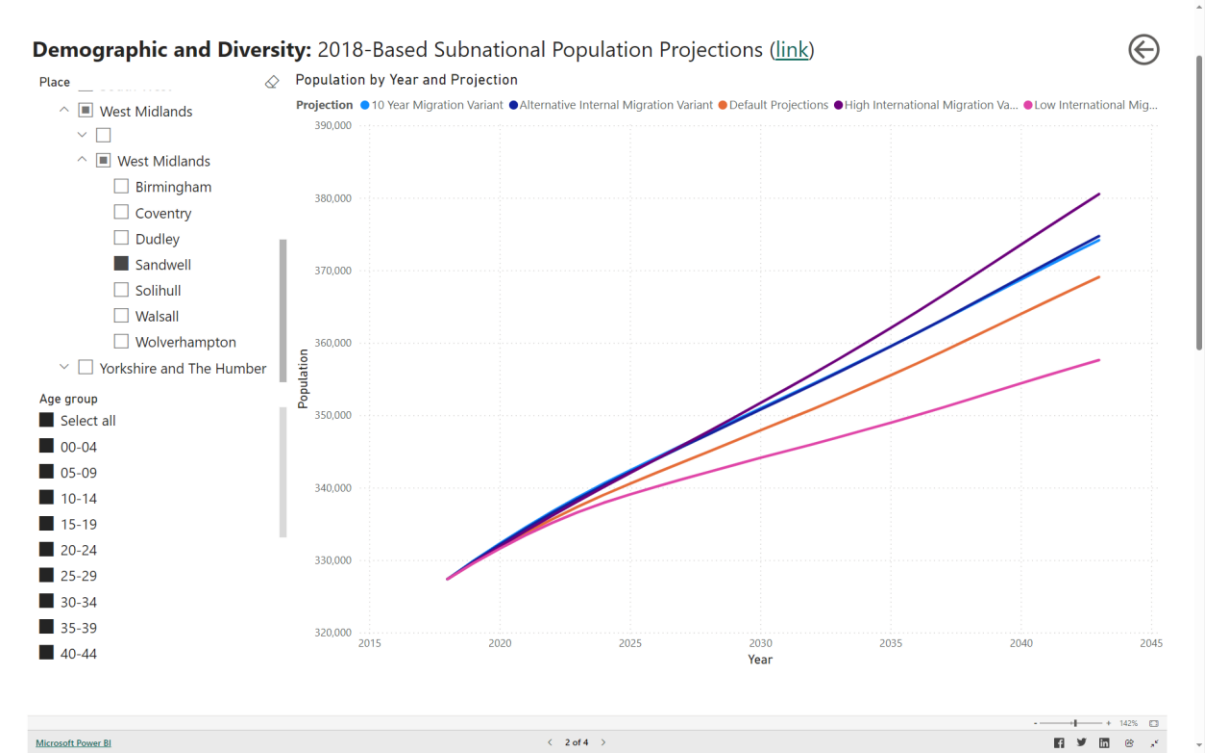
Aged 65 and over



Under every scenario, Dudley's over 65s population is expected to grow rapidly.

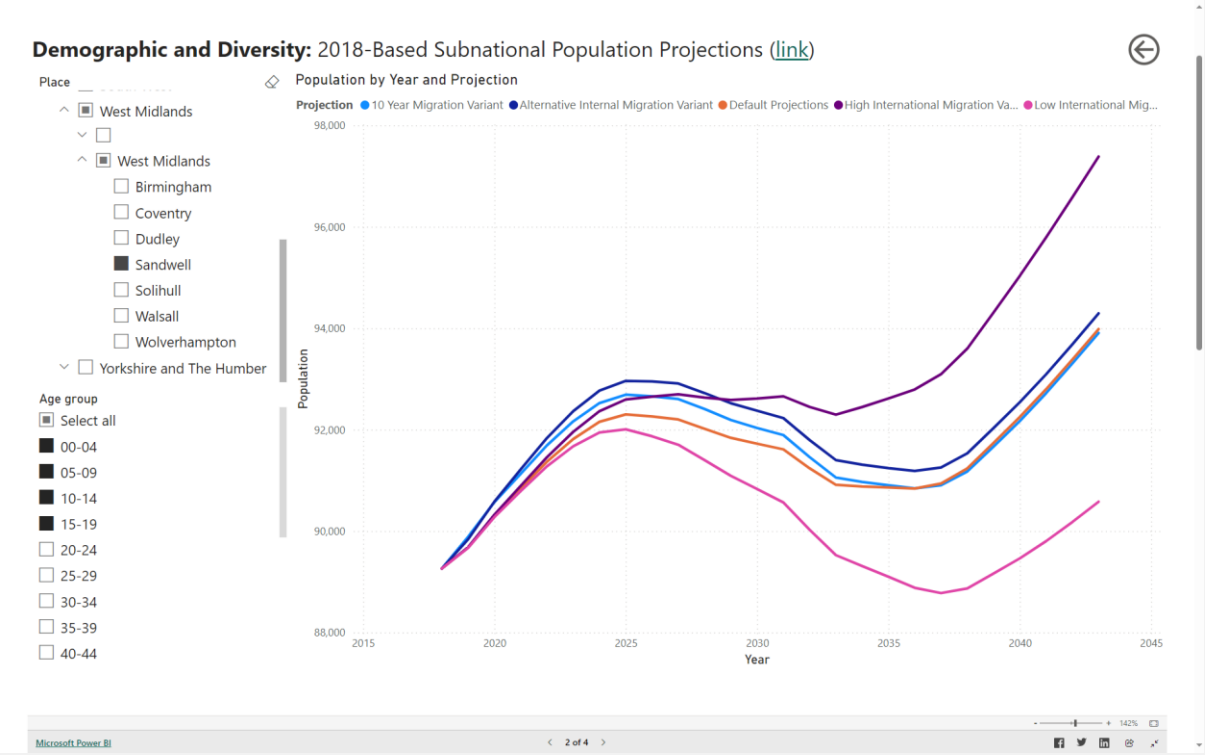
Sandwell projections

All ages



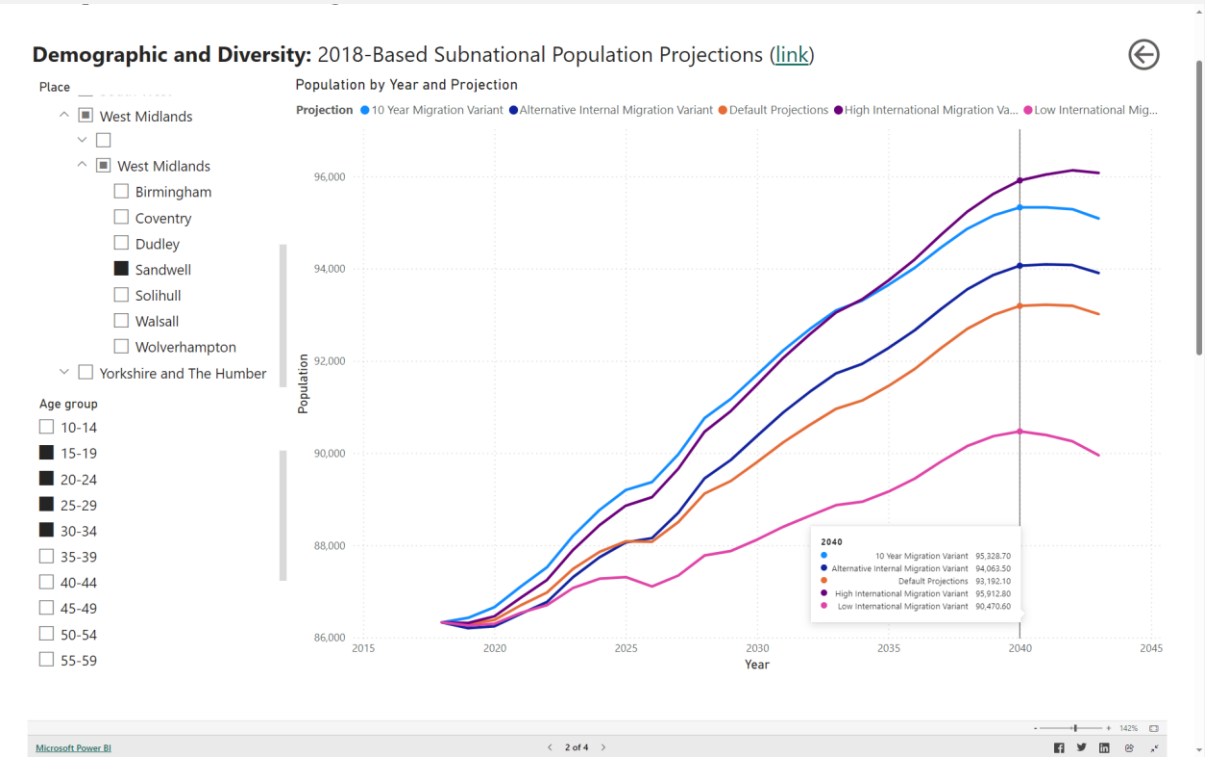
Sandwell	2018	2021	2023	2030	2035	2043
Census and Population Estimates		341,832	347,551			
10 Year Migration Variant		334,529	338,682	350,932	359,516	374,152
Alternative Internal Migration Variant		334,351	338,467	350,763	359,475	374,702
Principal projections	327,378	333,731	337,366	347,891	355,488	369,065
High International Migration Variant		334,019	338,119	351,666	362,019	380,512
Low International Migration Variant		333,442	336,609	344,110	348,949	357,606

Under 20s

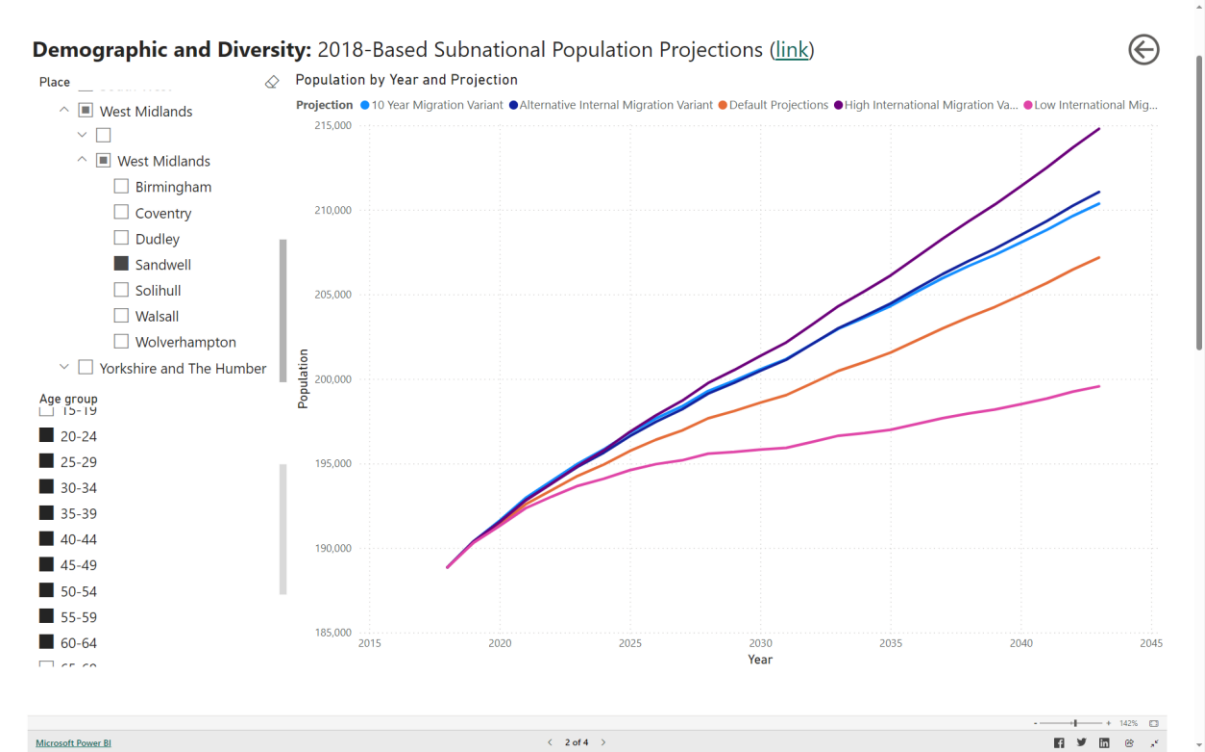


Sandwell's population of under 20s is likely to peak by 2025, before growing again in the 2040s.

Aged 15 to 34

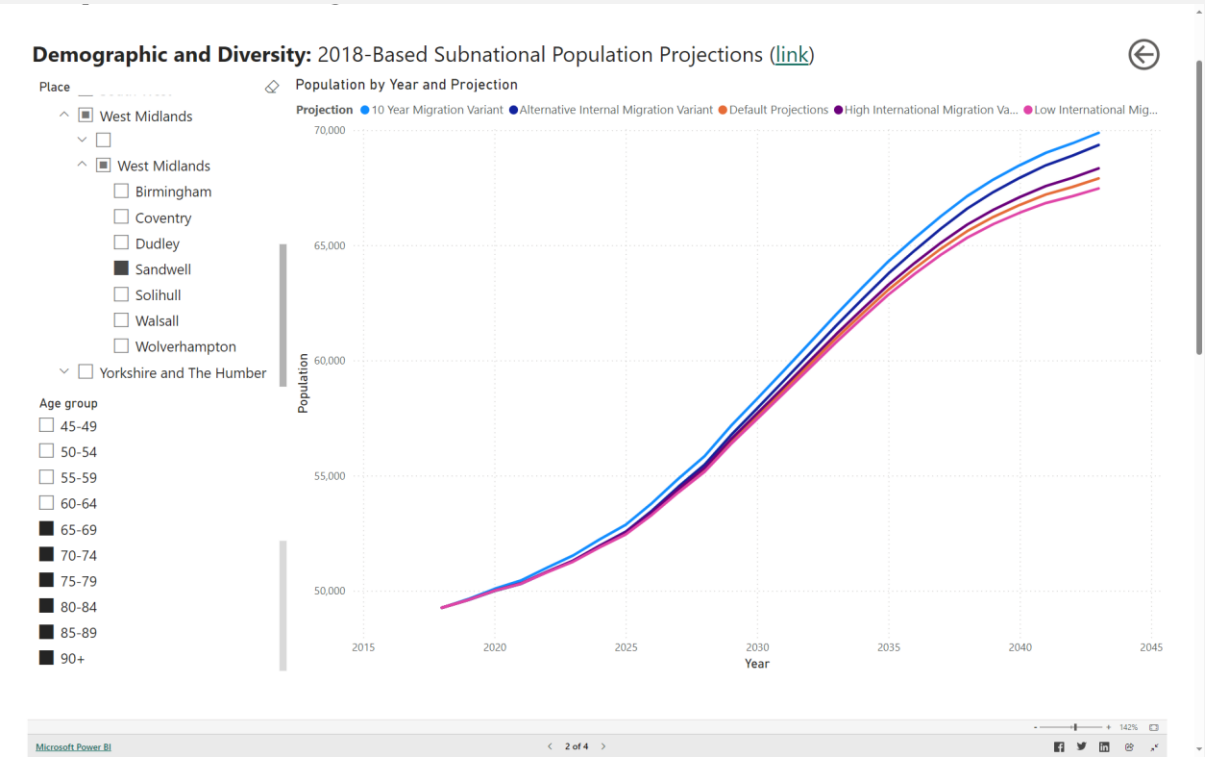


Aged 20 to 64



Its working aged population will be dependent on the level of migration.

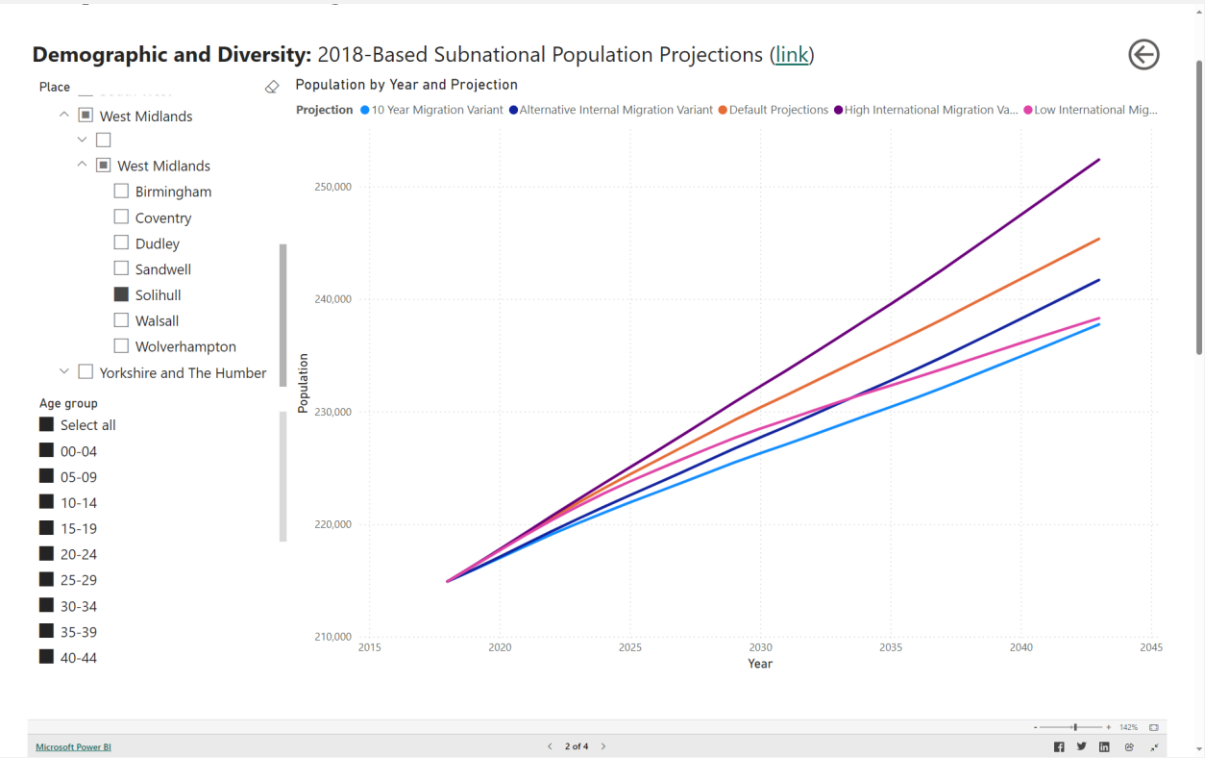
Aged 65 and over



Its over 65s population is expected to grow rapidly under all scenarios.

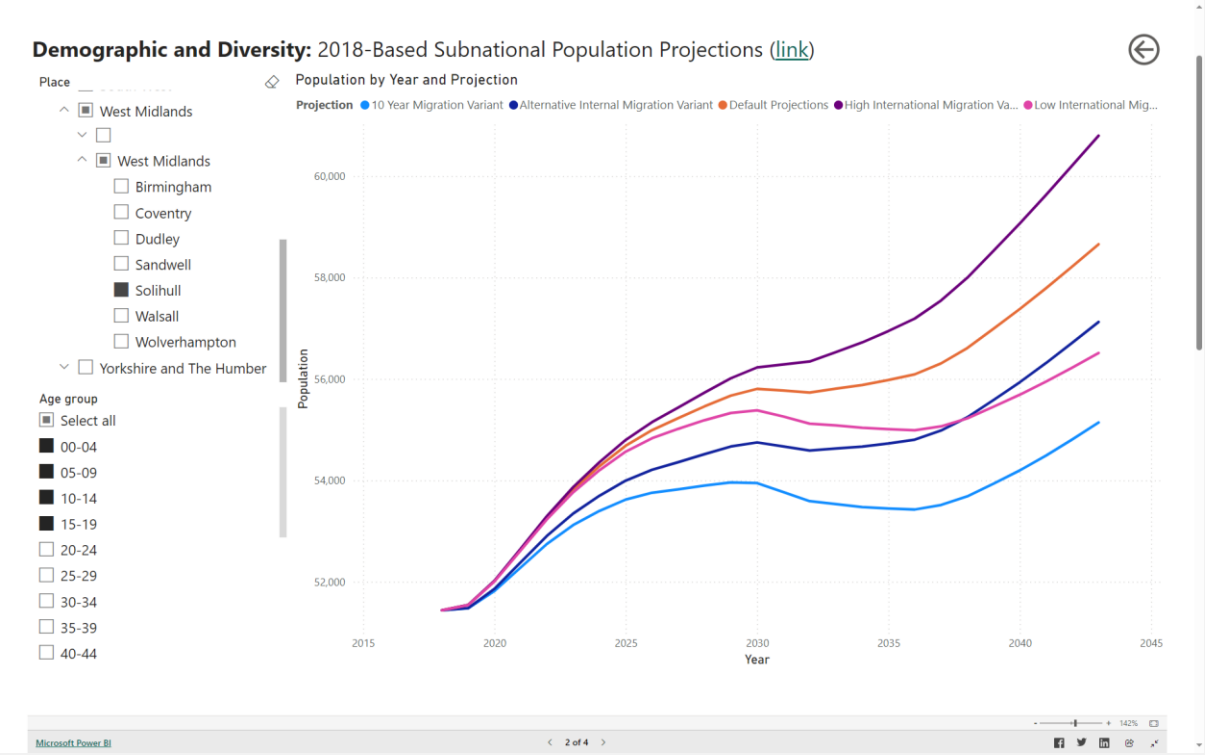
Solihull projections

All ages

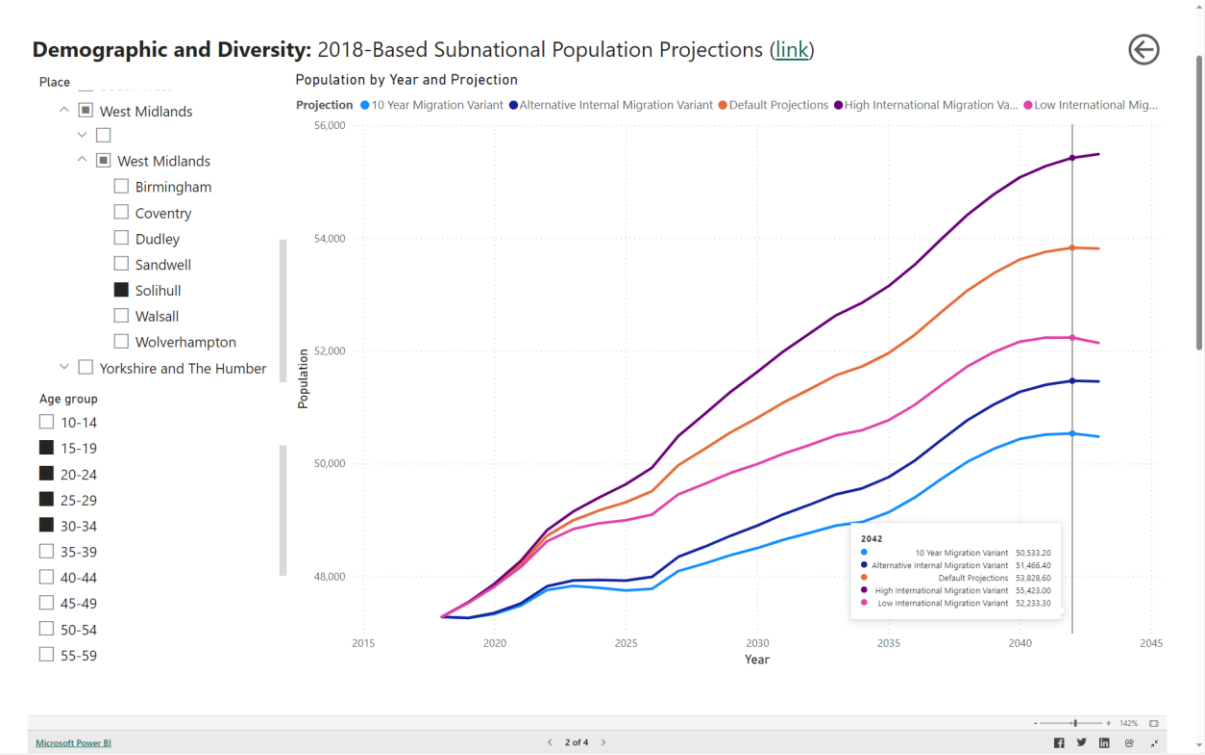


Solihull	2018	2021	2023	2030	2035	2043
Census and Population Estimates		216,240	218,793			
10 Year Migration Variant		218,056	220,070	226,294	230,400	237,753
Alternative Internal Migration Variant		218,237	220,463	227,704	232,738	241,691
Principal projections	214,909	219,139	221,879	230,362	235,927	245,342
High International Migration Variant		219,244	222,179	232,242	239,541	252,383
Low International Migration Variant		219,034	221,579	228,480	232,308	238,295

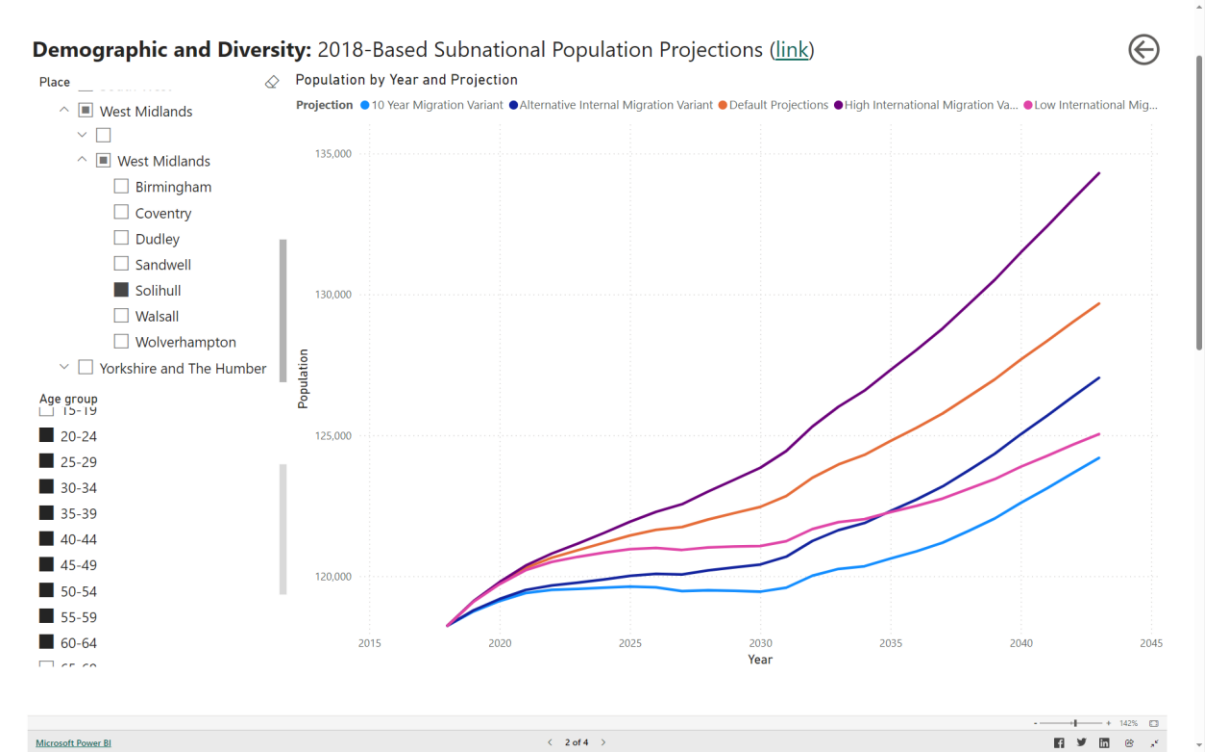
Under 20s



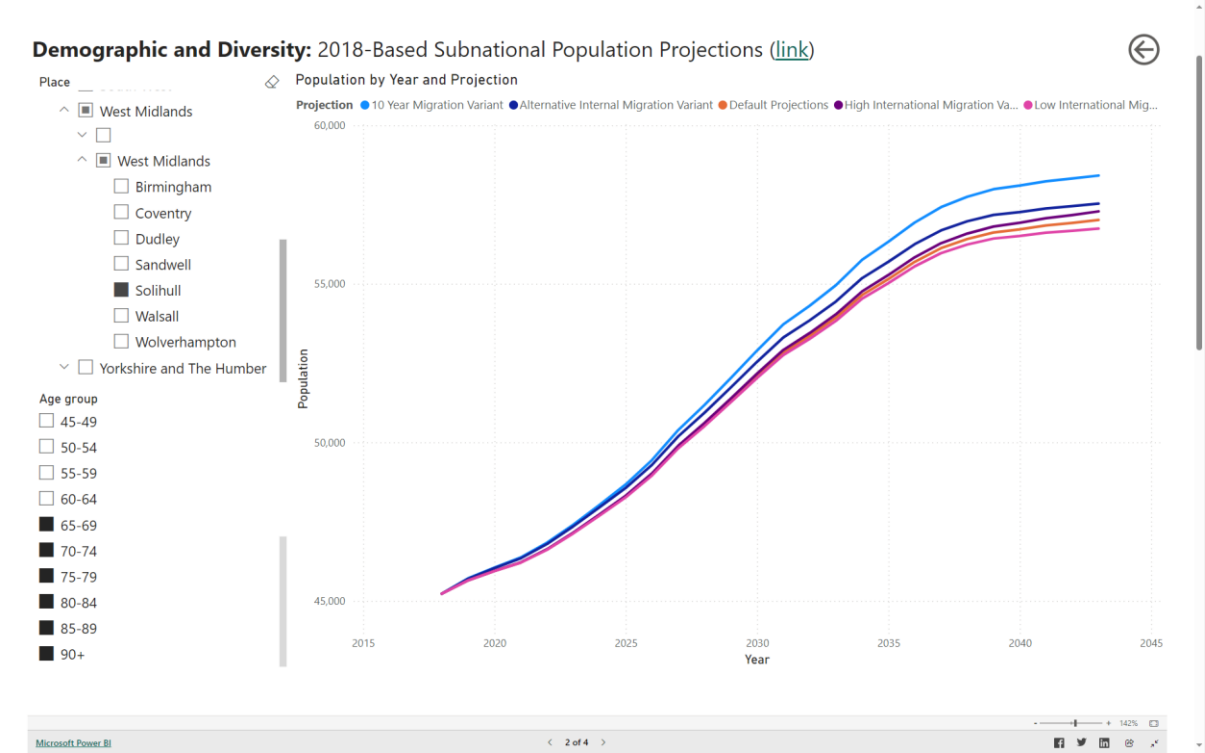
Aged 15 to 34



Aged 20 to 64

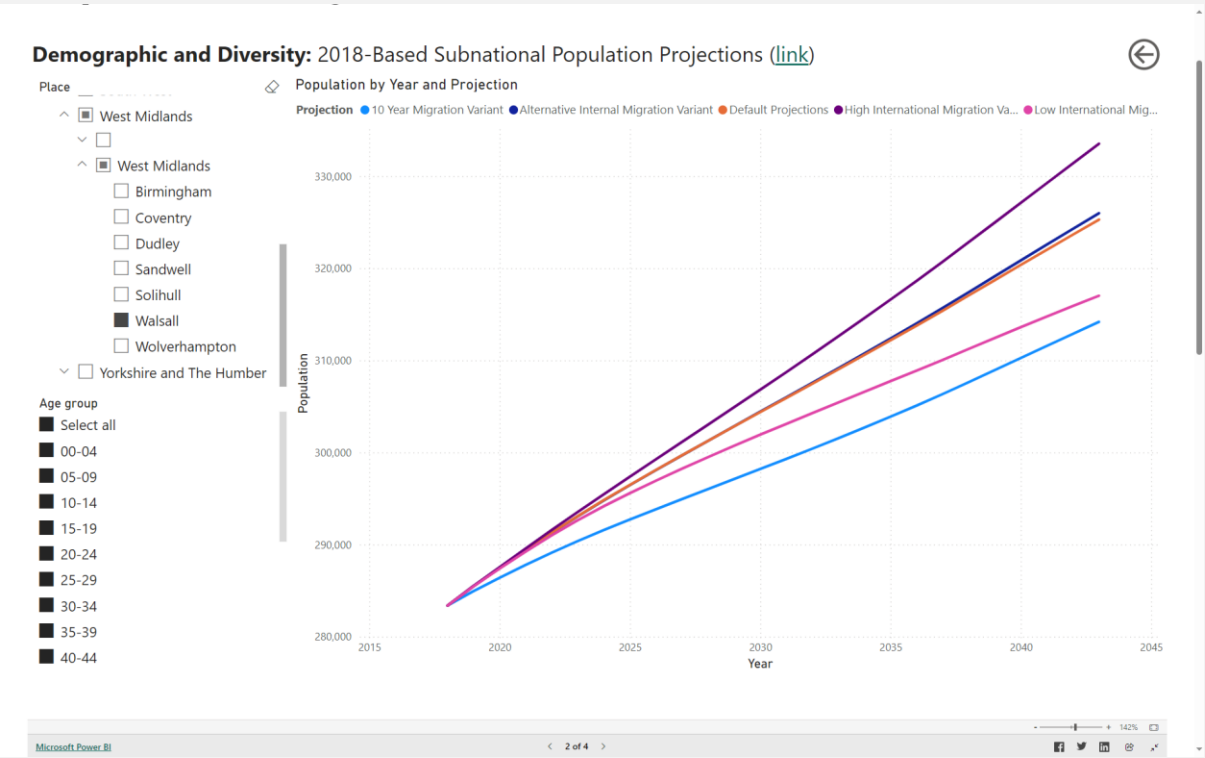


Aged 65 and over



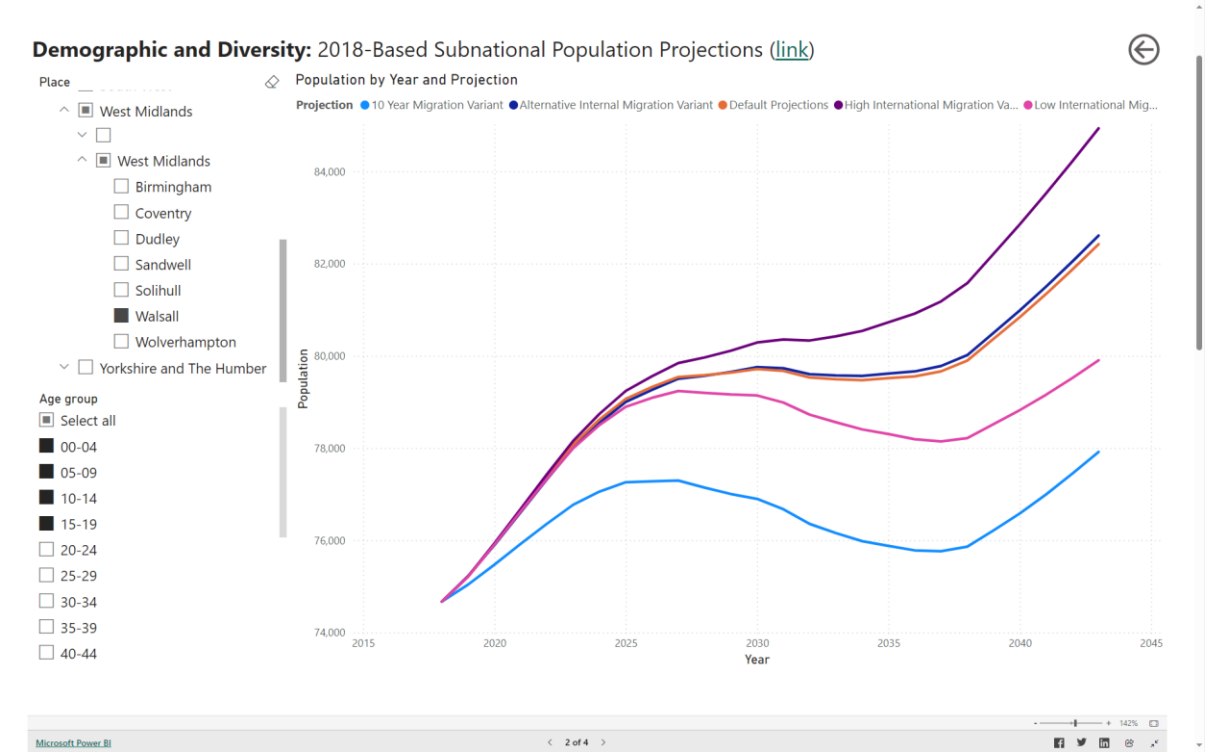
Walsall projections

All ages

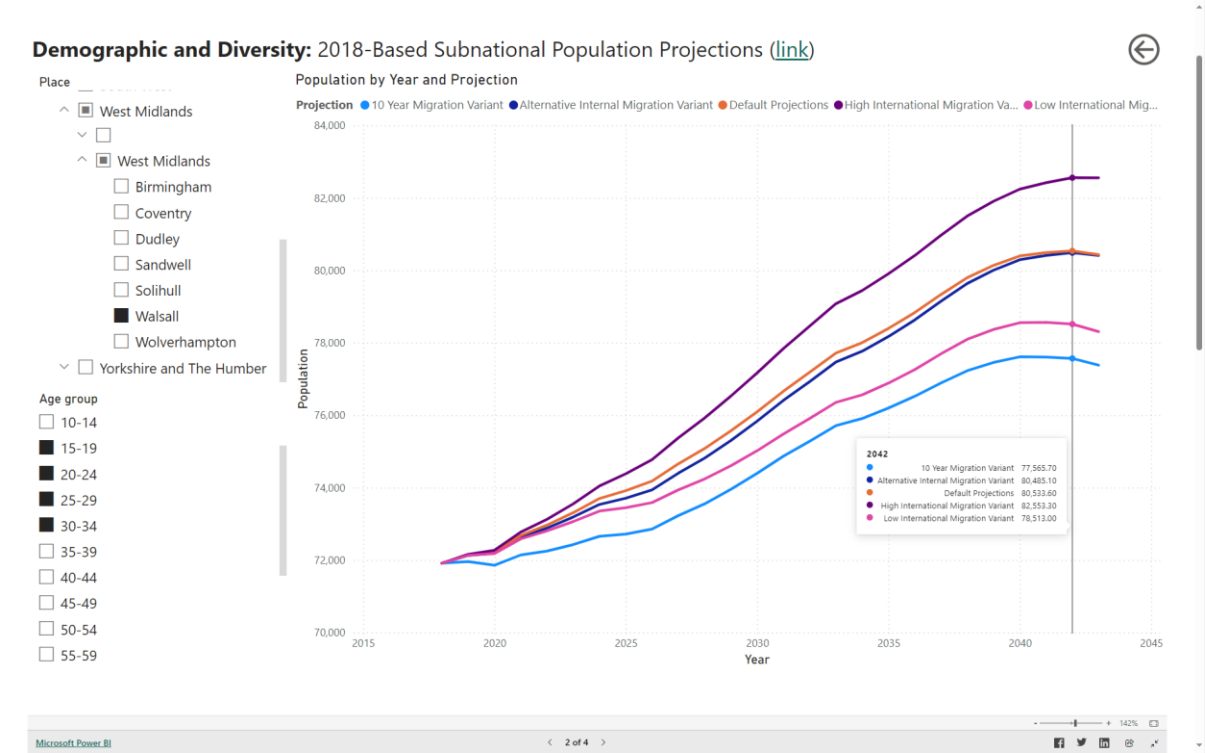


Walsall	2018	2021	2023	2030	2035	2043
Census and Population Estimates		284,124	288,736			
10 Year Migration Variant		287,798	290,384	298,218	303,893	314,186
Alternative Internal Migration Variant		289,389	293,065	304,431	312,383	325,985
Principal projections	283,378	289,405	293,095	304,384	312,180	325,281
High International Migration Variant		289,571	293,542	306,822	316,608	333,526
Low International Migration Variant		289,239	292,647	301,941	307,744	317,025

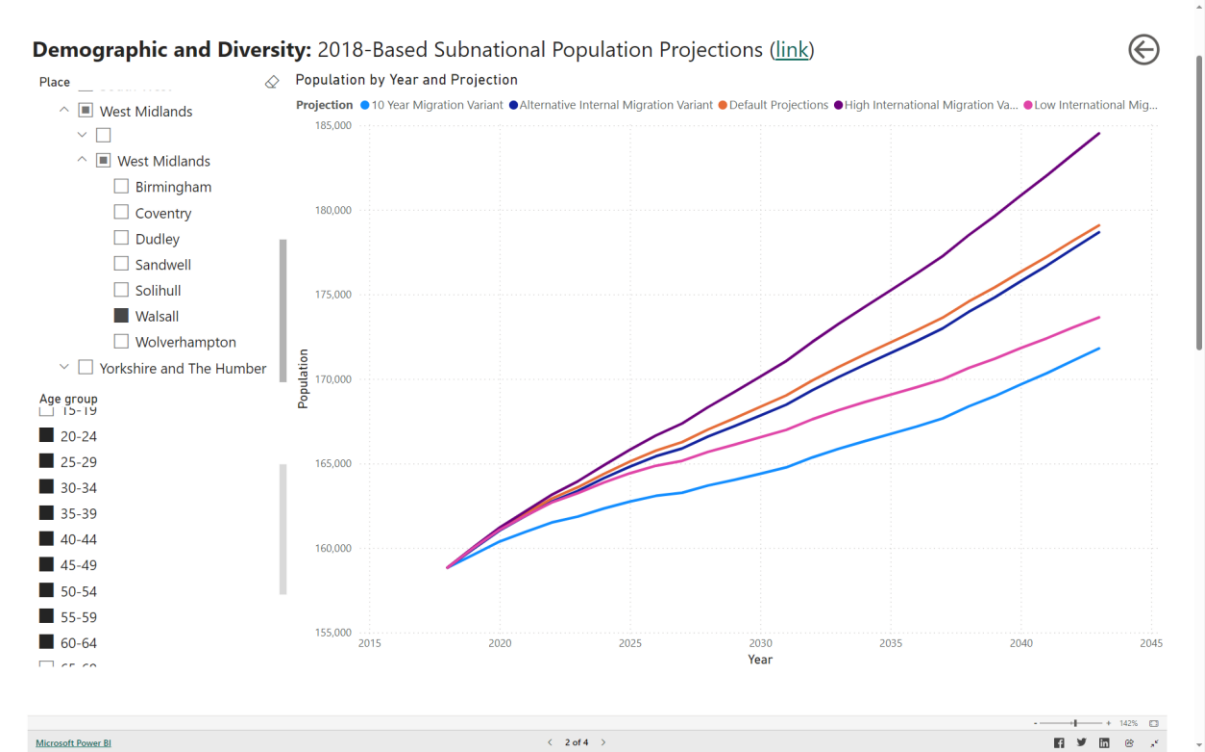
Under 20s



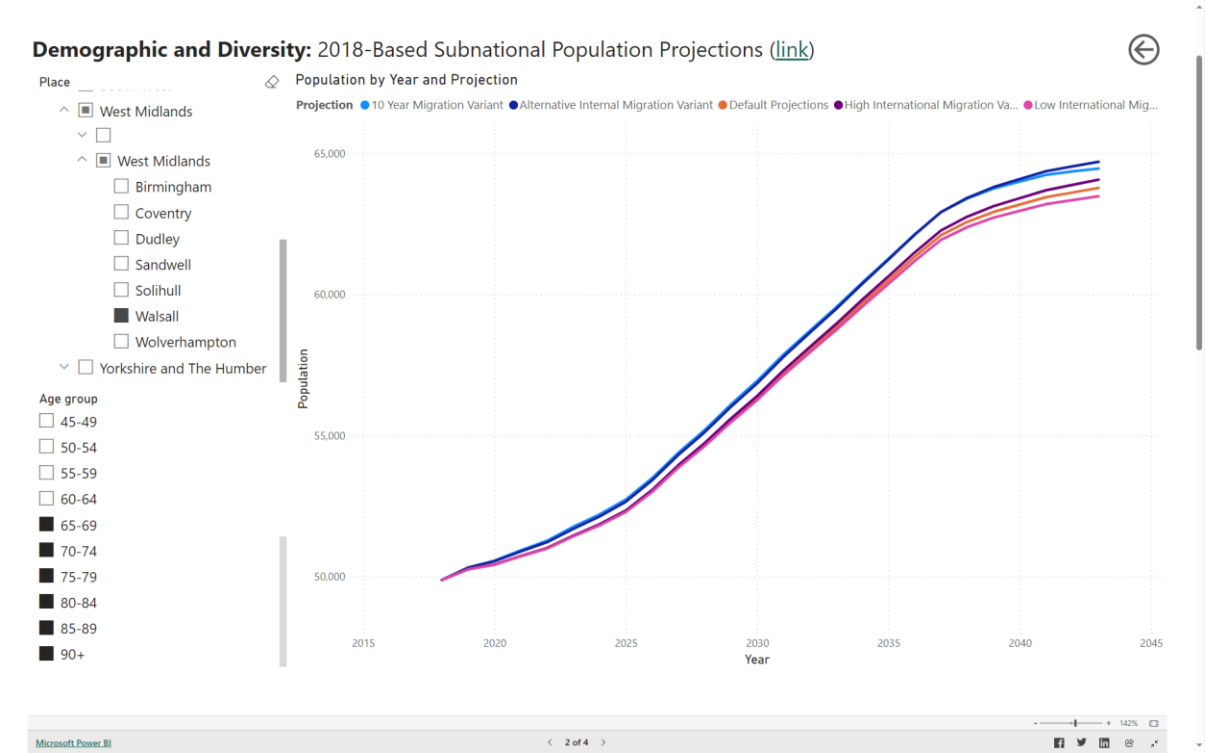
Aged 15 to 34



Aged 20 to 64

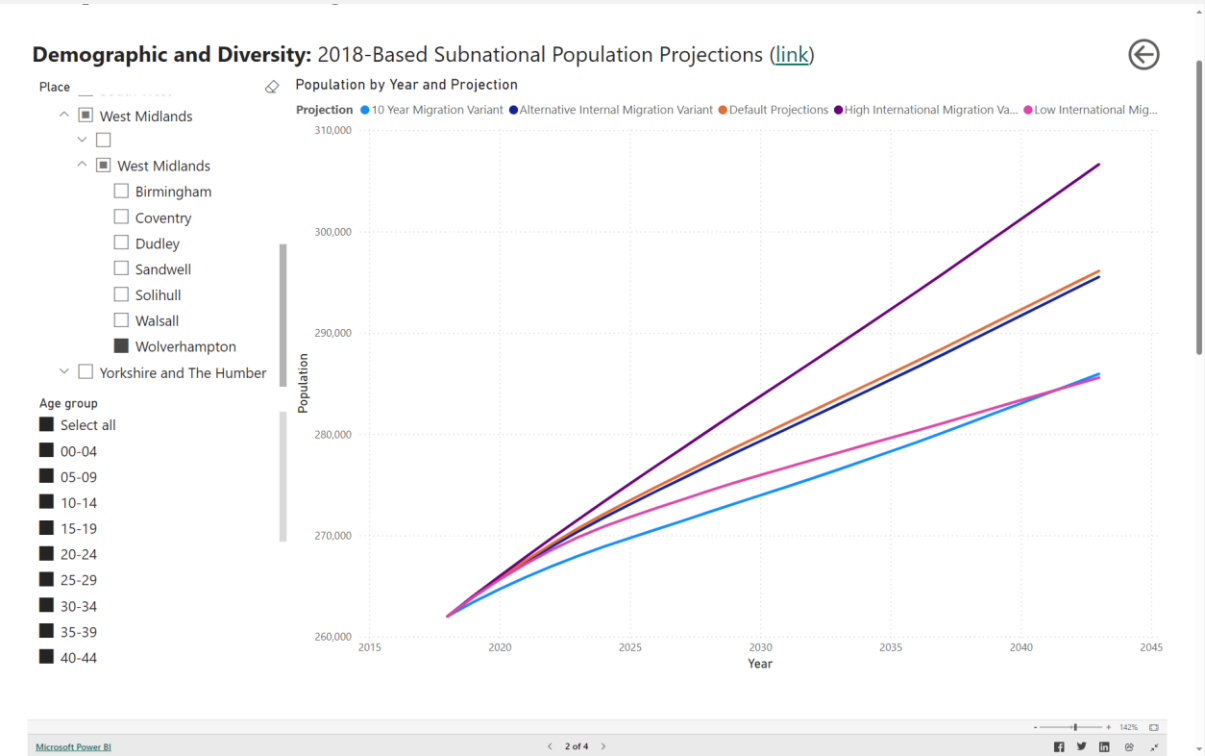


Aged 65 and over



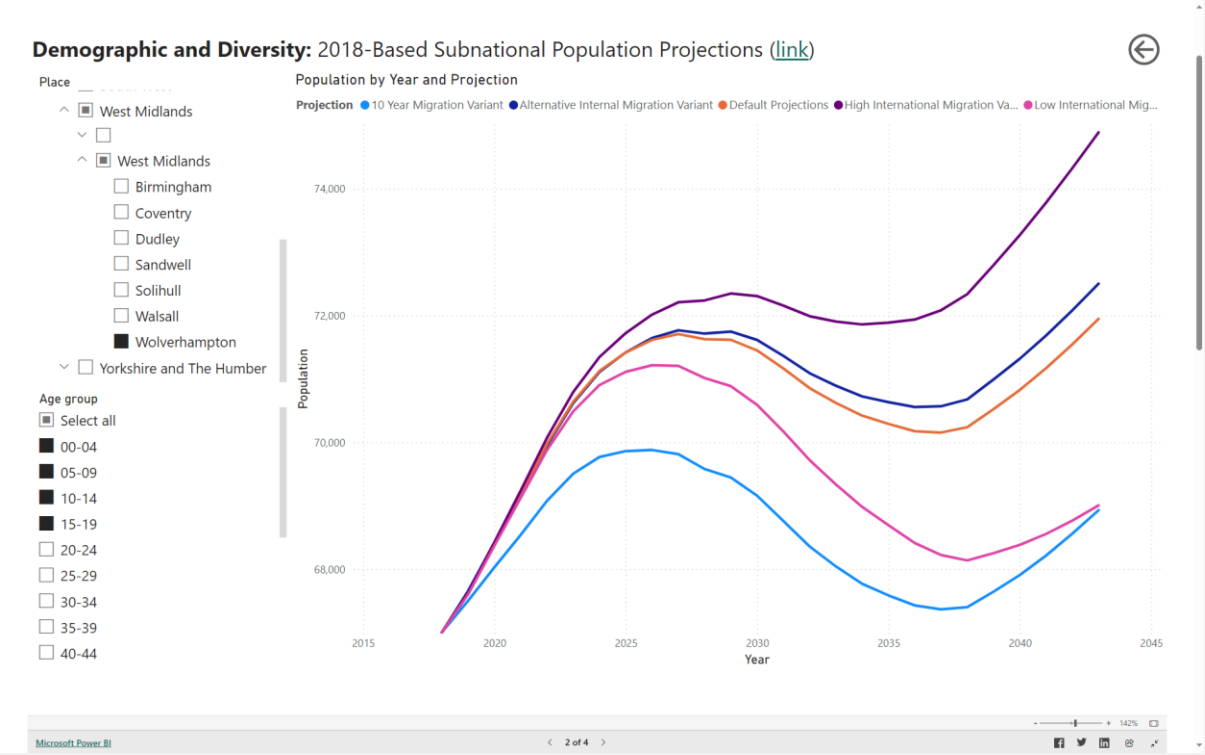
Wolverhampton projections

All ages



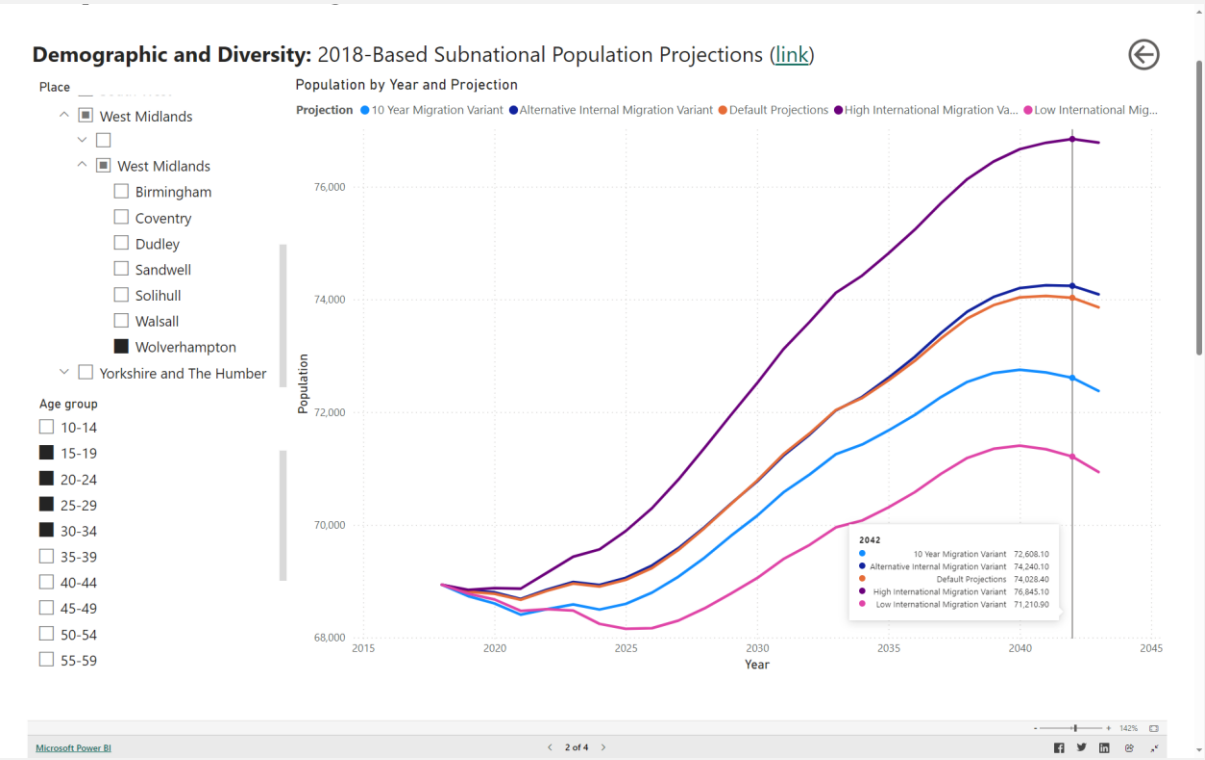
Wolverhampton	2018	2021	2023	2030	2035	2043
Census and Population Estimates		263,727	272,425			
10 Year Migration Variant		265,876	267,962	273,950	278,284	285,935
Alternative Internal Migration Variant		267,339	270,375	279,305	285,364	295,514
Principal projections	262,008	267,530	270,677	279,846	285,965	296,102
High International Migration Variant		267,873	271,544	283,733	292,302	306,619
Low International Migration Variant		267,186	269,805	275,953	279,622	285,577

Under 20s

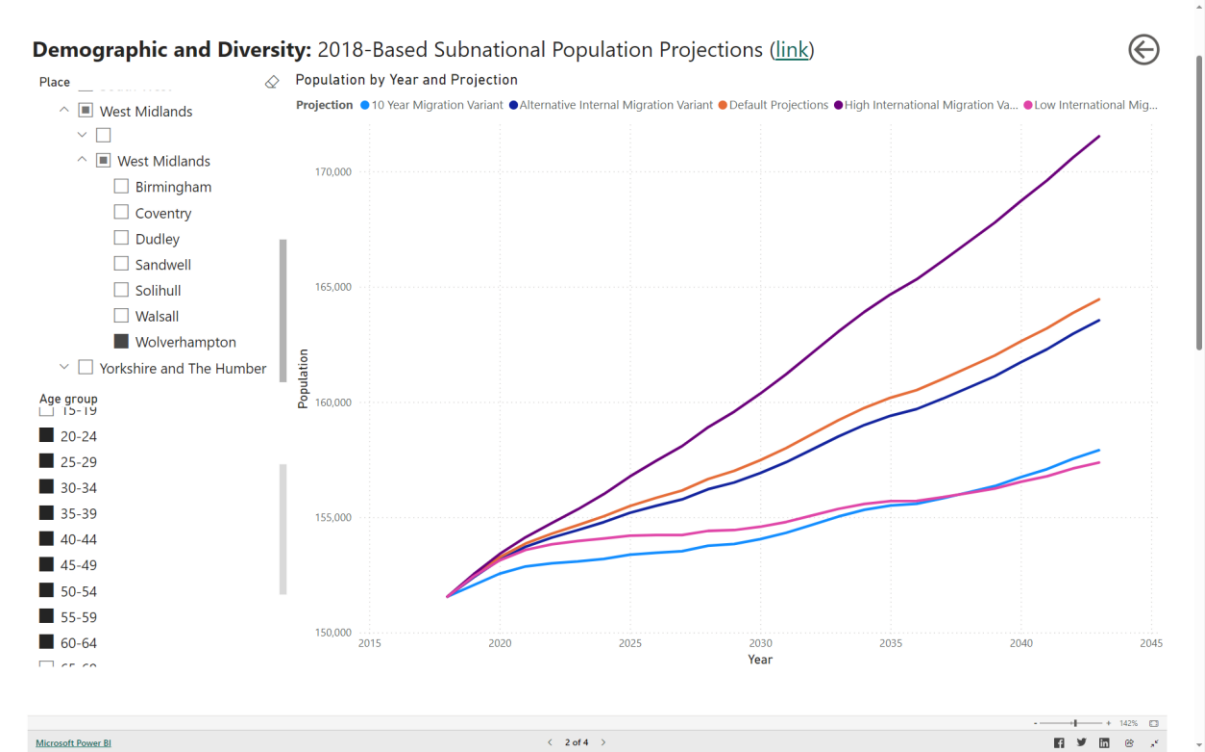


Wolverhampton's population of under 20s is expected to peak by around 2027, before growing again in the 2040s.

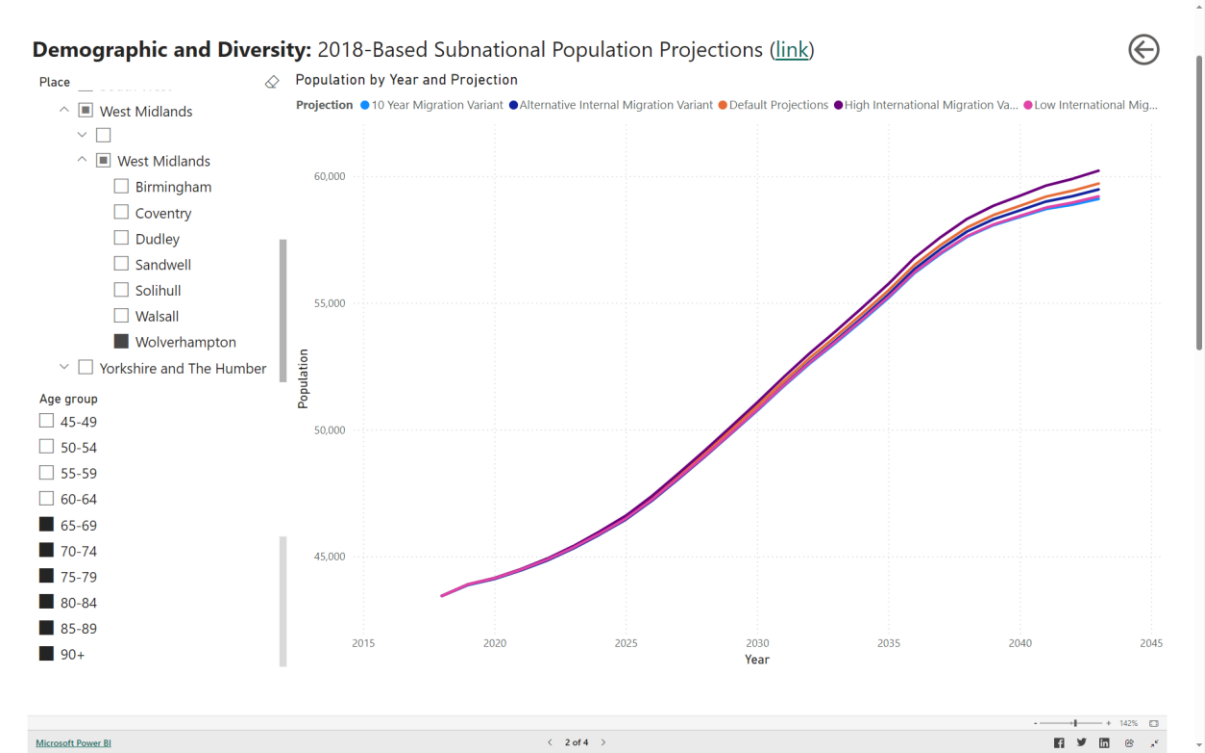
Aged 15 to 34



Aged 20 to 64

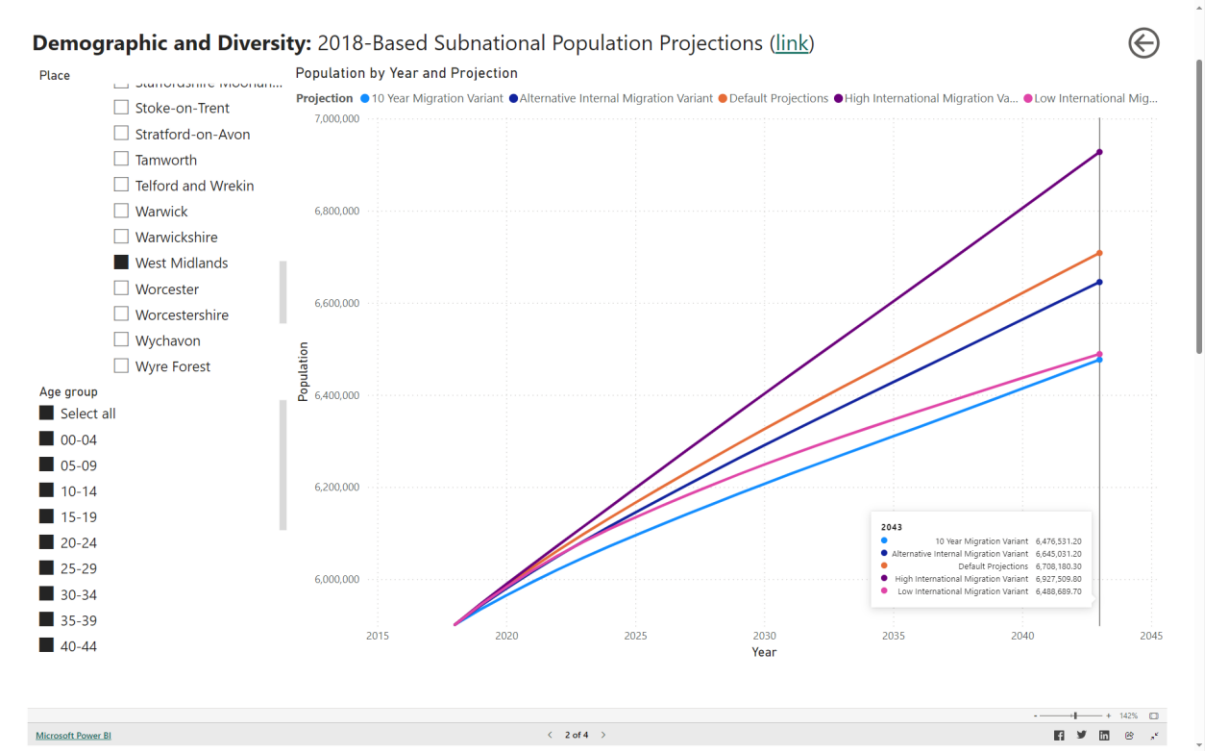


Aged 65 and over

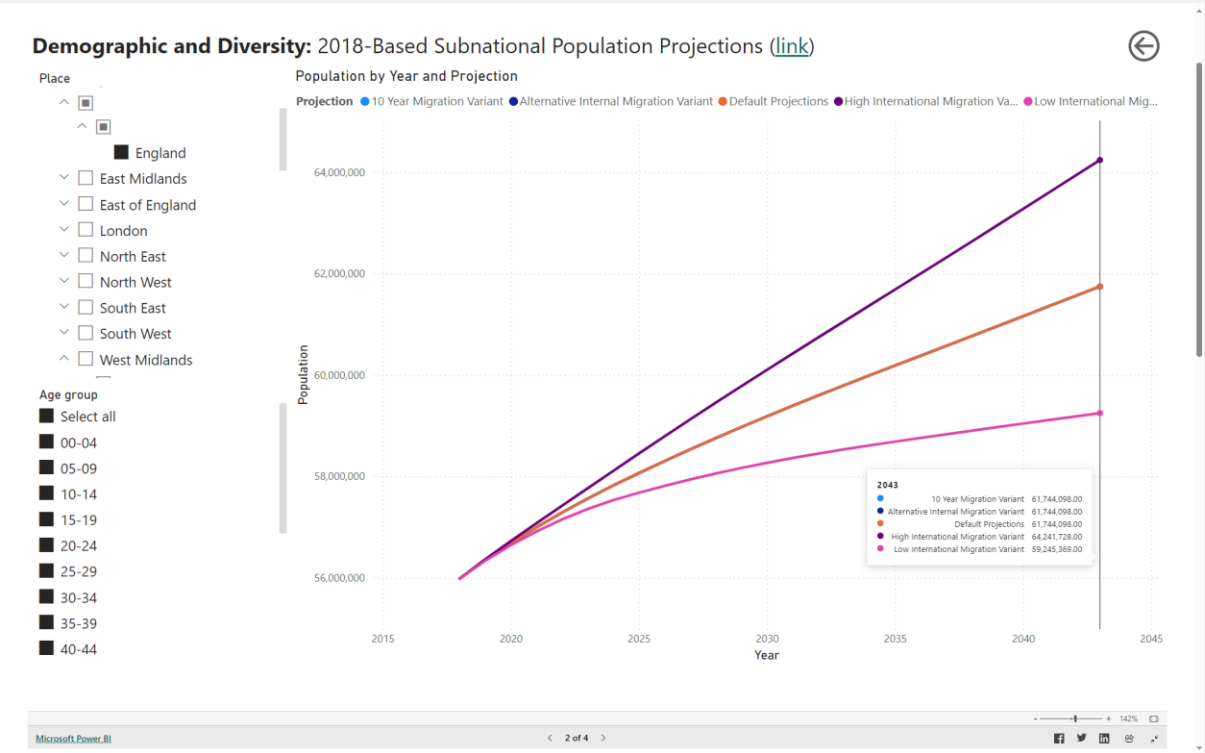


National and regional population projections

West Midlands Region, all ages



England, all ages



Power Query M functions

Power Query M functions were used to combine and transform the dataset into long flat tables with unique identifiers developed so that data can be merged correctly.

Power Query M functions: Principal projections

```
let

 Source =
Excel.Workbook(Web.Contents("https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2/2018based/table2.xls"), null, true),

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 #"Added Custom1" = Table.AddColumn(#"Added Custom", "Projection", each "Principal projections")

in

 #"Added Custom1"
```

Power Query M functions: 10 Year Migration Variant

```
let

 Source =
Excel.Workbook(Web.Contents("https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2/2018based10yearmigrationvariant/table217032020155604.xls"), null, true),

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```

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in

 #"Added Custom1"
```

Power Query M functions: High International Migration Variant

```
let

 Source =
Excel.Workbook(Web.Contents("https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/populationandmigration/populationp
rojections/datasets/localauthoritiesinenglandtable2/2018basedhighinternationalmigrationvariant/table21.xls"), null, true),

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in

 #"Added Custom1"
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Power Query M functions: Low International Migration Variant

```
let

 Source =
Excel.Workbook(Web.Contents("https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/populationandmigration/populationp
rojections/datasets/localauthoritiesinenglandtable2/2018basedlowinternationalmigrationvariant/table22.xls"), null, true),

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in

 #"Added Custom1"
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Alternative Internal Migration Variant

```
let

 Source =
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rojections/datasets/localauthoritiesinenglandtable2/2018basedalternativeinternalmigrationvariant/table23.xls"), null, true),

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in

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```

Combining the Variants

The five variants were joined up to create a long flat table.

```
let

 Source = Table.Combine({#"2018snpp principal projections", #"2018snpp 10-year migration variant", #"2018snpp high
international migration variant", #"2018snpp low international migration variant", #"2018snpp alternative internal migration
variant"}),

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 #"Replaced Value" = Table.ReplaceValue(#"Changed Type","0-4","00-04",Replacer.ReplaceValue,{"AGE GROUP"}),

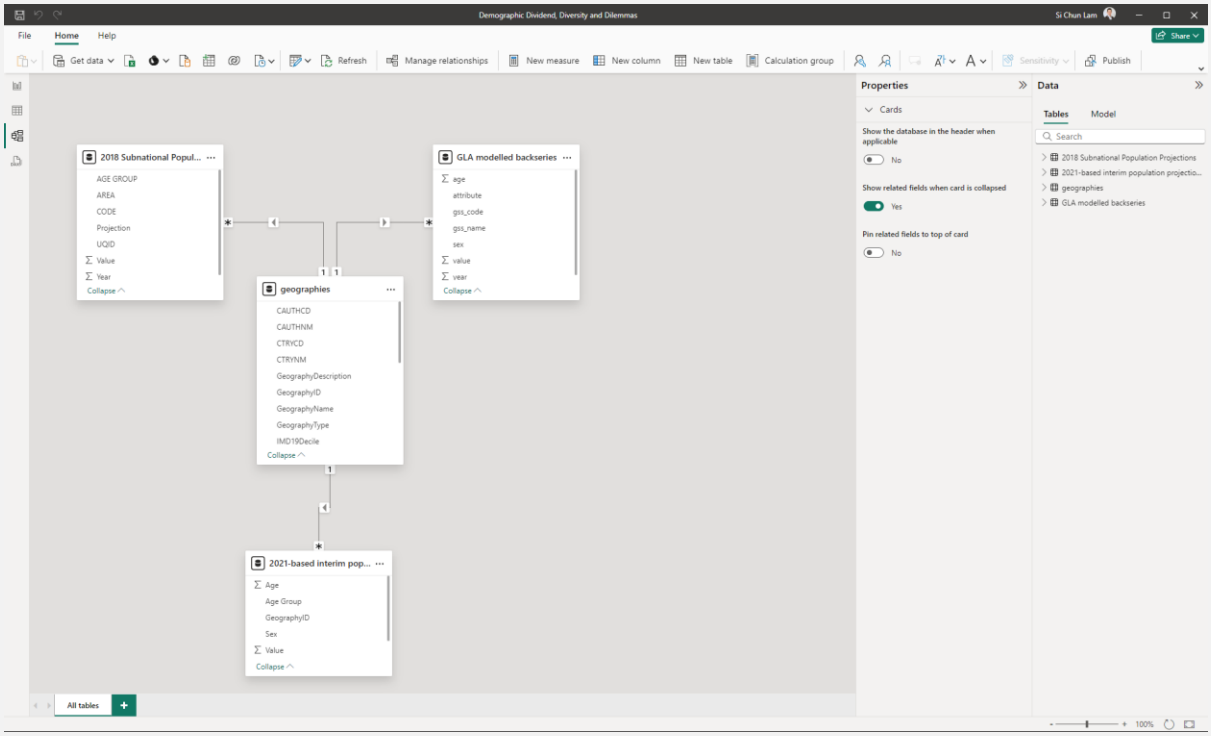
 #"Replaced Value1" = Table.ReplaceValue(#"Replaced Value","5-9","05-09",Replacer.ReplaceValue,{"AGE GROUP"})

in

 #"Replaced Value1"
```

Power BI Model

In addition to the 2018-based subnational population projections, the 2021-based interim projections for the United Kingdom and the GLA modelled population backseries were also brought in. These are then combined with *geographies.csv*, a long flat table representation of the UK. The projections are joined to the geographies in a star schema with one-to-many relationships as set out below:



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