



Fifteen new Birmingham

Population Impact: MW 518

8 November 2023

Summary

1. Britain's population growth is nowadays entirely due to immigration. If net migration were to continue at the present record level of 606,000 a year, Britain's population would rise to between 83-87 million by 2046. This would represent an increase of more than 15 million in Britain's population – equivalent to fifteen new cities the size of Birmingham. This paper provides a description of what this would require in terms of new schools, hospitals, roads, bus lanes, colleges and police stations. Such mass immigration would place an intolerable strain on public services, especially health, transport and education. Table 1 provides a summary of the new infrastructure required. Of course, if net migration was to be held to four or five hundred the requirements for infrastructure would be proportionately less. There is a strong case for an annual limit on net migration of about 100,000 a year.

Table 1: Infrastructure required to accommodate fifteen new Birmingham (2023)¹

Infrastructure	Units
Education	
Schools	6,675
Further education colleges	165
Universities	75
Health	
GP surgeries	2,640
Hospitals	135
Transport	
Roads	7,785
Bus lanes	2,235
Law enforcement	
Police stations	75

¹ Birmingham City Council., 2023. *Directory*. URL: <https://www.birmingham.gov.uk/directories>

Population size and economic performance

2. According to Professor George Borjas of Harvard University, there are many “extravagant claims” that mass immigration increases the wealth of nations by the tens of billions of pounds.² We are told that we need immigration to grow the economy, and that the more there is, the faster it will grow. As one political commentator recently put it: “Newcomers are a net benefit to a modern economy and should be welcomed accordingly.”³

3. These claims are often accepted uncritically. Yet most serious academic attempts to identify such benefits have found that, at best, they are marginal.⁴ A larger population will certainly make the economy bigger, but it will not raise living standards unless it makes GDP (the quantity of goods and services) grow more rapidly than the population. What matters to the existing population is not GDP for its own sake, but GDP *per head*.⁵ Internationally, there is no evidence over the last century that countries with faster population growth have achieved faster income or productivity growth.⁶

4. Economic benefits from immigration unquestionably exist.⁷ But, beyond a certain point, the benefits do not increase in proportion to the numbers settling here, whereas the problems (and costs) do. In a densely populated city like London, for example, rapid population growth puts immense strain on public services, roads and transport, while increasing the cost of land and housing.⁸ The British taxpayer will often have to bear the cost: either through higher taxes or hidden subsidies such as those to make accommodation more affordable for key workers.

5. Furthermore large-scale immigration places increasing pressure on the pre-existing stock of infrastructure and land, thus reducing productivity and living standards unless costly new investments; these in turn choke-off other productive investment.⁹

² Borjas, G. 2016. *We Wanted Workers*. p.132

³ Jenkins, S., 2023. “Britain is desperate for workers – but Sunak won’t admit immigration is the answer”, Guardian. URL: <https://www.theguardian.com/commentisfree/2023/feb/06/britain-workers-rishi-sunak-immigration-brexit-vacancies>

⁴ Migration Observatory, 2022. “The fiscal impact of immigration in the UK”, URL: <https://migrationobservatory.ox.ac.uk/resources/briefings/the-fiscal-impact-of-immigration-in-the-uk/>

⁵ Coleman, D., and Rowthorn, R., 2004. “The economic effects of immigration into the United Kingdom..” URL: https://cooperative-individualism.org/coleman-david_the-economic-effects-of-immigration-into-the-uk-2004-dec.pdf

⁶ Collier, P. 2013. *Exodus: immigration and multiculturalism in the 21st century*, p. 291

⁷ Productivity, vital to the economy, may be enhanced by immigrants moving into well-paid jobs that are in demand. This is most obvious in the case of skilled professionals – people who work in technology, finance, law, and medicine.

⁸ Collier, P., 2013. *Exodus: immigration and multiculturalism in the 21st century*, p. 291

⁹ Fry, J. 2014. “Migration and Macroeconomic Performance in New Zealand: Theory and Evidence ” URL: <https://www.treasury.govt.nz/sites/default/files/2014-04/twp14-10.pdf>

6. In general, smaller countries *can* thrive in a world with free trade. Many of the countries with the highest incomes per head have small populations – countries like Luxembourg, Singapore, Denmark and Norway.¹⁰ In that sense, Britain does not ‘need’ large-scale immigration. It has a population of 67 million, and considerable reserves of unused labour. High migration will increase Britain’s aggregate GDP, but this has little to do with individual welfare where *per capita* GDP is the relevant measure.

Population growth and public services

7. Should the level of net migration be allowed to continue, we will have to build around 6,675 new schools, 2,640 new surgeries, 135 hospitals, 75 universities, 75 police stations and 165 further education colleges by 2046. Expansion of infrastructure on such a scale would be both difficult and costly to implement, but the pressure on public services would become too severe to ignore.

8. To arrive at these estimates we have taken local authority data from Birmingham City Council and multiplied it by fifteen. However, these projections do not account for variations in geography and future settlement patterns, which cannot be forecast accurately in advance. Nevertheless, these figures provide a snapshot of the infrastructural challenges that the UK government would face should the level of net migration continue at the record level of 606,000.

9. Given the demands on infrastructure, it is not surprising that data from 32 OECD countries show no statistically significant association between productivity and population growth.¹¹ In parts of England there is already intense competition for primary school places. Moreover, new residents signing up with their local GP in areas where immigration is high will exacerbate longer waiting times for GP appointments and treatments. To illustrate this point, Table 2 provides a breakdown of the thousands of schools that would be needed for fifteen new Birminghams:

Table 2: Schools needed for fifteen new Birminghams (2023)¹²

School	Units
Nursery	405
Primary	3,885
Infants	270
Juniors	270
Secondary	1,230
All through	105
Special	405
Alternative	90
Other	15
Total	6,675

¹⁰ Collier, P, 2013. *Exodus: immigration and multiculturalism in the 21st century*, p. 291

¹¹ Betts, K., 2015. “The tenuous link between population and prosperity”, The Conversation. URL: <https://theconversation.com/the-tenuous-link-between-population-and-prosperity-38291>

¹² Birmingham City Council, 2023. *Directory*. URL: <https://www.birmingham.gov.uk/directories>

10. Some argue for making the investments early so that new infrastructure becomes available at the time it is needed. This reflects a belief that immigration pressures can be handled by building more homes, schools, hospitals, roads, rail networks and airports. Unfortunately, the changes required to accommodate a rapidly growing population may be both difficult and costly to implement, even when problems have become too severe to ignore. As Professor Robert Rowthorn has noted: “Suitable land may not be available except at great material or environmental cost. Re-engineering existing cities to accommodate the additional population may be very costly, and expansion into the surrounding countryside may be resisted by local people.”¹³

Population growth and transport systems

11. In addition to the impact on schools and hospitals, there is also the impact of immigration on roads and transport systems. In 2022, the average London driver lost £1,377 due to congestion, while drivers across the country missed out on £707.¹⁴ According to the INRIX traffic scorecard, Birmingham is the fourth most congested city in the UK, with an average of 73 “hours lost”:

Table 3: INRIX traffic scorecard, UK (2022)¹⁵

Impact rank (UK)	Urban area	Hours lost	Change from 2021	Change from 2019	Last mile speed
1	London	156	5%	5%	10
2	Bristol	91	38%	-11%	14
3	Manchester	84	35%	-9%	14
4	Birmingham	73	38%	-9%	16
5	Belfast	72	20%	-36%	16

12. Should the level of net migration be allowed to continue until at about 600,000 a year until 2046, Britain will have to build around 7,785 new roads and 2,235 bus lanes.¹⁶ Diseconomies of congestion will occur when demand for road travel exceeds the supply of roads. According to INRIX, “negative externalities like freight delay, inflationary pressure and environmental impact are generally exacerbated due to traffic congestion.”¹⁷

13. In terms of population size, large-scale immigration may have benefited sparsely populated countries when they needed a certain size of population to develop their resources and achieve economies of scale. However, the reverse is the case in a densely populated country like Britain: current levels of migration generate diseconomies of congestion and increase the cost of land and infrastructure. Rapid population growth means that some other investment that would otherwise occur will tend to be ‘crowded out’ to make way for the infrastructure needs of the increased population.

¹³ Rowthorn, R., 2015. *The Costs and benefits of large-scale immigration*, Civitas. p.41.

¹⁴ Fernandez, C., 2023. “Bad news for London commuters!”, Daily Mail, URL: <https://www.dailymail.co.uk/sciencetech/article-11619213/Londons-roads-congested-WORLD.html>

¹⁵ INRIX Global Traffic Scorecard, 2022. URL: <https://inrix.com/scorecard/>

¹⁶ Ibid.

¹⁷ Ibid.

Conclusion

14. A serious downside to large-scale immigration is its impact on population growth. As the population increases, the UK economy may receive some benefit from a larger talent pool and, perhaps, greater specialisation. However, much of the current massive inflow is relatively low skilled and any resulting benefits must be weighed against the future costs that a larger population will impose on land, housing, services and infrastructure. This paper demonstrates that mass immigration to Britain would place intolerable pressures on public services, especially health, transport and education. Even at lower net migration of 4-500,000 per year there would be severe pressure on infrastructure. The way forward, therefore, is to establish an annual limit on net migration of about 100,000 a year and stick to it