

Comparisons of aspects of Glasgow's 56 neighbourhoods



Ruairidh Nixon, February 2016

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Ruairidh Nixon worked as an intern at GCPH in the summer of 2014, comparing data from the census and other sources across Glasgow's neighbourhoods. This report summarises that work.

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1. Introduction

In this report, indicators used in the GCPH's neighbourhood profiles¹ (published in July 2014) are analysed. The indicators, which cover 56 neighbourhoods in Glasgow², are based on data derived from various sources, including the 2001 and 2011 Censuses, HMRC data and population estimates from National Records of Scotland. In the report each of the chosen indicators are compared across the range of neighbourhoods. Trends are also shown, mainly between 2001 and 2011. Correlations and associations between indicators are also analysed. The results are shown in graphical form and any notable results are highlighted.

¹ Understanding Glasgow. *Community Health and Wellbeing Profiles for Glasgow and its neighbourhoods*. <u>http://www.understandingglasgow.com/profiles</u> (accessed February 2016).

² These neighbourhoods, previously known as housing forum areas, were originally devised by staff in Development and Regeneration Services, Glasgow City Council in consultation with housing associations. They are designed to reflect real neighbourhoods which residents would recognise. Many of the neighbourhood boundaries are delineated by roads, railways or river systems, which create natural/man-made barriers between communities. The GCPH has used these neighbourhoods to produce neighbourhood profiles in 2008 and 2014.

2. People from a black and minority ethnic (BME) group³ (Figures 1, 2 & 3)

Scotland

In 2001, 2% of Scotland's population were from an ethnic minority. This had increased to 4% by 2011 – a relative increase of 98%.

<u>Glasgow</u>

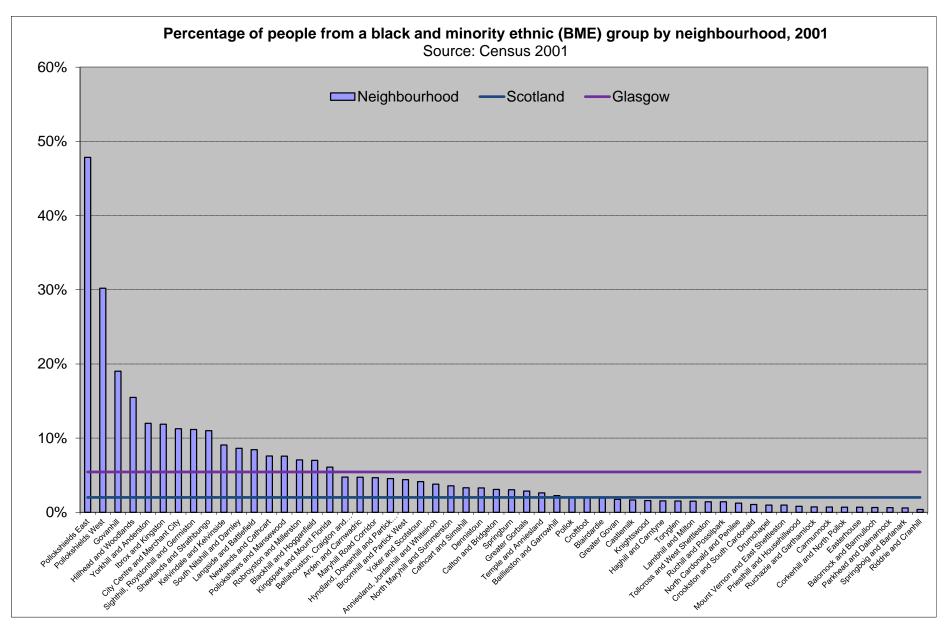
Glasgow's black and minority ethnic population made up 5% of the total population in 2001. By 2011, this had increased by 112% to nearly 12% of Glasgow's population.

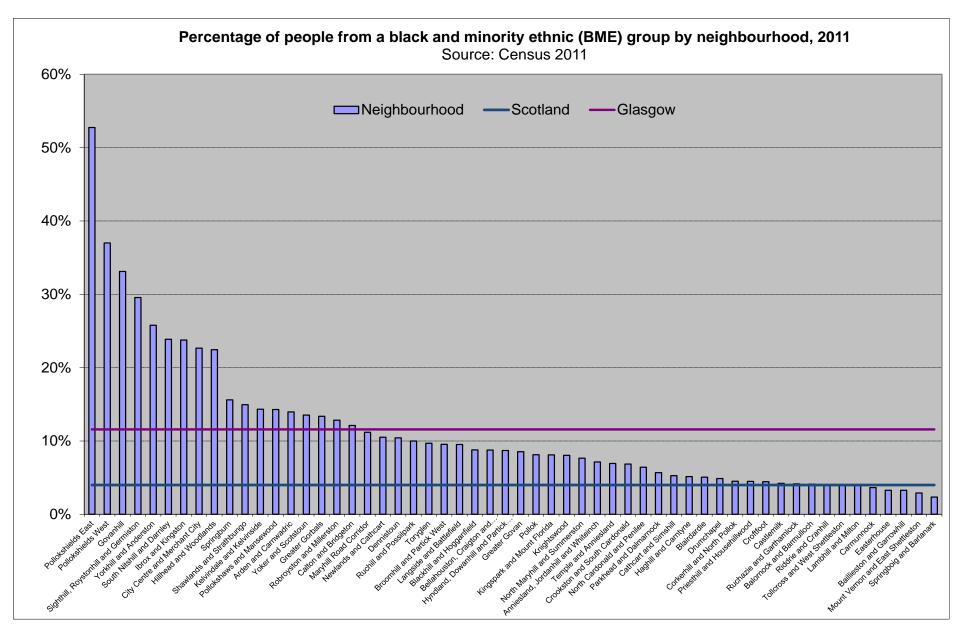
Neighbourhood

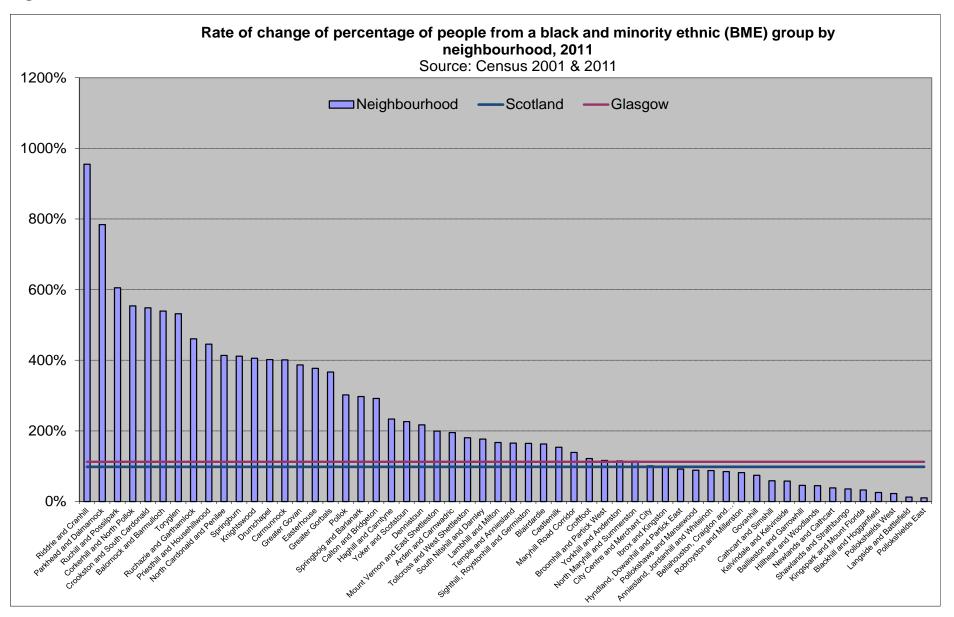
In 2001, the neighbourhood with the greatest proportion of people of ethnic minority was Pollokshields East (48%, 2001). Pollokshields East remained the neighbourhood with the highest percentage in 2011 (53%, 2011). Riddrie and Cranhill had the lowest proportion of people of ethnic minority in 2001 (0.4%, 2001), and Springboig and Barlanark had the lowest percentage in 2011 (2%, 2011). Riddrie and Cranhill experienced the highest rate of change in the percentage of people of ethnic minority with a 955% increase from 2001 to 2011 (0.4%, 2001; 4%, 2011). The neighbourhood with the lowest proportional increase in people of ethnic minority was Pollokshields East, where a relative increase⁴ of 10% was recorded (48%, 2001; 53%, 2011). Every neighbourhood in Glasgow experienced an increase in its ethnic minority population.

³ Number and percentage of total population categorised as being from a black and minority ethnic (BME) group. People are classified according to their own perceived ethnic group and cultural background. The BME classification includes the following groups: Asian/Asian Scottish/Asian British; Black/African/Caribbean/Black British; Other ethnic group; and mixed/multiple ethnic groups. This classification does not include the 'other White' category, which for example includes people from the new EU accession countries. Further details on this group are available in *Glasgow's Population by Ethnicity: An Analysis of 2011 Census Results*. Glasgow: Glasgow City Council; 2015; available at: https://www.glasgow.gov.uk/index.aspx?articleid=3926.

⁴ A relative increase, as reported here, describes the relative change in a measurement. In this example an increase from 48% to 53% represents a relative difference of $(5\% \div 48\%) \times 100 = 10\%$. This differs from a percentage point increase, which in this example would have been 5 percentage points (i.e. the difference between 48% and 53%).







3. Households with one or more cars⁵ (Figures 4, 5 & 6)

Scotland

The percentage of households with one or more cars in Scotland increased, relatively, by 10% from 2001 to 2011. The proportion of households with one or more cars was 63% in 2001, compared to 69% in 2011.

<u>Glasgow</u>

The percentage of households with one or more cars in Glasgow in 2001 was 43%, and in 2011 it was 49%. This represents a relative increase of 13% over the ten year period. The mean rate of increase for Glasgow neighbourhoods was 6%.

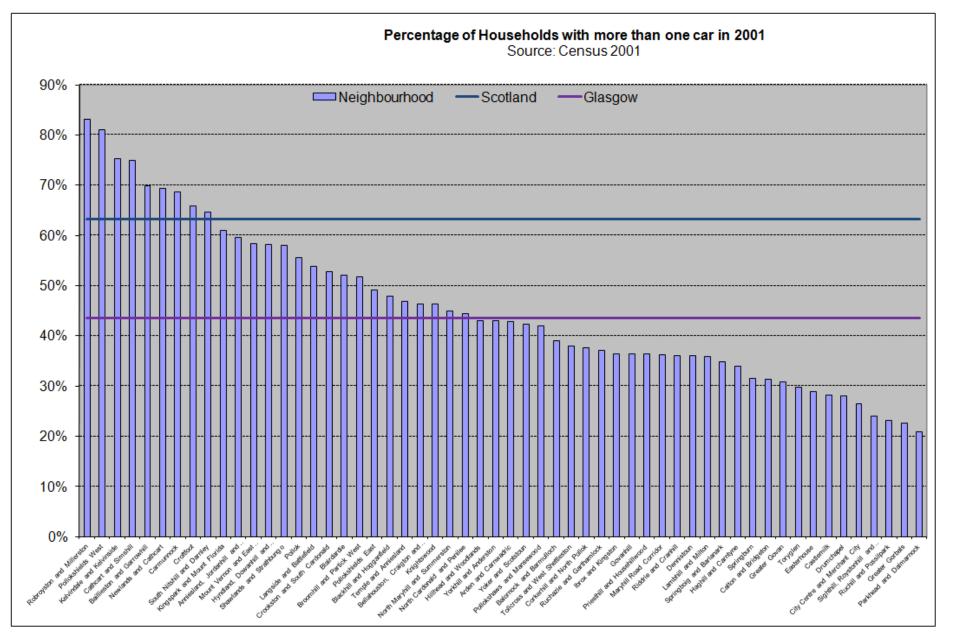
Neighbourhood

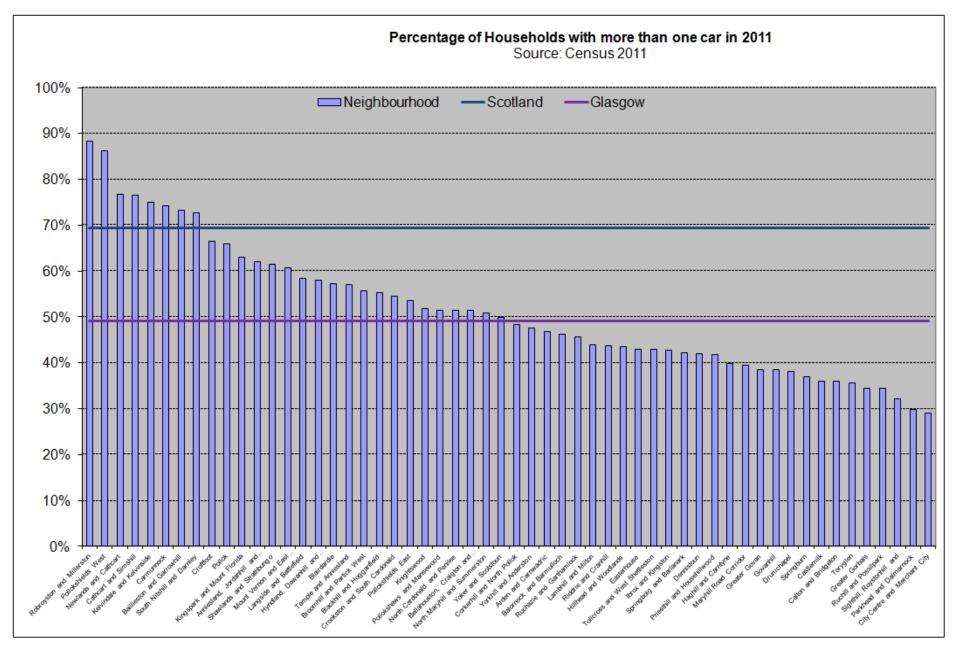
The neighbourhood with the highest percentage of households with one or more cars in 2001 and 2011 was Robroyston and Millerston (83%, 2001; 88%, 2011). The neighbourhood with the lowest percentage of households with one or more cars in 2001 was Parkhead and Dalmarnock (21%, 2001; 30%, 2011), and in 2011 was City Centre and Merchant City (27%, 2001; 29%, 2011).

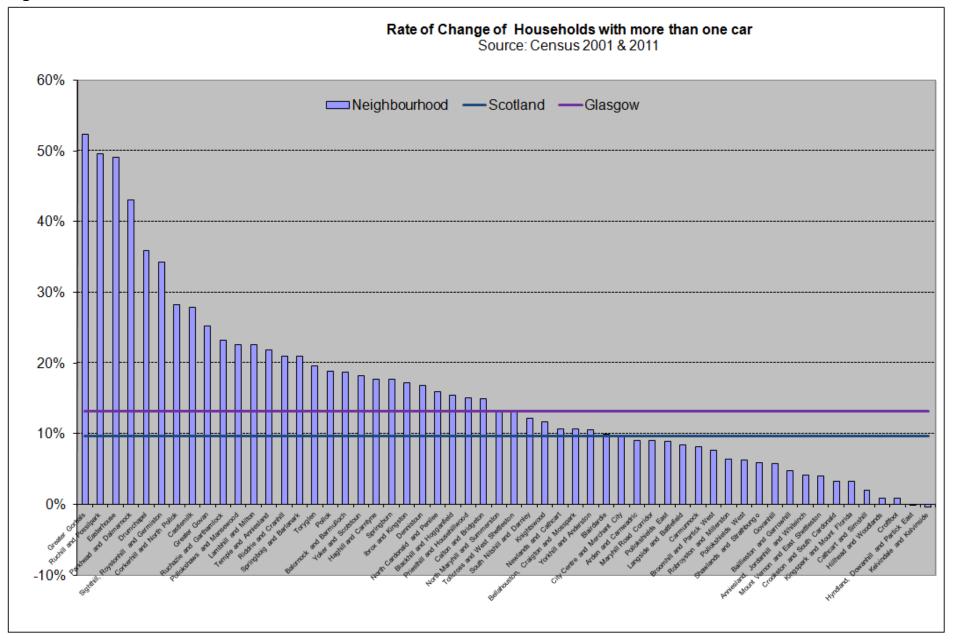
The biggest proportional increase in car ownership was 52% in Greater Gorbals (23%, 2001; 35%, 2011). In contrast there was no change in the car ownership level in Kelvindale and Kelvinside (75%, 2001; 75%, 2011).

⁵ Number and percentage of total households who own one or more cars or vans. The census question asks how many cars or vans are owned or available for use by members of the household; company cars or vans available for private use could be included.









4. Households with two or more cars⁶ (Figure 7)

Scotland

The proportion of households with two or more cars in Scotland in 2011 was 27%.

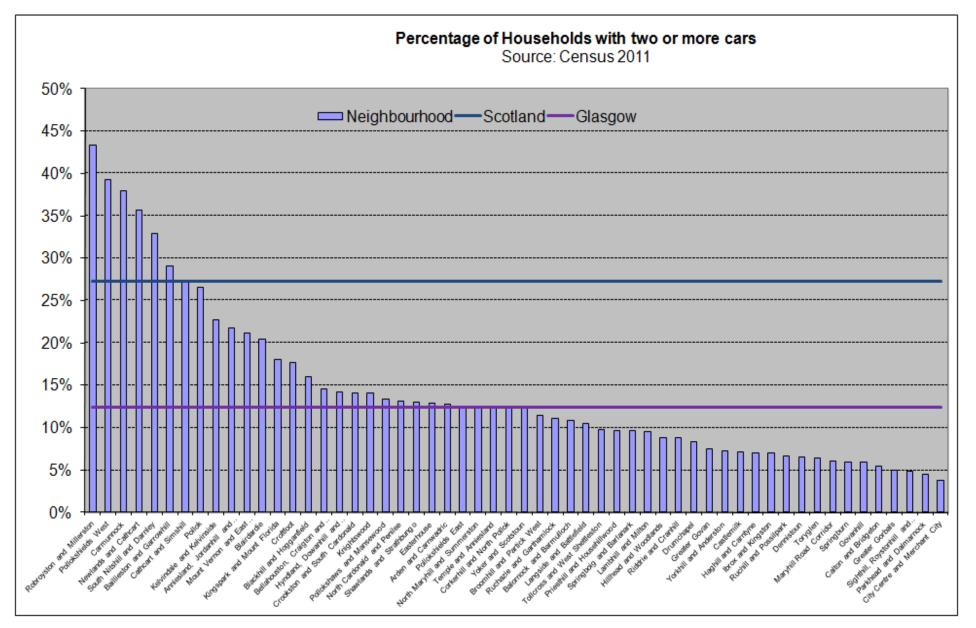
<u>Glasgow</u>

The proportion of households with two or more cars in Glasgow in 2011 was 12.5%.

Neighbourhood

The neighbourhood with the largest proportion of households with two or more cars in 2011 was Robroyston and Millerston (43%, 2011). Robroyston and Millerston also had the largest percentage of households with one or more cars. City Centre and Merchant City had the lowest proportion of households with two or more cars (4%, 2011).

⁶ Number and percentage of total households who own two or more cars or vans.



5. Overcrowded households⁷ (Figures 8, 9 & 10)

Scotland

The percentage of overcrowded households in Scotland has decreased from 16% in 2001 to 9% in 2011. This represents a relative decrease of 43%.

Glasgow

In Glasgow, the percentage of overcrowded houses also decreased from 21% in 2001 to 17% in 2011, at a rate of decrease of 19% which is lower than the Scottish national average.

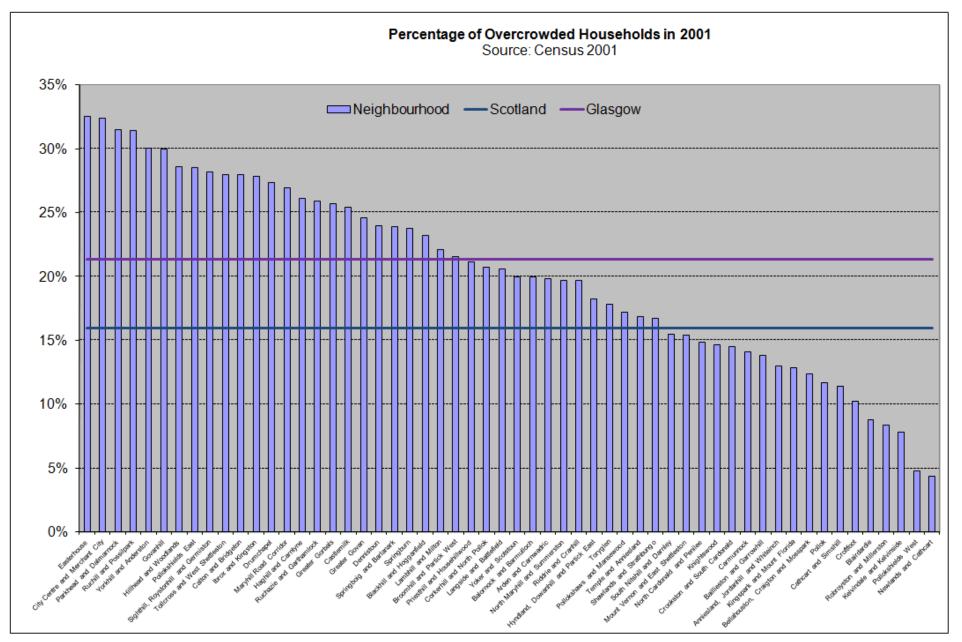
Neighbourhood

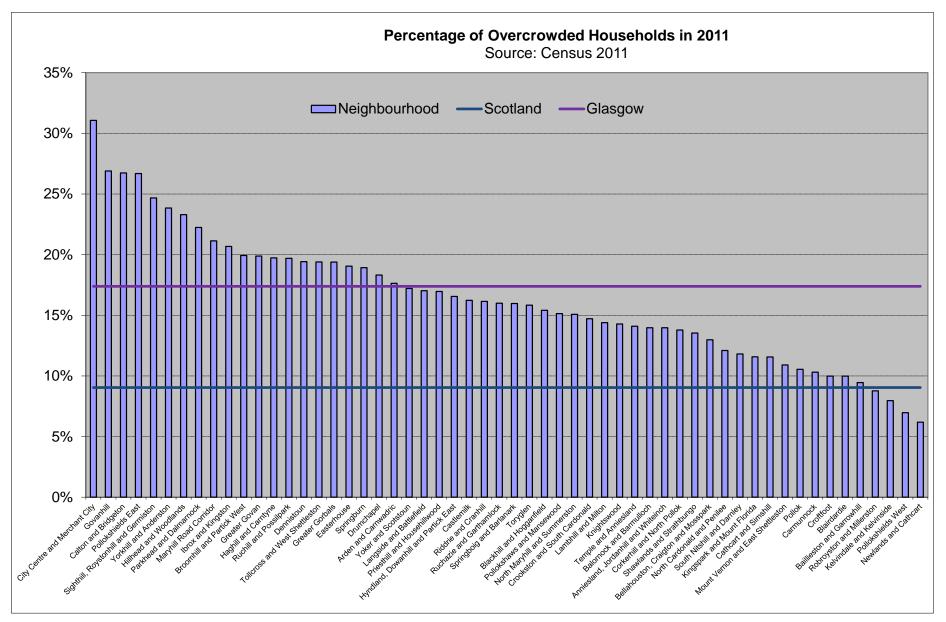
The neighbourhood with the greatest level of overcrowded households in 2001 was Easterhouse (33%, 2001). In 2011, City Centre and Merchant City had the highest rate of overcrowded houses (31%, 2011). Newlands and Cathcart had the lowest percentage of overcrowded households in 2001 (4%, 2001) and also in 2011 (6%, 2011).

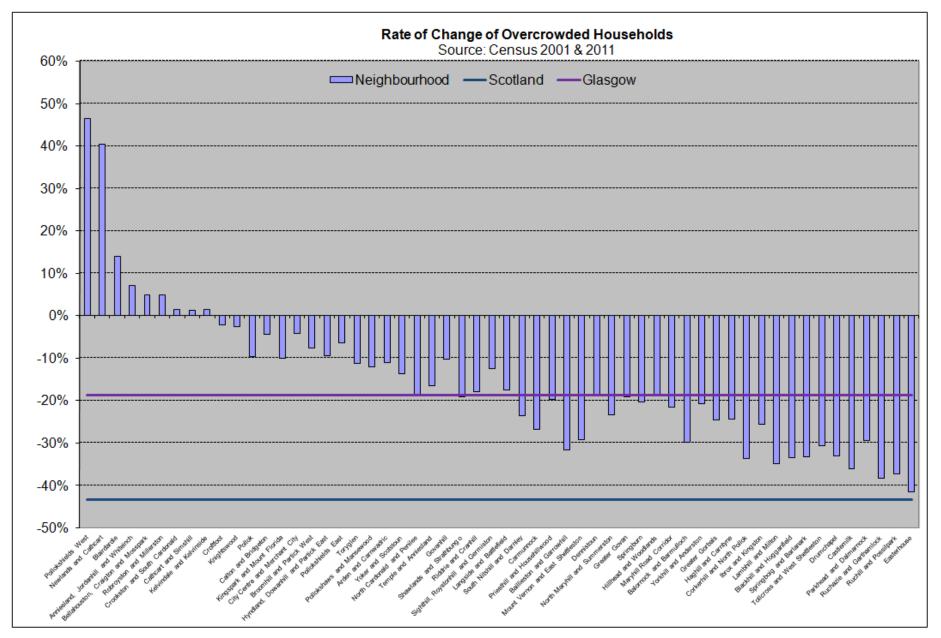
The biggest proportional increase in overcrowded housing was in Pollokshields West (5%, 2001; 7%, 2011). The neighbourhood with the biggest proportional decrease in overcrowding was Easterhouse (33%, 2001; 19%, 2011). Overall, the range of the proportion of overcrowded households in Glasgow has decreased slightly, from 29% (from 4% to 33%) in 2001 to 25% (from 6% to 31%) in 2011.

The rate of decrease in overcrowded households for every Glasgow neighbourhood was below the Scottish average of 43%.

⁷ Number and percentage of total households with an occupancy rating of less than or equal to -1. An occupancy rating of -1 implies that a household has one fewer room than required, whereas +1 implies that they have one more room than the standard requirement.







6. People limited by disability⁸ (Figures 11, 12 & 13)

Scotland

The percentage of people limited by disability in Scotland has decreased by 15%, relatively, from 23% in 2001 to 20% in 2011.

<u>Glasgow</u>

In Glasgow there was also a decrease in the proportion of people limited by disability. In 2001, 26% of the population reported being limited by disability compared to 23% in 2011. This represents a relative decrease of 13%.

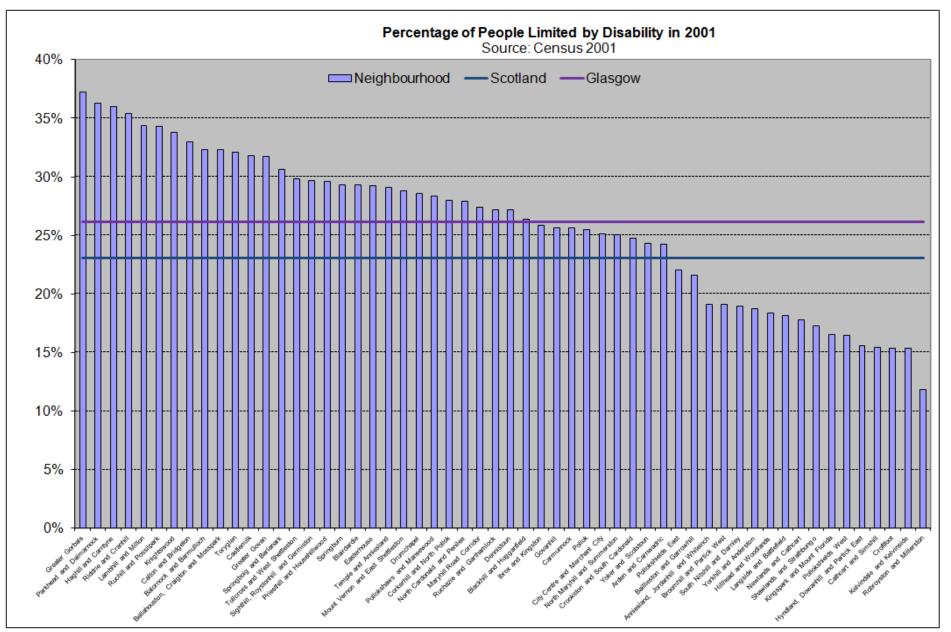
Neighbourhood

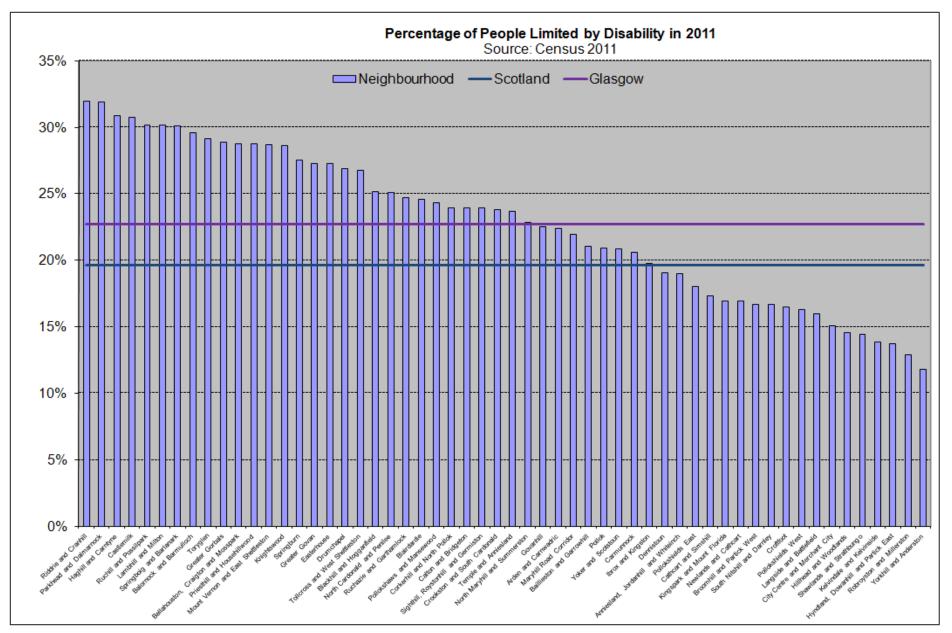
The neighbourhood with the greatest proportion of people limited by disability in 2001 was Greater Gorbals (37%, 2001). Riddrie and Cranhill had the highest rate of people limited by disability in 2011 (31%, 2011). The lowest percentage of people limited by disability in 2001 was in Robroyston and Millerston (12%, 2001), while in 2011 it was Yorkhill and Anderston (12%, 2011).

The biggest proportional increase in people limited by disability was in Cathcart and Simshill (15%, 2001; 17%, 2011). Only four neighbourhoods had an increase in the rate of people limited by disability. City Centre and Merchant City had the greatest proportional decrease (25%, 2001; 15%, 2011). Overall, the range of the proportion of people limited by disability in Glasgow has decreased from 25 percentage points (between 12% and 37%) in 2001 to 20 percentage points (between 12% and 32%) in 2011.

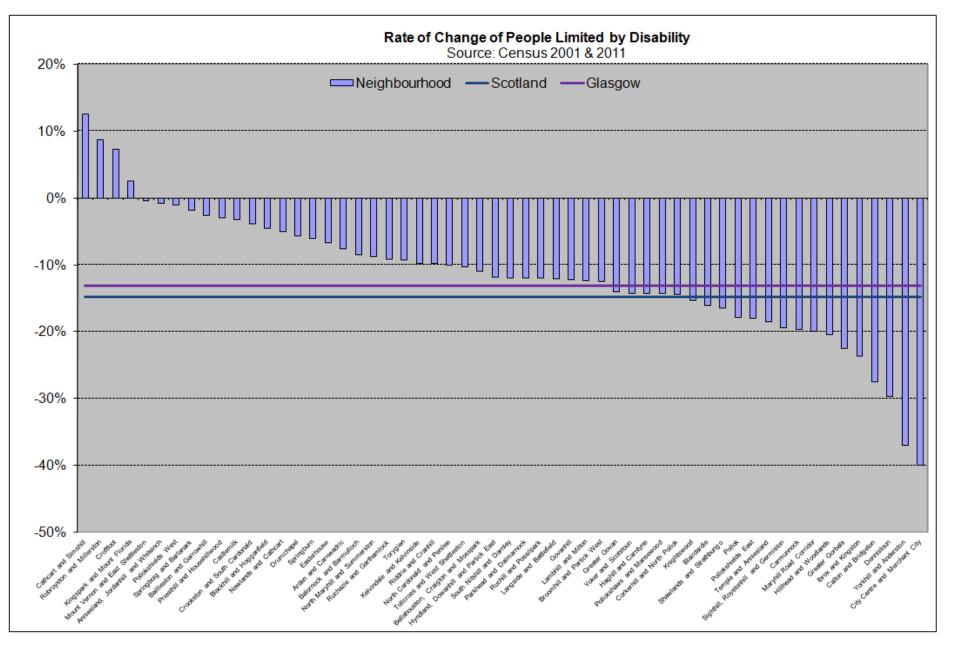
⁸ Number and percentage of total population whose day-to-day activities are limited "a little" or "a lot" by a long-term health problem or disability, which has lasted, or is expected to last, at least 12 months. This includes problems that are related to old age.











7. Adults with qualifications at Higher level or above⁹ (Figures 14, 15 & 16)

Scotland

In Scotland, the proportion of adults with qualifications at Higher level or above increased, from 42% in 2001 to 50% in 2011. This represents a relative increase of 19% over the ten-year period.

Glasgow

Glasgow also recorded a relative increase of 25% in adults with qualifications at Higher level or above. The proportion rose from 39% to 48% from 2001 to 2011.

Neighbourhood

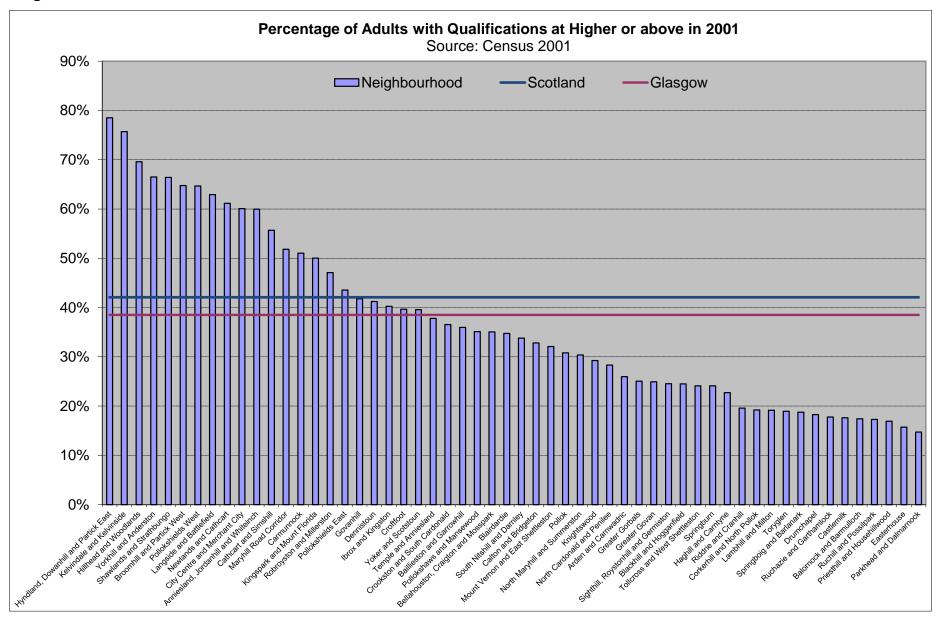
Hyndland, Dowanhill and Partick East had the highest proportion of adults with qualifications at Higher level or above in both 2001 and 2011 (79%, 2001; 82%, 2011). Parkhead and Dalmarnock recorded the lowest percentage in 2001 (15%, 2001). In 2011, Balornock and Barmulloch had the lowest proportion of adults with qualifications at Higher or above (24%, 2011).

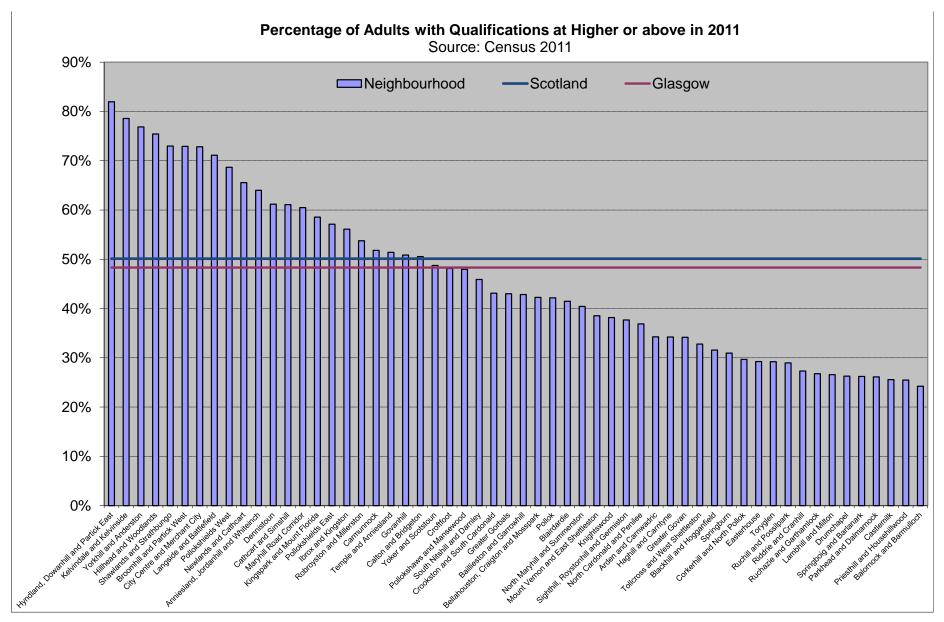
The neighbourhood that experienced the greatest rate of change in adults with qualifications at Higher level or above between 2001 and 2011 was Easterhouse (16%, 2001; 29%, 2011), which recorded an increase of 86%. Carmunnock had the smallest rate of change of 2% over the ten-year period (51%, 2001; 52%, 2011).

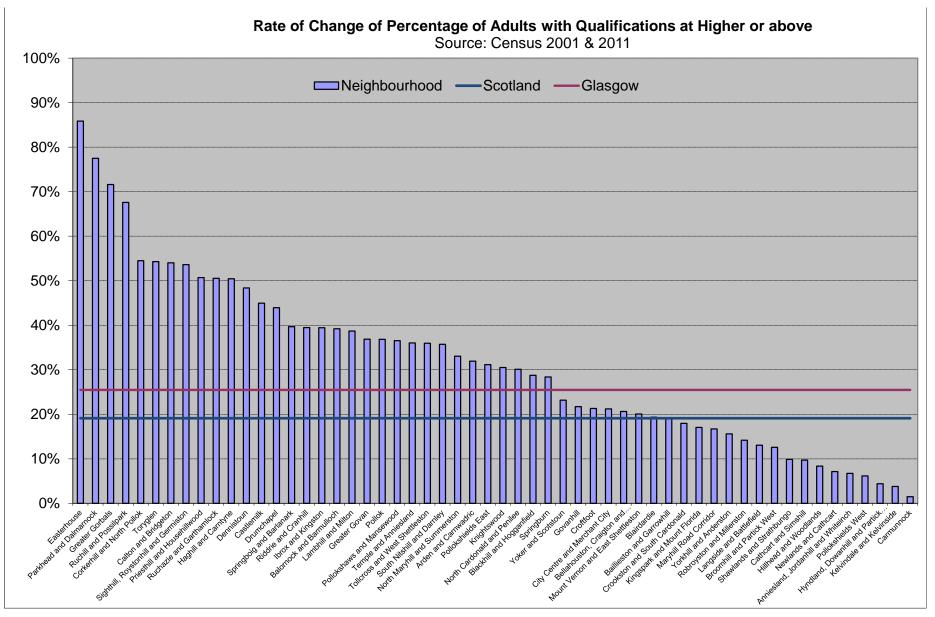
Overall, the range of the proportion of adults with qualifications at Higher level or above in Glasgow has decreased from 64 percentage points (between 15% and 79%) in 2001 to 58 percentage points (between 24% and 82%) in 2011.

⁹ Number and percentage of people aged 16 and over that have qualifications at level 2 and above. Level 2 includes Higher, Advanced Higher and A level qualifications, among others.

Figure 14







8. Owner-occupied households¹⁰ (Figures 17, 18 & 19)

Scotland

Scotland recorded a decrease of one percentage point in the proportion of owner-occupied households from 2001 to 2011. In 2001, 63% of Scottish households were owner-occupied, compared with 62% in 2011.

<u>Glasgow</u>

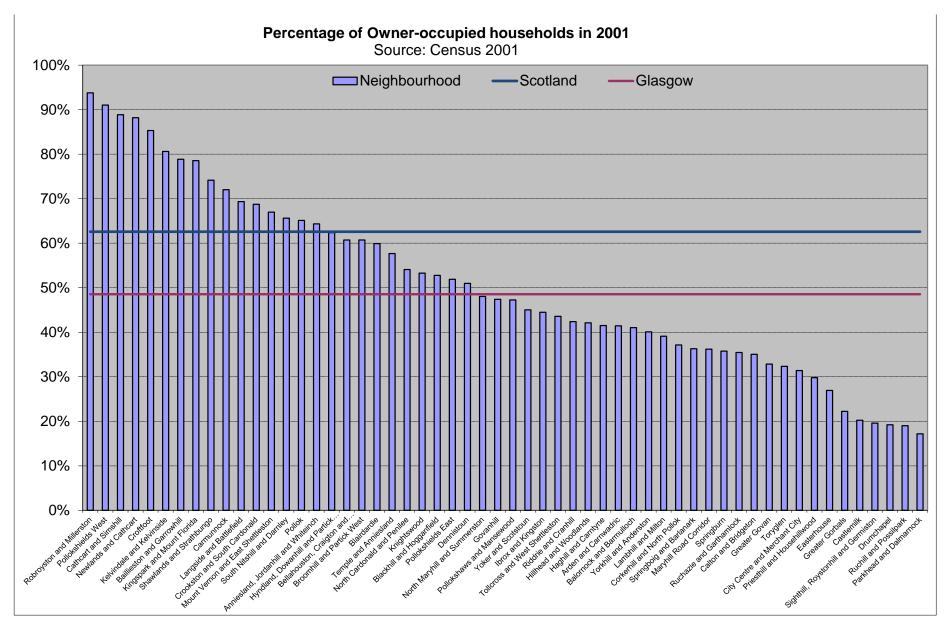
Glasgow also experienced a decrease in the proportion of owner-occupied households during the same period. In 2001 the proportion was 49%, which decreased by three percentage points to 46% in 2011.

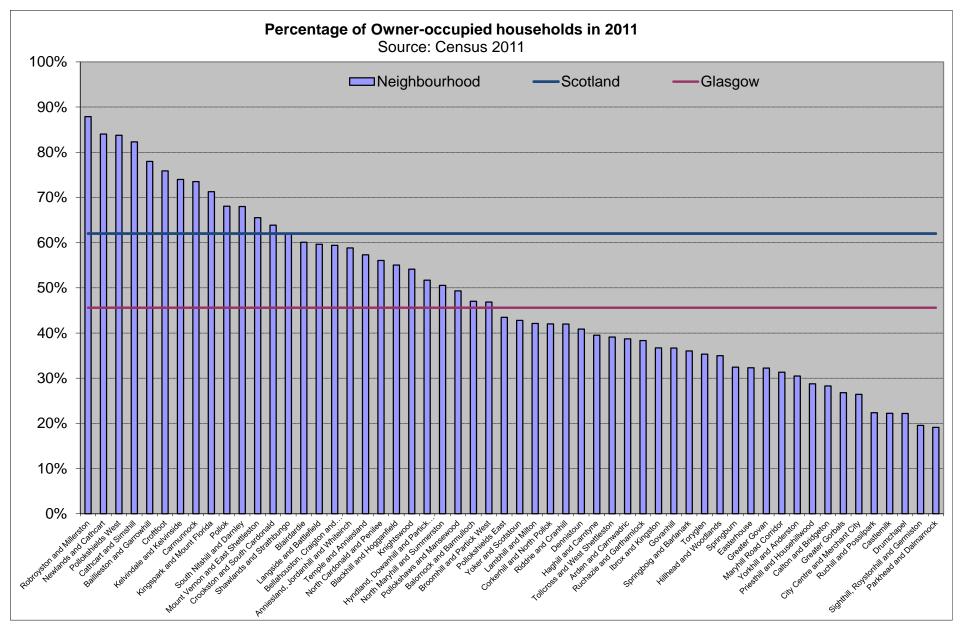
Neighbourhood

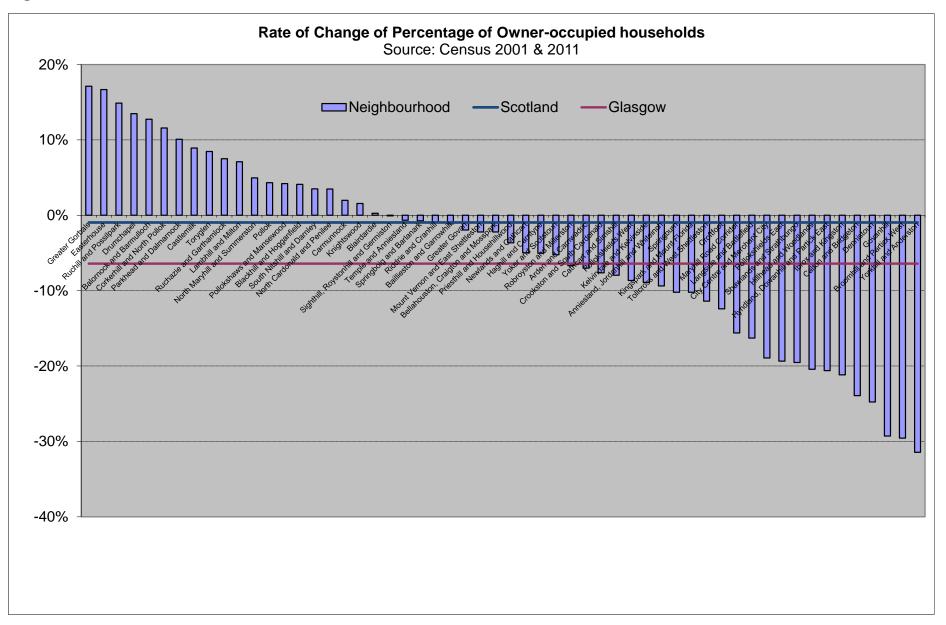
Robroyston and Millerston had the largest percentage of owner-occupied households in 2001 (94%, 2001), and in 2011 (88%, 2011). Parkhead and Dalmarnock had the lowest proportion of owner-occupied households during the same time period (17%, 2001; 19%, 2011).

Greater Gorbals experienced the greatest increase in owner-occupied households from 2001 to 2011 with a relative increase of 17% (22%, 2001; 27%, 2011). Yorkhill and Anderston recorded the greatest relative decrease in owner-occupied households, with a drop of 31% during the same ten-year period (40%, 2001; 30%, 2011).

¹⁰ Number and percentage of households which are owned by the householder. Owning can refer to the house being owned outright, owned with a mortgage or loan or owned as part of a shared ownership scheme by the householder.







9. People (aged 16-64) classified as social grade D or E¹¹ (Figure 20)

Scotland

The proportion of Scotland's 'working-age' population classified as social grade D or E in 2011 represented approximately¹² 28%.

<u>Glasgow</u>

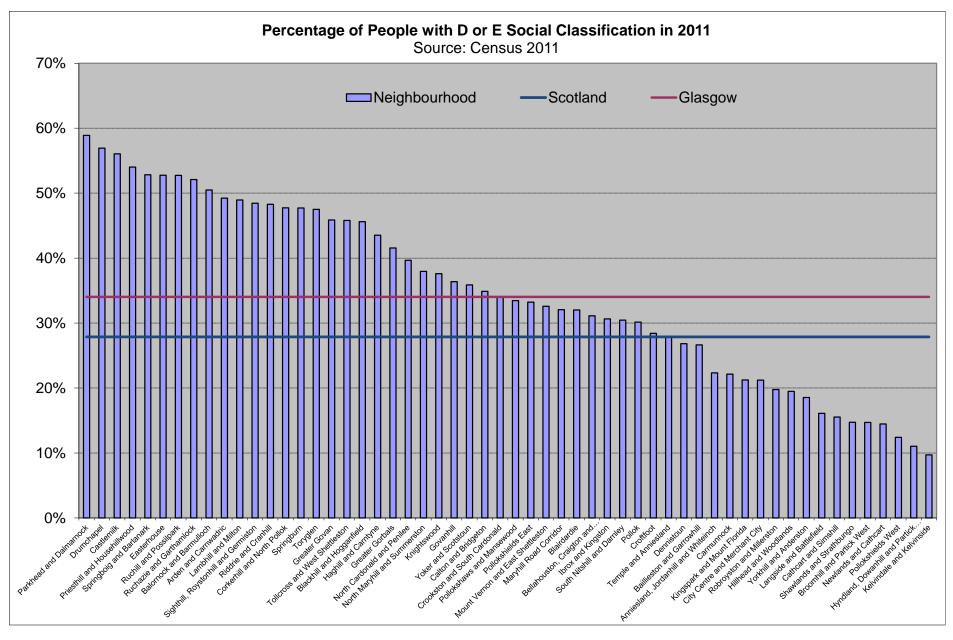
In Glasgow, the working-age population classified as social grade D or E represented approximately 34% of the population 2011.

Neighbourhood

The neighbourhood with the highest proportion of working age people in D or E social classification in 2011 was Parkhead and Dalmarnock (59%, 2011). Kelvindale and Kelvinside had the lowest percentage in 2011 (10%, 2011). Therefore the range on this measure across Glasgow neighbourhoods was 49%.

¹¹ Number and percentage of household reference persons aged 16-64 years with a social grade of D or E (Semi-skilled and unskilled manual workers; on state benefit; unemployed; lowest grade workers). Social grade is the socioeconomic classification used by the Market Research and Marketing Industries, most often in the analysis of spending habits and consumer attitudes. The denominator in the percentage is all household reference persons aged 16-64 years.

¹² This table excludes other household members (other than the reference person) in this age range so cannot be considered to completely accurate.



10. People with "good" or "very good" health¹³ (Figure 21)

Scotland

In Scotland, the proportion of the population with "good" or "very good" health in 2011 was 82%.

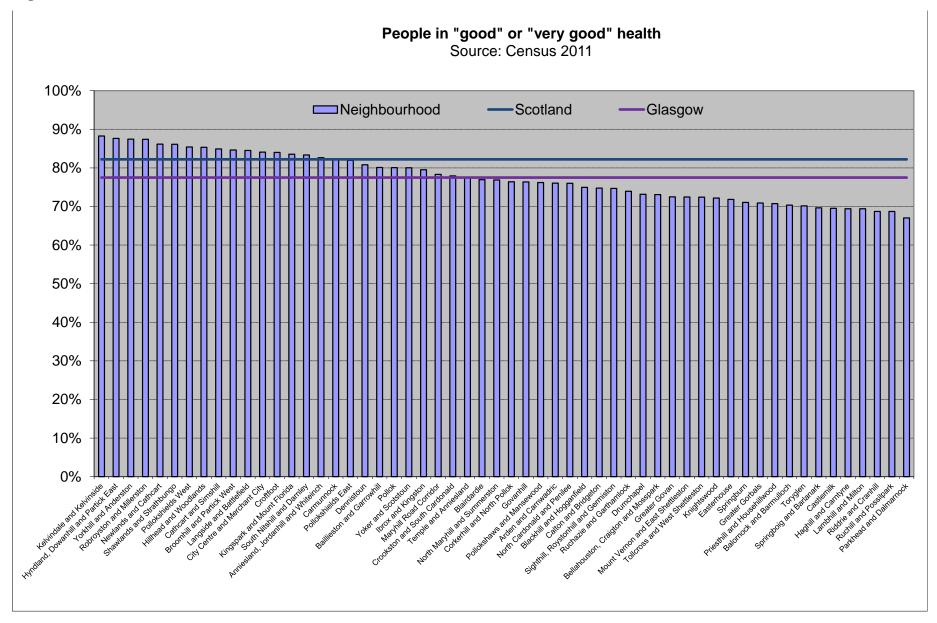
<u>Glasgow</u>

In 2011 Glasgow recorded a percentage of 77% of people in "good" or "very good" health.

Neighbourhood

The neighbourhood with the highest proportion of people with "good" or "very good" health in 2011 was Kelvindale and Kelvinside (88%, 2011). Parkhead and Dalmarnock recorded the lowest proportion, with 67% of people with "good" or "very good" health.

¹³ Number and percentage of total population that reported their health to be either "good" or "very good". In the census people were asked to assess whether their health was very good, good, fair, bad or very bad. This assessment is not based on a person's health or based over any specified period of time.



11. People living within 500m of vacant or derelict land¹⁴ (Figure 22)

Scotland

Thirty per cent of Scotland's population lived within 500m of vacant or derelict land in 2011.

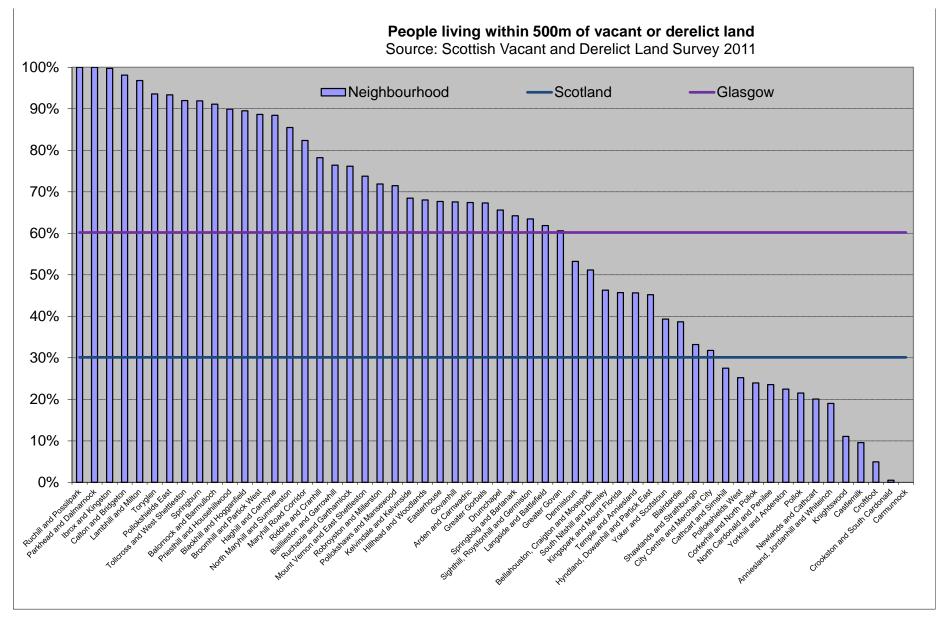
<u>Glasgow</u>

Glasgow recorded a proportion of 60% of people living within 500m of vacant or derelict land in 2011.

Neighbourhood

The two neighbourhoods with the highest proportion of people living within 500m of vacant or derelict land were Ruchill and Possilpark, and Parkhead and Dalmarnock (100%, 2011). Carmunnock had the lowest proportion, with none of its population living within 500m of vacant or derelict land.

¹⁴ Number and percentage of total population who live within 500 metres of vacant or derelict land. Derelict land (and buildings) is that which has been so damaged by development or use that it is incapable of being developed for beneficial use without rehabilitation, and which is not being used for either the purpose for which it is held, or for a use acceptable in a local plan. For further information see the Scottish Neighbourhood Statistics website: http://www.sns.gov.uk/Guide/IndicatorGuide.aspx?MetaIndicatorCode=CS-DERdpctpop2#Meta



12. Children in poverty¹⁵ (Figure 23)

Scotland

In Scotland in 2011, 19% of children were living in poverty.

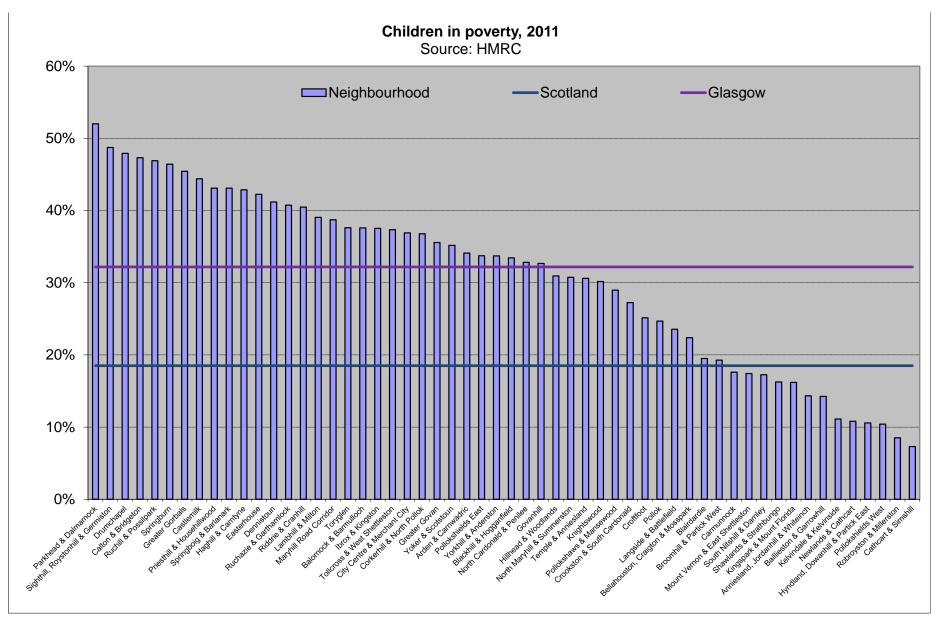
<u>Glasgow</u>

Glasgow recorded a proportion of 32% of children living in poverty.

Neighbourhood

The neighbourhood with the largest percentage of children living in poverty in 2011 was Parkhead and Dalmarnock, with 52% of children in poverty. Cathcart and Simshill had the lowest proportion of children living in poverty in 2011, at 7%.

¹⁵ Number and percentage of dependent children under the age of 20 in families in receipt of Child Tax Credits (<60% median income) or Income Support/Jobseeker's Allowance.



13. Life expectancy

13.1. Male life expectancy¹⁶ (Figures 24, 25 & 26)

Scotland

In 1995-99, estimated male life expectancy at birth in Scotland was approximately 73. By 2008-12, this figure had increased to 76 years.

<u>Glasgow</u>

Estimated male life expectancy in Glasgow increased by approximately 4 years between 1995-99 and 2008-12, rising from 68 years to 72 years during this period.

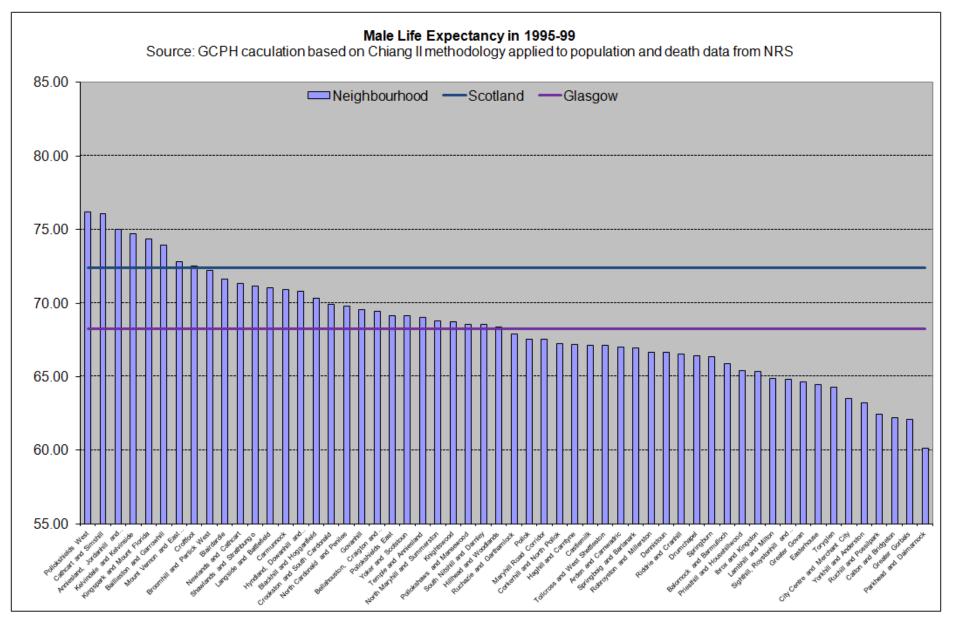
Neighbourhood

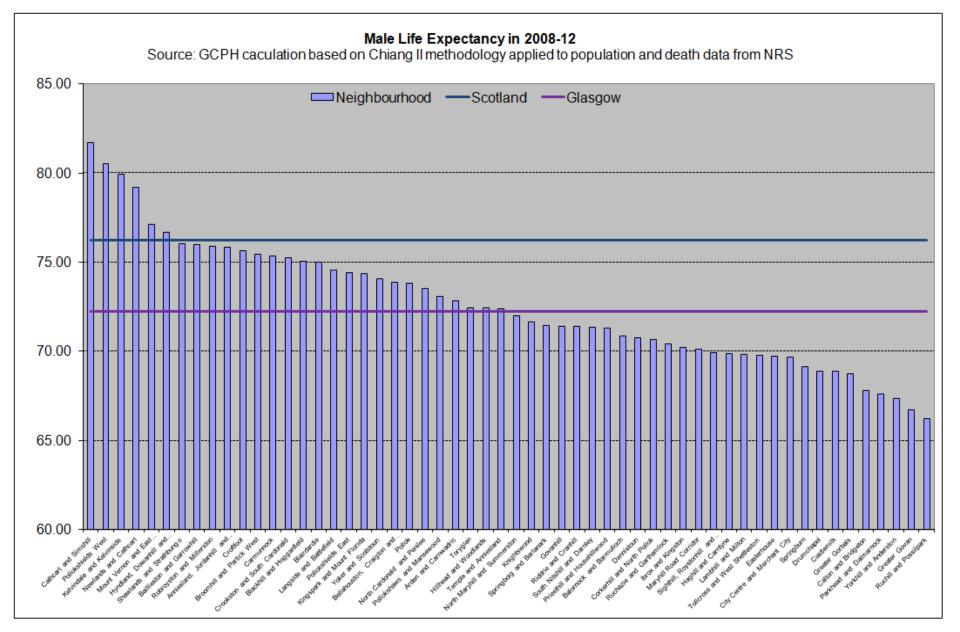
In 1995-99, the neighbourhood with the highest estimated male life expectancy was Pollokshields West (76 years, 1995-99), and the neighbourhood with the lowest estimated male life expectancy was Parkhead and Dalmarnock (60 years, 1995-99).

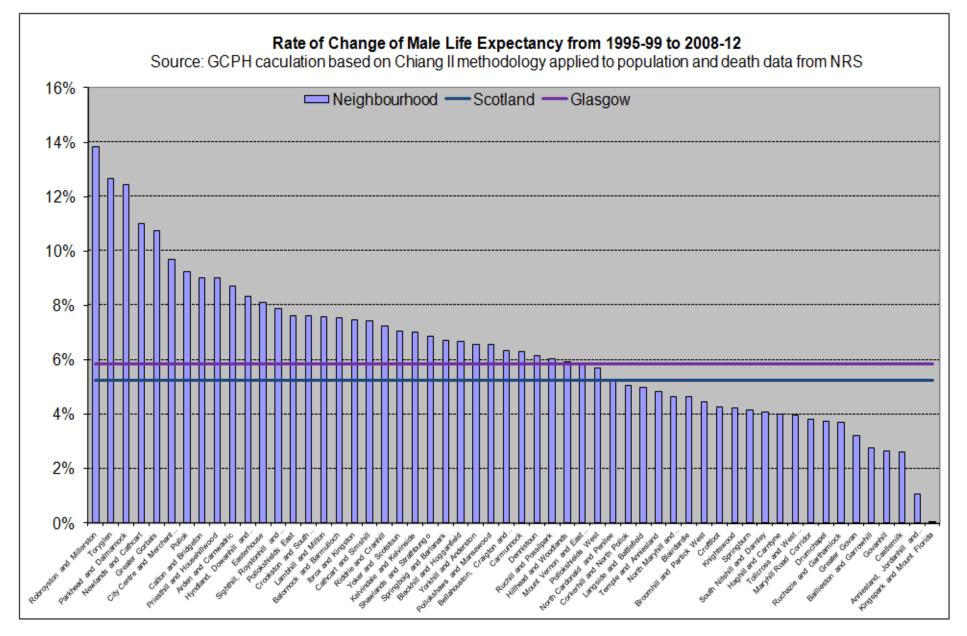
In 2008-12, Cathcart and Simshill was the neighbourhood with the highest estimated male life expectancy (82 years, 2008-12), while Ruchill and Possilpark had the lowest (66 years, 2008-12).

The neighbourhood that experienced the greatest proportional increase in male life expectancy from 1995-99 to 2008-12 was Robroyston and Millerston, which recorded an increase of 9 years from 67 to 76. The smallest rate of increase was in King's Park and Mount Florida where the estimated male life expectancy remained essentially unchanged, at 74 years, between the two time periods.

¹⁶ Estimated male life expectancy at birth in years calculated using Chiang (II) methodology as devised at ONS 2003. The population and mortality data required for the calculation came from National Records of Scotland (NRS). Mortality data are based on year of registration. Deaths for non-residents are excluded.







13.2. Female life expectancy¹⁷ (Figures 27, 28 & 29)

Scotland

In Scotland, estimated female life expectancy increased by approximately 3 years in the period 1995-99 to 2008-12, rising from 78 years in 1995-99 to 81 years in 2008-12.

<u>Glasgow</u>

Glasgow also recorded an increase of 3 years in estimated female life expectancy. In 1995-99, estimated female life expectancy was 75 years, and this increased to 78 years in 2008-12.

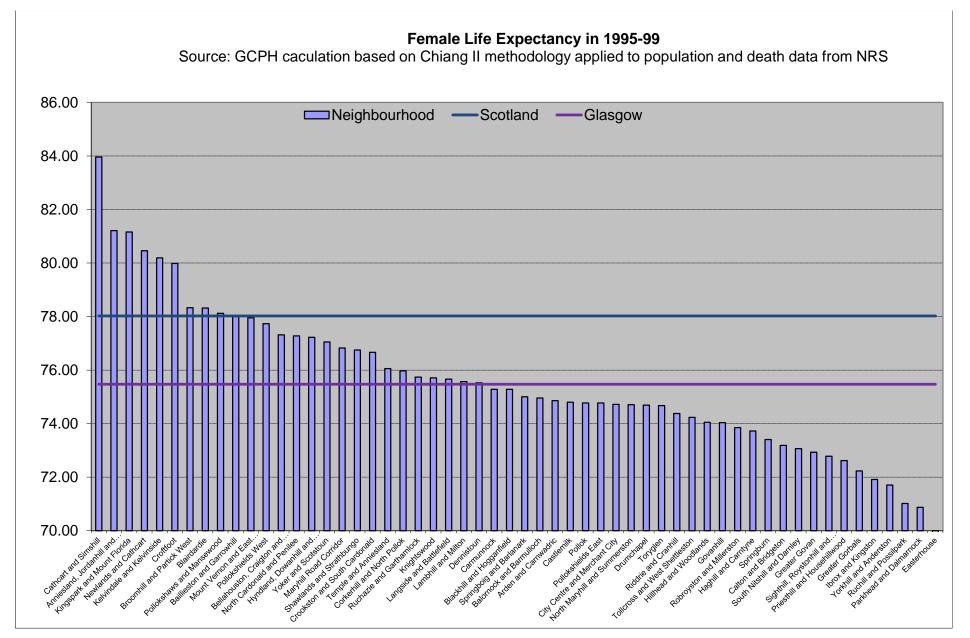
Neighbourhood

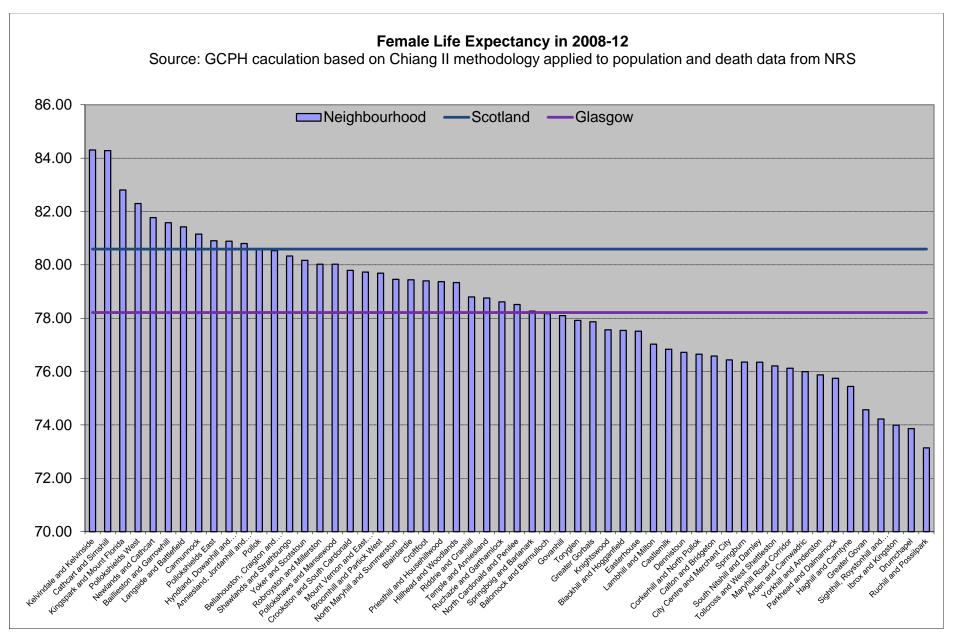
In 1995-99, the neighbourhood with the highest estimated female life expectancy was Cathcart and Simshill (84 years, 1995-99). Easterhouse had the lowest estimated female life expectancy (70 years, 1995-99).

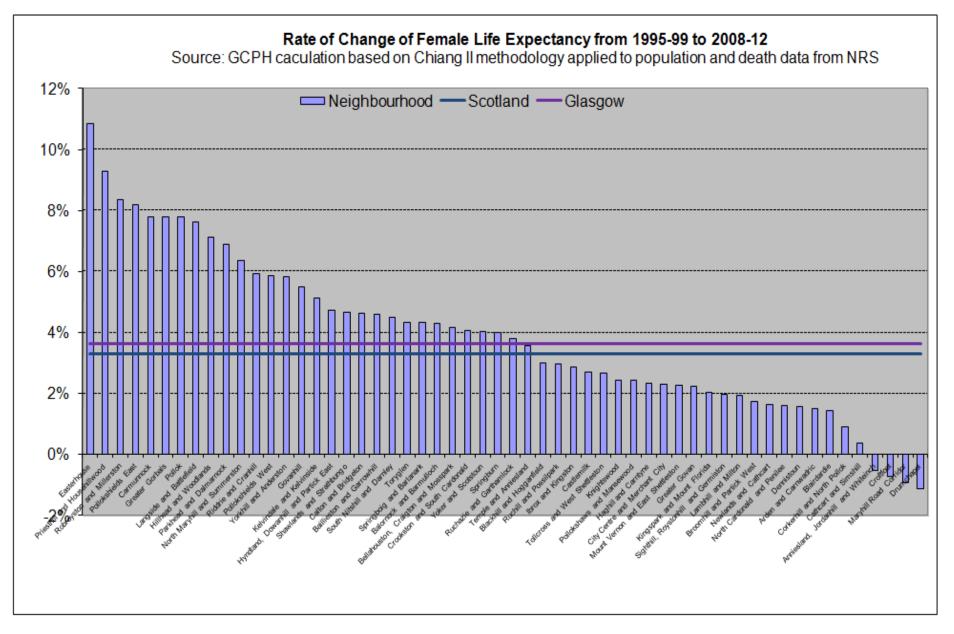
In 2008-12, the neighbourhood with the highest estimated female life expectancy was Kelvindale and Kelvinside (84, 2008-12). The lowest estimated female life expectancy in 2008-12 was in Ruchill and Possilpark (73, 2008-12).

Easterhouse recorded the greatest proportional increase in female life expectancy from 1995-99 to 2008-12 with an increase of 8 years from 70 years in 1995-99 to 78 years in 2008-12. Drumchapel experienced the highest proportional decrease – from 75 years in 1995-99 to 74 years in 2008-12.

¹⁷ Estimated female life expectancy at birth in years calculated using Chiang (II) methodology as devised at ONS 2003. The population and mortality data required for the calculation came from National Records of Scotland (NRS). Mortality data are based on year of registration. Deaths for non-residents are excluded.







14. Population distribution

14.1. People aged 0-15 (Figures 30 & 31)

Scotland

In Scotland, the proportion of the population aged 0-15 in 2011 was 17%. This figure had reduced relatively by 10% from the 2001 proportion of 19%.

<u>Glasgow</u>

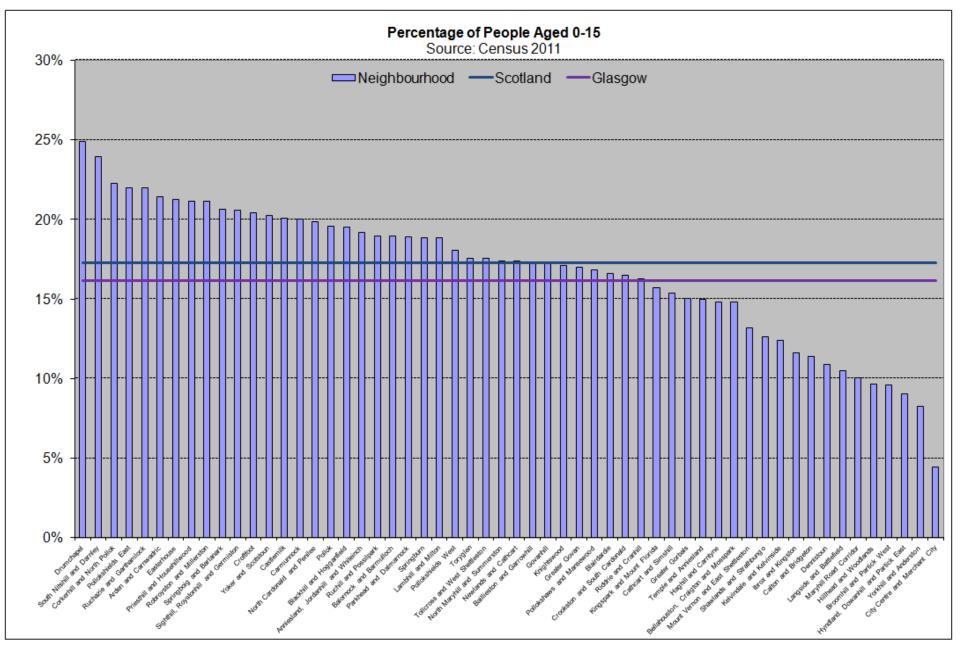
Between 2001 and 2011, Glasgow's population aged 0-15 decreased by 12%, relatively, from 18% in 2001 to 16% in 2011.

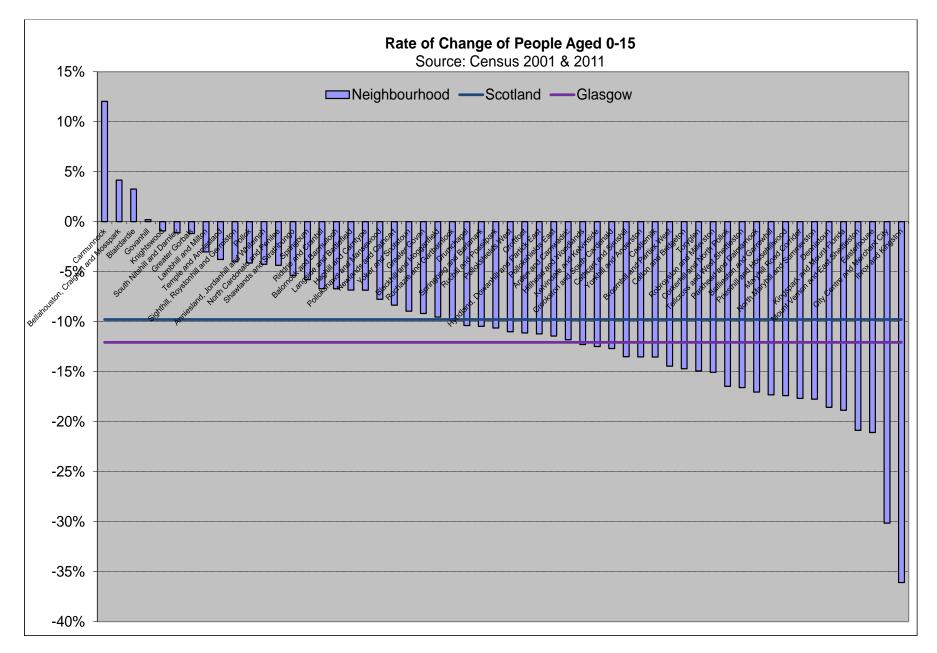
Neighbourhood

The neighbourhood with the greatest proportion of children was Drumchapel (25%, 2011), while the City Centre and Merchant City had the lowest percentage of children (4%, 2011).

Carmunnock recorded the greatest percentage increase in 0-15 year olds, with a relative increase of 12% from 18% 2001 to 20% in 2011. Ibrox and Kingston experienced the largest relative decrease in this age range of 36%, with the percentage of 0-15 year olds reducing from 18% to 12% between 2001 and 2011.







14.2. People aged 16-44 (Figures 32 & 33)

Scotland

Scotland experienced a slight relative decrease of 5% in the proportion of people aged 16-44 between 2001 and 2011, with the proportion of people aged 16-44 falling from 40% in 2001 to 38% in 2011.

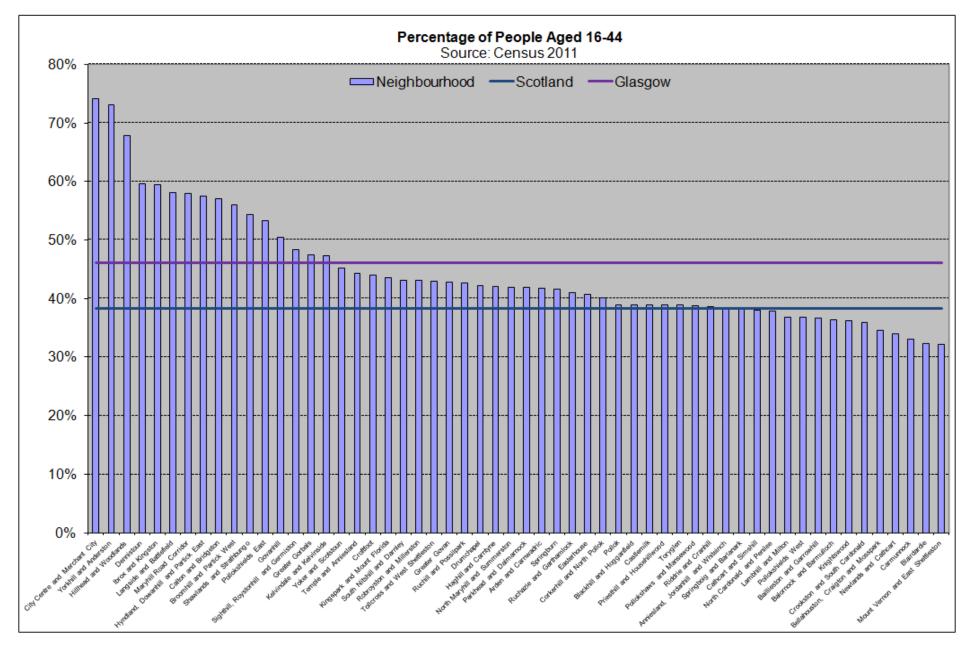
<u>Glasgow</u>

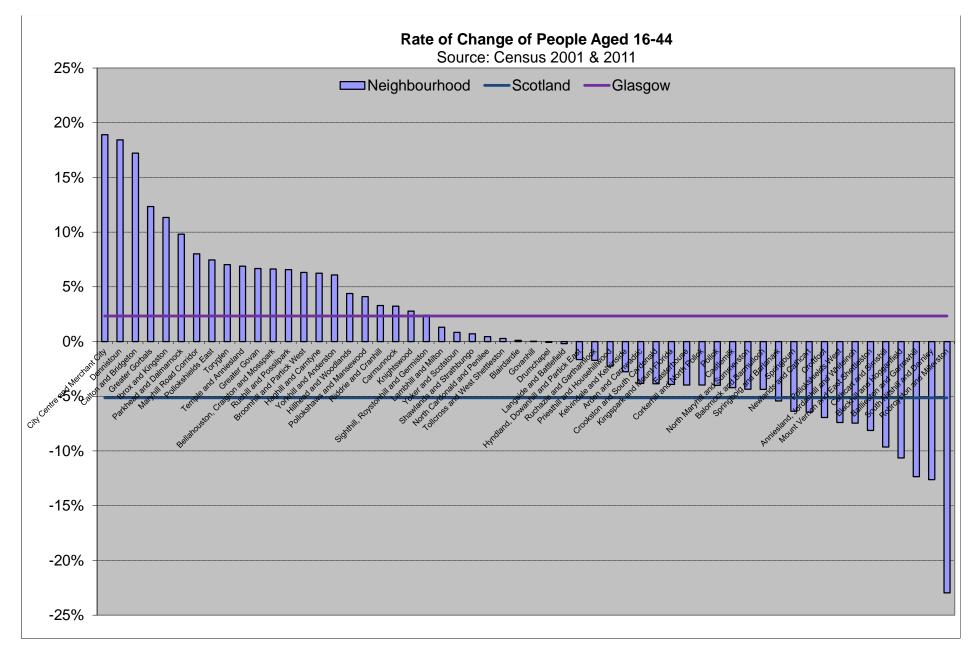
In Glasgow, the proportion of people aged 16-44 increased slightly between 2001 and 2011 from 45% to 46%. This represents a relative increase of 2%.

Neighbourhood

City Centre and Merchant City had the highest percentage of people within the 16-44 age range (74%, 2011), while Mount Vernon and East Shettleston had the lowest proportion of 16-44 year olds (32%, 2011).

City Centre and Merchant City experienced the greatest relative increase in 16-44 year olds of 19%, from 62% in 2001 to 74% in 2011. The neighbourhood with the largest percentage decrease in this age group over the same decade was Robroyston and Millerston, which recorded a 23% relative decrease from 56% in 2001 to 43% in 2011.





14.3. People aged 45-64 (Figures 34 & 35)

Scotland

The proportion of people aged 45-64 in Scotland in 2011 was 27%, representing a slight increase from 2001 when 25% of the population were in this age group.

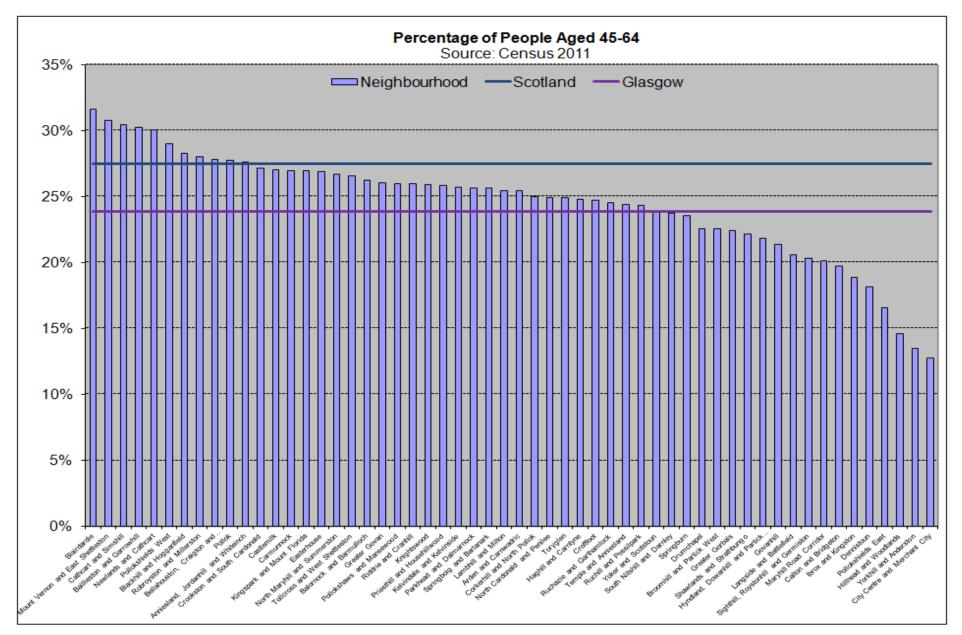
<u>Glasgow</u>

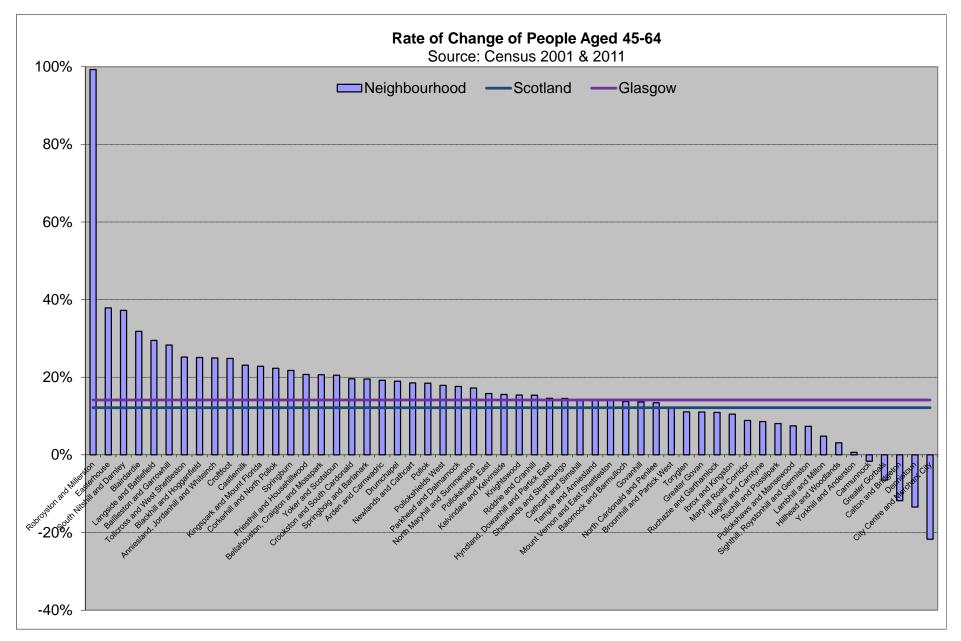
In the period 2001-2011, Glasgow experienced a relative increase of 14% in people aged 45-64 with the percentage of people aged 45-64 years rising from 21% in 2001 to 24% in 2011.

Neighbourhood

In 2011, Blairdardie had the highest proportion of 45-64 year olds (32%, 2011), and City Centre and Merchant City had the lowest percentage of people aged 45-64 (13%, 2011).

Robroyston and Millerston recorded the largest percentage increase in 45-64 year olds, from 14% in 2001 to 28% in 2011 – a 99% increase. City Centre and Merchant City experienced the greatest relative decrease in this age group of 22%, with the proportion of 45-64 year olds reducing from 16% in 2001 to 13% in 2011.





14.4. People aged 65+ (Figures 36 & 37)

Scotland

In 2011, the proportion of people aged 65+ in Scotland was 17%. This was a slight increase from 2001, when the proportion was 16%.

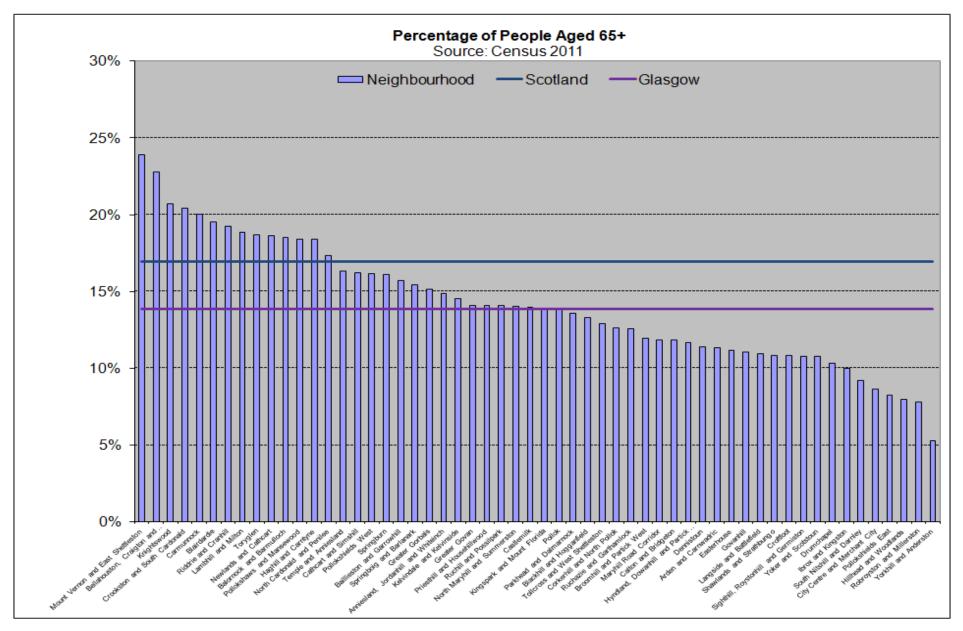
<u>Glasgow</u>

The proportion of people aged 65+ in Glasgow decreased by 11%, relatively, in the period 2001-2011. In 2001, the proportion of people aged 65+ was 16%, and in 2011 it was 14%.

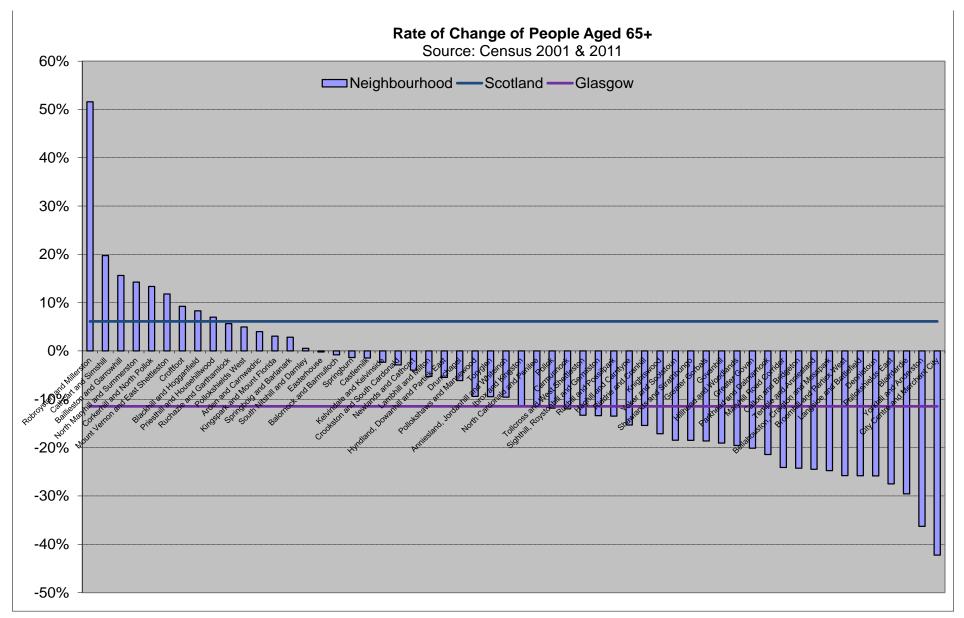
Neighbourhood

The neighbourhood with the highest percentage of people aged 65+ was Mount Vernon and East Shettleston (24%, 2011), while Yorkhill and Anderston had the lowest proportion of people in this age range (5%, 2011).

Robroyston and Millerston experienced the largest relative increase in people aged 65+ from 5% to 8% (a relative increase of 52%). The neighbourhood with the greatest relative decrease was City Centre and Merchant City (42%), with the proportion of people 65+ reducing from 15% in 2001 to 9% in 2011.

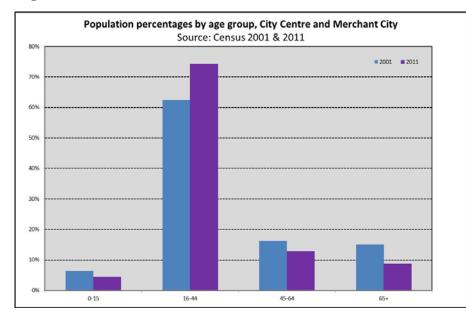


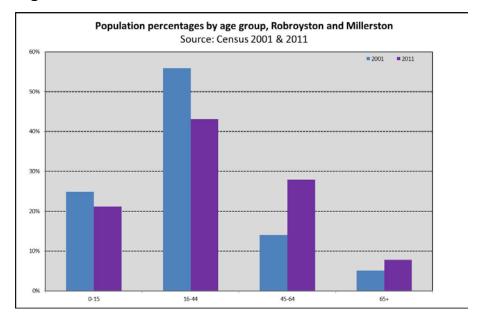




The population distribution graphs for City Centre and Merchant City (Figure 38), and Robroyston and Millerston (Figure 39) are shown, as they illustrate the largest proportional increase and decrease in many of the population categories. City Centre and Merchant City has experienced a decrease in all population sectors apart from people aged 16-44, where it had the largest proportional increase of all Glasgow neighbourhoods. Robroyston and Millerston recorded an increase in people aged 45-64 and people aged 65+, both in numbers of people and as a proprtion of the population, but experienced a decrease in population in the younger age groups.

Figure 38





15. Correlations

These indicators can be analysed to show correlations, or associations, between the social determinants and the health outcomes. Pearson's Correlation Coefficient analyses two different variables (in this case each of the social determinants and the three health outcomes) and gives a value between +1 and -1, where +1 indicates total positive correlation, -1 indicates total negative correlation, and 0 indicates no correlation. The correlation coefficient r is calculated as follows:

$$r = \frac{\sum (x - \overline{x})(y - \overline{y})}{\sqrt{\sum (x - \overline{x})^2 \sum (y - \overline{y})^2}}$$

The correlation coefficients for the 2011 data were calculated and are shown in the following table (Figure 42). Correlations greater than 0.75 are coloured green, correlations between 0.5 and 0.75 are coloured yellow, and correlations below 0.5 are coloured red:

2011 Pearson Correlation Coefficients				
	Male life expectancy	Female life expectancy	Limited by disability	Self-assessed health
Ethnic minority	0.04	-0.02	-0.44	0.37
1+ car households	0.84	0.75	-0.59	0.68
2+ car households	0.72	0.61	-0.44	0.53
Overcrowded households	-0.66	-0.59	0.10	-0.22
Adults with qualifications	0.18	0.26	0.00	0.04
Owner-occupied houses	0.86	0.77	-0.50	0.60
D or E grade social class	-0.69	-0.65	0.86	-0.91
Living near derelict land	-0.38	-0.35	0.36	-0.44
Child poverty	-0.87	-0.78	0.66	-0.75
Pop aged 0-15	-0.09	-0.15	0.37	-0.38
Pop aged 16-44	-0.08	-0.07	-0.70	0.60
Pop aged 45-65	0.26	0.26	0.47	-0.36
Pop aged 65+	0.05	0.11	0.51	-0.40

From this we can see that there is a strong positive correlation between households with more than one car, and male life expectancy. There is also a strong positive correlation between male life expectancy and owner-occupied houses. Male life expectancy has a strong negative correlation with children in poverty.

Female life expectancy shows similar correlations with these variables but the correlation with each of the variables is weaker compared to male life expectancy.

People limited by disability has a strong positive correlation with people in D or E grade social classification. There is also a strong negative correlation with adults with qualifications at Higher or above.

People with "good" or "very good" health has a very strong negative correlation with people living in D or E grade social classification. It also has a strong positive correlation with adults with qualifications at Higher or above.

These correlation coefficients have been calculated based on neighbourhood (or area level) data, rather than at an individual level. Correlation analysis based on individual data may have produced stronger correlations between some variables.

16. Conclusions

These analyses show how aspects of Glasgow's neighbourhoods changed over the decade between 2001 and 2011. The analyses provide comparisons and trends, and illustrate where there are strong relationships between health and social indicators. This report, while relatively detailed, could be expanded upon greatly. We hope this document provides a useful initial indication of changes in Glasgow's neighbourhoods.

Notes

The graphs used in this report are available from GCPH on request. If you have queries about any aspects of this analysis please contact Bruce Whyte at the GCPH: <u>bruce.whyte@glasgow.gov.uk</u>.