

# Greenspace for kids

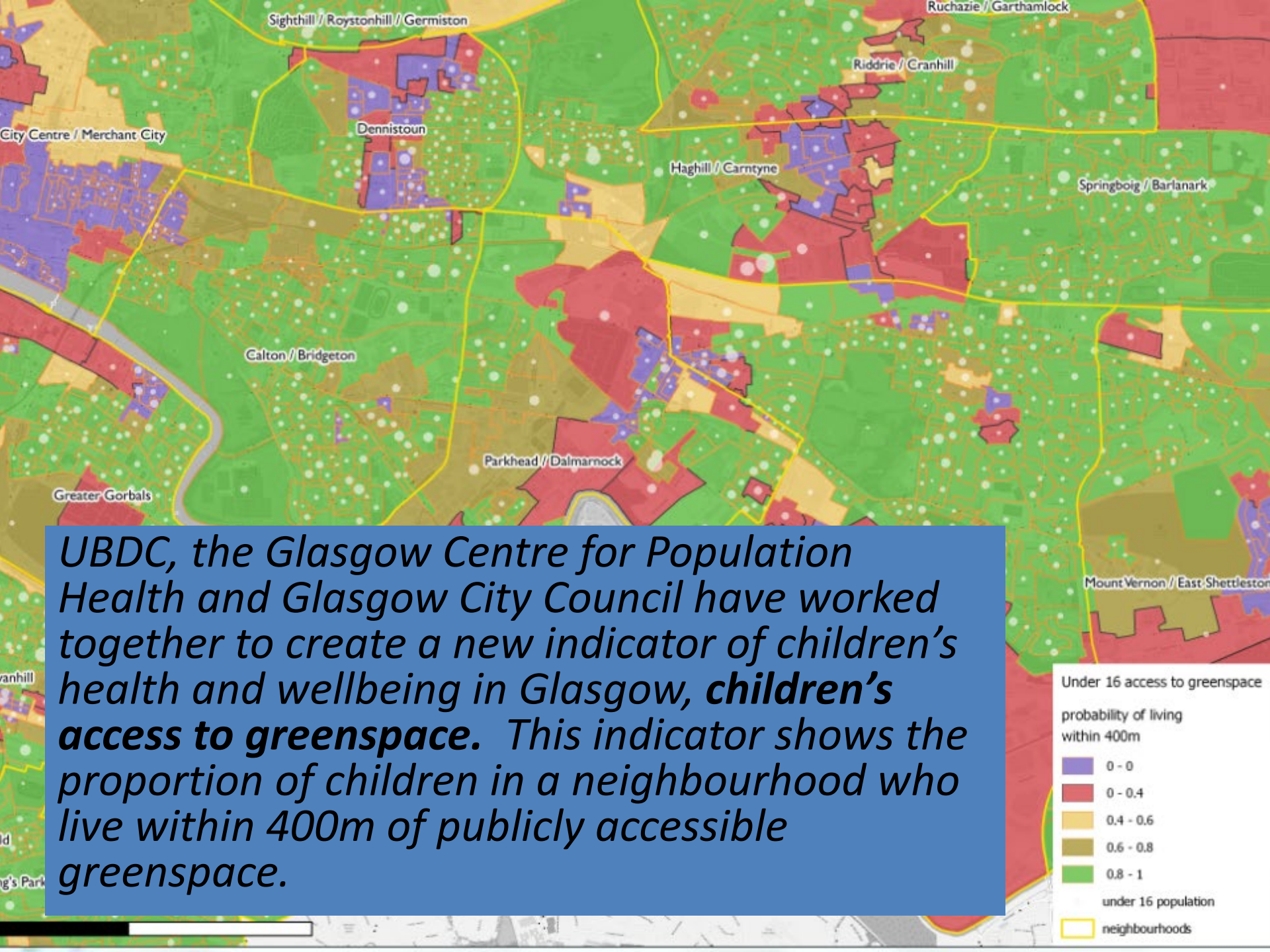


Rod Walpole (Urban Big Data Centre), Bruce Whyte (Glasgow Centre for Population Health)

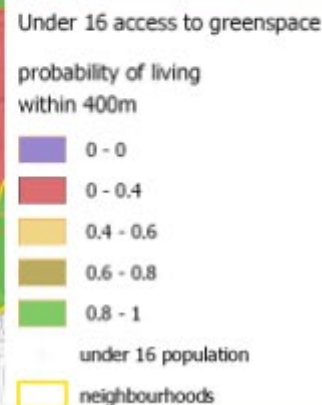
Urban Big Data Centre Showcase event

Wednesday 28th November 2018, IET Teacher Building, Glasgow





UBDC, the Glasgow Centre for Population Health and Glasgow City Council have worked together to create a new indicator of children's health and wellbeing in Glasgow, **children's access to greenspace**. This indicator shows the proportion of children in a neighbourhood who live within 400m of publicly accessible greenspace.





There are clear health, developmental and recreational benefits in ensuring children have access to good quality natural outdoor environments.

*“In adventurous outdoor play children can challenge themselves, test out their limits and learn to self-regulate their emotions.”*  
([the Lancet](#)).

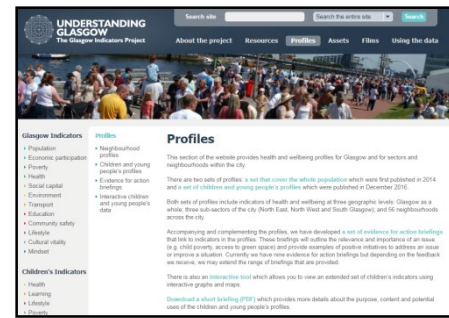


A [Position Statement on Active Outdoor Play](#): stated that *“Access to active play in nature and outdoors – with its risks – is essential for healthy child development”*



However, we know that the area where children can roam unsupervised around their homes has reduced dramatically and changes in education policy have tended to restrict the amount of learning through play.

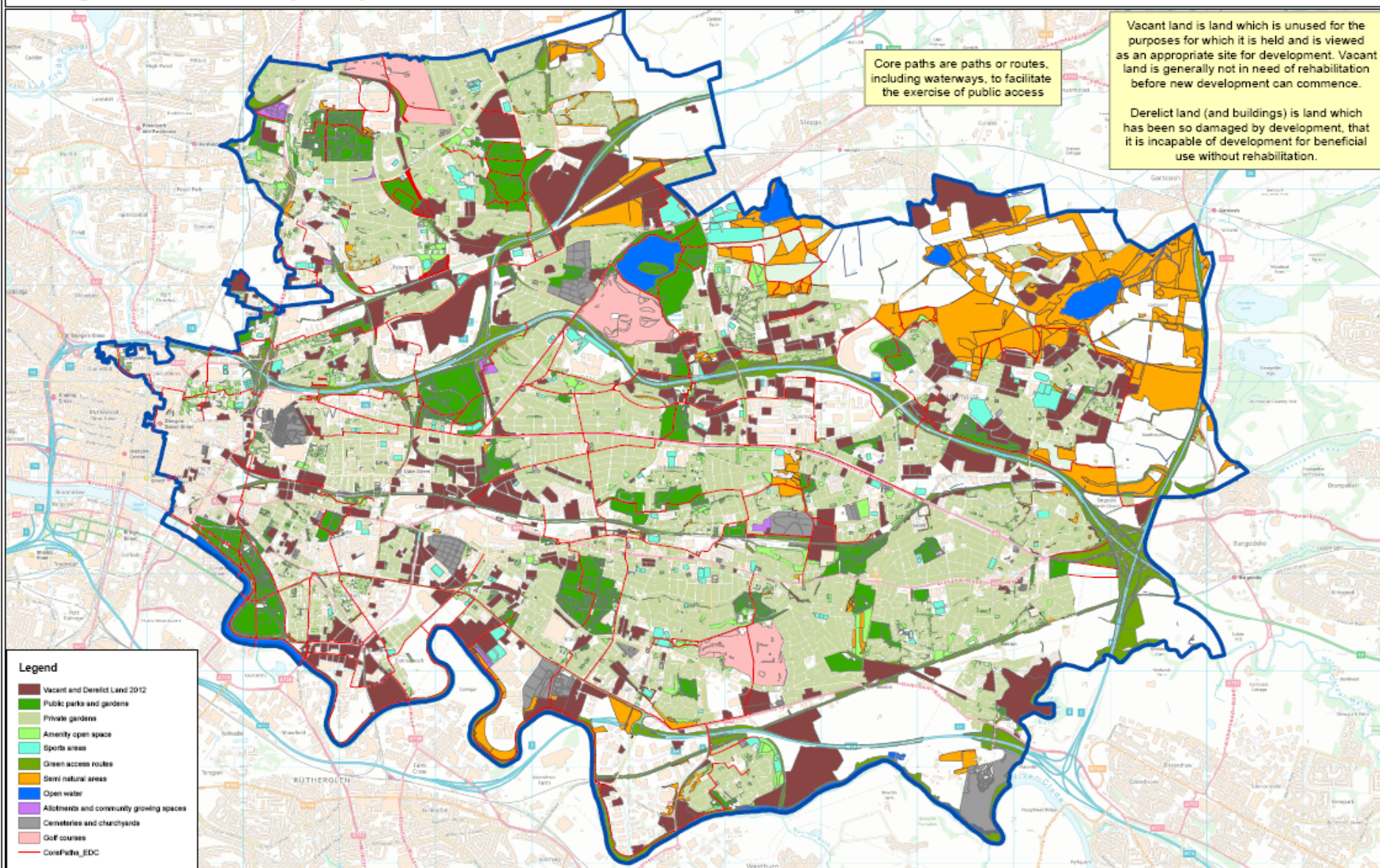
# *Why create an indicator of children's access to greenspace?*



- *Because we didn't have one before ➔*
- *Arguably we take play, particularly outdoor play, for granted;*
- *We tend to undervalue parks and informal outdoor spaces as places that support children's physical and social development;*
- *We know that children who are active in natural outdoor spaces are more likely to utilise them as adults*



# Glasgow North East Open Space Provision, Vacant and Derelict Land and Core Paths



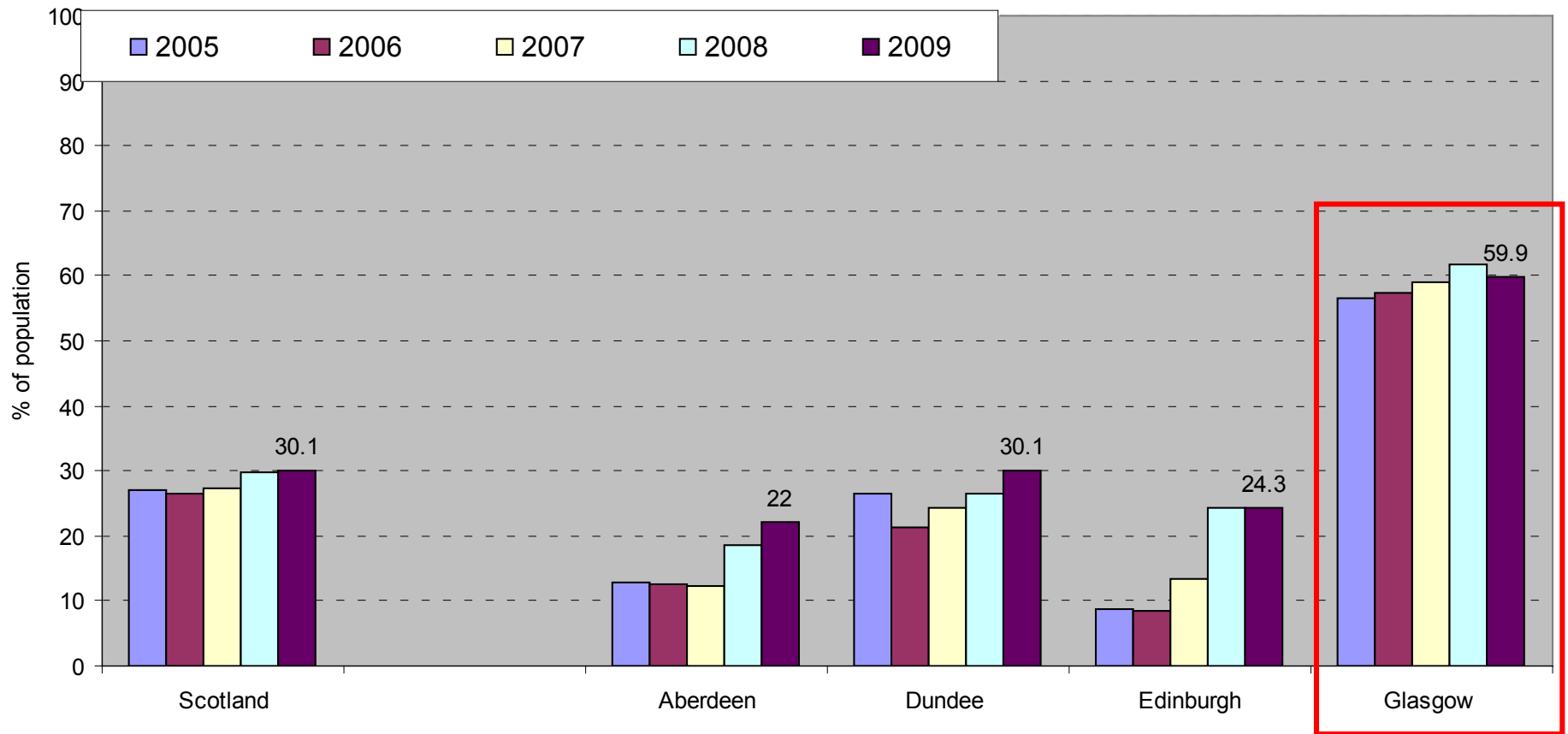
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# Proximity to derelict land

**Percentage of population living within 500m of any derelict site  
(Aberdeen, Dundee, Edinburgh, Glasgow and Scotland, 2005-2009)**

Source: Scottish Neighbourhood Statistics (from Scottish Vacant and Derelict Land Survey)






# Greenspace






# Children and Young People's Profiles (2016)

**UNDERSTANDING GLASGOW**  
The Glasgow Indicators Project

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**Glasgow Indicators**

- Population
- Economic participation
- Poverty
- Health
- Social capital
- Environment
- Transport
- Education
- Community safety
- Lifestyle
- Cultural vitality
- Mindset

**Profiles**

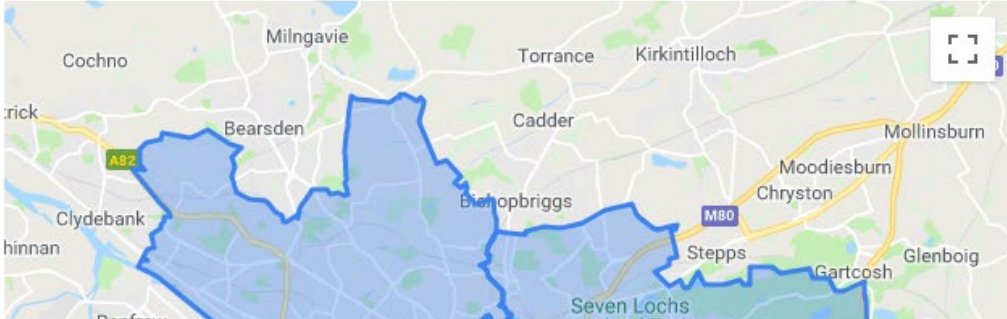
- Neighbourhood profiles
- Children and young people's profiles**
- Evidence for action briefings
- Interactive children and young people's data

## Glasgow

The profiles on these pages provide a comprehensive overview of health and wellbeing in Glasgow. There are 60 profiles in total, covering Glasgow as a whole, the three sub-sectors of the city (North East, North West and South Glasgow) and 56 neighbourhoods across the city. They highlight differences in health and life circumstances across the city for a range of indicators organised under broad themes: population; cultural factors; environment and transport; socioeconomic factors; education; poverty; and health. The profiles are intended to be a resource for local communities and to inform action at neighbourhood level.

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# TASK

**To estimate how many children in Glasgow are within 400m of quality assessed greenspace or play area**

- Location of publicly accessible greenspace and play areas
- Greenspace and play area quality assessment
- Greenspace and play area pedestrian access points
- Walking route network
- The distribution of housing in Glasgow
- The distribution of children in Glasgow

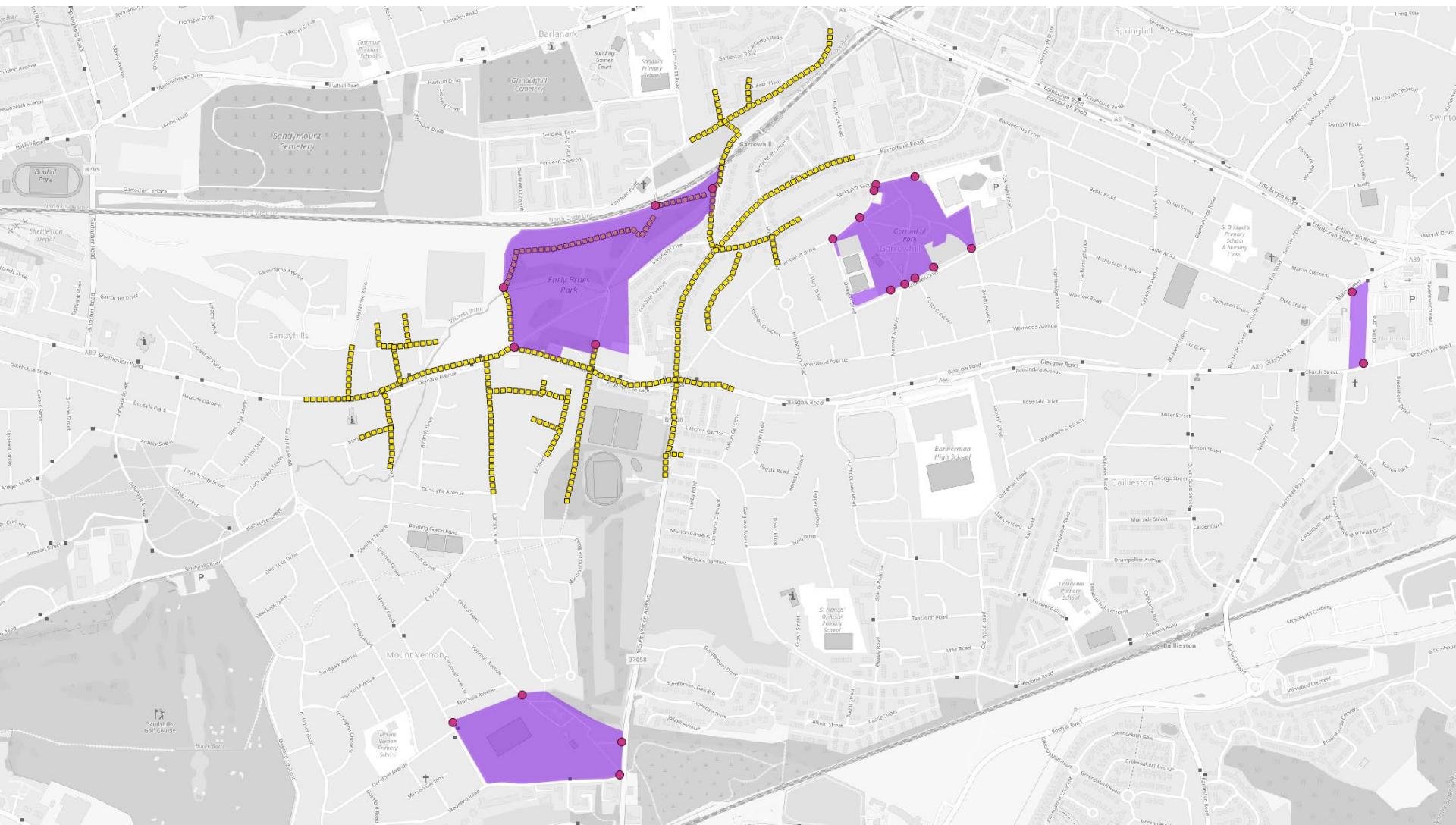


## A detailed map of the Sandyhills area in Dublin, showing streets, parks, and landmarks. The map includes labels for 'Sandyhills', 'Fairview Park', 'Sandyhills Cemetery', 'Barrington Park', 'St. Patrick's of Ashurst Primary School', 'Barrington High School', and 'St. Brigid's Primary School &amp; Nursery'. Major roads like 'R115', 'R116', and 'R117' are also indicated.



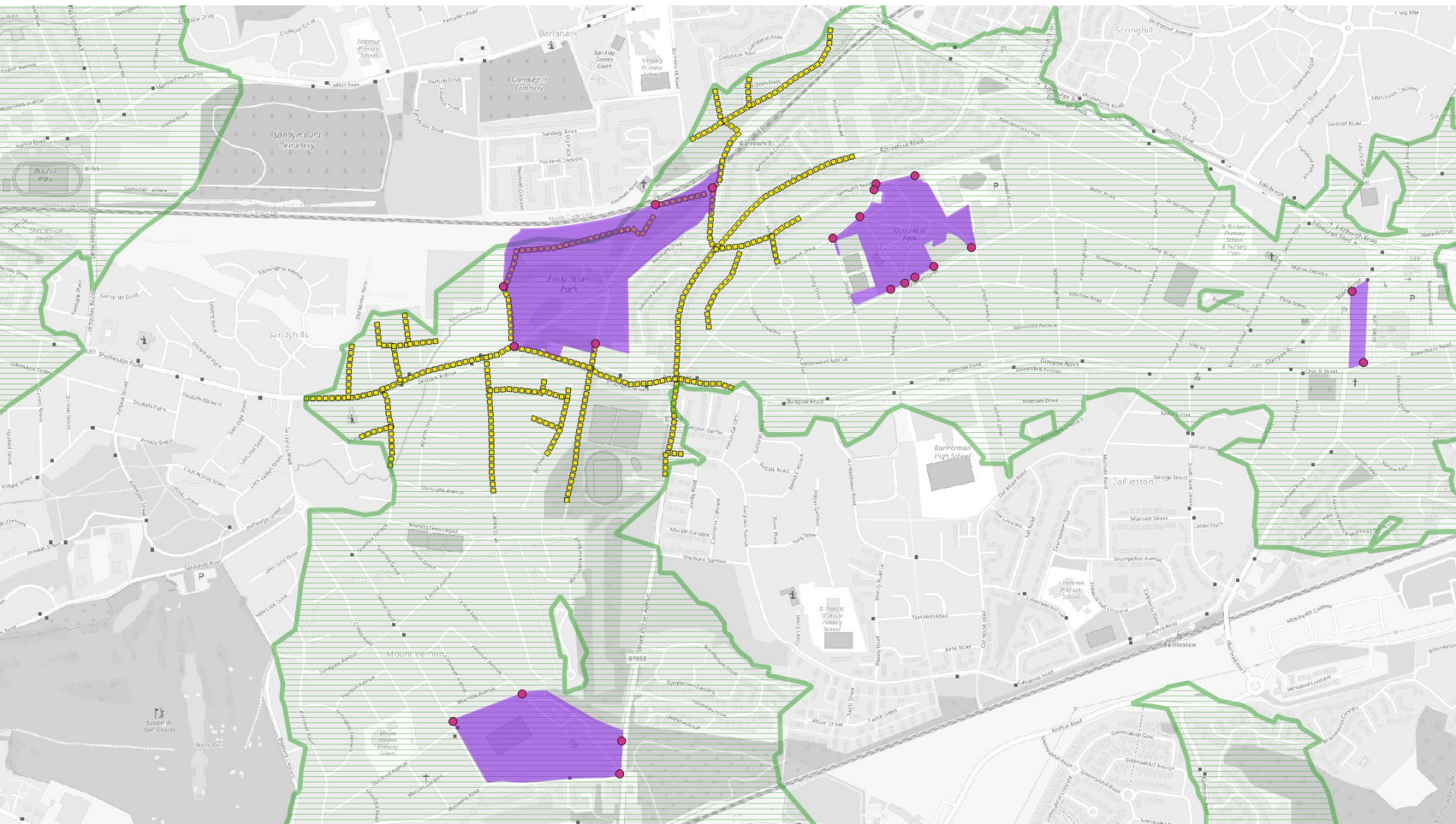
The map displays the Sandymount area in Dublin, with various streets and landmarks labeled. The map is overlaid with colored regions: a large orange area on the left, a large purple area in the center, and several smaller cyan and orange areas on the right. A legend on the right side of the map shows four colored squares labeled A, B, C, and D, corresponding to the regions on the map.

# 400m Walking Routes



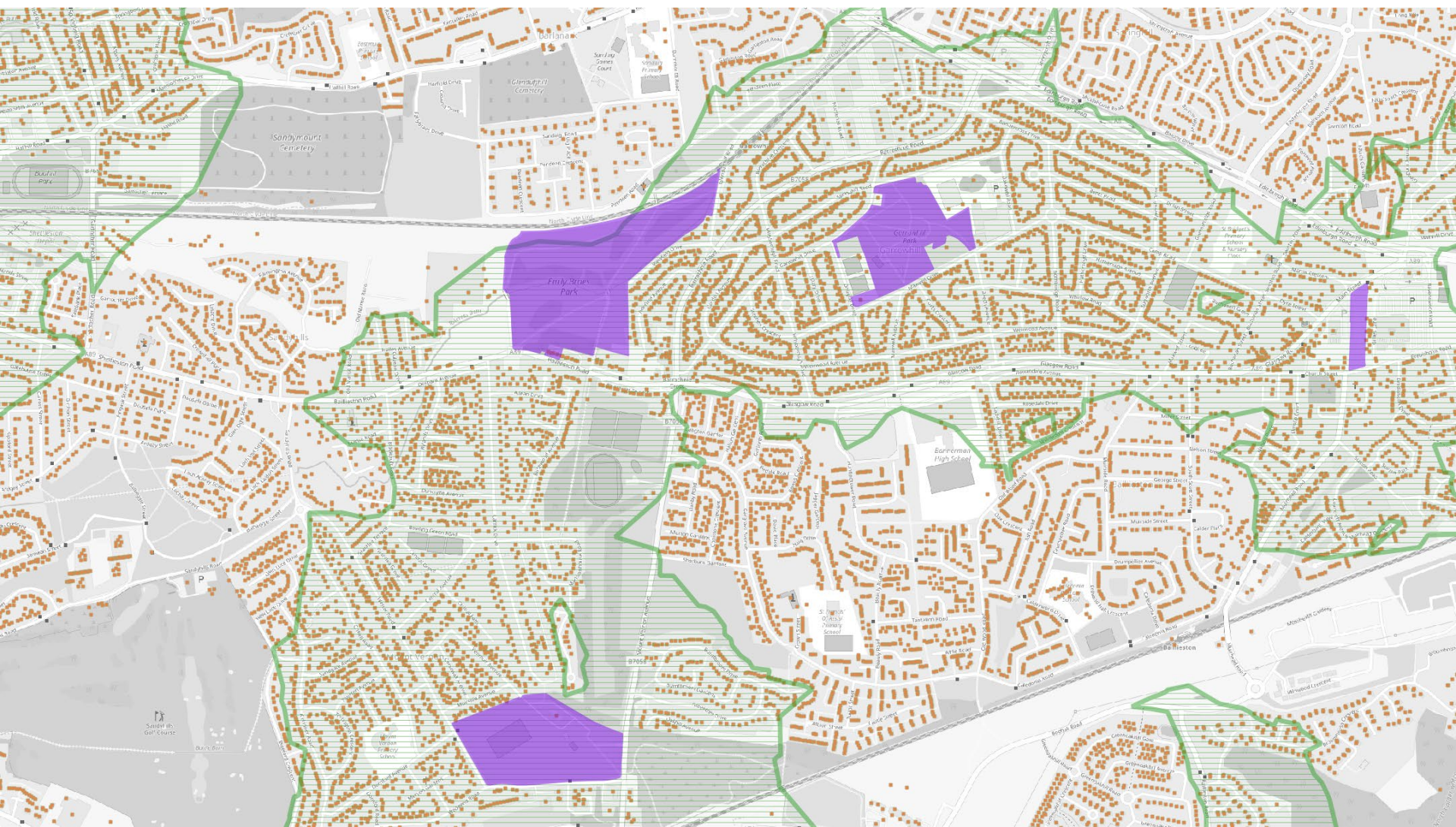


# 400m access polygon



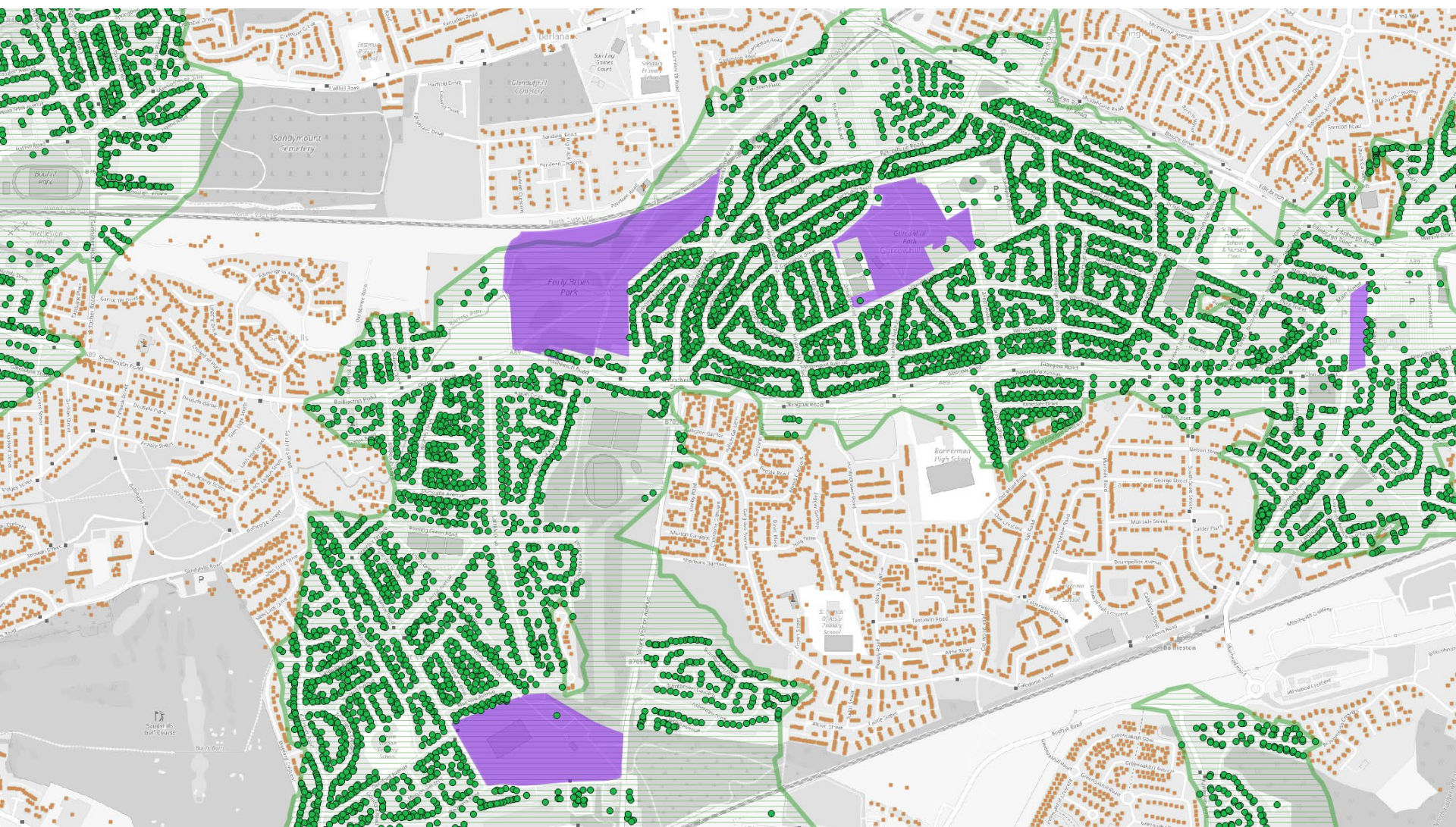


# Glasgow Buildings : OS



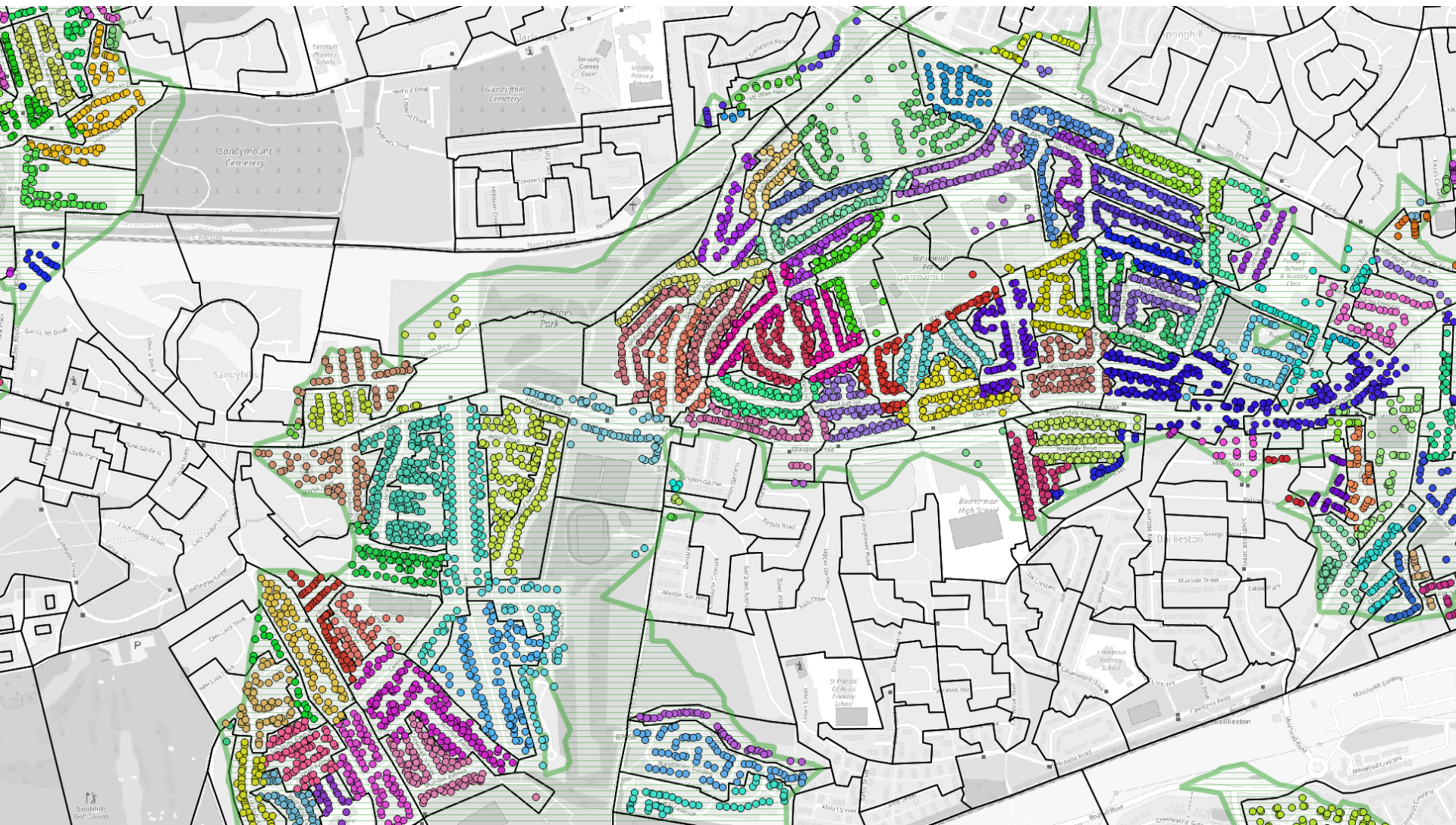


# Buildings within 400m walk



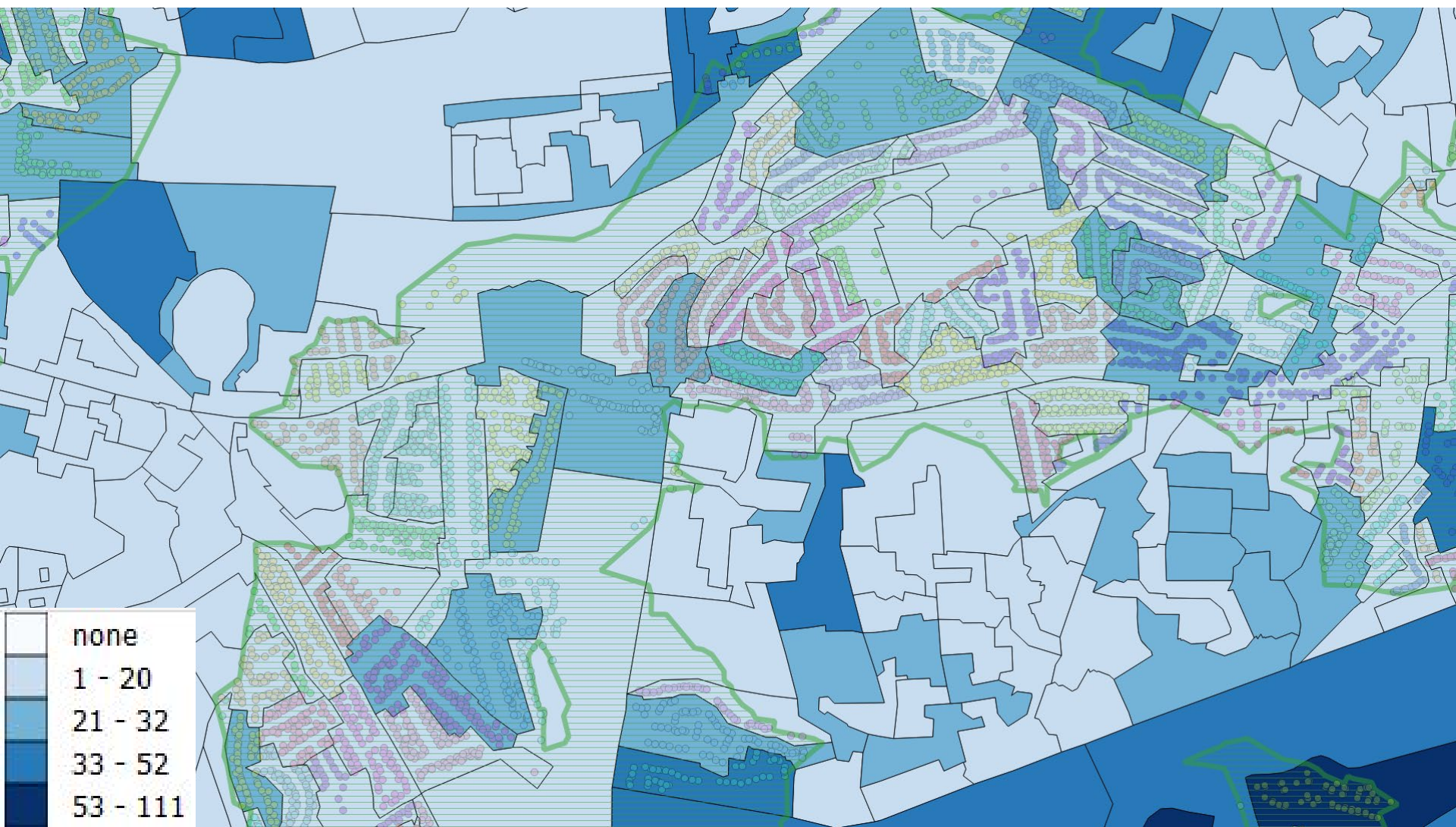


# Buildings - Census Output Area





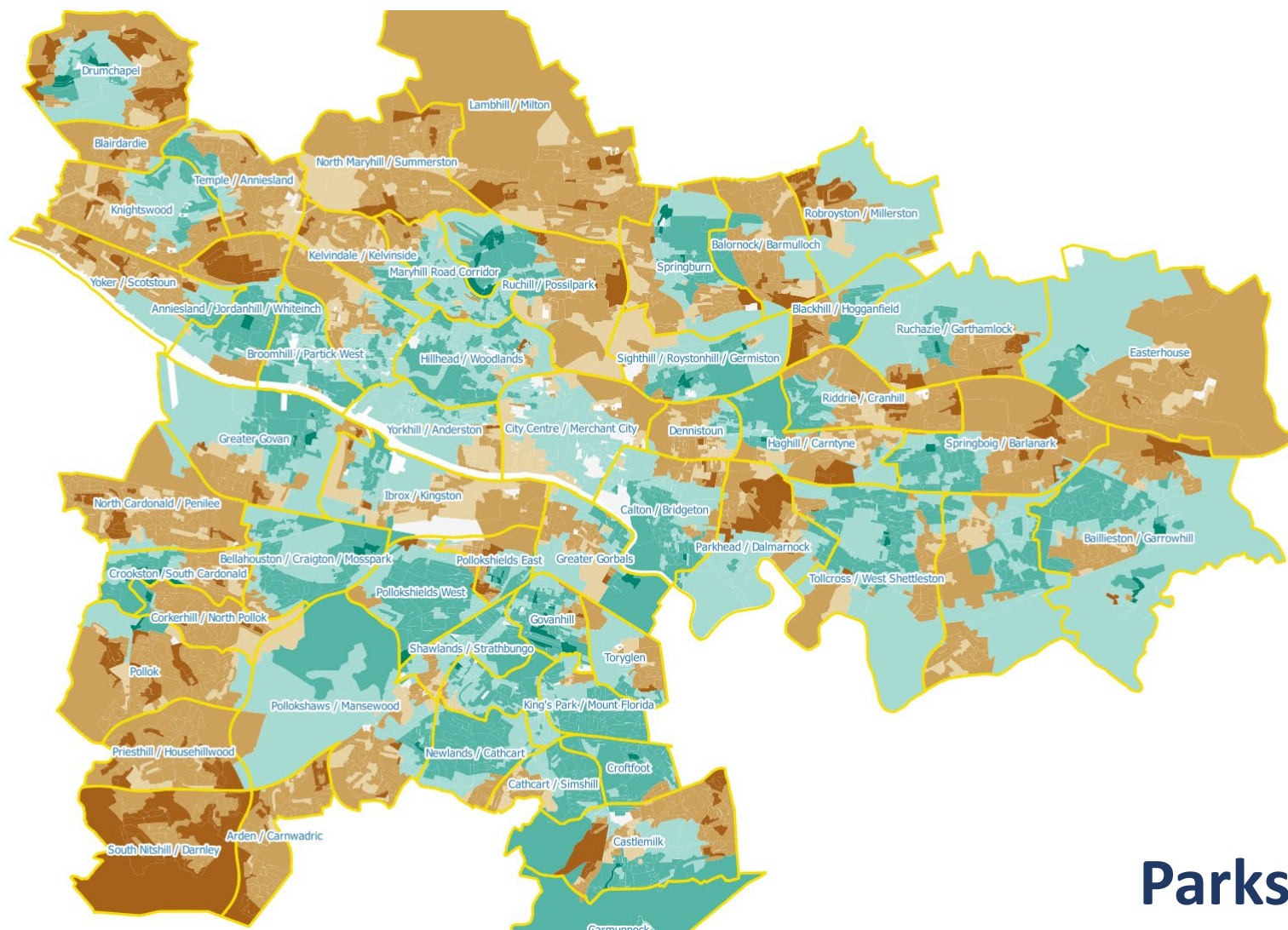
# Estimated numbers of U16's - SAPE



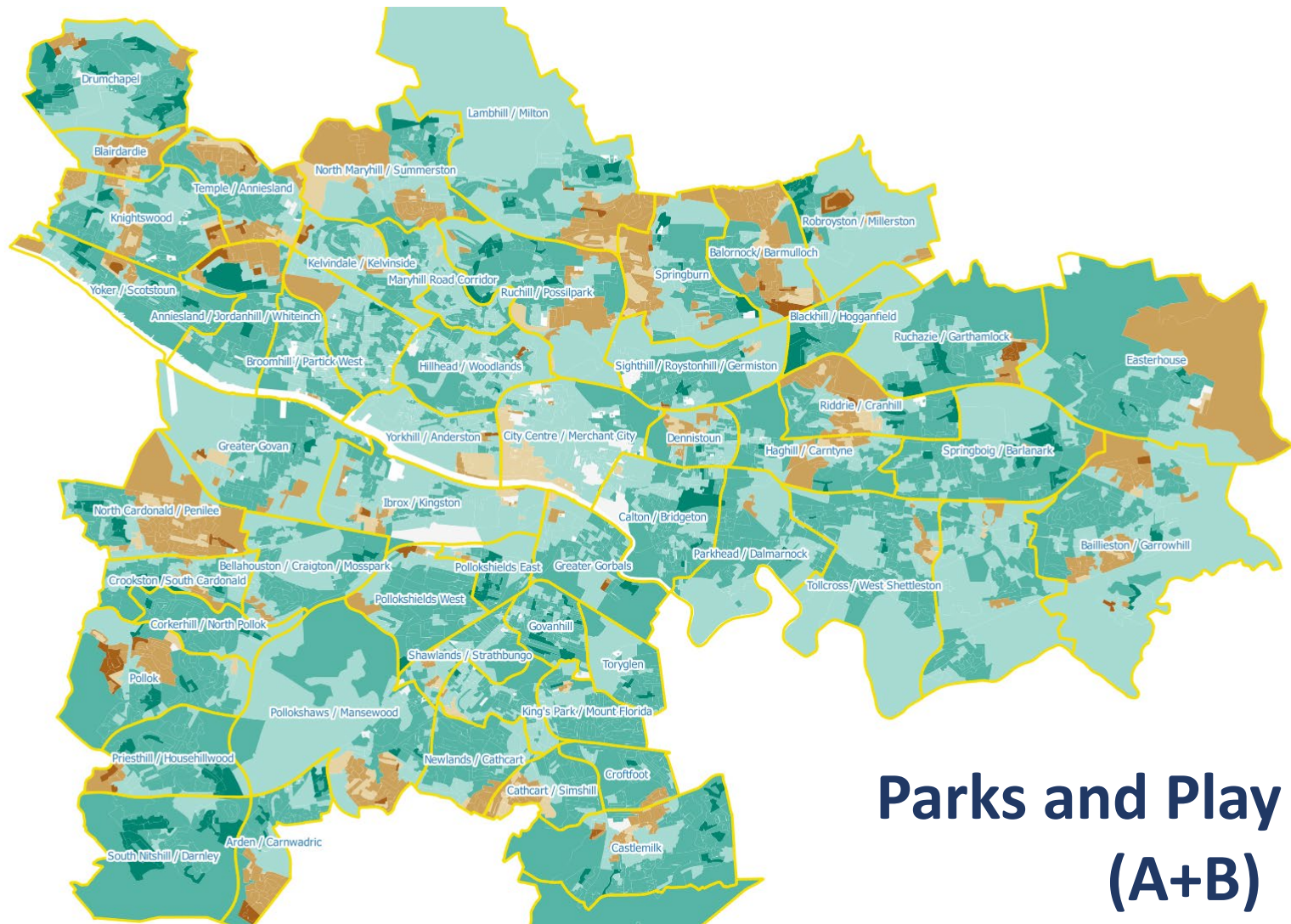
# Estimate of U16's within 400m Parks (A)







## Parks (A)



## Parks and Play Areas (A+B)




# Improvements

- Missing walking routes from path network.
- Building use - identify residential buildings.
- Edge effects - only greenspace in Glasgow.




# Understanding Glasgow

**UNDERSTANDING GLASGOW**  
The Glasgow Indicators Project

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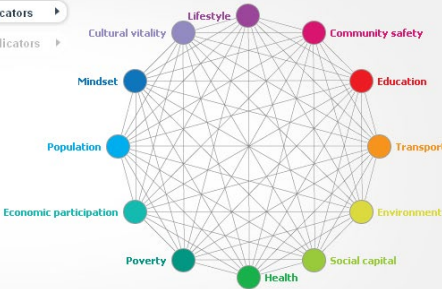
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Understanding Glasgow sets out to describe the city and its people. We aim to create an accessible resource that will inform a wide audience about issues of importance to Glasgow's population (e.g. health, poverty, education, environment, etc) and that will illustrate trends, make comparisons both within the city and with other cities, allow progress to be monitored and encourage discussion and engagement about the future of our city.

Glasgow Indicators

Children's Indicators




## Children and Young People's Profiles (2016)

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**Children's Indicators**

- Health
- Learning
- Lifestyle
- Poverty
- Wellbeing & development
- Safety

**Profiles**

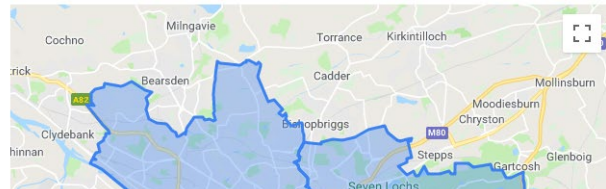
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# Content and coverage

- Indicators from a range of administrative sources and surveys
- Themes covered include: demography; infant health; culture and environment; crime and safety; socio-economic factors; learning and education; health and wellbeing
- **Coverage:** 56 Glasgow neighbourhoods, 3 localities (North West, North East and South Glasgow) and Glasgow as a whole
- **Format:** web pages (graphs, descriptive text), pdfs, excel workbook, interactive pages, Evidence for Action briefings





## Children and Young People's Profile for Pollok

Pollok has a population of 3,510 children and young people (aged 0-24 years).

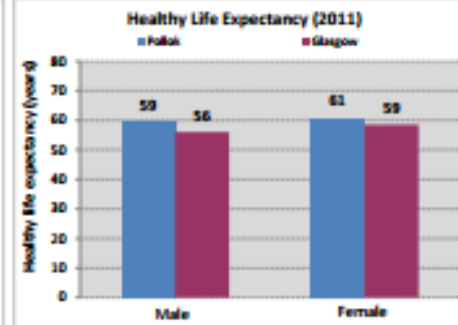
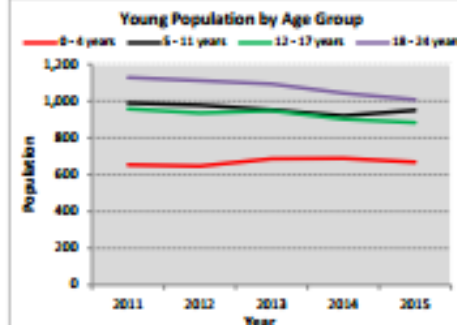


### Neighbourhood Comparisons with Glasgow

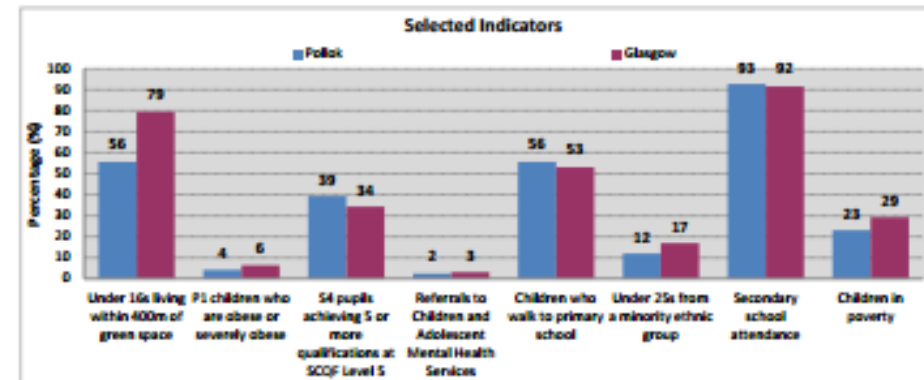
The proportion of school age children in Pollok is markedly higher than Glasgow as a whole. 12% of under 25s are from a minority ethnic group. 56% of children live within 400m of green space. The neighbourhood has fewer referrals to the Scottish Children's Reporter Administration (-34%), fewer offenders (-40%) and victims of crime (-24%) and less overcrowding (-37%) than in Glasgow overall. 54 pupil attainment is higher (+14%) than the Glasgow average and fewer 16-19 year olds are not in employment, education or training (-38%). Likely development difficulties in pre-school children are lower than the Glasgow average (-3%) and communication delay in young children is also lower than average (-26%).

Domain	Indicator	Count	Rate	Difference from Glasgow	Period
Demography	Population aged 0 to 4	669	6%	-3%	2015
	Population aged 5 to 11	950	8%	+20%	2015
	Population aged 12 to 17	883	7%	+35%	2015
	Population aged 18 to 24	1,008	8%	-28%	2015
	Birth rate (per 1,000 pop'n)	145	12.0	-2%	2013
Infant Health	Under 25s from a minority ethnic group	449	12%	-29%	2011
	Infants who sleep in the supine position	104	95%	+2%	2015
	Babies exposed to passive smoking	N/A	18%	+19%	2014/15
Culture and Environment	Babies with birth weight below 2500g	13	4%	+46%	2012 - 2015
	Children who walk to primary school	N/A	56%	+5%	2008 - 2015
	Under 16s living within 400m of green space	1,229	56%	-30%	2014
Crime and Safety	P1 children who are obese or severely obese	N/A	4%	-34%	2012/13 - 2014/15
	Hospitalisations for dental treatment (per 1,000 pop'n under 16)	37	16.8	+26%	2014
	Referrals to Scottish Children's Reporter Administration	26	1%	-34%	2015/16
Social-Economic	Offenders (per 1,000 pop'n aged 8 to 18)	28	18.0	-40%	2015/16
	Victims of crime (per 1,000 pop'n aged 8 to 18)	25	16.0	-24%	2015/16
	Emergency hospitalisations due to assault (per 1,000 pop'n under 25)	N/A	1.2	-9%	2010/11 - 2014/15
Learning and Education	Emergency hospitalisations for unintentional injuries (per 1,000 pop'n under 15)	N/A	10.2	+1%	2010/11 - 2014/15
	Children in poverty	630	23%	-21%	2013
	Low parent households	463	29%	-28%	2011
Health and Wellbeing	Overcrowded households with children	253	11%	-37%	2011
	Children with communication delay at 27 to 30 months	45	18%	-26%	2014
	54 pupils achieving 5 or more qualifications at SCQF Level 5	68	39%	+14%	2012 - 2013
Health and Wellbeing	Secondary school attendance	N/A	93%	+1%	2013/14
	School leavers with a positive destination	140	91%	+1%	2013
	16 to 19 year olds not in employment, education or training	120	17%	-38%	2012
Health and Wellbeing	Pre-school children with likely development difficulties	N/A	7%	-3%	2012 - 2014
	Referrals to Children and Adolescent Mental Health Services	53	2%	-24%	2015/16
	Male healthy life expectancy (years)	N/A	59.4	+6%	2011
Health and Wellbeing	Female healthy life expectancy (years)	N/A	60.8	+4%	2011
	Under 25s whose day-to-day activities are limited by disability	218	6%	-2%	2011

## Neighbourhood Trends



The number of 18-24 year olds in Pollok has decreased by 11% since 2011, while the number of 0-4 year olds has increased by 2%. Healthy life expectancy for males is approximately 3 years higher than Glasgow as a whole and 2 years higher for females.



Pupil attainment in Pollok is higher than in Glasgow overall, while child poverty and P1 obesity levels are lower than the Glasgow average. Although fewer children than average live in proximity to green space, primary school children are slightly more likely to walk to school when compared to the Glasgow average. Secondary school attendance is higher than the Glasgow average, while referrals to children and adolescent mental health services are slightly lower.

### Notes

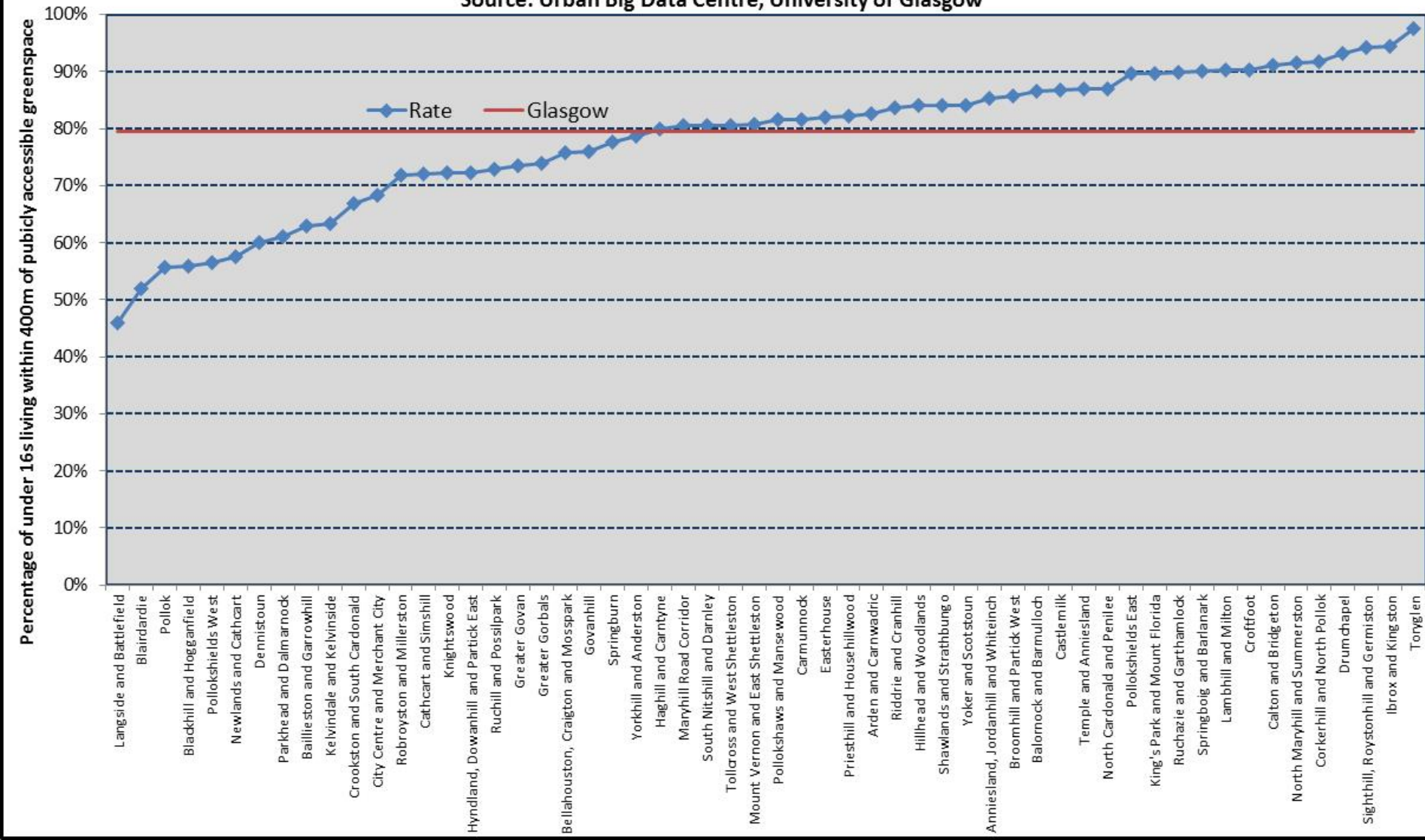
1. Data sources: Census 2011, GCPH, Glasgow City Council, HMRC - Child Poverty Unit, ISD Scotland, National Records of Scotland (NRS), Transport Scotland, Sustrans, Police Scotland, the Scottish Government and the Urban Big Data Centre, Glasgow University.
2. Indicators are aggregated using latest available data (2001 or 2011); neighbourhood boundaries based on 2001 data zones.
3. All count figures of less than 5 (denoted as 'c 5') have been suppressed to avoid any potential identification.
4. Populations presented in the population trend chart, also used to calculate healthy life expectancy estimates, use NRS small area population estimates for the years 2011 - 2015.
5. 'Healthy life expectancy' is an estimate of the average number of years people are likely to spend in good health. It is shorter than 'life expectancy' because it excludes years likely to be spent in fair or poor health. It is calculated using population estimates, death registrations and self-assessed health from the 2011 Census.
6. Denotes children referred to the Scottish Children's Reporter Administration for an offence or non-offence related reason.
7. A notes and definitions document providing further information on the indicators presented in the profile can be found in the Profiles section of [www.understandingglasgow.com/profiles](http://www.understandingglasgow.com/profiles).



# Children living in proximity to greenspace

Percentage of under 16s living within 400m of publicly accessible greenspace, Glasgow  
Neighbourhoods, 2014

Source: Urban Big Data Centre, University of Glasgow

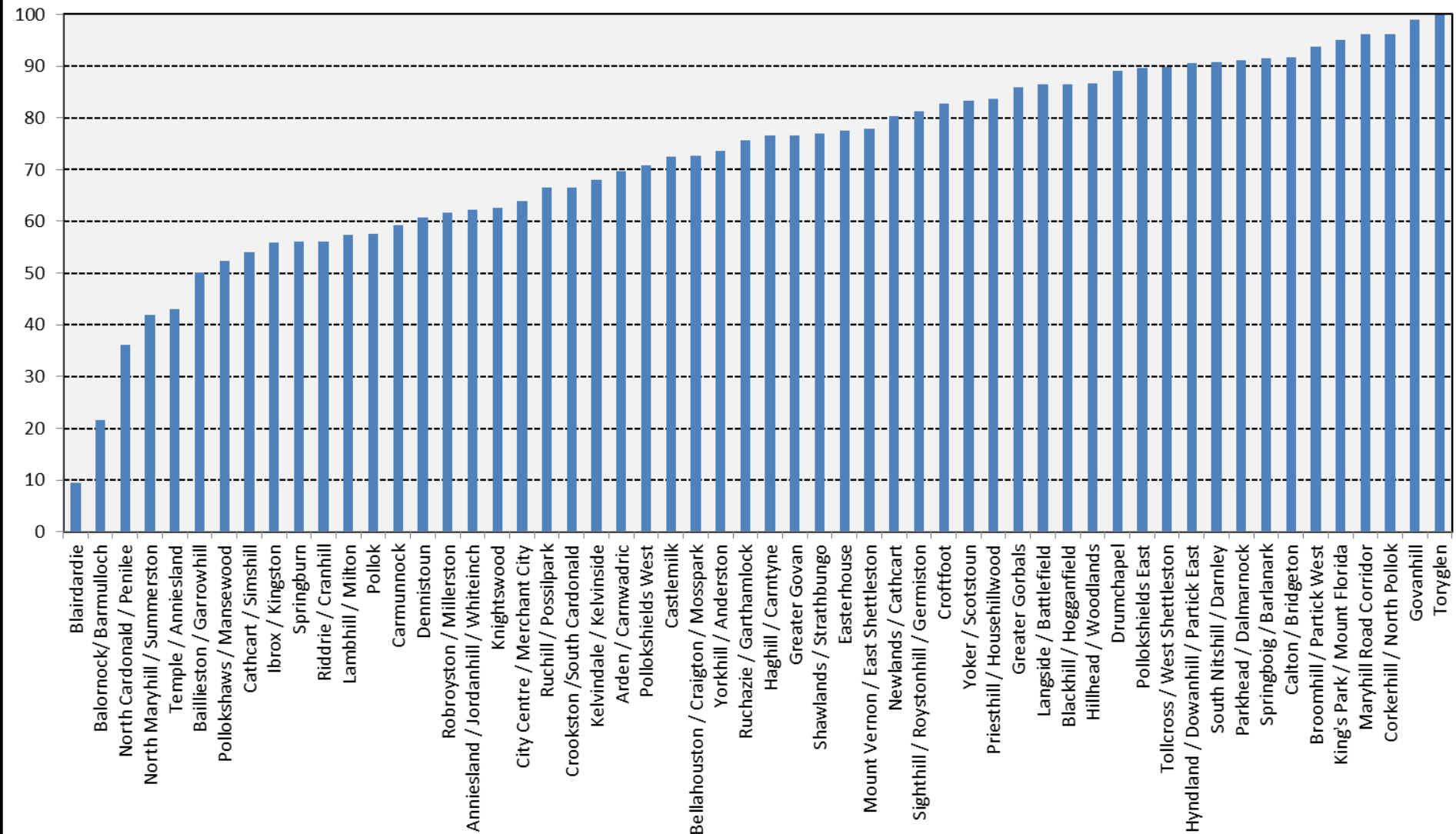




# Children's access to high quality greenspace

## % of children in Glasgow living within 400m of Grade A or B park or play space by Glasgow neighbourhood

Source: data provided by Glasgow City Council, modelled by UBDC, University of Glasgow

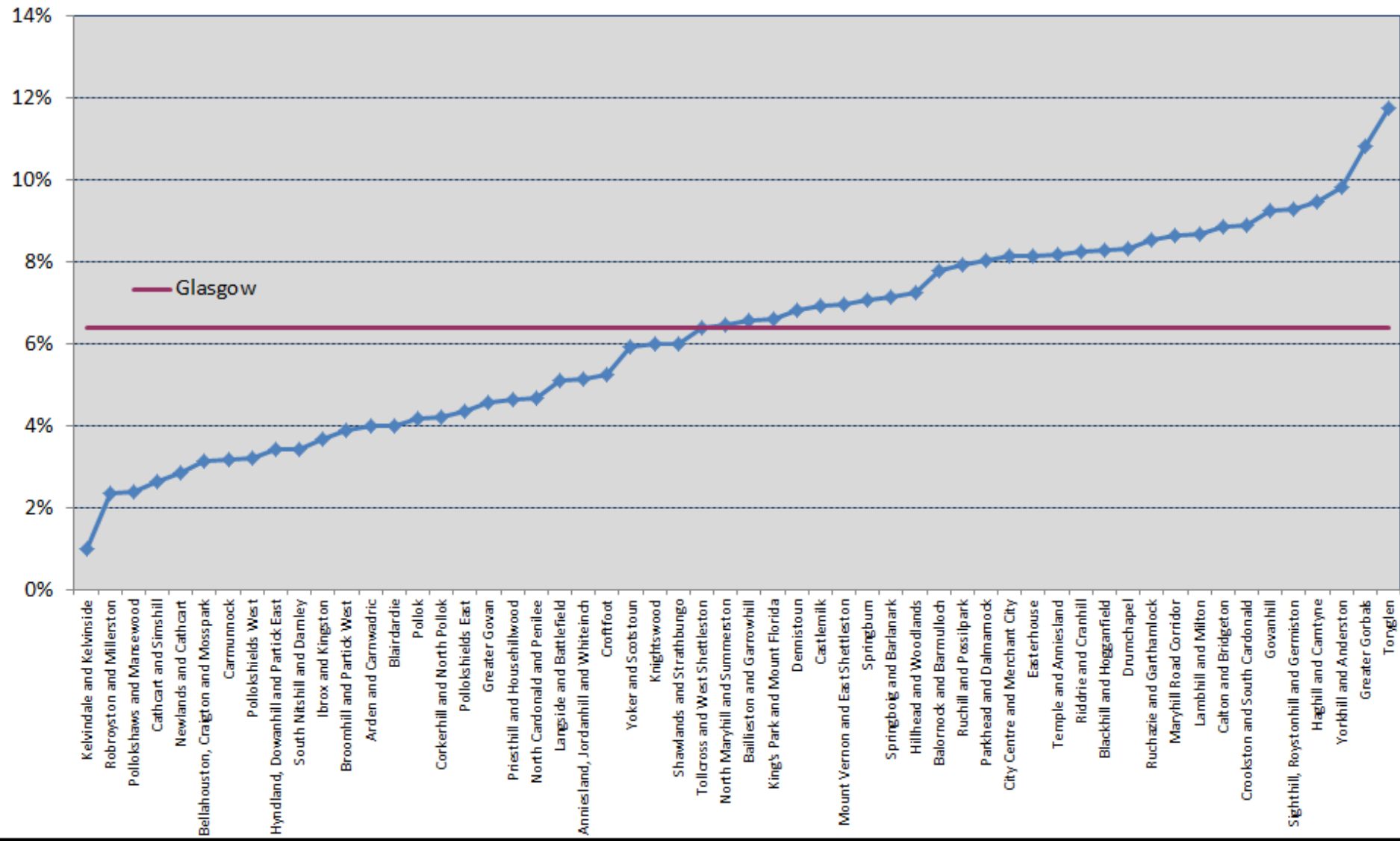




# Childhood obesity

Percentage of Primary 1 children classed as obese, Glasgow Neighbourhoods, 2014/15

Source: Child Health Systems Programme

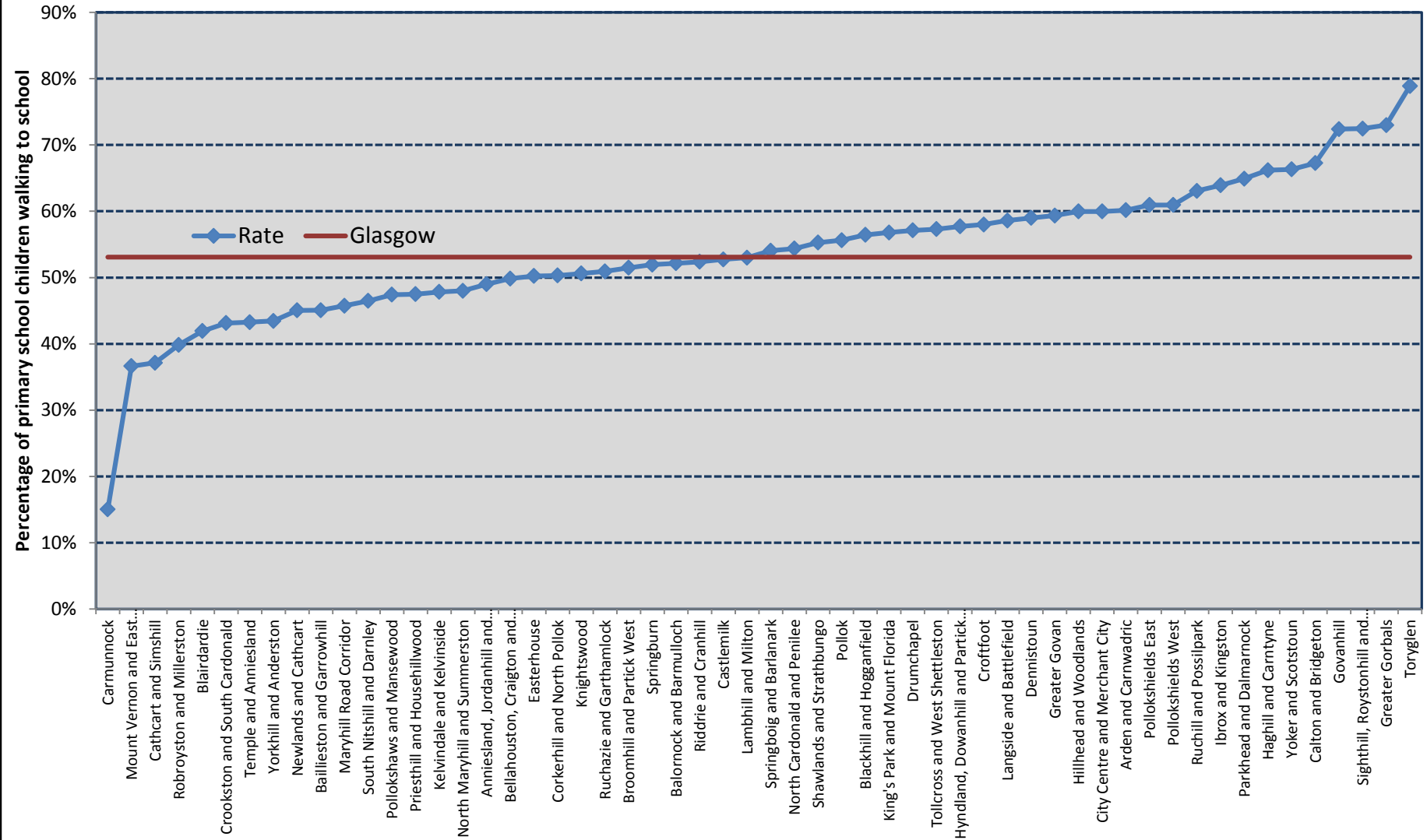




# Primary children walking to school

Percentage of primary school children walking to school, Glasgow Neighbourhoods, 2008-2015

Source: Hands Up, Sustrans Scotland





# Is policy changing?

- The Scottish Government recognises the role of [outdoor learning in delivering the Curriculum for Excellence](#), emphasises the importance of outdoor play in their [Play Strategy](#) and sees good access to outdoor learning as a key component of the [Expansion of Early Learning and Childcare in Scotland](#).
- In her [GCPH seminar series lecture](#), Sue Palmer noted that opportunities for children to engage in active, creative, outdoor play have declined and argued that to reinstate play at the heart of early childhood we should consider introducing a Nordic-style kindergarten stage for 3-7 year-olds, with particular emphasis on outdoor play.
- Support for this work came from the Glasgow City Council's development plan team and the work they have been doing on an Open Space Strategy for the City ([under consultation currently](#)). This sets out how **open space** can contribute to health and wellbeing through recreation, exercise and sport and recognises the opportunities to create cycling and walking routes that support green corridors.
- [The Central Scotland Green Network](#) similarly emphasises the importance of green space for play and recreation, community growing and for active travel.
- There are also the challenges of physical inactivity and obesity, which affect our whole population, and often begin in childhood. [Unplug and Play - the Active Healthy Kids Scotland Report Card](#) highlights that (on average) Scottish kids spend far too long sitting in front of screens, have very low levels of physical activity, a poor diet and are increasingly at risk of being obese or overweight.



The access to greenspace indicator has helped inform thinking about new outdoor nursery provision in Glasgow.

In future, a Scotland-wide indicator of children's access to greenspace indicator could be of widespread utility, helping to influence debate and decisions around the sorts of healthy outdoor environments all our children should have access to.



# Thank you



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