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.
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.

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).
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

Vacant land is land which is unused for the purposes for which it is held and is viewed as an appropriate site for development. Vacant land is generally not in need of rehabilitation before new development can commence.

Derelict land (and buildings) is land which has been so damaged by development that it is incapable of development for beneficial use without rehabilitation.

Core paths are paths or routes, including waterways, to facilitate the exercise of public access.
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)
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
Accessible Greenspace: GCC
400m access polygon
Glasgow Buildings : OS
Buildings within 400m walk
Estimated numbers of U16’s - SAPE
Estimate of U16’s within 400m 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 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.
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 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.

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%).

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicator</th>
<th>Count</th>
<th>Rate</th>
<th>Difference from Glasgow</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demography</td>
<td>Population aged 0 to 4</td>
<td>669</td>
<td>6%</td>
<td>-3%</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Population aged 5 to 11</td>
<td>950</td>
<td>8%</td>
<td>-12%</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Population aged 12 to 17</td>
<td>883</td>
<td>7%</td>
<td>+15%</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Population aged 18 to 24</td>
<td>1,008</td>
<td>8%</td>
<td>-28%</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Birth rate (per 1,000 pop’n)</td>
<td>145</td>
<td>12.0</td>
<td>-7%</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Under 25s from a minority ethnic group</td>
<td>449</td>
<td>12.0</td>
<td>-29%</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Birth weight below 2500g</td>
<td>13</td>
<td>4%</td>
<td>+60%</td>
<td>2013-2015</td>
</tr>
<tr>
<td></td>
<td>Children who walk to primary school</td>
<td>N/A</td>
<td>56%</td>
<td>+5%</td>
<td>2008-2013</td>
</tr>
<tr>
<td></td>
<td>Under 18 living within 400m of green space</td>
<td>1,229</td>
<td>56%</td>
<td>-30%</td>
<td>2014</td>
</tr>
<tr>
<td></td>
<td>P1 children who are obese or severely obese</td>
<td>N/A</td>
<td>4%</td>
<td>-24%</td>
<td>2012/13-2014/15</td>
</tr>
<tr>
<td></td>
<td>Hospitalisations for dental treatment (per 1,000 pop’n under 16)</td>
<td>37</td>
<td>16.8</td>
<td>+26%</td>
<td>2014</td>
</tr>
<tr>
<td></td>
<td>Referrals to Scottish Children’s Reporter Administration</td>
<td>28</td>
<td>1.7%</td>
<td>-4%</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Offenders (per 1,000 pop’n aged 8 to 18)</td>
<td>28</td>
<td>1.8%</td>
<td>-40%</td>
<td>2015</td>
</tr>
<tr>
<td></td>
<td>Victims of crime (per 1,000 pop’n aged 8 to 18)</td>
<td>25</td>
<td>16.0</td>
<td>-24%</td>
<td>2015</td>
</tr>
<tr>
<td></td>
<td>Emergency hospitalisations due to assault (per 1,000 pop’n under 15)</td>
<td>N/A</td>
<td>1.2</td>
<td>-9%</td>
<td>2015</td>
</tr>
<tr>
<td></td>
<td>Emergency hospitalisations for unintentional injuries (per 1,000 pop’n</td>
<td>N/A</td>
<td>10.2</td>
<td>+1%</td>
<td>2015</td>
</tr>
</tbody>
</table>

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

2. Indicators are aggregated using latest available data sources (2001 or 2011); neighbourhood boundaries based on 2001 data sources.
3. All count figures of less than 5 (denoted as ‘<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.
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
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

Email: Bruce.whyte@glasgow.ac.uk
Understanding Glasgow - www.understandingglasgow.com
• GCPH – www.gcph.co.uk