

Travel to school in Glasgow: a descriptive analysis of results from the Hands Up Survey

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Key points

- All Glasgow state primary and secondary schools were invited to participate in the 2015 Hands Up Survey exploring children's methods of travelling to school. No independent schools participated in the 2015 survey.
- Responses were obtained from 54% of Glasgow state primary school pupils and 28% of state secondary school pupils. Of all Glasgow pupils responding:
 - 49.5% walk to school (Scottish figure 43.7%)
 - o 28% are driven to school (Scottish figure 22.1%)
 - o 9.6% travel by bus (Scottish figure 17.8%)
 - o 2.9% cycle to school (Scottish figure 3.5%)
- Levels of active travel (walk, cycle, scooter/skating/skate-boarding) Glasgow are 55% compared with 65.6% in Edinburgh 56.7% in Aberdeen and 52.6% in Dundee. In Glasgow, 28% of pupils are driven to school compared with 21.1% in Aberdeen, 24.5% in Dundee and 13.8% in Edinburgh.
- Levels of walking are similar in Glasgow primary and secondary schools, but percentages of pupils cycling or using scooters/skates fall between primary and secondary school.
- Since 2008 there has been little change in Glasgow in the proportion of children travelling to school actively (walking/cycling/scooting/skating) and those travelling by car or bus.
- Five Glasgow primary schools reported more than 80% of pupils travelling to school actively, and nine had less than 40%. Only one secondary school of those responding reported levels of pupils walking/cycling/scooting/skating to school of greater than 80%.
- Levels of cycling compared with other modes of travel are low, as elsewhere in Scotland. Similar proportions of pupils cycle in Glasgow, Aberdeen and Dundee but levels for primary and secondary schools combined in Edinburgh (5%) are higher than Glasgow (2.9%).
- There has been an increase in Glasgow primary pupils cycling between 2008 and 2015 from 2% to 4%. Provision of pre-school cycling opportunities for all Glasgow children, and development in infrastructure such as provision of bike shelters may have contributed to this growth.
- Twenty primary schools in Glasgow reported levels of cycling above 5%, with one primary school reporting that one-in-six pupils travel to school by bike.
- However, only three of the 15 secondary schools in Glasgow responding to the survey reported that more than four pupils cycled to school.

Figures above all refer to 2015, unless otherwise stated

1. Introduction

The Hands Up Scotland Survey is an annual survey based on a large sample of pupils enrolled at schools in Scotland. The survey, first conducted in 2008, is funded by Transport Scotland and is a joint project between Sustrans and Scottish local authorities. The survey asks, 'How do you normally travel to school?', with the following response options: walk, cycle, scooter/skate (includes skate-boarding), park and stride (driven part of the way by car and walk the rest), driven, bus, taxi and other. The survey is carried out during the second week of September each year.

The data collected are reported at a national and a local authority level on the <u>Sustrans website</u>, where a <u>national results summary</u> is also available. Data at an individual school level in each local authority are supplied to the relevant local authority. Where a percentage represents a value of between one and four pupils, the data is suppressed to maintain anonymity of respondents.

This analysis focuses upon the data gathered for state schools in Glasgow City, which were made available to the Glasgow Centre for Population Health (GCPH) by Glasgow City Council. The findings gathered, particularly related to cycling, are described here and compared with the national data.

2. Analysis and description

2.1 Number of pupils surveyed

In 2015, all Glasgow primary schools (n=139) and secondary schools (n=31) in the state sector were invited to participate in the survey. Jordanhill School which has a distinct status from all other Glasgow schools in that it is funded directly by the Scottish Government, was included with this number. Responses were received from 101 primary schools, comprising 21,477 pupils (53.6% of the Glasgow City school roll) and 15 secondary schools, comprising 7,254 pupils (28% of the Glasgow City school roll). Data were also gathered for seven nursery schools and six special educational needs schools. However the responses for these establishments numbered fewer than 400 pupils, and given this, and the likely variation in travel needs for these groups compared with the majority of pupils in primary and secondary schools, no detailed examination of this data was undertaken. No data were gathered from independent schools in Glasgow in 2015.

The survey is conducted annually at the same time of year, but the number of responses gathered each year varies, so caution is required in comparing temporal trends. The likely impact of different weather conditions should also be borne in mind when comparing data from different collection dates.

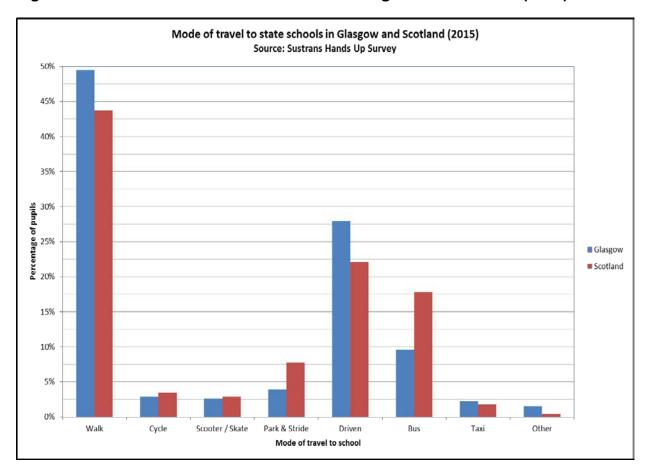
2.2 Results for 2015 for Glasgow compared with Scotland overall

Table 1 shows the percentage of pupils using different modes of travel in Glasgow compared with Scotland as a whole for 2015. It can be seen that the most common mode of travel to school in Glasgow, and across Scotland, was walking followed by being driven. In Glasgow, 49.5% of pupils indicated that they walk to school, a figure 5.8 percentage points higher than the figure for walking in Scotland overall. The percentage of pupils being driven to school in Glasgow (28%) is higher than the Scottish figure (22.1%), and the number travelling by bus is lower. Regarding cycling, 2.9% of pupils said that they cycled to school in Glasgow, compared with 3.5% of pupils overall in Scotland. The results for Glasgow and Scotland are shown in Figure 1. Table 1 and Figure 1 include both primary and secondary pupils.

Table 1. Travel mode – all state schools in Glasgow and Scotland (2015).

	Walk	Cycl e	Scoote r / skate	Park & strid e	Drive n	Bus	Taxi	Othe r
Glasgow	49.5 %	2.9%	2.6%	3.9%	28.0%	9.6%	2.2 %	1.5%
Scotland	43.7 %	3.5%	2.9%	7.8%	22.1%	17.8 %	1.8 %	0.4%
Difference between Glasgow and Scotland (percentage points)	+5.8	-0.6	-0.3	-3.9	+5.9	-7.2	+0.4	+1.1

Figure 1: Mode of travel to state schools in Glasgow and Scotland (2015).



2.3 Results for 2015 for Glasgow compared with other urban centres

To allow a more like-for-like comparison with other urban centres in Scotland, Table 2 shows the results for Glasgow alongside data for Aberdeen, Dundee and Edinburgh for 2015, based upon pupils attending state schools (excluding nursery schools).

Table 2. Travel mode – all state schools in urban centres in Scotland (2015).

	Walk	Cycle	Scooter	Total	Park	Driven	Bus	Taxi	Other
			/ skate	active	&				
				travel	stride				
Aberdeen	52.0%	2.8%	1.9%	56.7%	7.5%	21.1%	13.0%	1.6%	0.1%
Dundee	48.0%	2.4%	2.2%	52.6%	10.0%	24.5%	11.5%	1.3%	0.1%
Edinburgh	54.4%	5.0%	6.2%	65.6%	7.3%	13.8%	12.7%	0.4%	0.3%
Glasgow	49.5%	2.9%	2.6%	55%	3.9%	28.0%	9.6%	2.2%	1.5%

NB: excluding nurseries.

It can be seen that in terms of active travel as a whole (either walking, cycling, scooting skating), Glasgow (55%) is broadly comparable with Aberdeen (56.7%) and Dundee (52.5%). However all these cities fall behind Edinburgh (65.6%). While levels of pupils cycling to school are very low in all cities, in Edinburgh they are 2.1 percentage points higher than Glasgow. Glasgow has the highest percentage of pupils being driven to school (28%), with levels more than double that of Edinburgh (13.8%). Travelling by bus to school in Glasgow is at lower level than in all the other cities.

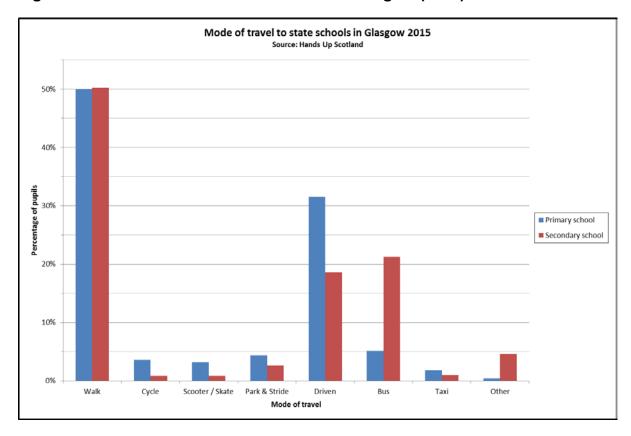
2.4 Results for 2015 for Glasgow state primary schools compared with secondary schools

Comparing travel to secondary schools in Glasgow with travel to primary schools (Table 3 and Figure 2), it can be seen that levels of walking are very similar. However, cycling and scooter/skate travel falls from primary to secondary. The percentage of pupils travelling by bus increases more than three-fold from primary to secondary school, and the percentage of pupils being driven decreases by over a third.

Table 3. Travel mode – Comparison of state primary versus state secondary schools in Glasgow (2015).

School type	Walk	Cycle	Scooter/ skate	Park & stride	Driven	Bus	Taxi	Other
Primary	50.0%	3.6%	3.2%	4.3%	31.5%	5.1%	1.8%	0.4%
school								
Secondary	50.2%	0.9%	0.9%	2.6%	18.5%	21.3%	1.0%	4.6%
school								

Figure 2: Mode of travel to state schools in Glasgow (2015).



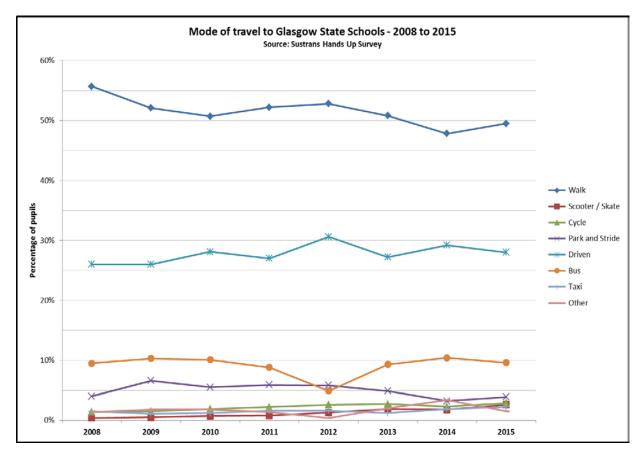
2.5 Temporal trends - Glasgow

Table 4 presents the percentage of all pupils using each mode of travel from 2008 to 2015, allowing temporal trends to be studied, and the results are illustrated in Figure 3. There appears to be a decrease over time in the percentage of pupils walking and a slight increase in the percentage being driven, but overall there is very little change in the proportions of active versus motorised travel. Proportions for cycling, taxi, other, park and stride, and scooter/skating are small so it is hard to detect clear trends, but since 2008 there has been a steady growth in scooter/skate use, a small increase in taxi usage, and fluctuating levels of park and stride and uses of other modes of transport. The data for cycling is considered separately in Table 5 and Figure 4.

Table 4. Travel mode – all state schools in Glasgow (2008 to 2015).

Year	Walk	Cycl	Scoote	Total	Park	Drive	Bus	Taxi	Other
		е	r	active	&	n			
			/skate	travel	strid				
					е				
2008	55.7	1.4	0.4%	57.5%	4.0%	26.0	9.5%	1.5%	1.4%
	%	%				%			
2009	52.1	1.5	0.5%	54.1%	6.6%	26.0	10.3	1.1%	1.8%
	%	%				%	%		
2010	50.7	1.9	0.7%	53.3%	5.5%	28.1	10.1	1.2%	1.8%
	%	%				%	%		
2011	52.2	2.2	0.8%	55.2%	5.9%	27.0	8.8%	1.6%	1.4%
	%	%				%			
2012	52.8	2.6	1.3%	56.7%	5.8%	30.6	4.9%	1.6%	0.4%
	%	%				%			
2013	50.8	2.7	1.9%	55.4%	4.9%	27.2	9.3%	1.2%	2.0%
	%	%				%			
2014	47.8	2.3	1.8%	51.9%	3.2%	29.2	10.4	1.9%	3.4%
	%	%				%	%		
2015	49.5	2.9	2.6%	55.0%	3.9%	28.0	9.6%	2.2%	1.5%
	%	%				%			

Figure 3: Mode of travel to Glasgow state schools (2008 to 2015).



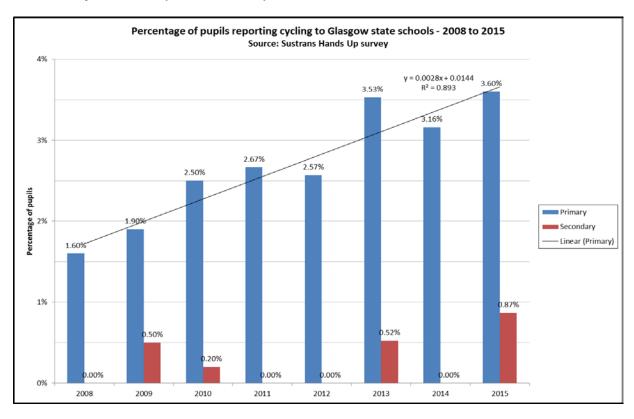
While the percentage of pupils cycling to school is small (between 0 and 4%), there has been an increase in the percentage of primary school pupils in Glasgow cycling to school between 2008 and 2015 of approximately 2 percentage points (Table 5). Fitting a linear trend line to this data (y = 0.0028x + 0.0144, $R^2 = 0.893$) suggests that cycling among primary school pupils in Glasgow is growing at a rate of approximately 0.28 percentage points each year (Figure 4).

Numbers of pupils cycling to secondary school are much smaller than for primary schools, and indeed in some years, too small for any data to be recorded. As such, no trends can be determined.

Table 5. Percentage of pupils cycling to Glasgow state primary and secondary schools (2008 to 2015).

Year	Primary school	Secondary school
2008	1.60%	0.00%
2009	1.90%	0.50%
2010	2.50%	0.20%
2011	2.67%	0.00%
2012	2.57%	0.00%
2013	3.53%	0.52%
2014	3.16%	0.00%
2015	3.60%	0.87%

Figure 4: Percentage of pupils cycling to Glasgow state primary and secondary schools (2008 to 2015).



2.6 Active travel in primary schools

Five primary schools had more than 80% of pupils travelling to school by walking, cycling or skating/scooter in 2015. These schools are listed in Table 6, with the percentages displayed comprising the total proportion of pupils using an active travel mode to get to school. Data are provided for previous years to enable comparisons to be made. However the incompleteness of the data for most of the schools precludes detailed study of trends. The variation in results for Jordanhill School between 2009 and later years is very large, and without obvious explanation. The sample size surveyed at the school in 2009 was around one third of that in 2015, which may account for some of the difference.

Table 6. Primary schools with highest levels of active travel in 2015.

School (area)	2008	2009	2010	2011	2012	2013	2014	2015
Jordanhill (Anniesland, Jordanhill and Whiteinch)	*	4.5%	75.7%	69.4%	*	*	*	90.7%
St Brigid's Primary School (Toryglen)	76.1%	79.8%	78.0%	*	*	*	*	90.0%
Toryglen Primary School (Toryglen)	87.2%	84.8%	75.7%	*	79.5%	*	*	88.0%
Royston Primary School (Sighthill, Roystonhill & Germiston)	72.6%	*	79.2%	*	*	86.5%	*	80.3%
St George's Primary School (North Cardonald and Penilee)	66.5%	67.1%	66.1%	*	63.4%	80.8%	72.5%	80.2%

^{(*} indicates no data reported)

Of the schools reporting data for 2015, there were nine which had less than 40% of pupils using an active mode of travel. These are listed in Table 7. Again, due to incomplete data it is difficult to detect trends in the data.

Table 7. Primary schools with lowest levels of active travel in 2015.

School (area)	2008	2009	2010	2011	2012	2013	2014	2015
St Mirin's Primary School	38.2%	31.1%	48.0%	*	*	34.8%	51.7%	23.3%
(Cathcart & Simshill)								
Carmunnock Primary School	14.8%	19.2%	9.7%	*	21.8%	*	15.9%	26.7%
(Carmunnock)								
St Benedict's Primary School	55.1%	48.8%	51.2%	0.0%	44.0%	45.4%	0.0%	33.3%
(Easterhouse)								
Our Lady Of The Rosary	46.3%	*	*	*	*	*	*	35.1%
Primary School & Nursery Class								
(Crookston & South Cardonald)								
St Martha's Primary School	54.7%	*	48.9%	*	48.3%	50.0%	43.2%	35.6%
(Springburn)								
St Clare's Primary School	*	*	49.4%	48.4%	57.5%	33.3%	*	36.1%
(Drumchapel)								
Carmyle Primary School &	46.1%	*	47.5%	*	*	50.4%	*	36.9%
Nursery Class (Mount Vernon &								
East Shettleston)								
Broomhill Primary School	53.7%	54.7%	54.2%	*	*	50.8%	*	39.7%
(Broomhill & Partick West)								
St Ninian's Primary School	*	41.5%	48.5%	*	41.7%	45.3%	31.2%	39.8%
(Temple & Anniesland)								

^{(*} indicates no data reported)

Carmunnock Primary school had the highest number of pupils being driven to school in 2015, at 60.7% and this was followed by St Mirin's at 49.3%. These are the two schools with the lowest levels of active travel in 2015 and both schools have reported consistently low levels of active travel to school since 2008.

2.6.1 Cycling in primary schools

Interpretation of the cycle data for Glasgow state schools is made difficult by the small numbers of pupils who report cycling, and also by the incomplete data. A breakdown of the available data in 2015 is given in Table 8.

Table 8. Primary school cycling data in 2015.

2015 data	Number of schools
No data reported	36
Reporting zero pupils cycling	14
Reporting between 1 and 4 pupils cycling	34
Reporting between 1 % and 5% of pupils of cycling	33
Reporting >5% of pupils cycling	20

The 20 primary schools listed in Table 9 all reported levels of cycling above 5% in 2015. The average percentage of primary school children in Glasgow cycling to school in 2015 was 2.9% (the average for Scotland was 3.5%). The school with the highest percentage of pupils cycling (St George's Primary) had approximately one-in-six pupils travelling by bike.

Table 9. State primary schools in Glasgow with the highest levels of cycle travel.

School (area)	% cycling
St George's Primary School (North Cardonald & Penilee)	16.3
Battlefield Primary School (Langside & Battlefield)	10.0
Knightswood Primary School (Temple & Anniesland)	9.7
St Bridget's Primary School & Nursery Class (Baillieston & Gallowhill)	8.5
Carmyle Primary School & Nursery Class (Mount Vernon & East Shettleston)	8.4
Garscadden Primary School (Knightswood)	7.8
St Ninian's Primary School (Temple & Anniesland)	7.7
St Maria Goretti Primary School (Riddrie & Cranhill)	7.7
St Paul's (Whiteinch) Primary School (Anniesland, Jordanhill & Whiteinch)	7.6
St Fillan's Primary School & Nursery Class (Cathcart & Simshill)	6.5
Merrylee Primary School (Newlands & Cathcart)	6.4
St Philomena's Primary School (Blackhill and Hogganfield)	6.1
Mosspark Primary School & Nursery Class (Bellahouston, Craigton and Mosspark)	5.9
Hillhead Primary School (Hillhead & Woodlands)	5.6
Broomhill Primary School (Broomhill & Partick West)	5.4
St Vincent's Primary School (Arden & Carnwadric)	5.3
St Martha's Primary School (Springburn)	5.3
Sandwood Primary School (North Cardonald & Penilee)	5.2
Bankhead Primary School (Knightswood)	5.2
St Mirin's Primary School (Cathcart & Simshill)	5.1

There are very few schools for which a complete dataset for cycling from 2008 to 2015 is available, preventing detailed examination of trends.

Examining the data for the last eight years for the school with currently the highest proportion of pupils cycling (St George's Primary), it can be seen that the levels of cycling have increased from between one and four pupils (denoted by 'data suppressed') to around 10% or greater in each of the last three years (Table 10). Levels of scooter/skate use have also risen over this time. However, the percentage walking has fallen, and the percentage being driven has fallen only slightly, suggesting that some of the increase in cycling and scooter/skating is as a result of shifting among active travel modes, rather than a move away from motorised travel. Data from Knightswood Primary School (Table 11), which also had high levels of cycling in 2015, again suggests that part of the increase in cycling may be due to a decrease in walking rather than a move away from motorised transport.

Very limited data on cycling infrastructure and support for active travel within and around primary schools was already held by the GCPH, and time constraints did not allow detailed data to be gathered. This precludes much discussion and explanation of these results. However, a list of primary schools with cycle/scooter shelters installed and the dates of the installations had been previously supplied to the GCPH by Glasgow City Council. From this it was possible to establish that St George's Primary School had a cycle/scooter shelter installed in February 2013, and so provide one example of what might influence the observed data. The corresponding rise in cycling and scootering/skating to school at this time, suggests that this may have made a contribution to the increase. It could also be that the erection of the shelter was accompanied by cycle promotion or other local initiatives which contributed to the change. A similar effect was seen in St Vincent's Primary School after the installation of a shelter in 2013, with cycling levels rising from fewer than four pupils cycling to school in the years preceding 2013 to 6.3% in 2014 and 5.3% in 2015.

Table 10. Travel modes for St George's Primary School, 2008 to 2015.

	Walk	Cycle	Scooter / skate	Park & stride	Drive n	Bus	Taxi	Other
200	66.5	Data	0.0%	Data	31.4%	Data	Data	0.0%
8	%	supresse		supresse		supresse	supresse	
		d		d		d	d	
200	67.1	Data	Data	Data	28.5%	Data	Data	0.0%
9	%	supresse	supresse	supresse		supresse	supresse	
		d	d	d		d	d	
201	66.1	Data	Data	Data	27.6%	0.0%	Data	Data
0	%	supresse	supresse	supresse			supresse	supresse
		d	d	d			d	d
201	*	*	*	*	*	*	*	*
1								
201	63.4	Data	Data	0.0%	30.6%	Data	0.0%	0.0%
2	%	supresse	supresse			supresse		
		d	d			d		
201	65.2	11.1%	4.5%	0.0%	17.7%	Data	Data	0.0%
3	%					supresse	supresse	
						d	d	
201	56.0	9.8%	6.7%	0.0%	25.4%	0.0%	Data	Data
4	%						supresse	supresse
							d	d
201	53.5	16.3%	10.4%	0.0%	18.8%	0.0%	Data	Data
5	%						supresse	supresse
							d	d

^{(*} indicates no data reported)

Table 11. Travel modes for Knightswood Primary School, 2008 to 2015.

	Walk	Cycle	Scooter / skate	Park & stride	Driven	Bus	Taxi	Other
							Data	Data
2008	50.4%	4.2%	1.7%	7.5%	29.4%	6.0%	suppressed	suppressed
							Data	Data
2009	49.4%	3.9%	2.2%	9.0%	31.4%	3.6%	suppressed	suppressed
							Data	Data
2010	46.3%	5.7%	3.2%	4.6%	32.0%	4.6%	suppressed	suppressed
		Data		Data		Data		Data
2011	56.0%	suppressed	0.0%	suppressed	28.6%	suppressed	0.0%	suppressed
		Data	Data	Data		Data	Data	Data
2012	48.8%	suppressed	suppressed	suppressed	24.4%	suppressed	suppressed	suppressed
2013	45.7%	7.7%	9.5%	0.0%	31.8%	3.3%	0.0%	2.0%
							Data	Data
2014	42.2%	7.0%	9.6%	5.6%	29.5%	4.4%	suppressed	suppressed
							Data	Data
2015	38.0%	9.7%	9.7%	4.5%	31.7%	3.4%	suppressed	suppressed

2.7 Active travel in secondary schools

A smaller amount of data is available for secondary school pupils than for primary schools, and there are more gaps in the datasets from individual schools across the period 2008-2015. There were seven secondary schools among those reporting data in 2015, with more than half of their pupils travelling to school by bike, on foot or by scooter/skating. These are shown in Table 12 with data for these schools for the previous years also shown.

Table 12. Secondary schools with the highest levels of active travel in 2015.

School (area)	2008	2009	2010	2011	2012	2013	2014	2015
Jordanhill School (Anniesland, Jordanhill and Whiteinch)	*	*	*	*	*	*	*	95.1 %
Whitehill Secondary School (Dennistoun)	*	76.2 %	84.2%	*	*	72.2 %	*	69.0 %
St Paul's High School (Crookston & South Cardonald)	*	53.5 %	*	61.6%	*	67.5 %	61.0 %	62.7 %
Hyndland Secondary School (Hyndland, Dowanhill & Partick East)	*	61.8 %	64.9%	*	*	62.0 %	*	60.7 %
Hillhead High School (Hillhead & Woodlands)	*	57.9 %	*	67.9%	*	*	*	59.5 %
Eastbank Academy (Tollcross & West Shettleston)	*	51.1 %	*	*	*	56.8 %	*	51.4 %
St Margaret Mary's Secondary School (Castlemilk)	*	47.5 %	45.4%	*	*	*	*	50.7 %

^{(*} indicates no data reported)

Two schools had particularly low levels of active travel reported. These are shown in Table 13.

Table 13. Secondary schools with the lowest levels of active travel in 2015.

School (area)	2008	2009	2010	2011	2012	2013	2014	2015
Glasgow Gaelic School	*	*	*	*	*	*	*	14.6%
(Yorkhill & Anderston)								
Notre Dame High School	2.6%	*	20.1%	20.6%	*	20.4%	12.9%	14.9%
(Hyndland, Dowanhill &								
Partick East)								

^{(*} indicates no data reported)

Only one year of data is available for the Glasgow Gaelic School (2015), but for Notre Dame (Table 14), it can be seen that the lower levels of active travel are accompanied by higher levels of pupils being driven to school, going by bus and using other means of transport (potentially train or underground given the location of this school). As a Gaelic medium education unit, Glasgow Gaelic school draws pupils from all over the city and from neighbouring local authorities, and Notre Dame, as an all-girls catholic school, is also likely to draw pupils from a wide catchment area. The longer distances being travelled by pupils to get to these schools may go some way to explaining the low active travel figures.

Table 14. Travel models for Notre Dame High School, 2008 to 2015.

Year	Walk	Cycle	Scooter / skate	Park & stride	Driven	Bus	Taxi	Other
2008	2.6%	0.0%	0.0%	9.2%	30.2%	32.5%	1.0%	24.5%
2009	*	*	*	*	*	*	*	*
2010	20.1%	0.0%	0.0%	15.4%	31.1%	33.3%	0.0%	0.0%
2011	20.6%	Data suppressed	0.0%	14.3%	30.3%	22.1%	Data suppressed	12.3%
2012	*	*	*	*	*	*	*	*
2013	19.2%	0.0%	1.2%	14.9%	29.4%	34.7%	Data suppressed	Data suppressed
2014	12.9%	Data suppressed	Data suppressed	4.1%	31.3%	29.2%	1.1%	21.3%
2015	14.9%	0.0%	Data suppressed	10.0%	34.6%	24.2%	Data suppressed	16.0%

(* indicates no data reported)

2.7.1 Cycling in secondary schools

Only three secondary schools of the 15 responding in 2015 reported levels of cycling greater than 1-4 pupils. The highest percentage of pupils cycling was at Glasgow Gaelic School at 6.6%, the second at Hillhead High School at 3.7% and Holyrood Secondary School reported 0.6%. Five of the schools who collected data in 2015, reported 0% of pupils cycling, and seven schools reported between one and four pupils cycling. The West City Way (previously known as the Connect2) cycle route runs outside the Glasgow Gaelic School, and a cycle shelter was installed there in the last couple of years. These developments may have contributed to the higher levels of cycling to this school.

3. Summary

Around half of Glasgow primary school pupils and one third of secondary school pupils took part in the Hands Up Survey. The survey shows that Glasgow has a greater percentage of pupils walking to school than the overall figure for Scotland, but also a higher percentage of pupils being driven and a smaller percentage travelling by bus than Scotland as a whole. Levels of walking are similar in primary and secondary schools, but other forms of active travel (cycling and use of scooters/skating) decline between primary and secondary school. Since 2008, there has been little change in the percentage of active versus motorised travel to school in Glasgow overall. However there are large differences in levels of active travel among schools, with some primary schools reporting more than 80% of pupils using active travel and others with less than 40%. There are likely to be a multitude of issues influencing these differences such as geographical spread of the school catchment area, transport and road infrastructure in the area and availability of supporting measures such as installation of bike shelters and bikeability training. Further investigation would be needed to tease out the features which are affecting travel modes in local situations. Numbers of pupils cycling are very small but there does appear to be an increasing number of primary pupils cycling and also using skates/skateboards/scooters. This increase appears to have resulted in a redistribution of numbers among active travel modes however, as growth has come from a reduced number of walkers, rather than from reduced numbers of children using motorised transport. A multi-agency project, Play on Pedals¹, designed to give every preschool child in Glasgow the opportunity to learn to ride a bike before starting school, was introduced in Glasgow in early 2014 and may be contributing to the growth in numbers of primary school pupils cycling to school. It would be interesting to work with schools with high levels of active travel, to understand what has contributed to their success. Some factors of success may be specific to a particular school, but there are likely to be other aspects which could be transferrable to other schools.

Research indicates that action is needed on a number of fronts simultaneously to promote increased levels of cycling². For schools, this may take the form of the provision of cycle training such as the Bikeability scheme, secure cycling parking, creation and awareness raising of safe routes of travel, promotion of active travel in the school curriculum, and ensuring access to bikes. A report³ produced in 2016 for the Scottish Government provides evidence on school transport choices and which approaches have been effective in influencing these, in order to inform the development of workable and deliverable policies that minimise the proportion of journeys to school made by car while increasing the proportion choosing active travel. This work comprised a literature review, secondary data analysis, qualitative studies with staff, pupils, and parents, and discussions with local stakeholders. This work again highlights that a suite of interventions is needed to effect change.

Glasgow's Strategic Plan for cycling 2016-2025⁴ makes a number of commitments to encouraging cycling among schoolchildren with a view to increasing levels of children cycling to 7% by 2025. These include increasing Bikeability Level 2 participation to 100% of primary schools by 2025, 100% of city schools to have cycle parking by 2025, and support for schools to train ride leaders/coaches working within the school.

The Scottish Government's Cycling Action Plan for Scotland⁵ also contains a number of measures designed to promote cycling to school, including support to install improved cycle facilities within schools, opportunities for secondary school pupils to train to become 'cycle champions' within their school and development of schemes to provide access to bikes in areas of low cycle use or deprivation. The plan also promotes projects to encourage primary school pupils to continue cycling when transferring to secondary education, a time when as seen with the Glasgow data, the proportions of pupils cycling falls.

Given that increases in cycling may be coming from children changing from walking to school rather than from those being driven, particular efforts in future could target those parents of children who currently drive their child to school but who live within cycling or walking distance of the school.

This reports forms part of a series of reports detailing descriptive analyses of data relating to cycling in Glasgow. These reports provide a picture of aspects of current cycling activity within the city. The other three reports cover <u>cycle journeys on the Anderston-Argyle Street Bridge</u>, <u>cycle journeys on the South West City Way</u>, and <u>analysis of Glasgow's public bike hire scheme</u>.

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