

City of Edinburgh Council

Before and After Research into the implementation of 20mph speed limits in South Edinburgh

Final Research Report September 2013

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City of Edinburgh Council

20mph Survey Research Report 2013

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EXECUTIVE SUMMARY

Introduction and Background

This report summarises the key findings from the City of Edinburgh Council's survey of public attitudes to a 20mph speed limit in south central Edinburgh.

The study involved a two stage survey. The initial baseline study ('before' survey) was carried out during December 2011 and January 2012, prior to the implementation of the 20mph speed limit to present a baseline of residents' attitudes and behaviours in relation to walking, cycling and children's safety in the area in addition to their perception of, and support for, the introduction of the proposed 20mph speed limit. The 20mph limit was implemented shortly after completion of this initial survey. The results of this survey are available as a separate report. A further report is available on the effects on recorded speeds.

The 'after' survey was carried out during February and March 2013, approximately one year after the implementation of the 20mph limit. The survey asked the same questions of residents' attitudes and behaviours in relation to walking, cycling and children's safety in addition to their perception of the impact of the 20mph speed limit. This report details the results of the 'after' study, drawing comparisons to the 'before' study, where relevant.

Methodology

A total of 1,015 face to face interviews were carried out with a sample of South Edinburgh residents, providing robust data upon which statistical analysis can be carried out. In order to ensure comparability with the before study, targets for the number of interviews to be completed were set on the basis of street, in line with interview coverage for the before survey. This ensured that interviews were spread across the whole area and in a way which was comparable to the way interviews were completed in the before survey. A full list of the streets covered and the number of interviews achieved within each street is available in report Appendix 2. Just over three quarters of interviews, 80% (810), were carried out with residents that lived in the 20mph streets and 20% (205) with residents in the streets retained at 30mph. A map is shown of the sample area on Page 15.

The aim of the survey was to achieve interviews with a sample of adults who represented the demographic profile of those living in the area. Demographic information about the sample is reported on Page 19. This was the adult that answered the door.

The survey was undertaken using a paper based questionnaire and then the results entered by a team of data processors into a data entry and analysis package. A map of the 20mph zone was shown to residents.

All interviewing was undertaken by Research Resource's highly trained and experienced field force, in accordance with ISO20252 and the Market Research Society Code of Conduct.

Summary of Key Findings

The following paragraphs summarise the key significant findings of the 'after' survey when compared to the 'before' survey. This is broken down by people living in 20mph and 30mph streets, in the North and South of the zone, and by respondents' regular mode of transport, where relevant to the analysis.

An increase or decrease refers to a higher or lower figure in the after survey compared to the before survey; however, this does not imply a causal relationship between the factor concerned and the implementation of the 20mph limit. Such a conclusion can only be drawn from a longer term study and further qualitative evidence.

Headlines

- A large majority of respondents (79%) are in support of the 20mph speed limit compared to 4% who oppose. This is a significant increase from 68% of respondents supporting in the 'before' survey. Importantly, respondents were significantly more likely to strongly support (14% 'before' and 37% 'after').
- The proportion of residents stating they believed traffic speeds were too fast has fallen significantly. Interestingly this fall was larger on what respondents believe to be busier roads, with 50% stating that they felt speeds to be 'just about right' in the 'before' survey, rising to 68% in the 'after' survey.
- There has been a generally positive change in relation to attitudes towards road safety between the before and after studies, for example, whilst traffic speed is still the top concern relating to safety for both walking and cycling in the local area in both surveys, the level of concern has decreased, most notably with regard to walking in the local area. In the before survey, 32% of respondents agreed that they worried about traffic speeds whereas 24% of respondents agreed that they worried about traffic speeds in the after study.
- Safety for children walking and playing in the street are the top perceived benefits of the scheme. However, somewhat fewer respondents cited these benefit in the 'after' survey than had cited them as a perceived potential benefit in the 'before' survey (walking: 34% 'after', 45% 'before'; playing: 29% 'after', 39% 'before').
- Analysis of questions regarding children's safety are interesting, although not statistically significant, but show an increase in walking and cycling to school, and decreased use of the car, and an increase in parental consent for unsupervised play in the street for older primary school children.

Attitudes towards 20mph speed limit

- A large majority of respondents (79%) are in support of the 20mph speed limit compared to 4% who oppose. This is a significant increase from 68% of respondents supporting in the 'before' survey. Importantly, respondents were significantly more likely to strongly support (14% 'before' and 37% 'after').
- Households with children are more likely to support the 20mph limit with 94% (83% before) of households with children in support compared to 77% (67% before) of households without.

- Analysis by street speed limit indicated that respondents who live in the **20mph streets** are slightly more likely to be in support (80%, 70% 'before') than those in **30mph streets** (72%, 64% 'before'). Additionally, the proportion opposing the speed limit is marginally higher in 20mph streets (5%, 6% 'before') than in 30mph streets (1%, 5% 'before').
- Respondents were asked, unprompted, about the **benefits of the 20mph speed limit**. The main benefits suggested by respondents were regarding safety for children, better conditions for walking, cycling and less accidents. These benefits were also the main benefits that were perceived in the 'before' survey.
- More respondents in the 'after' survey indicated that better conditions for cycling was a benefit (29%) than had perceived this to be a benefit in the 'before' survey (20%). This is in line with other findings of an increased perception of safety for cycling.
- Safety for children walking and playing in the street are the top perceived benefits of the scheme. However, somewhat fewer respondents cited these benefits in the 'after' survey than had cited them as a perceived potential benefit in the 'before' survey (walking: 34% 'after', 45% 'before'; playing: 29% 'after', 39% 'before').
- In terms of the disadvantages, 8 in 10 respondents said they could not think of any disadvantages of the proposed 20mph speed limit in the 'before' survey. This has risen to 89% in the 'after' survey.

These attitudes are further explored in the sections below.

Children's Travel and Play

- Due to the small number of households interviewed who had children, analysis of questions regarding children's safety are interesting, although not statistically significant.
- Just over one in ten respondents (12%) interviewed stated they had at least one child under the age of 16 living in their household. This is similar to the 'before' survey. Analysis by proposed street speed limit revealed that more households within the proposed 20mph streets had children in the household (13%) than in 30mph streets (8%). This may be expected due to the greater traffic volumes and/or differences in house types in the 30mph streets and is similar to the 'before' survey.
- Analysis of trends in relation to travel to school shows some interesting differences compared to the 'before' survey. Most notably:
 - The proportion of lower primary school age children walking to school has increased from 58% in the 'before' survey to 74% in the 'after' survey.
 - The proportion of older primary school children cycling to school has increased from just 3% in the 'before' survey to 22% in the 'after' survey.
 - For all children, there has been a decrease in the use of a car as a method of transport to school (21% in the 'before' survey and 13% in the 'after' survey).
- There has been an increase in the proportion of older primary school age children who were allowed to play unsupervised outside their home, on the pavement or in the street (rising from 31% 'before' to 66% 'after'). As was the case in the before survey, this was directly correlated to the age of the child, where older children were more likely to be allowed to play unsupervised.

Despite positive changes in behaviour, comparison to the 'before' survey results in relation to factors that influence **parents' and guardians' attitudes to children's independent travel** and street play indicates that there is now a higher level of concern about all factors (stranger danger, mixing with other children without adult supervision, danger from traffic and pollution from traffic) when compared to the before survey.

Attitudes towards traffic speeds for walking and cycling

- There was an increase in the proportion of respondents stating that they felt that traffic speeds on their street was 'just about right', rising from 71% 'before' to 78% 'after'.
- The proportion of residents stating they believed traffic speeds were too fast has fallen significantly. Interestingly this fall was larger on what respondents believe to be busier roads with 50% stating that they felt speeds to be 'just about right' in the 'before' survey, rising to 68% in the 'after' survey.
- The majority of respondents considered traffic speeds for walking (86%) and cycling (74%) very or fairly safe. This is an interesting finding given that respondents, when asked whether they perceived that traffic speeds influence people's feeling of safety when walking and cycling, indicated that they felt that traffic speeds were more of an influence on people's feeling of safety when walking than cycling (24% agreed that they worried about traffic speeds when cycling).
- Respondents who live in 20mph streets are significantly more likely to consider traffic speeds in the local area to be very or fairly safe for cycling than those who lived in 30mph streets (75% in 20mph streets compared to 69% in 30mph streets).
- Comparison to the 'before' survey indicates that respondents are now significantly more likely to consider traffic speeds in the local area as safe for both walking and cycling. The proportion of respondents feeling that traffic speeds were unsafe for cycling has decreased from 26% 'before' to 18% 'after' and just 12% in the 'after' survey considered traffic speeds unsafe for walking compared to 17% 'before'.
- It is interesting to note that all groups (cyclists and non cyclists) indicated similar levels for feeling of safety (77% for regular and infrequent cyclists and 73% for non cyclists) in the 'after' survey whereas there was significant variance in this in the 'before' survey.
- All respondents, were asked about their perception of traffic speeds for older primary school children. Almost three quarters of respondents (72%) said traffic speeds were very or fairly safe for walking and just under half (48%) said they were very or fairly safe for cycling. This is consistent with the attitudes towards walking and cycling generally in the area where respondents perceived traffic speeds as being more unsafe for cycling than walking. However, the extent to which they believed traffic speeds to be unsafe was higher for older primary school children than for adults.
- Respondents living in 20mph streets are significantly more likely to consider traffic speeds to be safe for walking (76%) and cycling (50%) than in 30mph streets (63% safe for walking and 38% for cycling).
- Compared to the 'before' survey, there has been an increase in the perception of safety for older primary school children walking, with the feeling of safety increasing from 67% 'before' to 73% 'after. However, the perception of safety for cycling has stayed the same.

Interestingly, this is at odds with the noted increase in the incidence of older primary school children cycling to school.

Attitudes towards road safety

- There has been a generally positive change in relation to attitudes towards road safety between the before and after studies, for example, whilst traffic speeds are still the top concern relating to safety for both walking and cycling in the local area in both surveys, the level of concern has decreased, most notably with regard to walking in the local area. In the before survey, 32% of respondents agreed that they worried about traffic speeds whereas 24% of respondents agreed that they worried about traffic speeds in the after study.
- All respondents were asked to state the extent to which they agreed or disagreed with various factors which may have an influence on people's feeling of safety when walking in the local area. From those factors which were asked about, traffic speed was the biggest concern for respondents overall with 24% agreeing that this was a factor that influences people's feeling of safety when walking in the local area. This was followed by traffic volumes (18%) being the second greatest level of concern from the factors asked about. In both instances, this represents a decrease in concern compared to the before survey where concern about traffic speed was 32% and concern about traffic volumes was 23%.
- The 'before' survey indicated that respondents living in 20mph streets were significantly more likely to agree that they worry about traffic speeds (34%) than those living in the proposed 30mph streets (27%). However, 'after' survey responses indicate that respondents are now less likely to agree that they worry about traffic speeds, with the most notable decrease seen in 20mph streets (falling to 24% in the 'after' survey in 20mph streets and 20% in 30mph streets).
- All respondents, regardless of whether they cycled or not, were asked about factors they perceived as influencing **people's feeling of safety when cycling** on the streets in the local area. As was the case in relation to factors which influence people's feeling of safety when walking, traffic speeds were perceived to be the biggest concern from the factors asked about. The level of concern in this respect has decreased from 25% in the 'before' survey to 20% in the 'after' survey.
- Analysis of the level of concern for regular cyclists shows that they are now significantly less likely to be concerned about traffic speeds than they were in the 'before' survey, with the level of agreement to the statement 'I worry about traffic speeds' falling from 65% in the 'before' survey to 46% in the 'after' survey.

Travel Methods and Reasons

There were more car owners interviewed in the 'after' survey compared to the 'before' survey. This change is likely to be due to a somewhat different sample profile; it is extremely unlikely to have been due to the introduction of the 20mph limit. Choice of travel method generally has a strong relationship with car ownership. So the impact of the sampling difference was examined by 'weighting' the after data on Travel Methods. As elsewhere in the report, <u>unweighted</u> results are presented here.

- Overall travelling on foot was the most common travel method within the area. This was the case both in the 'before' and 'after' studies. 44% of people stated they travelled most often on foot in the after study compared to 38% in the before study.
- There were various other changes in reported travel habits, including a fall in the proportion of respondents who said they used **public transport** most often from 32% in the 'before' survey to 20% in the 'after' survey.
- Analysis by speed limit indicates that the proportion of respondents living in the **20mph** streets reporting that they travel most often by foot has risen significantly compared to the 'before' survey, rising from 36% 'before' to 44% 'after'. There has not been a significant change for respondents living in **30mph streets**.
- Over the last year there appears to have been an increase in active travel, with a net increase of 7% in relation to travelling on foot and a net increase of 5% in relation to cycling in the local area.
- Those who had lived in the area for more than one year were asked if they had increased the amount they use local shops and services over the last year. The results show no significant change in this respect.
- Respondents were asked to think about the local journeys they made most often and why (unprompted) they travel this way. The main reasons cited by respondents overall were cost (26%), journey time/ speed (26%), habit/ always done this (18%) and health benefits (18%).
- Travel reasons varied considerably by the travel method used most often. Cost of travel is more likely to be given as a reason by those who travel by bicycle, public transport or travel on foot than those who drive. Journey time is likely to be a reason for travelling that way by those who drive a car or van, use public transport, or cycle. Health benefits are most likely to be cited by those who cycle or walk.

Comparison of key indicators between before and after studies

The table below summarises the before and after survey findings for a series of key indicators:

FIGURE 1: SUMMARY OF KEY INDICATORS FOR BEFORE AND AFTER SURVEYS

FIGURE 1. SUMMART OF RET INDICATORS FOR BEFORE AND AFTER SURVEYS	Before findings	After findings
% of support for the scheme	68%	79%
% of support for the scheme from households with children	83%	94%
% of respondents with children	10%	12%
% of respondents cycling once a month	15%	16%
% of respondents who agreed that they worried about traffic	32%	24%
speeds when walking in the local area	52%	24%
% of respondents who agreed that they worried about traffic	25%	20%
speeds when cycling in the local area	25%	20%
% of people who felt current traffic speeds were about right		
On their street	71%	78%
On busier roads	50%	68%
% of regular cyclists considering traffic speeds unsafe	51%	21%
% of respondents considering traffic speeds safe for older		
primary school children		
For walking	67%	72%
For cycling	48%	48%
% net change in transport mode (% of users increasing		
minus decreasing)		
Car	+2%	-3%
Foot	+12%	+7%
Bicycle	+8%	+5%
Public transport	-5%	+4%
% older primary school children allowed to play outside	31%	66%

Main differences between before and after survey sample

The before and after surveys were both carried out utilising the same sampling and survey methodology in order to yield robust survey data upon which behaviour and attitudes can be assessed. The surveys were carried out as independent samples in order to allow for the collation of the same number of interviews across each survey wave, providing the same level of robust data for each survey.

It should be noted that for each survey wave there is a margin of error associated with the survey data due to the fact that the survey has been completed with a sample of residents and not every single resident living in the survey area. Therefore, there may be changes or variance between the before and after surveys that have occurred due to chance as a factor of the change in sample. In order to ensure that statistically significant differences within the samples are highlighted, statistical tests have been run. Therefore where it is stated that there are significant differences between sample sub groups, this is statistically significant.

Key differences observed in the sample profile of the before survey respondents compared to the after survey respondents are:

- Fewer younger respondents were surveyed in the 20-29 age group (34% in the before survey and 24% in the after survey)
- Fewer students were surveyed (29% in the before survey and 22% in the after survey)
- More car owners were surveyed (63% did not own a car in the before survey and 53% did not own a car in the after survey).

This report is based upon unweighted survey data. However, in order to understand the impact of this change in the sample profile, we have undertaken weighting of data by the above factors. This does not result in any significant differences in survey results in relation to the attitudinal or most of the behavioural questions. However, weighting by car ownership and usage profile does have an impact upon the transport methods used.

Conclusions

There is strong support for the introduction of the 20mph speed limit in the proposed streets across south central Edinburgh. Perhaps the greatest indicator of the scheme's success is that the level of support for the 20mph speed limit has increased overall, and the proportion of respondents strongly supporting the speed limit has increased significantly.

There is strong evidence to support that the 20mph limit has increased people's perception of safety for cycling and notably increased the feeling of safety of regular cyclists.

Traffic speeds were cited as the greatest concern, from a number of factors listed, in relation to people's feeling of safety when walking and cycling in the local area. Whilst traffic speeds are still a concern for a significant minority of respondents, the proportion of respondents expressing a concern has fallen.

There was agreement from parents that danger from traffic is a concern in relation to their attitude to allowing children to travel independently and play in the street. A higher level active travel to school was reported across all age groups, with older primary school children more likely to be cycling to school, more likely to be allowed to make unsupervised trips in the neighbourhood and play in the street in the after survey.

The most significant perceived benefit for all groups, and in particular parents, in the 'before' survey was safety for children to walk about the area and to play in the street. In the after survey, when asked about the benefits that have been seen as a result of the implementation of the 20mph speed limit, these are the top two realised benefits cited by respondents. However, it is interesting to note that the extent to which this benefit has been realised is slightly lower than the anticipated benefit. This is the case for both parents and wider residents.

Traffic speeds were highlighted as an issue which may impact on people's feeling of safety when walking and cycling in the local area, however, the majority believed that traffic speeds in their street were about right. This has improved when compared to the 'before' survey and respondents were now less likely to state that traffic was too fast.

We conclude that the introduction of the 20mph limit has been accompanied by positive attitudes towards it from local residents and appears to have influenced residents' attitudes on the safety of walking and cycling in the area for both adults and children. Reported changes in behaviour are mixed, and the short term nature of the study means that it is difficult to draw conclusions on the impacts on behaviour. A separate report has been undertaken by the City of Edinburgh Council examining impacts on traffic speeds.

1. INTRODUCTION, BACKGROUND AND METHODOLOGY

1.1. Introduction

This report presents and discusses the findings to emerge from the City of Edinburgh Council's survey of public attitudes to the proposed 20mph speed limit in south central Edinburgh.

The aim of this research was to assess, and compare to the before research:

- public attitudes to a 20mph speed limit zone in south central Edinburgh
- changes to residents' behaviour and residents' attitudes in the 20mph limit zone.

1.2. Background

The City of Edinburgh Council has a long standing policy of introducing 20mph speed limits in residential areas. Around 50% of the city's residential streets now have a 20mph speed limit. In 20mph streets, road humps and other traffic calming features ensure speeds stay low. These measures are very effective, but expensive to install.

In early 2012, a new 20mph speed limit was introduced in south central area of Edinburgh. In this area there were over 40 road casualties in the 3 years prior to the introduction of the 20mph limit, however they were scattered across the area and the implementation of a 20mph speed limit across the area with traffic calming would be expensive. It was therefore decided, based upon successful implementation of 20mph speed limits in Portsmouth without traffic calming features, that the Council adopt a similar approach. The main speed reduction measure was signage to indicate that the speed limit is 20mph in that street. A map of where the limits were introduced is shown over the page.

A 30mph speed limit was retained on busier streets (shown on the map, Figure 1 overleaf, in white). It should be noted that whilst the overall area is highlighted in the map, not all streets will be affected as some streets already had a 20mph speed limit imposed or already have traffic calming in place (shaded orange) and an additional short section of 20mph was implemented on Ratcliffe Terrace as part of the South Edinburgh University on-road cycle route.

The introduction of the scheme has cost just under £200,000 excluding surveys, of which £113,000 was the costs of signs and surface markings. This compares to an estimated £600,000 for conventional 20mph speed limit treatment (with traffic calming) in the same area. The impact of the pilot has been monitored by the Council by monitoring speeds, traffic volumes and road casualties. However, additional benefits may be that people feel safer in their street and choose to walk or cycle more. In order to monitor these attitudinal and behavioural benefits of the scheme, a survey of residents in the area was carried out prior to implementation of the scheme in order to understand 'before' what their behaviour was and how they felt about their streets and the implementation of the proposed 20mph speed limit. This survey was replicated in the 'after' survey, one year after implementation of the speed limit in accordance with Scottish Government

guidance (SEDD Circular No. 6/2001)¹ [Understanding of the success of the scheme will be based upon comparison of attitudes and behaviour of residents surveyed.

It should be noted that streets that were 'in scope' for the survey were those that it was proposed to introduce a 20mph speed limit or those on main 30mph streets. Streets that already had a 20mph speed limit or traffic calming in place (shaded orange) were excluded from the survey as no change would be experienced by residents in these streets in relation to the implementation of the 20mph limit in the area.

This report details the findings of the 'after' attitudinal survey of residents surveyed, drawing comparisons to the 'before' survey in order to identify any change in behaviour or attitude.

¹ Scottish Government guidance is not available on the evaluation of mandatory limits, however, the guidance for advisory limits has been applied which states, "Advisory 20 mph speed limits should be monitored and evaluated after at least 12 months and not more than 3 years, with speeds and accidents being taken into account"

FIGURE 2: STUDY AREA



Note: A 20mph limit has also been applied to the 0.5 mile stretch of road north of 'Ratcliffe Terrace shown on this map as a 30mph route.

1.3. Sample design

A total of 1,015 face to face interviews were carried out with a sample of South Edinburgh residents, providing robust data² upon which statistical analysis³ can be carried out. In order to ensure comparability with the before study, targets for the number of interviews to be completed were set on the basis of street, in line with interview coverage for the before survey. This ensured that interviews were spread across the whole area and in a way which was comparable to the way interviews were completed in the before survey. A full list of the streets covered and the number of interviews achieved within each street is available in report Appendix 2. Just over three quarters of interviews, 80% (810), were carried out with residents that lived in the 20mph streets and 20% (205) with residents in the streets retained at 30mph. A map is shown of the sample area on Page 15.

The aim of the survey was to achieve interviews with a sample of adults who represented the demographic profile of those living in the area. Demographic information about the sample is reported on Page 18. This was the adult that answered the door.

1.4. Sampling approach

In line with best practice in research a random sampling approach was taken. A sample of three times the desired number of interviews per street was drawn. Interviewers were instructed to visit each address on their list up to 4 times, on different days of the week, at different times of the day, including evenings and weekends before classifying that address as a non-response. By instructing interviewers to visit addresses on different days of the week and at different times of the day the opportunity of achieving interviews from the greatest range of households and demographics was maximised.

Where contact was made with a household the adult who answered the door was invited to participate in the interview. Interviewers did not note any explicit refusals to participate in the survey, rather a small number of 'soft' refusals were noted where potential respondents indicated that they were 'too busy' or 'just going out'. In these instances, interviewers simply called back at the address at a later date or time. Interviewers continued to call at sampled addresses until their quota of interviews in either 20mph or 30mph streets had been achieved.

 $^{^{2}}$ 1,015 interviews provides data accurate to <u>+</u>2.9% based upon a 50% estimate at the 95% level of confidence. This means that if 50% of our sample agreed that the 20mph speed limit had made a difference to the way they travel, you could be 95% certain that if every single resident in the South Edinburgh area was asked the same question, the response would be between 47.1% and 52.9%.

³ Statistical significance has been identified through the use of z tests.

1.5. Interviewing and quality control

All interviewing was undertaken by Research Resource's highly trained and experienced field force, all of whom are highly experienced in undertaking customer and resident surveys for Local Authorities, including undertaking the 'before' survey. Interviewing took place between 11th February and the 22nd March 2013. Interviews took place on a face to face basis with residents at their door. Responses were recorded on a paper based questionnaire. A copy of the final questionnaire used is available in Appendix 1. Interviews took on average between 10 and 15 minutes to complete.

In the 'after' survey, the respondents were told: "The Council put in place a 20mph speed limit on most residential streets around here in March last year. The area is shown on the map. No extra road humps were put in, but there were new signs and road markings at the entrances to roads with the new limit and smaller signs at intervals to remind people of the limit. Most of the busier roads kept their 30mph limit."

In the 'before' survey, respondents were told "The Council is about to put in place a 20mph speed limit on most residential streets around here. The area is shown on the map. There won't be any extra road humps but there will be signs and road markings at the entrances to roads with the new limit and smaller signs at intervals to remind people of the limit. Most of the busier roads will keep the 30mph limit. The proposal is on this map."

All interviews were completed in accordance with ISO20252 accredited policies and procedures and in accordance with the Market Research Society Code of Conduct.

Upon completion of interviews, completed questionnaires were manually edited and checked for quality and consistency of interviews. As a further validation, 10% of each interviewer's quota of interviews were checked through 'back checking' which involved re-contacting the respondent by telephone and verifying key details about the interview and ensuring that interviewers were polite, pleasant and showed identification.

1.6. Survey Analysis and Reporting

A SNAP database was designed to conduct the data processing and analysis. SNAP Data Entry software was used to enter the data which ensures accuracy of response and reduces data entry operator error. Once the data was entered, appropriate range and logic checks were applied and open-ended questions were coded.

This report details the findings of the survey for the area as a whole overall and includes statistically⁴ significant, analysis of results by street speed limit (20mph/ 30mph), geographical area (North/ South) and demographic characteristic(s). Additionally, comparative analysis has been carried out with the 'before' study.

In reading this report, it should be noted that the findings are based upon a sample of residents, rather than the whole population of the proposed 20mph streets being interviewed, therefore, all results are subject to sampling tolerances and not all differences will be statistically significant.

When reporting the data in this document, in general, percentages in tables have been rounded to the nearest whole number. Responses greater than 0% but less than 0.5% are shown as 0% and responses between 0.5% and less than 1% are rounded to 1%. Where no responses have been made this is shown as –. Columns may not add to 100% because of rounding or where multiple responses to a question are possible. The total number of respondents to each question is shown either as 'Base' or 'n=xxx' in the tables or charts. Where the base or 'n' is less than the total number of respondents, this is because respondents may be 'routed' past some questions if they were not applicable.

1.7. Main differences between before and after survey sample

The before and after surveys were both carried out utilising the same sampling and survey methodology in order to yield robust survey data upon which behaviour and attitudes can be assessed. The surveys were carried out as independent samples in order to allow for the collation of the same number of interviews across each survey wave, providing the same level of robust data for each survey.

It should be noted that for each survey wave there is a margin of error associated with the survey data due to the fact that the survey has been completed with a sample of residents and not every single resident living in the survey area. Therefore, there may be changes or variance between the before and after surveys that have occurred due to chance as a factor of the change in sample. In order to ensure that statistically significant differences within the samples are highlighted, statistical tests have been run. Therefore where it is stated that there are significant differences between sample sub groups, this is statistically significant.

Key differences observed in the sample profile of the before survey respondents compared to the after survey respondents are:

- Fewer younger respondents were surveyed in the 20-29 age group (34% in the before survey and 24% in the after survey)
- Fewer students were surveyed (29% in the before survey and 22% in the after survey)
- More car owners were surveyed (63% did not own a car in the before survey and 53% did not own a car in the after survey).

The impact of this can mean, for example, that data on means of travel used most often may be due to the difference in the sample profile as opposed to the implementation of the 20mph speed limit.

This report is based upon unweighted survey data. However, in order to understand the impact of this change in the sample profile, we have undertaken weighting of data by the above factors. This does not result in any significant differences in survey results in relation to the attitudinal or most of the behavioural questions. However, weighting by car ownership and usage profile does have an impact upon the transport methods used.

2. **RESPONDENT CHARACTERISTICS**

2.1. Sample Profile

As stated in 1.3, the aim of the survey was to achieve interviews with a sample of adults who represented the demographic profile of those living in the area. Attempts were made in order to try and ensure that the achieved sample was as representative as possible through street by street sampling. Summarised below are the key demographic characteristics of respondents for the overall sample. The summary also notes significant differences to the 'before' study sample characteristics.

Age:

Respondents were from a wide range of age bands. It was notable that a significant proportion of respondents were **aged under 30** (29%). This is slightly less than the 37% of survey respondents who were aged under 30 interviewed in the 'before' survey (See Figure 3).



FIGURE 3: AGE PROFILE OF RESPONDENTS - BEFORE COMPARED TO AFTER SURVEY

Gender:

 Just under half of respondents (48%) were male and 52% female. This is very similar to the 'before' survey.

Household composition:

 Just under three in ten (28%) households comprised single adults, 36% of households were two adult households with no children, 21% were three adult households, 1% 1 parent families and 11% 2 parent families. There is no significant variance in the household composition of respondents between the 'before' and 'after' surveys.(See Figure 4).

FIGURE 4: HOUSEHOLD COMPOSITION – BEFORE COMPARED TO AFTER SURVEY



Children in the household:

 Just over one in ten respondents (12%) had children under the age of 16 living in their household. This is not significantly greater than the 10% who had children under the age of 16 in the 'before' survey.

Working status:

- Just over four in ten (42%) respondents were either **working** full or part time, 25% retired and 22% were in further or higher education.
- Compared to the 'before' study, a greater proportion of respondents were in full time employment (38% in the 'after' survey and 30% in the 'before' survey).
- Fewer respondents in **further/ higher education** were surveyed (22% in the 'after' survey and 29% in the 'before' survey).(See Figure 5).

FIGURE 5: EMPLOYMENT PROFILE OF RESPONDENTS – BEFORE COMPARED TO AFTER SURVEY



Health problem/ disability

 Just under 9 in 10 respondents (87%) said they had no long term health conditions, 5% had a physical disability and 3% had some form of long term illness, disease or condition. In the 'before' survey, 91% of respondents stated that they had no long term health conditions. Similar proportions reported physical disability or long term illness.

Car ownership and use:

- Over 4 in 10 respondents (46%) said they had at least one car available for their household. Compared to the 'before' survey, this represents a higher level of car ownership. In the 'before' survey, 37% of respondents stated that they had at least one car available for their household.
- Of these respondents, a large majority (74%, 69% 'before') used their car at least three times a week (classified as frequent drivers). The level of usage is higher with 34% of respondents in the 'after' survey classified as frequent users compared to 25% of respondents in the 'before' survey.

Bicycle ownership and use:

Around one quarter of respondents (27%) said they had at least one bicycle available for use by adults in their household. Just over six in ten respondents (62%) who had at least one bicycle said they cycled at least once a month (classified as regular cyclists). This is very similar to the 'before' survey bicycle ownership and usage profile.

2.2. Geographic Profile

Analysis has been undertaken throughout the report on the basis of geography. The map below shows how the South Edinburgh area was divided in to North and South regions. One third of interviews (33%) were completed with residents in the South area and 67% with residents in the North area.

FIGURE 6: MAP OF NORTH AND SOUTH AREAS



20MPH MARKET RESEARCH NORTH AND SOUTH AREAS

Analysis of the survey highlights some significant differences in attitude between residents who lived in the North compared to those who lived in the South in a number of instances. Significant variances between the two areas are noted below. These follow a similar profile to what was seen in the 'before' study:

Age:

 As was the case in the 'before' survey, an older population lives in the South area with over 62% of respondents **aged over 50** in the South compared to 33% in the North area.

Household composition:

- In line with the age profile, households from the South area are almost twice as likely to be **adult only households** aged over 65 (37%) than households from the North area (19%).
- In the North area, households are significantly more likely to comprise 3 or more adults (31%) than in the South area (9%).

Working Status:

- In relation to the student population (in further/ higher education), there is a significant difference in where they lived. Just 6% of South area respondents are in further or higher education compared to 30% of those in the North area.
- Over one third of respondents (37%) in the South area are permanently retired from work compared to 18% in the North area. This is in line with the older age profile in the South area.
- Respondents who were interviewed from the South area are more likely to be at home during the day (i.e. were unemployed, retired, looking after the home, not working due to ill health or disability) than respondents who lived in the North area (47% and 24% respectively).

Health problem/ disability:

In line with the age profile, a greater proportion of respondents who lived in the South area said they had some form of health problem or disability (17%) than those who lived in the North area (10%).

Car ownership and use:

- **Car ownership** is greater in the South area, with 55% of households having a car available for use compared to 42% of those in the North area.
- In terms of frequency of car use, those living in the South area are more likely to use their car more frequently with 43% of all respondents interviewed from the South area stating they used their car at least three times a week compared to 30% for respondents living in the North area.

Bicycle ownership and use:

- Respondents who lived in the South area are less likely to own a bicycle (16%) than those in the North area (32%).
- Similarly South respondents are less likely to cycle regularly (7% stated they cycle at least once a month) compared to 21% in the North. This is again linked to the age profile of respondents.

2.3. Speed Limit Profile

Analysis has been undertaken on the basis of the speed limit of the street in which respondents live (20mph and 30mph). There are significant variances between the street speed limits and respondent characteristics identified, as follows:

- Age:
 - A **younger** population resides in the 30mph streets with 40% of respondents being aged under 30 compared to just 26% in the 20mph streets.
- Household composition:
 - Those who live in the 20mph streets are more likely to be **1 or 2 parent households** (14%) than those in the 30mph streets (9%).
- Car ownership and use:
 - Car ownership is greater for respondents living within the 20mph streets, with 48% of households having a car available for use compared to 40% of those who live in the 30mph streets.
 - In terms of frequency of car use, those who live in the 20mph streets were more likely to use their car more frequently with 35% of all respondents interviewed from the 20mph streets stating they use their car at least three times a week compared to 30% for respondents in the 30mph streets.
- Bicycle ownership:
 - Bicycle ownership was higher for those residing in the 30mph streets (33%) than those in 20mph streets (25%).

The profile identified in the after survey above is very similar to the significant differences identified in the 'before' study.

2.4. Car Use/ Ownership

Analysis has been undertaken throughout the report on the basis of car ownership and use. The three groups used for this analysis are:

- Frequent car users (34% of the overall sample, 347 respondents): those who said they have at least one car available for use by the household which they used frequently (at least 3 times a week);
- Less frequent car users (12% of the overall sample, 126 respondents): those who said they have at least one car available for use by the household which they used less than 3 times a week (may include never for respondent);
- 3) **Non car owner** (53% of the overall sample, 542 respondents): those who said their household **do not have access to a car**.

Frequent car users were most likely to have the following characteristics, many of which may relate to the fact that frequent car users tended to be families. Whilst the level of car ownership was higher in the 'after' survey, the characteristics of car owners are similar to the 'before' survey:

- Aged 50-59 (62% of respondents aged 50-59 are frequent car users).
- Households with children under the age of 16 (60% are frequent car users).
- Live in the South area (43% are frequent car users)

Those who did not have access to a car were most likely to have the following characteristics, many of which allude to the fact that non car owners are more likely to be students. Again, these characteristics are similar to the 'before' study:

- Aged 16-29 (81% of respondents aged 16-29 do not own a car).
- Had no children in the household (58% do not own a car)
- In further or higher education (89% do not own a car)
- Three or more adult households (80% do not own a car).

2.5. Cyclists/ Bicycle Ownership

Analysis has been undertaken throughout the report on the basis of bicycle ownership and bicycle use. The profile of bicycle ownership and bicycle use was almost identical in the 'after' survey to the 'before' survey. The three groups used for this analysis are:

- Regular cyclists (16% of the overall sample, 166 respondents): those who said they have at least one bicycle available for use by adults in the household which they use frequently (at least once a month);
- 2) Infrequent cyclists (10% of the overall sample, 106 respondents): those who said they have at least one bicycle available for use by adults in the household which they use less than once a month;
- 3) Non bicycle owner (73% of the overall sample, 743 respondents): households who do not have a bicycle available for use.

Individuals or households with following characteristics were particularly likely to be **regular cyclists**:

- Aged 16-29 (32% of 16-29 year olds are regular cyclists)
- 3 or more adult households (34%) or families with children under 16 (29% are regular cyclists)
- In further education (33% are regular cyclists).

Older households or people in poor health were most likely to be **non-cyclists**:

- Aged 70+ (84% of respondents aged 70+ do not have a bicycle)
- Adult only households aged over 65 (90% do not have a bicycle)
- Retired (86% do not have a bicycle), sick or disabled (96% do not have a bicycle)
- Have a health problem or disability (93% do not have a bicycle).

3. ATTITUDES TOWARDS THE 20MPH SPEED LIMIT

3.1. Opinions on the 20mph Speed Limit

Respondents were asked, in both surveys, about the extent to which they support or oppose the 20mph limit.

In the 'after' survey, 79% of respondents stated that they either strongly support or support the 20mph speed limit. This is a significant increase on the 68% who stated that they supported the proposal in the 'before' survey. Importantly, the strength with which residents support the speed limit has increased, rising from 14% strongly supported in the 'before' survey to 37% strongly supporting in the 'after' survey.



FIGURE 7: OVERALL DO YOU SUPPORT OR OPPOSE THIS PROPOSAL? – BEFORE COMPARED TO AFTER SURVEY

Analysis indicates that whilst the overall support for the 20mph limit is strong, there is evidence of some differences between groups. Which is consistent with the 'before' survey. Significant differences in support are:

- Households with children are more likely to support the 20mph limit with 94% (83% before) of households with children in support compared to 77% (67% before) of households without children.
- Other interesting, although not statistically significant, findings are that respondents who live in the 20mph streets are slightly more likely to be in support (80%) than those in who live in 30mph streets (72%). This support has increased from 70% from those who lived in 20mph streets 'before' and 64% supporting from those who lived in 30mph streets in the 'before' survey.

3.2. Benefits of the 20mph Speed Limit

Respondents were asked, unprompted, about the benefits of the 20mph speed limit. In the 'before' survey, this was posed in relation to what they believe the possible benefits could be and in the 'after' survey, it was asked what the benefits have been. The table below compares the difference between 'before' and 'after' responses.

The main benefits that respondents believe there have been in the after survey are safety for children (34% safer for children to walk about the area; 29% safer for children to play in the street), better conditions for walking (29%), better conditions for cycling (29%) and less accidents (27%).

These are consistent with the 'before' survey results although the perception of benefits achieved in relation to safety for children was lower than the perception of possible benefits (45% said they thought a possible benefit would be safer for children to walk about the area before and 39% said they thought a possible benefit would be that it would be safer for children to play in the street before).

Interestingly, the proportion of respondents who identified better conditions for cycling as being a benefit has increased between the 'before' (20%) and 'after' surveys (29%).

Similar proportions of respondents (18% in the 'before' survey and 19% in the 'after' survey) felt they were not able to identify any specific benefits of the speed limit.

	Before	After
Base	1018	1015
Safer for children to walk about the area	45%	34%
Safer for children to play in the street	39%	29%
Better conditions for walking	29%	29%
Better conditions for cycling	20%	29%
Less accidents	24%	27%
Increased amount of cycling in the area	10%	6%
Better area to drive in	6%	6%
Increased amount of walking in the area	9%	5%
Less aggressive driving	6%	2%
Less noise	4%	2%
Other benefits	1%	2%
Less through traffic	3%	1%
Less congestion	1%	1%
Better air quality	2%	0.4%
Better community atmosphere	1%	0.4%
Better/ safer for elderly	3%	-
Better for pedestrians/ crossing roads	1%	-
Don't know	1%	-
None	18%	19%

FIGURE 8: BENEFITS OF THE 20MPH SPEED LIMIT – BEFORE COMPARED TO AFTER SURVEY

Figure 8 shows that increased safety for children to walk and play were the most commonly cited benefits for all respondents. They were significantly more likely to be cited by those with children in the household.

Realisation of benefits

It is interesting to note that the realisation of these benefits for households with children is slightly lower than the perceived benefit in the 'before' survey:

- 51% (70% before) of households with children believed a benefit is that it is safer for children to play in the street. This is compared to 26% (42% before) of those without;
- 44% (60% before) of households with children believe a benefit is being was safer for children to walk about the area. This is compared to 33% (37% before) of those without.

3.3. Disadvantages of the 20mph Speed Limit

In terms of the disadvantages, almost 9 in 10 respondents (89%) said they could not think of any disadvantages of the proposed 20mph speed limit, an increase from 80% in the 'before' survey.

Realisation of disadvantages

The main perceived disadvantages cited in the 'before' survey of more congestion and more aggressive driving have not been realised with only 2% of respondents in the after survey stating that they believe that this was a disadvantage of the 20mph limit.

FIGURE 9: DISADVANTAGES OF THE 20MPH SPEED LIMIT – BEFORE COMPARED	TO AFTER S	URVEY					
What do you think the disadvantages of the 20mph speed limit have been/							
possible disadvantages could be?	Deferre	After					
	Before	After					
Base	1018	1015					
More congestion	8%	2%					
More aggressive driving	7%	2%					
Worse air quality	3%	1%					
Worse area to drive in	2%	1%					
Longer journey time	1%	0%					
Traffic moving too slowly/ 20mph is too slow	1%	1%					
Don't think it will make a difference/ people will not stick to speed limit/ people do not stick to it	1%	1%					
Drivers will become impatient/ frustrated	1%	0%					
Cost/ waste of money	0%	-					
More noise	0%	-					
There are no speed bumps	0%	-					
More difficult to park	0%	-					
Other disadvantages	1%	1%					
Don't know	1%	1%					
None	80%	89%					

3.4. Media coverage of the 20mph limit

New to the 'after' survey, a series of questions were asked about the media coverage on the scheme. The majority of respondents (75%) are not aware of media coverage and could not answer this question. For those that are aware of media coverage, the majority said that they feel it has been neither positive nor negative (20%), 5% of respondents stated they feel coverage has been positive and just one respondent said that they feel coverage has been negative.

Just 13 respondents (1%) stated that they believe media coverage has had an influence on their opinion of the scheme.

Just under one in five respondents (19%) said that they have heard of the **Streets Ahead** campaign.

3.5. Usage of local shops and services

Those who had lived in the area for more than one year (87% of respondents) were asked if they have increased the amount they use local shops and services over the last year. The majority (93%) said that this has stayed the same. Just 3% stated that they have increased the amount they use local shops and services and the same proportion stated that it has decreased. The remainder did not know.

3.6. Perception of signage and road markings relating to the 20mph speed limit

When considering the amount of signage and road markings relating to the 20mph speed limit in their street, the majority of respondents consider the markings to be about right.

Just under one in five respondents considers there to be too little signage and road markings on their street. Interestingly, this is significantly more likely to be the case for respondents living in 30mph streets (25%) than in 20mph streets (17%).

FIGURE 10: PERCEPTION OF SIGNAGE AND ROAD MARKINGS RELATING TO THE 20MPH SPEED LIMIT – AFTER SURVEY



When considering the amount of signage generally in the area, again those living in 30mph streets are significantly more likely to state that there is too little (25%) than those living in 20mph streets (16%).

There is no significant difference in perception of this between respondents in the North and the South areas.

4. CHILDREN'S TRAVEL AND PLAY

4.1. Headlines

Whilst analysis by a range of factors was carried out for households with children, care should be taken when reading these results as, due to the smaller numbers of households with children (12% of households had at least one child under the age of 16 in their household), the results of these analyses are not statistically significant. They have been reported, however, as they are interesting findings and provide an indication of parental attitudes to children's' safety.

Analysis of trends in relation to travel to school shows some interesting differences compared to the 'before' survey. Most notably:

- The proportion of lower primary school age children walking to school has increased from 58% in the 'before' survey to 74% in the 'after' survey.
- The proportion of older primary school children cycling to school has increased from just 3% in the 'before' survey to 22% in the 'after' survey.
- For all children, there has been a decrease in the use of a car as a method of transport to school (21% in the 'before' survey and 13% in the 'after' survey).

There has been an increase in the proportion of older primary school age children who were allowed to play unsupervised outside their home, on the pavement or in the street (rising from 31% 'before' to 66% 'after'). As was the case in the before survey, this was directly correlated to the age of the child, where older children were more likely to be allowed to play unsupervised.

4.2. Travel Methods for School Children

In terms of travel methods for school children, almost two thirds of children (65%) travel to school on foot with 73% of these travelling with adult supervision (61 children) and 27% without adult supervision (23 children).

School travel methods by age group – After survey*							
	Lower Primary	Older primary	Secondary	All school age children			
Base	39	67	23	129			
Bus	3%	7%	26%	9%			
Car	23%	10%	4%	13%			
Cycle with adult supervision	0%	22%	4%	12%			
Cycle without adult supervision	0%	0%	0%	0%			
On Foot Total	74%	60%	65%	65%			
On foot with adult supervision	74%	42%	17%	47%			
On foot without adult supervision	0%	18%	48%	18%			

FIGURE 11: TRAVEL TO SCHOOL METHOD BY AGE OF CHILD – AFTER SURVEY

*please note that percentages do not sum to 100% due to rounding.

Car use and walking levels are highest amongst younger children. For older (secondary school) children, **bus use and independent walking** dominates.

For **lower primary school children**, travelling on foot with adult supervision (74%) has increased compared to the 'before' survey where 58% of this age group walked to school. For this age group, a reduction in the use of a car as a method of transport to school has also been seen (33% in the 'before' survey and 23% in the 'after' survey).

For **older primary children**, walking is the main mode of transport to school, used by 60% of children this age. Just over one in five (22%) cycle with adult supervision. Comparison to the 'before' survey shows, again, that there has been a change in mode of transport with an increase in the proportion of older primary children that cycle to school (was 3% in the 'before' survey). There has also been a reduction in car use (falling from 20% 'before' to 10% 'after').

School travel methods by age group – Before survey							
	Lower Older Primary primary Secondary		All school age children				
Base	43	35	38	116			
Bus	5%	11%	16%	10%			
Car	33%	20%	8%	21%			
Cycle with adult supervision	2%	0%	3%	2%			
Cycle without adult supervision	0%	3%	3%	2%			
On foot with adult supervision	51%	40%	8%	34%			
On foot without adult supervision	7%	26%	58%	29%			
Other	2%	0%	5%	3%			

FIGURE 12: TRAVEL TO SCHOOL METHOD BY AGE OF CHILD – BEFORE SURVEY

4.3.

4.4. Children's Independent Travel

37% of all **children aged under 16** (57 children) are allowed to make local trips that involved them crossing a road without adult supervision. This is the same proportion as in the 'before' survey. There was a direct correlation between the age of child and the response to this question. Perhaps unsurprisingly, no **pre-school children** are allowed to make local trips that involved crossing a road without adult supervision. This compares to 74% of **secondary school children**.

FIGURE 13: CHILDREN MAKING LOCAL TRIPS THAT INVOLVE CROSSING A ROAD WITHOUT ADULT SUPERVISION BY AGE – BEFORE COMPARED TO AFTER SURVEY

Independent travel by age group – 'Before' Survey									
	Pre- school	Lower primary	Older primary	Secondary	Refused	Overall			
Base	44	43	35	38	4	174			
Yes	0%	9%	51%	95%	50%	37%			
No	100%	91%	91% 49% 5% 50%		50%	63%			
Indepe	endent tra	vel by age gro	oup – 'After'	Survey					
	Pre- school	Lower primary	Older primary	Secondary	Refused	Overall			
Base	39	39	67	23	6	164			
Yes	0%	13%	60%	74%	50%	37%			
No	100%	87%	40%	26%	50%	63%			

FIGURE 14: ATTITUDES TOWARDS PLAYING UNSUPERVISED BY AGE – BEFORE COMPARED TO AFTER SURVEY

Unsupervised play on pavement/ in street – 'Before' Survey								
	Pre- school	Lower primary	Older primary	Secondary	Refused	Overall		
Base	44	43	35	38	4	164		
Yes	0%	12%	31%	82%	50%	30%		
No	100%	88%	69%	18%	50%	70%		
Unsupervised play on pave	ment/ in s	treet – 'After'	Survey					
	Pre- Lower Older school primary primary Secondary Refused Overa							
Base	39	39	67	23	6	174		
Yes	0%	10%	66%	74%	50%	39%		
No	100%	90%	34%	26%	50%	61%		

Three in ten children (39%, 68 children) are allowed to **play unsupervised** outside their home, on the pavement or in the street. For **Primary School** children this is directly correlated to the age of the child where older children are more likely to be allowed to play unsupervised.

There has been an increase in the proportion of **older primary school** age children allowed to play unsupervised on the pavement or in street (31% in the 'before' survey compared to 66% in the 'after' survey.

4.5. Factors that Influence Parents' and Guardians' Attitudes to Children's Independent Travel

Respondents with children were asked to give their opinions on various factors that influence parents' or guardians' attitudes to children's independent travel and street play. **Danger from traffic in the street** is the biggest concern for parents (65%). A sizeable minority worry about the following factors:

- I worry about stranger danger in my street (42% agree)
- I worry about pollution from traffic in my street (47% agree)
- I worry about my children mixing with other kids without adult supervision in my street (43% agree)

FIGURE 15: PARENTAL ATTITUDES TOWARDS CHILDREN'S INDEPENDENT TRAVEL AND STREET PLAY – AFTER SURVEY

Factors that influence parents and guardians attitudes to children's independent travel and street play



Compared to the 'before' survey, there has been an increase in relation to the extent that respondents agree that they worry about these aspects.

Figure 16: Parental attitudes towards children's independent travel and street play - Before compared to After Survey

% of respondents strongly agreeing/ tend to agree with the following statement						
	Before Survey	After survey				
Base	102	120				
I worry about Stranger Danger in my street	34%	42%				
I worry about my children mixing with other kids without adult supervision in my street	19%	43%				
I worry about danger from traffic in my street	54%	65%				
I worry about pollution from traffic in my street	27%	47%				
5. ATTITUDES TOWARDS TRAFFIC SPEEDS FOR WALKING AND CYCLING

5.1. Headlines

There was an increase in the proportion of respondents stating that they felt that traffic speeds on their street was 'just about right', rising from 71% 'before' to 78% 'after'.

The proportion of residents stating they believed traffic speeds were too fast has fallen significantly. Interestingly this fall was larger on what respondents believe to be busier roads with 50% stating that they felt speeds to be 'just about right' in the 'before' survey, rising to 68% in the 'after' survey.

When comparing perceptions of safety in relation to traffic speeds to the 'before' survey, there have been positive changes in perception with respondents now more likely to consider traffic speeds in the local area as safe. Most notably, the proportion who consider traffic speeds *unsafe* for cycling has significantly decreased from 26% in the 'before' survey to 18% in the 'after' survey. Significantly, just 12% now consider traffic speeds unsafe for walking compared to 17% in the 'before' survey.

5.2. Home Street Traffic Speeds Outside Rush Hours

Almost 8 in 10 respondents (78%) feel that the traffic speeds **on their street** are just about right. 20% said the speed is much or a bit too fast and less than 1% said traffic speeds are too slow. Fewer respondents feel that traffic speeds on **busier roads** in the area outside rush hours are just about right (68%), and 27% feel that they are much or a bit too fast (Figure 17).



FIGURE 17: PERCEPTIONS OF TRAFFIC SPEEDS - AFTER SURVEY

Compared to the 'before' survey, perception of changes in traffic speeds has been positive:

- 27% of respondents stated that they believed traffic speeds on their street were too fast in the before survey, which has now decreased to 20%.
- 68% of respondents now feel that the traffic speeds on **busier roads** are just about right compared to 50% in the 'before' survey with those believing that traffic speeds are too fast falling from 46% to 27%.

It is interesting to note that analysis of perception of traffic speeds does not vary significantly based upon the speed limit of the street in which the respondent lived. This is in comparison to the 'before' survey where respondents who lived on 30mph streets were significantly more likely to consider traffic speeds on their street to be too fast (36%) compared to those who lived on proposed 20mph streets (25%).

5.3. Local Area Traffic Speeds

The majority of respondents consider traffic speeds for walking (86%) and cycling (74%) very or fairly safe. Respondents are more likely to consider traffic speeds unsafe for cycling (18%) than for walking (12%). This is an interesting finding given the responses given to questions on the extent to which respondents perceive traffic speeds influence people's feeling of safety when walking and cycling. In response to these questions, respondents are more likely to indicate that they believe traffic speeds are an influence on people's feeling of safety when walking (24%) compared to cycling (20%). This is consistent, however, with the 'before' survey.



FIGURE 18: PERCEPTION OF SAFETY OF TRAFFIC SPEEDS FOR WALKING AND CYCLING – AFTER SURVEY

When comparing perceptions of safety in relation to traffic speeds to the 'before' survey, there have been positive changes in perception with respondents now more likely to consider traffic speeds in the local area as safe. Most notably, the proportion who consider traffic speeds *unsafe* for cycling has decreased from 26% in the 'before' survey to 18% in the 'after' survey. Just 12% now consider traffic speeds unsafe for walking compared to 17% in the 'before' survey.

Respondents who live in 20mph streets are significantly more likely to consider traffic speeds in the local area to be very or fairly safe for cycling than those who lived in 30mph streets (75% in 20mph streets compared to 69% in 30mph streets).

Analysis by geography indicates that there was no significant difference in perception between those living in the South compared to the North of the area.

Analysis of perception of traffic speeds for cycling, analysed for regular cyclists indicates that regular cyclists are now significantly more likely to consider traffic speeds to be safe (77%) than in the 'before' survey (47%).

FIGURE 19: PERCEPTION OF TRAFFIC SPEEDS FOR CYCLING BY REGULAR/ INFREQUENT CYCLISTS AND NON BICYCLE OWNERS – BEFORE COMPARED TO AFTER SURVEY

% of respondents stating they believe traffic speeds for cycling to be unsafe by cyclist type							
	% stating safe % stating uns						
	Before survey	After survey	Before survey	After survey			
Regular cyclist (n=166)	47%	77%	51%	21%			
Infrequent cyclist (n=106)	20%	77%	71%	13%			
Do not own a bicycle (n=743)	23%	73%	67%	18%			

It is interesting to note that all groups indicated similar levels for feeling of safety (77% for regular and infrequent cyclists and 73% for non-cyclists) in the 'after' survey whereas there was significant variance in this in the 'before' survey.

5.4. Traffic Speeds for Older Primary School Children

In terms of traffic speeds for **older primary school children**, almost three quarters of respondents (73%) said traffic speeds are very or fairly safe for **walking** and just under half (48%) said they are very or fairly safe for **cycling**. This was fairly consistent with the attitudes generally where respondents perceive traffic speeds as more unsafe for cycling than walking. The extent to which they believe this to be the case, however, is greater for older primary school aged children than for adults.

Figure 20: Perception of traffic speeds for walking and cycling for older primary school aged children – After Survey



Compared to the 'before' survey, there has been an improvement in the perception of safety for older primary school children walking, from 67% in the 'before' survey to 73% in the 'after'. However, the perception of safety for cycling has stayed static at 48%.

Respondents who live in **20mph streets** are significantly more likely to consider traffic speeds for older primary school age children in the local area to be safe for walking (76%) and cycling (50%) than those who live in 30mph streets, 63% of whom thought traffic speeds to be safe for walking and 38% for cycling.

6. ATTITUDES TOWARDS ROAD SAFETY

6.1. Headlines

There has been a generally positive change in relation to attitudes towards road safety between the before and after studies, for example, whilst traffic speed is still the top concern relating to safety for both walking and cycling in the local area in both surveys, the level of concern has decreased, most notably with regard to walking in the local area. In the before survey, 32% of respondents agreed that they worried about traffic speeds whereas 24% of respondents agree that they worried about traffic speeds whereas 24% of respondents agree that they worried about traffic speeds whereas 24% of respondents agree that they worried about traffic speeds whereas 24% of respondents agree that they worried about traffic speeds whereas 24% of respondents agree that they worried about traffic speeds whereas 24% of respondents agree that they worried about traffic speeds whereas 24% of respondents agree that they worried about traffic speeds whereas 24% of respondents agree that they worried about traffic speeds in the after study.

6.2. Factors that Influence People's Feeling of Safety when Walking

All respondents were asked to state the extent to which they agree or disagree with various prompted factors which may influence people's feeling of safety when walking in the local area. In general, two-thirds of respondents do not agree that they worry about any of the suggested factors. From those factors which were asked about, **traffic speed** is the biggest concern for respondents overall with 24% agreeing that they worry about this factor. This is followed by **traffic volumes** (18%) being the second greatest level of concern from the factors asked about.



FIGURE 21: INFLUENCE ON FEELING OF SAFETY WHEN WALKING – AFTER SURVEY

This is a positive comparison to the 'before' survey. The proportion of respondents agreeing with each statement has decreased, with worry about traffic speeds decreasing from 32% in the 'before' survey to 24% in the 'after' survey (Figure 22).

% of respondents agreeing with statements regarding factors that influence people's feeling of safety when walking in the local area						
After survey Before survey						
	1015	1018				
I worry about Stranger Danger	8%	10%				
I worry about traffic volumes	18%	23%				
I worry about traffic speeds	24%	32%				
I worry about pollution	9%	14%				
I worry about cars parked in the street	9%	13%				

FIGURE 22: INFLUENCE ON FEELING OF SAFETY WHEN WALKING COMPARISON BETWEEN BEFORE AND AFTER SURVEYS

Analysis of the after survey shows that respondents who live in **20mph streets** are slightly more likely to agree that they worry about traffic speeds (25%) than those living in the **30mph streets** (20%). However, the level of agreement in both has decreased, most significantly decreasing from 33% agreeing in 20mph streets in the 'before' survey.

Significantly more respondents with children (44%) agree that they worry about traffic speeds than those without (22%).

6.3. Factors that Influence People's Feeling of Safety when Cycling

All respondents, both those that cycle and those that do not, were asked about factors they perceive as influencing people's feeling of safety when cycling on the streets in the local area. As was the case in relation to factors which influence people's feeling of safety when walking, **traffic speeds** are the biggest concern from the factors asked about; one fifth of respondents (20%) agree that people worry about this. This was followed by **traffic volumes** (17%), again as was the case in relation to walking.

FIGURE 23: FACTORS INFLUENCING FEELING OF SAFETY WHEN CYCLING – AFTER SURVEY



This is a positive comparison with the before survey. The level of worry has decreased for each statement with the exception of Stranger Danger. The proportion of respondents who stated that they worried about **traffic speeds** has decreased from 25% to 20% and for **traffic volumes** decreased from 21% to 17%.

FIGURE 24: FACTORS INFLUENCING FEELING OF SAFETY WHEN CYCLING COMPARISON BETWEEN BEFORE AND AFTER SURVEYS

% of respondents agreeing with statements regarding factors that influence people's feeling of safety when cycling in the local area						
After survey Before survey						
	1015	1018				
I worry about Stranger Danger	6%	6%				
I worry about traffic volumes	17%	21%				
I worry about traffic speeds	20%	25%				
I worry about pollution	7%	11%				
I worry about cars parked in the street	10%	15%				

The table below (Figure 25) shows the responses to this question broken down by regular cyclists, those who rarely cycle and those who do not own a bicycle.

As was the case in the 'before' survey, regular cyclists are significantly more likely to worry about:

- traffic speeds (46% agree 'after', 65% 'before'),
- traffic volumes (40% agree 'after', 56% 'before), and
- parked cars in the street (29% agree 'after', 44% 'before).

However, the level of concern for regular cyclists has fallen compared to the 'before' survey.

FIGURE 25: FACTORS INFLUENCING FEELING OF SAFETY WHEN CYCLING, REGULAR CYCLISTS VS INFREQUENT VS NON-CYCLISTS- AFTER SURVEY

Factors that influence people's feeling of safety when cycling						
		% agree	% disagree	% neither	% don't know	
Lucom, chout	Regular cyclist (n=166)	1%	87%	6%	6%	
I worry about Stranger Danger	Infrequent cyclist (n=106)	7%	55%	2%	37%	
Ottaliger Daliger	Do not own a bicycle (n=743)	6%	33%	15%	45%	
land and the set the ff	Regular cyclist (n=166)	40%	40%	14%	5%	
I worry about traffic volumes	Infrequent cyclist (n=106)	10%	34%	18%	28%	
Volumes	Do not own a bicycle (n=743)	13%	28%	14%	46%	
Lung man also suit (maffin	Regular cyclist (n=166)	46%	36%	12%	5%	
I worry about traffic speeds	Infrequent cyclist (n=106)	11%	34%	18%	37%	
300003	Do not own a bicycle (n=743)	16%	25%	13%	46%	
Lucia marcia la sust	Regular cyclist (n=166)	13%	49%	33%	5%	
I worry about pollution	Infrequent cyclist (n=106)	7%	35%	22%	37%	
policitori	Do not own a bicycle (n=743)	6%	29%	20%	46%	
	Regular cyclist (n=166)	29%	46%	20%	5%	
I worry about cars parked in the street	Infrequent cyclist (n=106)	8%	44%	9%	38%	
	Do not own a bicycle (n=743)	6%	29%	17%	48%	

Fewer infrequent cyclists are worried about traffic volumes, speeds and parked cars than regular cyclists; the numbers disagreeing that these factors form a worry are comparable to regular cyclists, however. Infrequent cyclists with less cycling experience tended to opt for 'neither agree nor disagree' or 'don't know' to these statements rather than providing a positive opinion.

7. TRAVEL METHODS AND REASONS

7.1. Headlines

Over the last year there appears to have been an increase in **active travel**, with a net increase of 7% in relation to travelling on foot and a net increase of 5% in relation to cycling in the local area.

7.2. Travel Methods Used Most Often

There were more people from car owning households interviewed in the 'after' survey compared to the 'before' survey. (47% compared with 37%) This change is likely to be due to a somewhat different sample profile; it is extremely unlikely to have been due to the introduction of the 20mph limit. Choice of travel method generally has a strong relationship with car ownership. So the impact of the sampling difference was examined by 'weighting' the after data on Travel Methods. As elsewhere in the report, <u>unweighted</u> results are presented here.

The survey opened by asking respondents about the travel methods they use most often and second most often within the area. Overall **travelling on foot** is the most common travel method. Nearly one in two respondents (44%) stating they travel by foot most often and 29% second most often. This represents a significant difference in the use of 'on foot' as the method of travel used most frequently when compared to the before study where 38% stated that they travelled 'on foot' most often.

The second most common method of travel used most often is **driving a car or van**, followed by **public transport** (25% and 20% respectively). There has been a change between the 'before' and 'after' surveys in the proportion of respondents who stated that they use public transport has decreased and there has been an increase in the proportion who drive a car or van compared to the 'before' survey. This change is likely to be due to the difference in the sample profile as there are more car owners interviewed in the 'after' survey compared to the 'before' survey.



FIGURE 26: TRAVEL METHODS USED MOST OFTEN – BEFORE COMPARED TO AFTER

Demographic analysis within the 'after' survey data indicates that there are some significant differences in terms of the transport method used most often:

- Those with children under 16 in the household are more likely to travel by car or van than those without (34% compared to 24% respectively). This is in line with the findings that car ownership was highest amongst households with children.
- Retired respondents are most likely to travel by public transport (36% compared to 20% overall). In general, the proportion of respondents who use public transport increases with age.
- Those who were permanently sick or disabled are more likely to travel by car as a passenger (52% compared to 6% overall).

City of Edinburgh Council

- Students are most likely to travel on foot (70% compared to 44% overall). In general, the proportion of respondents who travel on foot decreases with age.
- Students are also more likely to travel by bicycle than other respondent types (13% compared to 4% overall).

Analysis by speed limit reveals that travelling by foot within the local area is the most common travel method for all respondents regardless of the speed limit of the street they live in, with 44% in the 20mph streets and 45% in the 30mph streets stating that they travel in this way. Whilst in the 30mph streets this does not represent a significant difference to the 'before' survey, there has been an change in the proportion of the survey sample living in the 20mph streets stating that they travel on foot most commonly. This has changed from 36% in the 'before' survey sample to 44% in the 'after' survey sample.

Significant differences in relation to mode of transport used most often between the **North and South areas** were (see Figure 27 below):

- Residents who live in the South area are significantly less likely to travel on foot (21%) than respondents who live in the North (56%).
- Those in the South are more likely to travel by public transport (28% compared to 16% of those in the North) or drive a car or van (38% in the South compared to 18% of North).

These differences were also noted in the 'before' survey.



FIGURE 27: MAIN TRAVEL METHOD BY GEOGRAPHY- AFTER SURVEY

7.3. Reasons for Travelling this Way

Respondents were asked to think about the local journeys they made most often and why (unprompted) they travel this way. The main reasons cited by respondents overall were:

- Cost (26%, was 36% in the 'before' survey)
- Journey time/ speed (26%, was 24% in the 'before' survey)
- Habit/ always done this (18%, was 7% in the 'before' survey)
- Health benefits (18%, was 17% in the 'before' survey)

FIGURE 28: REASON FOR MAIN METHOD OF TRAVEL – AFTER SURVEY



Travel reasons varied considerably by the travel method used most often. Significant differences include⁵:

- Cost of travel is more likely to be given as a reason by those who travel by bicycle, public transport or travel on foot than those who drive. 62% of cyclists, 39% of public transport users and 35% of those who travel on foot said that cost was a reason why they travel in this way, compared to just 2% of those that drive;
- Journey time is likely to be a reason for travelling that way by those who drive a car or van, use public transport or who cycle. 37% of those who use public transport and 33% of those who travel by car or van, or cycle, said that journey time was a reason for travelling that way;
- Health benefit is much more likely to be cited as a reason for cycling (45%) or walking (27%) than for the choice of other means of travel
- Safety is more likely to be cited as a reason for choice to travel by public transport (25% of pubic transport users said this was a reason why they travel this way) than those who use other methods;
- Environmental benefit is more likely to be a reason for cyclists to travel that way (17% of cyclists said this was a reason for travelling this way) than those who use other methods;
- Less stressful is more likely to be given as a reason for travelling in this way by those who travel by bicycle (17% of cyclists said this) or on foot (14% of those who travel on foot said this);
- Disability reasons are more likely to be said by those who are a passenger in a car or van with 48% of passengers saying this is the reason they travel this way.

These reasons also show some interesting differences by demographic and geography:

- Cost and the perceived health benefits are most important for students (who are more likely to travel on foot or by bike). This is also a significant finding geographically with North respondents being more likely to have given these reasons than South respondents, which is due to the demographic profile of the North area which consisted of a higher proportion of student households.
- **Families** are more likely to be influenced by *convenience*.

⁵ Please see Appendix 2 for tabulation of reason vs. mode.

7.4. Change in Travel Methods

Residents were asked about any changes to their travel behaviour in the last year. The chart below shows the responses provided to this question for respondents, excluding the proportion who answered 'don't use'.

Those who travel on **foot** are most likely to have changed the amount they use this method with 12% stating they have increased the amount they travel this way and a net increase of 7%. Just under one in ten respondents (9%) state that they have **increased the amount they cycle** over the last year (a net increase of 5%) and 9% state that they have increased the amount they travel by **public transport (a net increase of 4%)**. Smaller percentages have decreased the use of these modes, leading to an overall net gain in sustainable modes with a commensurate net decrease in car use.

FIGURE 29: CHANGE IN TRAVEL METHODS – AFTER SURVEY



Responses for this question (excluding those who don't use each travel method) have been analysed by street speed limit. This reveals that there are no significant differences in the change in behaviour based upon the speed limit in the street in which they live, with the exception of the use of public transport where respondents living in 20mph streets are more likely to have increased use public transport (net increase of 5%) compared to those in the 30mph streets (net decrease of 7%).

Analysis by demographic indicates that there are some groups who are more likely to have changed the frequency they travel by different methods. Significant differences are:

- Younger respondents (16-29) are significantly more likely to have increased the amount they travel on foot (net increase of 21%). Conversely significantly more respondents aged 70+ stated that they have decreased the amount they travel on foot (net decrease of 23%)
- Females are significantly more likely to have increased the amount that they travel by public transport in the local area (net increase of 9%) than males (net decrease of 1%).
- In general the proportion of respondents who said they have increased the amount that they travel by active transport methods i.e. by foot or cycle decreased with age.

Compared to the 'before' survey, a lesser proportion of respondents had increased the amount they travel by active transport methods. For example, the before survey saw a net increase of 12% in relation to travel on foot and a net increase of 8% in relation to travel by bicycle compared to net increases of 7% and 5% for travel on foot and bicycle in the after survey.

8. ATTITUDES TOWARDS CYCLING

8.1. Practicality of cycling for a range of activities

In the after survey, respondents were asked how practical they believe cycling to be for a range of activities. The results are shown below. As can be seen, the vast majority of respondents either have **no opinion on the practicalities of cycling or believe that cycling would generally be impractical for most activities**.

Most likely to be perceived as practical would be cycling to **visit friends or relatives** (17% consider practical) or **leisure activities during the weekend** (13%).



FIGURE 30: PRACTICALITY OF CYCLING TO A RANGE OF ACTIVITIES- AFTER SURVEY

Perhaps unsurprisingly, there are significant differences in perception based upon how regularly respondents cycle. Regular cyclists are significantly more likely to consider cycling to a range of activities practical compared to both infrequent cyclists and those that do not own a bike. Most likely to be perceived as practical by regular cyclists was visitng friends and relatives (68%) and leisure activities during the weekend (47%).

FIGURE 31: PERCEIVED PRACTICALITY OF CYCLING TO DIFFERENT ACTIVITIES BY REGULAR/ INFREQUENT CYCLISTS AND
THOSE THAT DO NOT OWN A BICYCLE – AFTER SURVEY

% considering cycling to activity either very or fairly practical						
	Regular cyclists	Infrequent cyclists	Do not own a bicycle			
Base	166	106	743			
Visit friends/relatives	68%	19%	5%			
Take children to/ from school	14%	8%	0%			
Supermarket shopping	28%	5%	0%			
Town centre shopping	32%	4%	0%			
Evenings out for leisure purposes (e.g. meal, cinema etc.)	15%	2%	0%			
Take children to leisure activities	14%	8%	0%			
Go away for a weekend	9%	0%	0%			
Leisure activities during the weekend (playing sport, visiting tourist attractions)	47%	20%	5%			

9. TRAVEL OUTWITH THE AREA

9.1. Travel outwith the area

When asked about the methods of transport used largely outwith the area, the most common method used is public transport (45%) followed by driving a car or van (36%).

FIGURE 32: MOST FREQUENTLY USED METHOD OF TRANSPORT OUTWITH THE AREA – AFTER SURVEY



Analysis shows that there is a direct correlation between the mode of tranpsort respondents use most frequently within the area and the mode of transport used most frequently outwith the area. For example, 84% of those who use public transport most often outwith the area also stated that they use public transport most commonly within the area.

Although, it is interesting to note that this is not the case with those who largely travel by bicycle and on foot in the area. These respondents are most likely to travel by public transport when travelling outwith the area.

10. CONCLUSIONS

There is strong support for the introduction of the 20mph speed limit in the proposed streets across south central Edinburgh. Perhaps the greatest indicator of the scheme's success is that the level of support for the 20mph speed limit has increased overall, and the proportion of respondents strongly supporting the speed limit has increased significantly.

There is strong evidence to support that the 20mph limit has increased people's perception of safety for cycling and notably increased the feeling of safety of regular cyclists.

Traffic speeds were cited as the greatest concern, from a number of factors listed, in relation to people's feeling of safety when walking and cycling in the local area. Whilst traffic speeds are still a concern for a significant minority of respondents, the proportion of respondents expressing a concern has fallen.

There was agreement from parents that danger from traffic is a concern in relation to their attitude to allowing children to travel independently and play in the street. A higher level active travel to school was reported across all age groups, with older primary school children more likely to be cycling to school, more likely to be allowed to make unsupervised trips in the neighbourhood and play in the street in the after survey.

The most significant perceived benefit for all groups, and in particular parents, in the 'before' survey was safety for children to walk about the area and to play in the street. In the after survey, when asked about the benefits that have been seen as a result of the implementation of the 20mph speed limit, these are the top two realised benefits cited by respondents. However, it is interesting to note that the extent to which this benefit has been realised is slightly lower than the anticipated benefit. This is the case for both parents and wider residents.

Traffic speeds were highlighted as an issue which may impact on people's feeling of safety when walking and cycling in the local area, however, the majority believed that traffic speeds in their street were about right. This has improved when compared to the 'before' survey and respondents were now less likely to state that traffic was too fast.

For walking and cycling, the majority felt that speeds were safe. This has increased compared to the 'before' survey. When looking at the difference between walking and cycling, respondents are more likely to consider traffic speeds safe for walking than for cycling, as was evidenced in the earlier results.

We conclude that the introduction of the 20mph limit has been successful from data collected on changing attitudes and behaviour of residents across the area. and appears to have influenced residents attitudes on the safety of walking and cycling in the area for both adults and children. Reported changes in behaviour are mixed, and the short term nature of the study means that it is difficult to draw conclusions on the impacts on behaviour . A separate report has been undertaken by the City of Edinburgh Council examining impacts on traffic speeds.

Appendix 1 After Survey Questionnaire



Project name	Evaluation of the implementation of 20 mph speed limits in south
-	Edinburgh; 'after' survey

[INTERVIEWER: CLOSE INTERVIEW BY READING OUT STATEMENT]

"Thank you very much for your help. Can I assure you once again that the information you have given will be treated as absolutely confidential and will only be used for the purposes of genuine market research."

INTERVIEWER DECLARATION:

I declare that this interview was carried out according to instructions, within the Market Research Society's Code of Conduct, and that the respondent was not previously known to me.

Interviewer No:	Name:	
Questionnaire No	Signature:	
On quota:	Date:	
Edited by:	Duration	
Backchecked by:		

Introduction: Good morning/afternoon/evening. My name is and I work for the market research company [to be completed]. I'm doing some research for the City of Edinburgh Council into people's experiences and opinions of travel in the local area. Please can you spare some time to take part? I'd like to ask some questions about how you travel locally

SCREENING:

Do you normally live here?

□₁ Yes	If Yes , continue to Q1
--------	--------------------------------

No thank respondent for their time, and terminate interview

INTERVIEW

Q1a. I'd like you to think about <u>local</u> journeys you made largely within the area shown on this map in the past year. Can you tell me which means of travel you used most often and which second most often? [INTERVIEWER: present map. 'largely within the area' means within or just outside the area, for example to the University campuses. Cameron Toll. or Morningside]

	Most often	2 nd most often
Public transport - bus or coach		1
Motorcycle, scooter or moped	2	2
Drive car or van	3	3
Passenger in car or van	4	4
Taxi/minicab	5	5
Bicycle	6	6
On foot	7	7
Other method (please specify)	8	8

Q2. I would now like you to think about the local journeys that you make most often, that is, by {mode selected as most often at Q1}:

Please tell me why you travel this way? [INTERVIEWER: present map. Do not prompt unless no response. Code as appropriate; as many as apply]

journey time/speed	□ ₁
reliability	2
safety	3
comfort	4
convenience [INTERVIEWER PROBE: Why is it convenient?]	5
cost	6
difficulty/cost of parking	7
habit/always done this	8
health benefits	9
less stressful	10
need car/bike at destination	11
environmental benefits	12
no alternative	13
carry stuff/ take stuff with me	14
Disability means have to travel this way	15
other (please specify – then code if appropriate code is available)	16
Other - Quality Bike Corridor	17
Other - 20mph zone	18
Other - Parental responsibilities increasing/decreasing	19
Other – Weather	20
Other – lack of facilities at work	21
Other – picking up/dropping off on the way	22

Q3. Over the last year, has the amount you travel in the local area by the following methods

increased, stayed the same, or decreased? [INTERVIEWER: present map and show card. Code one option per means of transport]

	Don't use this means of transport within the area	Increased	Stayed the same	Decreased	Don't know
Car		2	3	4	5
Foot		2	3	4	5
Bicycle	1	2	3	4	5
Public transport		2	3	4	5
Motorcycle		2	3	4	5
Other (please specify)		2	3	4	5

Q4 a) Are there any children under 16 living in this household?

 \Box_1 Yes If **Yes**, continue to Q4b to Q4f

If **No**, go to Q5 2 NO

Q4 b)How old is each child? [INTERVIEWER: write in the age of each child. Question c is to be asked only of school age children. If no school age children in the household go to d]

c) I'd like to ask a series of questions about the children and how they travel. Firstly, for school age children, how do they usually travel to school?
[INTERVIEWER: use show card and code <u>all</u> methods for each child, for example, if they travel by bus do they walk or are they driven to the bus stop?]
d) [ASK FOR ALL CHILDREN] Do you allow them to make any other local trips that involve crossing a road without <u>adult</u> supervision?
e) [ASK FOR ALL CHILDREN] Do you allow them to play unsupervised outside your home, for example, on the pavement or in the street ?

		c) H	c) How do they usually travel to school? [SCHOOL AGE CHILDREN ONLY]								e) allowed the street	
	b) How old is each child?	Car	On foot <i>with</i> adult supervision	On foot <i>without</i> adult supervision	Cycle <i>with</i> adult supervision	Cycle <i>without</i> adult supervision	Bus	Other	Yes	No	Yes	No
Child 1		1	2	3	4	5	6	7		2		2
Child 2		1	2	3	4	□ ₅	6	7	□ ₁	2		2
Child 3		1	2	3	4	5	6	7	1	2	1	2
Child 4		1	2	3	4	5	6	7	□ ₁	2		2
Child 5		1	2	3	4	□ ₅	6	7	□ ₁	2		2
Child 6		1	2	3	4	5	6	7	1	2	1	2

f) Here are some statements about factors that influence parents and guardians attitudes to children's independent travel and street play. Can you let me know how much you agree with these statements?

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
I worry about Stranger Danger in my street		2	3	4	5	6
I worry about my children mixing with other kids without adult supervision in my street	□ 1	2	3	4	5	6
I worry about danger from traffic in my street	1	2	3	4	5	6
I worry about pollution from traffic in my street		2	3	4	□ ₅	6

Q5A: Here are some statements about factors that influence people's feelings of safety when <u>walking</u>. Thinking of the local area, how much do you agree or disagree with these statements?

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
I worry about Stranger Danger		2	3	4	5	6
I worry about traffic volumes	1	2	3	4	5	6
I worry about traffic speeds	1	2	3	4	5	6
I worry about pollution		2	3	4	5	6
I worry about cars parked in the street (e.g. the number of cars or where they are parked)	1	2	3	4	5	6
I worry about other things (PLEASE SPECIFY)						

Q5B: Now thinking about <u>cycling</u> on streets in the local area. How much do you agree or disagree with the same statements?

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree	Don't know
I worry about Stranger Danger		2	3	4	5	6
I worry about traffic volumes		2	3	4	5	6
I worry about traffic speeds		2	3	4	5	6
I worry about pollution		2	3	4	5	6
I worry about cars parked in the street (e.g. the number of cars or where they are parked)	1	2	3	4	5	6
I worry about other things (PLEASE SPECIFY)						

ASK ALL

Q6: What do you think of traffic speeds a) on your street and b) busier roads in the area <u>outside rush hours</u>?

	Much too fast	A bit too fast	Just about right	A bit too slow	Much too slow	Don't know
My street		2	3	4	5	6
Busier roads in the area (eg Blackford Ave, Marchmont Rd, Grange Rd)	□ ₁	2	3	4	5	6

	Very unsafe	Slightly unsafe	Fairly safe	Very safe	Don't know
For walking		2	3	4	5
For cycling		2	3	4	5

Q7: How safe do you think traffic speeds are in the local area?

Q8: Thinking of older primary-school aged children, how safe do you think traffic speeds are in the local area?

	Very unsafe	Slightly unsafe	Fairly safe	Very safe	Don't know
For walking		2	3	4	5
For cycling on the road	1	2	3	4	5

[INTERVIEWER: READ OUT INTRO TO Q9]

"The Council put in place a 20mph speed limit on most residential streets around here in March last year. The area is shown on the map. No extra road humps were put in, but there were new signs and road markings at the entrances to roads with the new limit and smaller signs at intervals to remind people of the limit. Most of the busier roads kept their 30mph limit."

Q9: Overall, do you now support or oppose this?

Strongly support	Support	Neither support or oppose	Oppose	Strongly oppose	Don't know
	2	3	4	□ ₅	6

Q10: What do you think the benefits of the 20mph speed limit have been? [INTERVIEWER: *Do not prompt. Code as appropriate; as many as apply*]

Do not prompt. Code as appropriate, as many as apply	
Safer for children to play in the street	1
Safer for children to walk about the area	2
Increased amount of walking in the area	3
Better conditions for walking	4
Increased amount of cycling in the area	5
Better conditions for cycling	6
Better area to drive in	7
Less accidents	□ ₈
Less noise	9
Better community atmosphere	□ ₁₀
Less congestion	□ ₁₁
Less aggressive driving	□ ₁₂
Less through traffic	□ ₁₃
Better air quality	□ ₁₄
More opportunity to stop and chat on the street	□ ₁₅
Other benefits (please specify)	□ ₁₆
None	17

Q11: What do you think disadvantages of the 20mph speed limit have been?

INTERVIEWER: Do not prompt. Code as appropriate; as many as apply]				
More noise				
More congestion	2			
More aggressive driving	3			
Worse air quality	4			
Worse area to drive in	5			
Other disadvantages (please specify)	6			
None	7			

Q11A: How do you feel media coverage (in newspapers, online and on TV] has been about the scheme?

Negative	Neither positive or negative	Positive	No answer
□ 1	2	3	4

Q11B: Has media coverage (in newspapers, online and on TV] influenced your opinion of the scheme?

Yes	No	No opinion
1	2	3

Q11C: Have you heard of the Streets Ahead campaign?

Yes	No	No opinion
1	2	□ ₃

Q11D: How long have you lived in the area?

One year or more	Less than one year	No answer
1	2	3

Q11E. Over the last year, has the amount you use local shops and services in the area

increased, stayed the same, or decreased? [INTERVIEWER: present map and show card. Code one option per means of transport]

Don't use local shops/services within the area	Increased	Stayed the same	Decreased	Don't know
	2	□ ₃	4	5

Q11F: What do you think of amount of signage and road markings relating to the 20mph zone a) on your street and b) generally in the area?

	Much too much	A bit too much	Just about right	A bit too little	Much too little	Don't know
My street		2	3	4	5	6
Generally in the area		2	3	4	5	6

<u>ABOUT YOU AND YOUR HOUSEHOLD</u> Finally, I'd like to ask some questions about you and your household. These will only be used to analyse the survey results to see if people in certain situations or with certain characteristics feel differently to others. All the information you give will be kept totally confidential and used only for analysis purposes.

Q12: Which of the following age groups do you fall into? Interviewer ask age group and gender

	Male	Female
16-19	1	1
20-29	2	2
30-39	3	3
40-49	4	4
50-59	5	5
60-69	6	6
70-79	7	7
80+	8	8

Q13: Which of the following best describes the composition of your household?

[INTERVIEWER: Showcard. Code one only]

Single Adult under 65 years	1
Single Adult over 65 years	2
Two adults both under 65	3
Two adults at least one aged over 65 years	4
Three adults all over 16 years	5
1-parent family with children, at least one under 16 years	6
2-parent family with children, at least one under 16 years	7
Other	8
Students	9

Q14: Which of the following best describes your current situation? [INTERVIEWER: Showcard. Code one only]

Working – full time (35+ hrs)	1
Working – Part-time (9-34hrs)	2
Self-employed	3
Unemployed and seeking work	4
Permanently retired from work	5
Looking after home or family	6
Permanently sick or disabled	7
In further/ higher education	8
Government work or training scheme	9
Unable to work due to short term illness or injury	10
Other	11
Refused	

Q15: Do you have any of the following conditions which are expected to last at least 12 months? [INTERVIEWER: tick all that apply]

No condition	_
No condition	1
Developmental disorder (e.g. Autistic Spectrum Disorder or Asperger's Syndrome)	2
Learning difficulty (r.g. dyslexia)	3
Learning disability (e.g. Down's Syndrome)	4
Blindness or partial sight loss	5
Deafness or partial hearing loss	6
Mental health condition	7
Physical disability	8
Long term illness, disease or condition	9
Other condition, write in	□ ₁₀

Q16: How many cars are normally available for use by your household?

One	Two	Three or more	None
	2		4
	Go to Q17		Ask Q18

Q17: How often do you drive a car/ van nowadays for private purposes (including travelling to work but ignoring any driving which is part of your job)?

Every day	1	
At least three times a week	2	
Once or twice a week	3	
At least 2 or 3 times a month	4	Ask Q17B
At least once a month	5	
Less than once a month	6	
Never, do not drive	7	Go to Q18

Q17B: In the next 12 months, would you like to use your car...

A lot more	Slightly more	About the same	Slightly less	A lot less	No opinion
□ <u>1</u>	2	□ ₃	4	□ ₅	6

Q18: When you do the following, how practical would it be to cycle to the following activities?

	Very practical	Fairly practical	Fairly impractical	Very impractical	No opinion
Visit friends/relatives	1	2	3	4	5
Take children to/from school	1	2	3	4	5
Supermarket shopping	1	2	3	4	5
Town centre shopping	1	2	3	4	5
Evenings out for leisure purposes (eg meal, cinema etc)	1	2	3	4	5
Take children to leisure activities	1	2	3	4	5
Go away for a weekend	1	2	3	4	5
Leisure activities during the weekend (playing sport, visiting tourist attractions)	1	2	3	4	5

Q19: How many bicycles are normally available for use by adults in your household?

One	Two	Three or more	None
		3	4
	Ask Q21		

Q20: How often do you cycle nowadays for private purposes (including travelling to work but ignoring any cycling which is part of your job)?

Every day	1
At least three times a week	2
Once or twice a week	3
At least 2 or 3 times a month	4
At least once a month	5
Less than once a month	6
Never, do not cycle	7

Q21. I'd like you to think about journeys you made largely outside of the area shown on this map <u>in the past year</u>. Can you tell me which means of travel you used most often and which second most often? [INTERVIEWER: present map. 'largely outside the area' means journeys that

begin or end outside the area, for example beyond the University campuses, Cameron Toll, or Morningside. Outside would include journeys to the city centre]

	Most often	2 nd most often
Public transport - bus or coach	1	1
Motorcycle, scooter or moped	2	2
Drive car or van	3	3
Passenger in car or van	4	4
Taxi/minicab	5	5
Bicycle	6	6
On foot	7	7
Other method (please specify)	8	8

Q22: Please could you tell me your home postcode? This will only be used to map the geographical representation of respondents taking part in the survey and no other purpose.

Q23: City of Edinburgh Council may wish to carry out follow up research to this survey either through focus group discussions or another survey in a year's time. Would you be willing to be re contacted at a later date to see if you would be interested in participating in one of these? Please remember, even if you say yes now, you can say no later.

Focus group	□₂ No
Longitudinal survey	□₂ No

Q24: Finally, do you have any further comments on the proposed 20mph limit in your area?

That's all of our questions, thank you for your time participating in our research.

Appendix 2

Number of interviews per street – before and after surveys

Number of interviews achieved per street					
	Before	After			
	Survey	Survey			
Base: total number of	1010	1015			
interviews	1018	1015			
Argyle Park Terrace	10	12			
Blacket Avenue	14	14			
Blackford Avenue	17	29			
Blackwood Crescent	46	45			
Cameron Crescent	18	17			
Cameron March	4	4			
Cameron Park	13	13			
Causewayside	55	55			
Chalmers Crescent	12	12			
Charterhall Road	3	2			
Church Hill	8	8			
Church Hill Place	7	7			
Cumin Place	6	6			
Dalkeith Road	31	31			
Dick Place	20	17			
Drumdryan Street	20	19			
East Parkside	30	29			
East Preston Street	17	17			
Esslemont Road	1	1			
Findhorn Place	16	16			
Gladstone Terrace	36	37			
Glengyle Terrace	14	15			
Grange Loan	5	5			
Kilgraston Court	4	4			
Kilmaurs Road	6	6			
King's Meadow	14	15			
Kirkhill Drive	8	8			
Kirkhill Gardens	2	2			
Kirkhill Road	6	6			
Kirkhill Terrace	2	4			
Langton Road	16	16			
Lauder Road	14	14			
Lord Russell Place	2	2			
Marchmont Crescent	41	42			
Marchmont Road	42	41			
Mayfield Road	20	19			
Mentone Terrace	3	3			

2	2
34	33
12	13
5	5
21	20
33	32
27	26
3	3
12	12
18	19
7	8
16	15
56	55
4	3
15	15
14	15
5	4
16	15
5	5
6	6
12	12
23	23
11	11
15	14
17	17
17	17
29	22
	34 12 5 21 33 27 3 12 18 7 16 56 4 15 14 5 6 12 23 11 15 17 17

Appendix 3

Reason vs Mode Cross Tabulation

_		Q1a Most often							
Break % Respondents		Public transport -	Motorcycle,		Passenger in car				Other method
	Total		scooter or moped	Drive car or van	or van	Taxi/minicab	Bicycle	On foot	(please specify)
Base	1015	201	2	252	65	5	42	446	2
Q2 Please tell me why you travel this way?									
Journey time/speed	26%	37%	100%	33%	15%	-	33%	17%	-
Reliability	16%	27%	50%	18%	14%	-	21%	9%	-
Safety	9%	25%	-	8%	15%	-	2%	2%	-
Comfort	13%	28%	-	20%	23%	-	5%	3%	-
Convenience	14%	8%	50%	15%	6%	-	14%	16%	-
Cost	26%	39%	-	2%	2%	-	62%	35%	-
Difficulty/cost of parking	4%	5%	-	-	-	-	12%	7%	-
Habit/always done this	18%	10%	-	17%	2%	-	14%	26%	-
Health benefits	18%	9%	-	5%	15%	100%	45%	27%	50%
Less stressful	10%	7%	50%	7%	2%	20%	17%	14%	-
Need car/bike at destination	3%	0%	-	6%	-	-	7%	1%	-
Environmental benefits	3%	-	-	-	2%	-	17%	4%	-
No alternative	13%	28%	-	2%	8%	-	5%	15%	-
Carry stuff/ take stuff with me	7%	3%	-	21%	8%	-	-	1%	-
Disability means have to travel this way	4%	2%	-	3%	48%	-	-	0%	-
Other (please specify	1%	0%	-	2%	-	-	-	1%	50%
Other - Quality bike corridor	0%	-	-	-	-	-	2%	-	-
Other - 20mph zone	-	-	-	-	-	-	-	-	-
Other - Parental responsibilities icre- asing/decreasing	0%	-	-	-	-	-	-	1%	-
Other - Weather	1%	-	-	4%	-	-	-	-	-
Other - Lack of facilities at work	0%	-	-	-	-	-	2%	0%	-
Other - Picking up/dropping off on the way	0%	-	-	0%	-	-	-	-	-
Enjoy driving	0%	-	-	2%	-	-	-	-	-