Scaynes Hill Sustainability Group

RESULTS & ANALYSIS OF A SURVEY ON THE NEED FOR AND POTENTIAL USE OF A SAFE CYCLE/WALKWAY FROM SCAYNES HILL TO LINDFIELD









Lindfield

REVISED & UPDATED

June 2021

EXECUTIVE SUMMARY

There has been a clear desire and need for a safe cycling and walking route from Scaynes Hill to Lindfield for decades, particularly for use by children attending schools in Lindfield and Haywards Heath. The only current route along the A272 and B2111 has always been hazardous and has become increasingly impractical with the increasing volume of traffic on those roads. Community consultation for the Village Plan in 2011 and for the Neighbourhood Plan in 2013 confirmed this need. A proposal for creation of a safe route was included in the Final Neighbourhood Plan in 2014. Section 106 community infrastructure funds from the recent Swallows development in Scaynes Hill was specifically allocated to this project in 2017, but is effectively frozen as it cannot be used for the necessary feasibility study to determine the optimum route. As yet there is no funding for a feasibility study and existing Section 106 monies are insufficient to fund the whole route. This survey was created to quantify the need and potential benefits of a safe cycle/walkway, with a view to finding a way to move it forward.

The initial survey was done in March by distributing paper copies to 460 houses in Scaynes Hill asking for either paper or online responses. 434 responses were received, 57% from Scaynes Hill residents and 43% from elsewhere. After analysing the responses and comments it was realised that there might be a similar desire for this scheme from residents of Lindfield. Therefore it was decided to carry out a second similar survey more specifically targeted at residents of Lindfield. The second survey had identical questions so that the results could be combined, but there were also 3 additional questions to obtain some more detailed information about potential usage. For this reason the second survey was open to those who had done the first, and a further mandatory question was also added to indicate whether a response to the previous survey had been submitted.

The second survey had 258 responses, of which 38 were from those who had also done the first, meaning that there were 220 new responses. Therefore together with the 434 responses from the first survey the total number of responses was 654. About a third of all responses were from individuals, while the other two thirds were from households. The average number of members in a household who were also said to be likely to use the cycle/walkway was about 3. Thus the survey represents the views of over 1600 people. For those resident in Scaynes Hill, the survey represents over 600 people (about 67% of the village), while for those in Lindfield it represents about 500 people.

The results indicate that:-

- 88% of all respondents strongly agreed that a safe cycle/walkway was necessary and a further 9% agreed.
- 84% of all respondents would be highly likely to use it with a further 12% moderately likely.
- 33% said they would use it several times a week with a further 38% saying they would use it weekly.

The potential number of journeys was estimated on a conservative basis as about 67,000 annually. Assuming 50% of these journeys replace existing travel by motorised vehicle the reduction in CO_2 emissions would be about 38 tonnes/year. On less conservative assumptions the number of journeys would be 84,000 and the reduction in emissions could be as much as 48 tonnes of CO_2 annually.

The high response rate and the alacrity with which responses were received, particularly in Scaynes Hill, clearly indicates the need for a safe cycle/walkway from Scaynes Hill to Lindfield. The quantifiable data indicates that this could lead to a substantial reduction of CO_2 emissions, which in the context of the current climate crisis and the drive to move to a carbon zero economy, is highly relevant. In addition encouraging more Active Travel will also increase the health and well-being of those using it.

CONTENTS

	page
Executive Summary	1
1. Background	3
2. Survey structure	4
3. Survey process	4
4. Survey response	5
5. Combined results from both surveys	5
6. Results from additional questions only in second survey	7
7. Analysis	8
8. Comments	10
9. Conclusions	10
References	12
Appendix A: Comparison & combination of the two surveys	A-1
Appendix B: Estimating journeys and CO ₂ emissions	B-1
Appendix C: Alternative routes	C-1
Appendix D: List of all comments	D-1

1. Background

For decades the residents of Scaynes Hill have expressed both a desire and need for a safe cycling and walking route from the village to Lindfield or Haywards Heath, particularly for children attending schools in those locations. West Sussex County Council (WSCC) deem the current route along the A272 and B2111 to Lindfield to be a safe cycling and walking route. However, the speed of traffic on the A272, which has a rough and sometimes narrow verge without any walkway, and the narrowness of the B2111, with no verge or walkway along part of it, have always made this an impractical route and with the ever increasing volume of traffic it has become even more unsafe.

In 2010 a 46 point questionnaire distributed to 500 households in Scaynes Hill formed the basis for the 2011 Village Plan¹, a process which was initiated by Lindfield Rural Parish Council (LRPC). There were about 300 responses received of which 79% felt that a safe cycling route to Haywards Heath via Lindfield was needed and 82% were in favour of a safe footpath to Haywards Heath. During the consultation for the joint Lindfield and Lindfield Rural Neighbourhood Plan (LLRNP) in 2013 one of the weaknesses identified was "Scaynes Hill (is) isolated from Lindfield due to lack of direct bus service and unsafe cycling route". There was clearly considerable support for a safe cycling and walking route between the two villages and this was included in the LLRNP vision³ and proposals. One of the Vision's Objectives was that "both settlements are better connected to each other and to the wider area by dedicated cycle routes" with the measure of this being "the miles length of new cycle routes coming forward". Both Parish Councils undertook to support proposals to establish a dedicated safe cycle route from Scaynes Hill through to the Lewes Road in Lindfield⁴.

Various routes have been suggested by different parties but there is not an agreed solution. Two potential routes were included in the West Sussex Walking & Cycling Strategy⁵ (ID186 & 213). It is not in the remit of this survey to favour any particular route but it is considered helpful to document the alternatives, which are briefly described and shown on the map in Appendix C. There could be potential synergy with cycling and walking provisions in the proposed Walstead Park development⁶ but it seems that this may have been overlooked.

As part of the Barn Cottage/Swallows development for 55 new dwellings in Scaynes Hill in 2017 the entire Section 106 contribution for Total Access Demand, a sum of about £135,000, was specifically designated for a safe cycleway to Lindfield⁷. This would be insufficient for the whole project and additional funds would still be required. However, it is understood that the Section 106 money cannot be used for a feasibility study to consider the various options and select an optimum route. In effect this money is frozen until such a study is undertaken to identify the best route.

In February 2021 the Scaynes Hill Sustainability Group⁸ discussed potential ways to raise funds for a professional assessment of possible routes. Paul Brown, Councillor for the High Weald ward at Mid Sussex District Council (MSDC), suggested that a survey of Scaynes Hill residents' views about a safe cycling and walking route would be helpful in demonstrating the residents' continuing support and could encourage Councillors and Councils at all levels to get behind advancing proposals for a dedicated cycleway and footway between Scaynes Hill and Lindfield. The survey, which was designed to quantify both the demand for and potential benefits of a safe cycle/walkway between the two villages, was carried out in March/April 2021.

There were 434 responses to this survey with 98% in favour of the scheme and a previous version⁹ of this report was drafted and distributed to Councillors and Officers at WSCC, MSDC, LRPC and

Lindfield Parish Council (LPC). Although the survey had been intended principally for Scaynes Hill residents over a third of responses were from outside the village. As a result of that and the comments received it was realised that there might be a similar desire for this scheme from residents of Lindfield, in order to reach Scaynes Hill and the countryside beyond. Therefore it was decided to carry out a second similar survey more specifically targeted at residents of Lindfield.

2. Survey structure

This second survey was devised to be as similar to the previous one as possible so that data from the two surveys could readily be combined. All 6 questions from the previous survey were used identically with the exception of the first question which asked if the responder was a resident of Lindfield (rather than Scaynes Hill). Three additional questions were included to refine the data capture. These were:-

- If responding as non-resident of Lindfield they were asked to give a postcode. This was added to give a better idea of the geographic distribution of respondents.
- If responding that they would use the cycle/walkway several times a week they were asked how many times this would be. In analysing the previous survey it was noted that this was a critical assumption in forecasting the frequency of use and it was felt to be helpful to gather some actual data on this aspect.
- If responding that they would use the cycleway they were asked to say whether this would be either predominantly for cycling or walking (incl mobility vehicle). Following correspondence with WSCC about the results of the first survey it was noted that the Department for Transport cost/benefit model for assessing Active Travel projects rates the benefits from cycling and walking rather differently.

Finally responders were asked if they had taken part in the previous survey, to avoid any double counting of the same data.

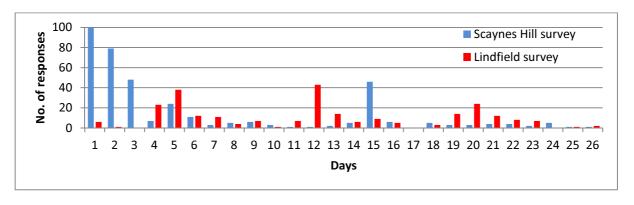
3. Survey process

The original survey, which ran from 24th March to 18th April 2021, had been conducted by distributing survey forms to about 460 households in Scaynes Hill referring them to an alternative online survey, which was also advertised on the village website and Facebook page. Since the distribution of physical survey forms around the whole of Lindfield would have been a much larger task than that already done for the Scaynes Hill survey, an online only survey was created on Google Forms, which was publicised in various ways. These included an article in the June issue of the local magazine Lindfield Life, followed later by e-mails to various local groups and schools and posts on a number of Lindfield based Facebook pages. The survey was opened on 22nd May with a deadline of 16th June, giving a period of just more than 3 weeks to gather responses.

As it was felt that answers to the additional questions could be helpful in extending the data from the original survey it was made clear that even those who had completed the original survey could do so again. However, one of the questions was to indicate whether they had responded to the first survey, in order to avoid double counting. Since no personal information was requested responses would be anonymous as for the original survey.

4. Survey response

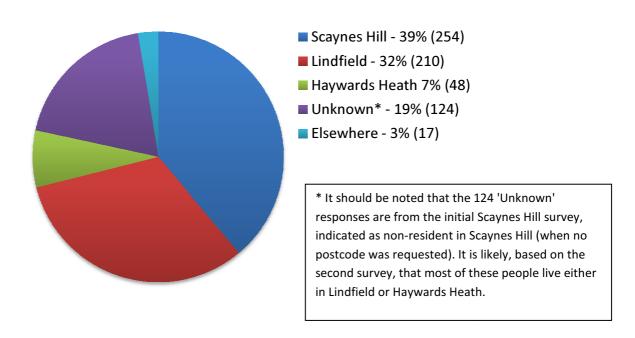
The response to the original survey had been immediate and in great numbers, the spike of numbers on day 15 being the manual entry of paper survey responses received by that date. The response to the Lindfield based survey was less immediate and more sporadic than that done in Scaynes Hill. There was a spike of responses immediately after the official publication date of Lindfield Life on 25th May (day 4) and another spike following posts of the Facebook groups made on 2nd June (day 12). By the closing date a total of 258 responses had been received, of which 38 indicated that they had also completed the previous survey, meaning that there were 220 new responses that could be added to the 434 received previously, making a total response of 654.



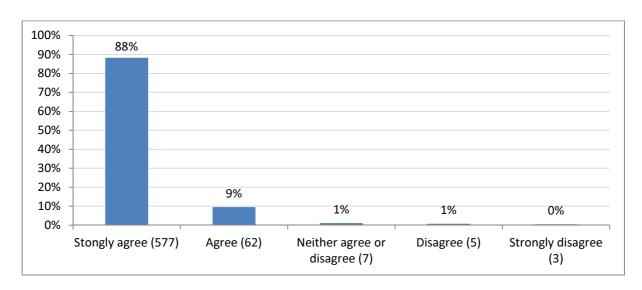
5. Combined results from both surveys

The data obtained by combining the two surveys, after removing any duplicate data, is given in graphical form below for the 6 original questions, which were identical in the two surveys. Percentage figures are given as well as actual numbers in brackets. The individual survey results and the comparison between the two surveys is given in Appendix A.

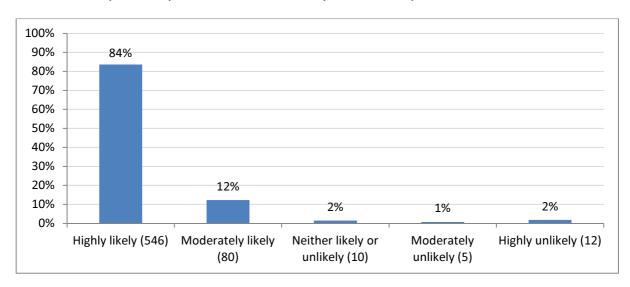
Q1. Where are you resident?



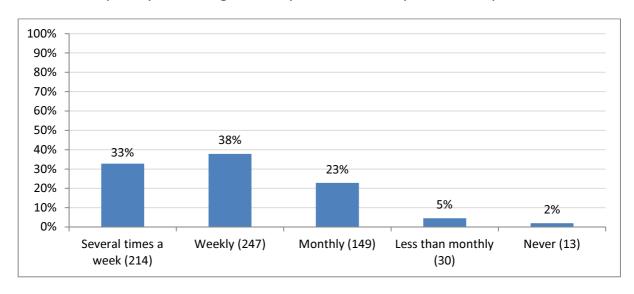
Q2. Do you agree there is a need for a safe cycle/walkway from Scaynes Hill to Lindfield?



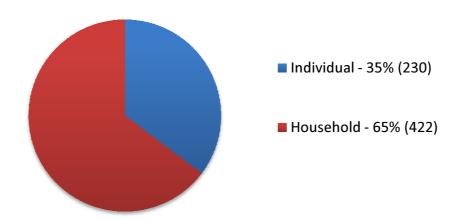
Q3. How likely would you be to use such a cycle/walkway?



Q4. How frequently on average would you use such a cycle/walkway?



Q5. Are you answering as an individual or on behalf of your household?



The sixth common question was about household size for those responding on behalf of a household. From the responses the average total number of potential users in households who would also be likely to use the cycle/walkway was 3.4.

In addition to the 219 comments received from the first survey an additional 53 comments were made by those in the second survey who had not participated in the first one, making a total of 272, which equates to 42% commenting. There were also comments from 12 people who had done the previous survey. An attempt has been made to categorise the comments into groups with an indication of how many in each group. As several comments fall into more than one group the sum of the percentages for all the groups is greater than 100%.

As the comments powerfully illustrate the strength of feeling of the respondents a record of all comments has been made. The 272 comments from the combined survey results together with the 12 additional comments from those who completed both surveys are given in Appendix D to this report. They have been listed in terms of their response to Q2 'Do you agree there is a need for a safe cycle/walkway from Scaynes Hill to Lindfield?' in order to give some context.

6. Results from additional questions only in second survey

As these questions had not been included in the first survey all responses have been considered below (ie including those who stated they had already done the first survey).

Q1a. If you are not a Lindfield resident please give your postcode

The postcodes of the 78 respondents who were not resident in Lindfield are plotted geographically in Appendix A. The distribution was as follows:-

- Haywards Heath 43 (55%)
- Scaynes Hill 25 (32%)
- Elsewhere 10 (13%)

Q4a. If you answered 'Several times a week' above please indicate how many times a week that would be?

The distribution of responses is given in Appendix A. From the 66 responses to this question the weighted average was 4.3 times per week.

Q7. What would you principally use it for?

The only alternatives given where either Cycling or Walking (incl mobility vehicle). Since this question was mandatory one of these alternatives had to be entered. As one of the comments pointed out there should have been an alternative for those who said they would never use it. For this reason only the responses to this question given by those who said they were either likely or highly likely to use it were considered. For those categories the split was:

- Walking (incl mobility vehicle) 132 (54%)
- Cycling 112 (46%)

7. Analysis

Number of people represented

As nearly two thirds of the responses received were from households, with the other third from individuals an estimate of the number of individuals whose views this survey represented was thought to be useful. The average household was 3.4 people in total who would potentially use a safe cycle/walkway. The total number of people represented in the survey was thus:

 $(230 \text{ individuals}) + (422 \text{ households } \times 3.4) = 1,665 \text{ individuals}$

Number of Scaynes Hill/Lindfield residents represented

As 61% of respondents were not resident in Scaynes Hill, a similar analysis of only those resident in Scaynes Hill was done. The data showed that of those living in Scaynes Hill there were 94 individual responses and 164 household responses, with an average number per household of 3.1. Therefore the total number of Scaynes Hill residents represented in the survey was:

 $(94 \text{ individuals}) + (164 \text{ households } \times 3.1) = 602 \text{ individuals}$

The current actual population of the village is not known but in the 2011 Village Plan it was estimated to be about 800 residents. In the last ten years there will have been some growth particularly with the number of new houses being built. If one were to assume the village population was now 900 then the survey results represent the views of 67% of all residents of Scaynes Hill.

For Lindfield (55 individuals and 130 households of average number of 3.4 per household) a similar calculation indicates the survey representing 497 residents of Lindfield. This is almost certainly an underestimate as it is probable that many of the 124 responses of unknown location come from Lindfield. It would therefore seem likely that the cycle/walkway is equally supported in both villages.

Number of potential journeys

In order to quantify the benefits of a safe cycle/walkway it was thought important to try and estimate the number of potential journeys that might be made.

The responses were analysed by populating a matrix of the likelihood and frequency of using the cycle/walkway with the numbers of responses in each category as follows:

	Highly likely	Moderately	Neither likely	Moderately	Highly
		likely	or unlikely	unlikely	unlikely
Several times a week	212	2	0	0	0
Weekly	225	22	0	0	0
Monthly	104	45	1	0	0
Less than monthly	5	11	9	5	0
Never	0	0	0	1	12

Using the following assumptions, which are considered conservative, the number of potential journeys was estimated:

- Several times a week = 4 times a week for 50 weeks/year or 200 journeys /year
- Weekly means 50 journeys/year
- Monthly means 10 journeys/year
- Less than monthly means 4 journeys/year
- For Moderately Likely a reduction factor of 50% was applied
- For neither likely/unlikely, unlikely and highly unlikely no journeys were assumed
- For other household members an additional 20% of journeys was added to the total.

Further details about the assumptions and the calculations are given in Appendix B. Based on the above the number of potential journeys was estimated to be about 67,000 journeys per year.

Using the less conservative assumption that journeys by other household members would be an additional 50% (rather than 20%) the number of journeys would be about 84,000 journeys/year.

Reduction in CO₂ emissions

Based on the number of journeys that would replace journeys by motorised transport it is possible to estimate the potential reduction of CO_2 emissions that would result. As not all journeys would necessarily replace vehicle journeys a reduction factor of 50% was applied. The justification for this reduction factor and the calculation of the potential reduction in CO_2 emissions is given in Appendix B. The potential CO_2 reductions were estimated as:

- 38 tonnes/year for the base case
- 48 tonnes/year for the higher estimate case

8. Comments

All comments are included in Appendix D. To protect confidentiality any names or contact details given have been removed but typos have not been corrected. Of the total 284 comments:

- 166 (58%) refer to the danger of the existing alternatives and need for something safer
- 75 (26%) refer to reducing car journeys and/or benefit to the environment and health
- 55 (19%) mention only cycling
- 50 (18%) refer to the need for children to access schooling safely
- 37 (13%) mention only walking
- 21 (7%) refer to some aspects of potential routes
- 20 (7%) indicate using it for recreational or other purpose not replacing car journeys
- 9 (3%) refer to the need to accommodate mobility scooters, wheelchairs or prams
- 4 (1%) refer to using the proposed route due to having no car.

Of the 284 comments received, 137 (48%) were from Scaynes Hill residents and 71 (25%) were from Lindfield, 13 (5%) were from Haywards Heath, 6 (2%) were from Walstead and 57 (20%) were from elsewhere or unknown.

Of the 137 comments from residents of Scaynes Hill, 31 comments (23%) referred to the cycle/walkway being needed for children going to school/college in Lindfield or Haywards Heath.

Other reasons mentioned for using the cycle/walkway were for work, visiting friends/relatives or the pub in Scaynes Hill or shopping in Lindfield.

9. Conclusions

Historically there has been a desire for a safe cycling and walking path between Scaynes Hill and Lindfield as the current alternatives are unsafe or impracticable. This need for a safe route between the two villages has been recorded in the Scaynes Hill Village Plan in 2011 and the subsequent joint Lindfield and Lindfield Rural Neighbourhood Plan in 2014. In the terminology of the Mid Sussex District Plan¹⁰, the overarching conclusion that these documents support is that Scaynes Hill is a small (Category 3) village isolated from its natural larger (Category 2) village centre of Lindfield and from the nearest (Category 1) settlement of Haywards Heath.

This survey further supports this conclusion and has clearly demonstrated a continuing and increasing suppressed demand for such a cycle/walkway. It has attempted to quantify the needs and benefits in an evidence based manner. The principal findings from the survey are:

- the survey represents the views of over 1600 people, of whom over 600 are residents of Scaynes Hill (67% of the entire village population) and at least 500 from Lindfield
- 88% of all respondents strongly agreed that a safe cycle/walkway was necessary and a further 9% agreed.
- 84% of all respondents would be highly likely to use it with a further 12% moderately likely.
- 33% said they would use it several times a week (on average over 4 times a week) with a further 38% saying they would use it weekly.
- use of the cycle/walkway would be split about equally between cycling and walking
- the estimated number of potential return journeys is about 67,000 per year
- the estimated potential reduction in CO₂ emissions is about 38 tonnes per year

Some initial funding (£135,000) for such a scheme is available in the form of Section 106 monies from The Swallows housing development, which is just being completed. However, there are various potential routes for a cycling and walking path and all these routes have issues to be resolved. There is potential synergy with cycling and walking provisions to be made in the Walstead Park development, but these seem to have been overlooked or ignored. As there is no obvious preferred route it is necessary as a first step to carry out a feasibility study to determine the optimum route. As the Section 106 monies cannot be used for such a feasibility study and are insufficient for a complete solution, they are effectively frozen and are in danger of being used elsewhere.

The implementation of a safe cycling and walking route would meet all the objectives of the Government's Walking & Cycling Investment Strategy¹¹ which are to increase cycling and walking, reduce the number of serious injuries and deaths to cyclists and increase the percentage of children walking to school.

The purpose of this survey and report is to quantify the need for and benefits of a safe cycling and walking path between Scaynes Hill and Lindfield in order to provide a sound basis for finding a way forward with this scheme. The next stage will need to be finding the funding for a feasibility study to determine the optimum feasible route.

References

¹ Scaynes Hill Village Plan 2011

- $^4\,$ Lindfield & Lindfield Rural Neighbourhood Plan 2014-2031 ' Made Version' Appendix C Proposal 2
- ⁵ West Sussex Walking & Cycling Strategy 2016-2026
- ⁶ Planning Application DM/15/4457 Development of land to the south of Scamps Hill, related appeal and subsequent approval
- Planning Obligation by way of Agreement pursuant to Section 106 relating to land at Barn Cottage, Scaynes Hill, signed 7th Feb 2017
- ⁸ Scaynes Hill Sustainability Group see https://scayneshillvillage.co.uk/sustainability.html
- 9 Results & analysis of a survey on the need for and potential use of a safe cycle/walkway from Scaynes Hill to Lindfield. April 2021
- ¹⁰ Mid Sussex District Plan 2014-2031
- ¹¹ Walking and Cycling Investment Strategy 2017

² Lindfield & Lindfield Rural Neighbourhood Plan 2014-2031 'Made Version' Section 2 State of the Parishes, Community views

³ Lindfield & Lindfield Rural Neighbourhood Plan 2014-2031 'Made Version' Section 3 Vision & Objectives

It was thought useful to document the two separate surveys to see how they compared and could be combined. The first section deals with the responses to the questions common to both surveys after removing the duplicates from the second survey (ie those who said they had also done the first survey). The results of the first survey in Scaynes Hill are indicated by the column '1st (SH)' and of the second survey by the column '2nd (L)'. Responses are given both as numbers and percentages.

The second section covers only the responses from the second survey to those additional questions which were intended to gather more detail on geographic location, frequency and type of use.

A1. SUMMARY OF COMMON QUESTIONS (both surveys excluding duplicates)

Q1. Are you a resident of Scaynes Hill/Lindfield?

	N	umbers		Per		
Response	1st (SH)	2nd (L)	Total	1st (SH)	2nd (L)	Total
Scaynes Hill	245	9	254	57%	4%	39%
Lindfield	49	161	210	11%	73%	32%
Haywards Heath	8	40	48	2%	18%	7%
Unknown*	124*	0	124*	29%	0%	19%
Elsewhere	7	10	17	2%	5%	3%
TOTAL	433	220	653	100%	100%	100%

^{*} It should be noted that the 124 'Unknown' responses are from the initial Scaynes Hill survey, indicated as non-resident in Scaynes Hill, when no postcode was requested. It is likely, based on the second survey, that most of these people live either in Lindfield or Haywards Heath. This number has been reduced (and reallocated) from that given in the previous report by a more detailed reading of the comments given.

Q2. Do you agree there is a need for a safe cycle/walkway from Scaynes Hill to Lindfield?

	Nu	mbers		Per		
Response	1st (SH)	2nd (L)	Total	1st (SH)	2nd (L)	Total
Strongly agree	400	177	577	92%	80%	88%
Agree	28	34	62	6%	15%	9%
Neither agree/disagree	4	3	7	1%	1%	1%
Disagree	1	4	5	0%	2%	1%
Strongly disagree	1	2	3	0%	1%	0%
TOTAL	434	220	654	100%	100%	100%

Q3. How likely you to use such a cycle/walkway?

	Nu	ımbers		Percentages			
Response	1st (SH)	2nd (L)	Total	1st (SH)	2nd (L)	Total	
Highly likely	370	176	546	85%	80%	84%	
Moderately likely	48	32	80	11%	15%	12%	
Neither likely/unlikely	6	4	10	1%	2%	2%	
Moderately unlikely	1	4	5	0%	2%	1%	
Highly unlikely	8	4	12	2%	2%	2%	
TOTAL	433	220	653	100%	100%	100%	

Q4. How frequently on average would you use such a cycle/walkway?

	Nι	ımbers		Percentages			
Response	1st (SH)	2nd (L)	Total	1st (SH)	2nd (L)	Total	
Several times a week	166	48	214	38%	22%	33%	
Weekly	158	89	247	36%	40%	38%	
Monthly	85	64	149	20%	29%	23%	
Less than monthly	16	14	30	4%	6%	5%	
Never	8	5	13	2%	2%	2%	
TOTAL	433	220	653	100%	100%	100%	

Q5. Are you answering as an individual or on behalf of your household?

	Nu	mbers		Per		
Response	1st (SH)	2nd (L)	Total	1st (SH)	2nd (L)	Total
Household	270	152	422	63%	69%	65%
Individual	162	68	230	38%	31%	35%
TOTAL	432	217	652	100%	100%	100%

Q6. If answering Q5 as a household, how many potential users in your household in total?

Response			Weighted
	1st (SH)	2nd (L)	average
Average no. from above	3.3	3.4	3.4

Any further comments?

	Nu	mbers		Per	centages	
Response	1st (SH) 2nd (L) Total			Ist (SH)	2nd (L)	Total
Comments received	219	53	272	50%	24%	42%
TOTAL responses	434	220	654			

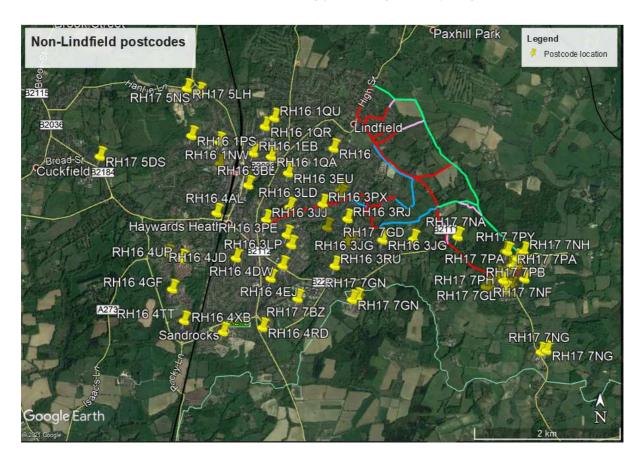
In addition there were another 12 comments in the second survey from those who had participated in the first survey.

2. SUMMARY OF ADDITIONAL QUESTIONS (Lindfield survey only)

Q1a - If you are not a Lindfield resident please enter postcode.

There were a total of 78 responses to this question, of which 19 had done the previous survey. The postcodes given are plotted on the map below and were distributed as follows:

- Haywards Heath 43 (of which 3 had done the previous survey)
- Scaynes Hill 25 (of which 16 had done the previous survey)
- Elsewhere 10 (Cuckfield, Danehill, Ardingly, Fletching, Crawley, Brighton)



Q4a. If you answered 'Several times a week' above please indicate how many times a week that would be.

There were a total of 66 responses to this question, including 20 that had done the previous survey, and their responses are summarised below.

Times	2	2-3	3	3-4	4	4-5	5	6	7	8	10	14	Weighted
													average
No. of responses	1	5	20	8	11	2	11	2	1	1	3	1	4.3

Q. What would you principally use it for?

	N	umbers		Percentages			
Response	1st (SH)	2nd (L)	Total	1st (SH)	2nd (L)	Total	
Walking (incl mobility veh)	18	126	144	47%	57%	56%	
Cycling	20	94	114	53%	43%	44%	
TOTAL	38	220	258	100%	100%	100%	

The only alternatives given where either Cycling or Walking (incl mobility vehicle). Since this question was mandatory one of these alternatives had to be entered. As one of the comments pointed out there should have been an alternative for those who said they would never use it. For this reason only the responses to this question given by those who said they were either likely or highly likely to use it were considered. For those categories the split was:

- Walking (incl mobility vehicle) 132 (54%)
- Cycling 112 (46%)

However, if one does an analysis for the number of journeys by each method (as done for the total number of journeys, which only considers those likely or highly likely to use it) the percentage of journeys comes out as:-

- Walking 51%
- Cycling 49%

As the above sample of 244 responses is about 37% of the total 654 responses it can be deemed representative. For future estimates for the benefits of the scheme it would seem appropriate to allocate these equally (ie 50/50) between cycling and walking.

Appendix B - Estimating journeys and CO₂ emissions

The potential journeys of each respondent were estimated taking account of the responses to the questions on likelihood and frequency of using the cycle/walkway using the following base case assumptions, which were regarded as conservative or realistic.

Frequency

In the original survey report it was assumed that for those stating they would use the cycle/walkway several times a week this would represent 3 times a week over 50 weeks of the year (ie 150 journeys per year). The reasoning was that for those responding in this way it was likely that they might be commuters or school children who would regularly use it 5 times a week. However, there are school holidays and work holidays to take into account, which would reduce the average over the year, and others may not be using it 5 times a week. Furthermore the word 'several' implies more than 2 times a week so it was considered that assuming 3 times a week would be conservative.

From the second survey 66 respondents (including 20 who had also completed the original survey) answered 'several times a week' and the average from this group was 4.3 times/week. This group represents 31% of all those who responded 'several times a week' and can therefore be regarded as representative of the whole group. Consequently it has been assumed that the average for the whole group would be 4 times a week (ie representing 200 journeys per year).

As before weekly responses were taken to mean 50 journeys per year, while monthly was assumed to be 10 times a year. Less than monthly was taken as 4 times a year.

Likelihood

The answer to the likelihood question was used to modify the above number of journeys as follows:

- Highly likely no reduction factor was applied
- Moderately likely a reduction factor of 0.50 was applied (ie half the number of journeys)
- Neither likely of unlikely -assumed no journeys
- Moderately unlikely or Never assumed no journeys

Households

About two thirds of responses were from households which stated that there were other members of the household likely to use the cycle/walkway. The average number of additional people in these households who were likely to also use the cycle/walkway was 2.4. If each of the other two members of the household were to use the cycle/walkway half as often as the respondent this would mean that the number of journeys accountable by that household would be more than twice the number accounted for by the respondent alone (ie increasing the number of journeys from that household by over 100%). As a conservative assumption it has been assumed that each other member of the household would contribute only 15% additional journeys, so the number of journeys for a household has been increased by 30% only. Since those representing households

Appendix B - Estimating journeys and CO₂ emissions

were about two thirds of the total responses, the additional journeys have been taken as 20% (ie $^2/_3$ x 30%) of the total journeys of individuals and households.

Distance

The distance of a journey was taken as the distance from the centre of Scaynes Hill (junction of the A272 and Church Road - opposite the Farmers pub) to the centre of Lindfield (junction of the B2111 and Lindfield High Street). Measured on Google Earth this is 3.3 km. It has also been assumed that each journey would be a return journey, which would certainly be the case for a bicycle. Although it is possible a walker could return by other means the likelihood of this seems fairly small so has been discounted. Therefore each journey has been taken as 6.6km.

The total distance of journeys has therefore been estimated by multiplying the total number of journeys by 6.6km.

CO₂ emissions

One could assume that all journeys replace similar journeys that would have been taken by a motorised vehicle. However, some of the comments (7% - see Section 8 of main report) suggest that a few uses would be purely recreational and therefore not replacing a vehicle journey. On the other hand a larger proportion of comments (18%) refer to school trips, which would involve twice as many return journeys by car (drop off and pick up). Also 26% of comments refer to the use of a new cycle/walkway replacing car journeys or improving the environment and health, which also suggests replacing vehicle journeys. For these reasons it was initially thought reasonable to assume that 75% of all estimated journeys represents the reduction of vehicle travel for the purposes of calculating CO_2 emissions. However, following a more careful reading of the comments, which give some further perspective, it has been considered more realistic to reduce this to 50%.

Using a leading carbon footprint calculator¹ on the internet it can be seen that the emissions from the average petrol car is 174.3 g/km. Thus the total emissions saved has been estimated by taking 50% of the total distance of all journeys, multiplying 174.3 and dividing by 1,000,000 to convert grams to tonnes of CO₂.

Higher estimate

The above assumptions are considered fairly realistic or conservative. A critical assumption, for which there is no hard evidence, is the additional number of journeys to be attributed to other members of a household. It is felt that the 20% addition may be particularly conservative, so a higher estimate has also been considered.

Therefore the two cases considered are:

- Base case an additional 20%
- Higher estimate an additional 50%

B-2

¹ Carbon Footprint Calculator developed by RADsite https://calculator.carbonfootprint.com/calculator.aspx?tab=4

Appendix B - Estimating journeys and CO₂ emissions

Data analysis

The numbers of respondents answering each of the questions on likelihood and frequency of use were tabulated into the following matrix in order to estimate the number of journeys:

	Highly likely	Moderately	Neither likely	Moderately	Highly
		likely	or unlikely	unlikely	unlikely
Several times a week	212	2	0	0	0
Weekly	225	22	0	0	0
Monthly	104	45	1	0	0
Less than monthly	5	11	9	5	0
Never	0	0	0	1	12

Therefore the numbers of journeys for each frequency are estimated as:

Several times a week: (212 x 200) + (2 x 200 x 0.5) = 42,600Weekly : (225 x 50) +(22 x 50 x 0.5) = 11,800 Monthly : (104 x 10) + (45 x 10 x 0.5) = 1,265 Less than monthly : $(5 \times 4) + (11 \times 4 \times 0.5)$ 42 = 55,707 Estimated journeys (individuals) Estimated journeys (household add 20%) = 11,141 TOTAL ESTIMATED JOURNEYS = 66,848

Repeating the above calculations on a less conservative basis by adding an additional 50% for journeys attributable to other members of the household (rather than 20%) the total number of journeys would be 83,561.

The reduction in CO₂ emissions for the base case has been estimated as:-

 $\frac{66,848 \text{ (journeys) x 6.6 km x 50\% (reduction factor) x 174.3 (emissions gm/km)}}{1,000,000} = 38.5 \text{ tonnes/year}$

For the higher estimate of 83,561 journeys the calculation gives:

48.1 tonnes/year

Appendix C - Alternative routes

It is not in the remit of this survey to favour any particular route but it is considered helpful to document and show on a map the various routes that have at one time been suggested.

The West Sussex Walking & Cycling Strategy (WSWCS), which was designed to complement the Government's Walking & Cycling Investment Strategy (WCIS), included a list of routes suggested by stakeholders and this included two relevant routes:

- ID 213 Route connecting Scaynes Hill and Lindfield. This is the route along the A272 and B2111, the description of which was "There is no pavement on this route currently making it very unsafe for cyclists and pedestrians". The Walstead Park development by Southern Homes, which already has planning permission, is due to improve the footway from Walstead to Lindfield but does not include a cycleway.
- ID186 America Lane to Scaynes Hill with no further description. The part of this route from Scaynes Hill to the crossing of the B2111, which follows the existing footpaths 2LR & 8LR, is relevant as this would avoid the most hazardous part of route ID 213, which is the busy A272 and Bedales Hill (the southern-most part of the B2111). The other part of the route east of the B2111 to Lyoth Lane falls in the area to be developed as a Country Park as part of the Walstead Park development, and does not appear to be included in their plans.

There is also a third potential route that has been suggested by others which follows the same route as ID186 from Scaynes Hill through Costells Wood, but at the stream crossing, instead of going west along footpath 8LR towards Walstead Stud and the B2111 it continues north along footpath 2LR to Lindfield. There are variants of this route, for example where it crosses East Mascalls Lane, it could run along the lane to re-join the B2111 route, or alternatively instead of going all the way to Lindfield Church short-cuts to join Noah's Ark Lane or Eastern Road have been suggested.

