

Follow on from Craigshaw

Drive: Cycle Lanes



Places for Everyone

Baseline monitoring report

09 August 2024

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Document details	
Reference ID:	<i>SUS2345</i>
Version:	<i>2.0</i>
Client:	<i>Aberdeen City Council</i>
Circulation Status:	<i>Public</i>
Issue Date:	<i>13/03/2025</i>
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Contents

Summary of results	3
1. Scheme overview	5
1.1 Places for Everyone programme	5
1.2 Scheme description	5
2. Monitoring	7
3. Findings	9
3.1 Levels of active travel	9
3.2 Quality of place	16
3.3 Dedicated space for active travel	20
3.4 Improve accessibility	24
4. Discussion of findings	28
5. Future monitoring	29
Appendices	32
Full monitoring framework	32

Summary of results

This monitoring was carried out for the Follow on from Craigshaw Drive: Cycle Lanes project in 2022 to establish a baseline for future comparison. This report presents the analysis of data collected using various tools and discusses the findings. The monitoring shows that there is an opportunity for active travel journeys to increase in Craigshaw Drive facilitating increased cycle and pedestrian movements.

This section presents summary statistics and findings from the baseline monitoring of Craigshaw Drive; organised according to the scheme's Places for Everyone Evaluation Outcomes.

Levels of active travel

- Annual usage estimates (AUEs) for active travel at **Abbotswell Road** were **260,000**, followed by **100,000** at **Shell Path** and **46,000** at **Craigshaw Drive – Southeast End**.
- **Walking** was the most popular active travel mode accounting for over **60%** of journeys at all three count locations. The proportion of walking was highest at Abbotswell Road (76%) followed by Craigshaw Drive - Southeast End (64%) and Shell Path (60%).
- In terms of purposeful trips made by walking and cycling, **recreation/touring** (including dog walking) was the most common purpose for **54%** of route users on Shell Path, followed by **34% commuting**. For those cycling, commuting was the main purpose (**78%**) and recreation/touring was the main purpose for walking (**66%**).

Quality of public realm

- Over **90%** of route users in Shell Path area felt it **was safe with regard to motor traffic** and a **safe place during the day, but only 16%** felt it was a **safe place to be after dark**.

Dedicated space for active travel

- On average **3,000 vehicular movements** per day were recorded in Craigshaw Drive with an **average speed of 21mph**.

- Out of 1229 cyclist and pedestrian crossings made, 95% had to wait before completing their crossing with an average waiting time of 6 seconds and average crossing time of 7 seconds.

Improved accessibility

- **95%** of the route users in Shell Path **agreed** that the route is **easily accessible** and **94%** **agreed** that it is **fit for purpose** and **enhances the area**.
- In terms of observable mobility issues, the number of **pushchair journeys** was the highest of all the modes observed (also wheelchair, walking with aid)

1. Scheme overview

1.1 Places for Everyone programme

Places for Everyone is an infrastructure programme that aims to create safe, attractive, healthier places by increasing the number of trips made by walking, wheeling and cycling for everyday journeys. The programme is funded by Transport Scotland and is managed by Sustrans Scotland.

The 'Craigshaw Drive' scheme originally received grant funding through the Community Links grant programme and subsequently under Places for Everyone¹; it is being delivered by Aberdeen City Council (ACC).

1.2 Scheme description

Table 1: Key features of the scheme

Key feature	
Places for Everyone scheme ID	ACC-PFE-2994
Category	3
Delivery partner(s)	Aberdeen City Council
New route (currently not passable on foot)	N
Upgrade of existing route	Y
Length (if linear / known)	1.6 km
Date of works starting (first spade / cone)	October 2023
Date of works completion (last cone)	April 2024
Total Places for Everyone grant awarded (cumulative for all stages)	1.13million
Total scheme cost (all funding sources)	1.62m

¹ The Places for Everyone programme superseded the Community Links programme in 2019.

The scheme is located within the West Tullos Industrial Estate to the south of Aberdeen. It will provide a quality active-travel connection between the existing traffic-free Shell path and the A956 Wellington Road. Following on from design work undertaken in 2017-19 this project aimed to construct segregated cycle lanes along Craigshaw Drive and install controlled crossings of Craigshaw Drive and Abbotswell Road.

In doing so, the project will facilitate cycle movements south of Aberdeen city and improve access to a range of services and employment sites for cyclists. It will also improve safety for cyclists in the busy Tullos area of the city. In particular the newly created separated pedestrian and cycle crossings of Craigshaw Drive and Abbotswell Road will provide a safe crossing for pushchairs, mobility scooters and wheelchairs. On completion, the project's goals are:

- To provide segregated cycle lanes over the full length of Craigshaw Drive;
- To reduce likelihood of pedestrian & cycle conflict with vehicles;
- To provide controlled crossing facilities for cyclists and pedestrians to link Craigshaw Drive facility to the Shell Path;
- To increase cycle traffic;
- To improve perception of route safety for cycling and walking.

The findings presented in this report are aligned to the following Places for Everyone monitoring outcomes:

- Increase number of people and trips for walking, cycling and wheeling for everyday journeys.
- Improve the quality of place and where possible increase the quality and quantity of green infrastructure.
- Provide dedicated, safe spaces for people to walk, cycle and wheel through, adhering to Sustrans Scotland's Design Principles.
- Improve accessibility for people with protected characteristics

The indicators aligned to each outcome and tools used for data collection are presented in Table 5 in the appendix.

2. Monitoring

Sustrans Research and Monitoring Unit (RMU) and ACC are collaborating on delivering a programme of monitoring before and after creation of the new infrastructure. This report presents a summary of the findings at the baseline monitoring stage.

Broad timings and key elements of the monitoring programme are summarized in Table 2. The locations of data collection are shown in Figure 1. Full details of each monitoring tool are given in the Methodology section of this document.

Table 2: Monitoring programme summary table








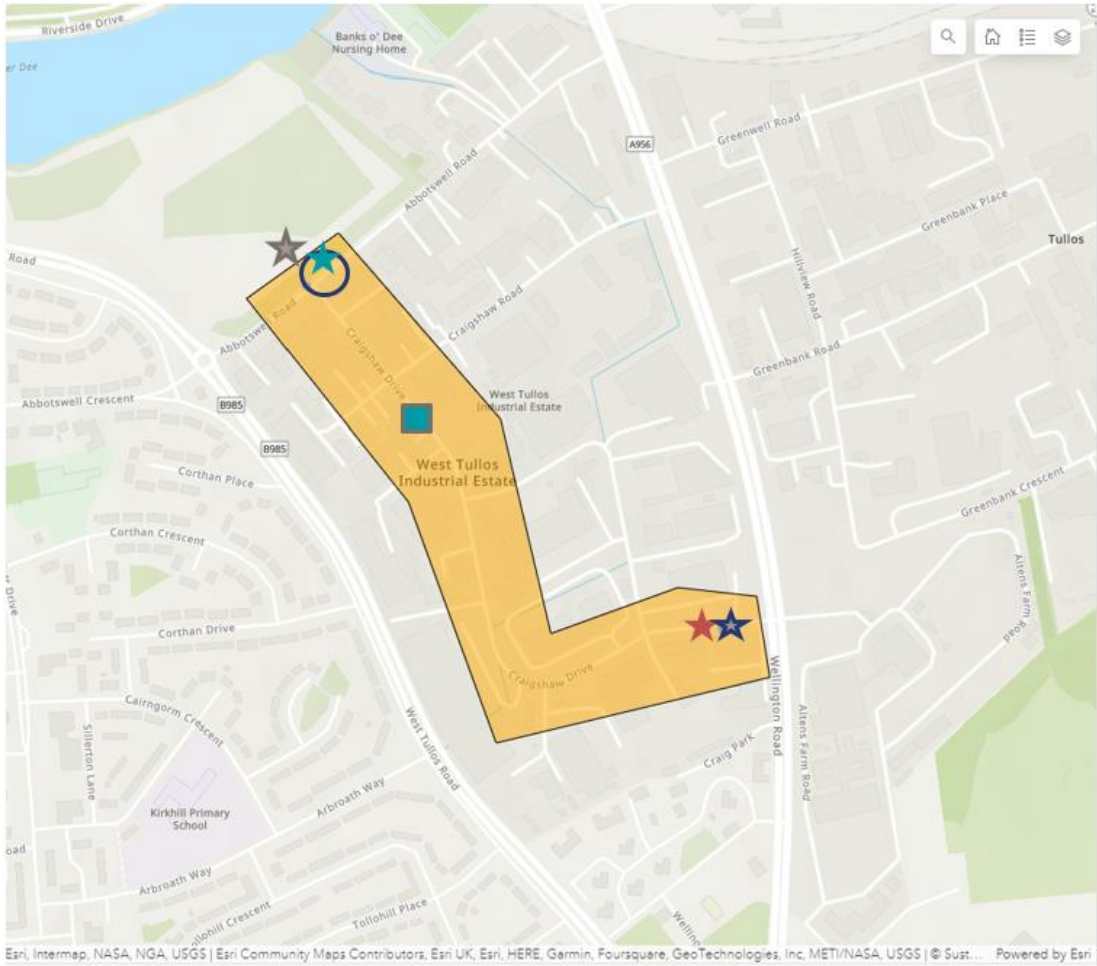
Monitoring tool	Ledger for Figure 1	Baseline	CONSTRUCTION	Expected follow-up
RUIS Shell Path		Sept 2022		Sept 2024
Video Manual Count (active travel) Craigshaw Drive Southeast End		Sept 2022		Sept 2024
Video Manual Count (active travel and motorised vehicles) 15 directions in Craigshaw Drive-Abbotswell Road		Sept 2022		Sept 2024
Traffic speed & volume survey		Sept 2022		Sept 2024
Video Monitoring (for parallel crossing over Abbotswell Road) - Crossing analysis - Interaction analysis		Sept 2022		Sept 2024
Manual Count		Nov 2016		N/A
Walking Focus Groups (with local stakeholders, residents and/or accessibility groups)	n/a	NA		Oct/Nov 2024
Automatic Pedestrian/Cyclist counter		Pre (ongoing)		Post (ongoing)
Site survey	n/a	NA		Dec 2024 (once constructed)

Figure 1 – Map showing project area (shaded orange) and the location of monitoring



3. Findings

Summary of findings at pre-intervention stage

This section provides a summary of the results of baseline monitoring against the four Places for Everyone outcomes which are relevant to this scheme. Key results at baseline are given here, and we have also commented where we expect the scheme could make a particular impact.

3.1 Levels of active travel

3.1.1 Active travel usage

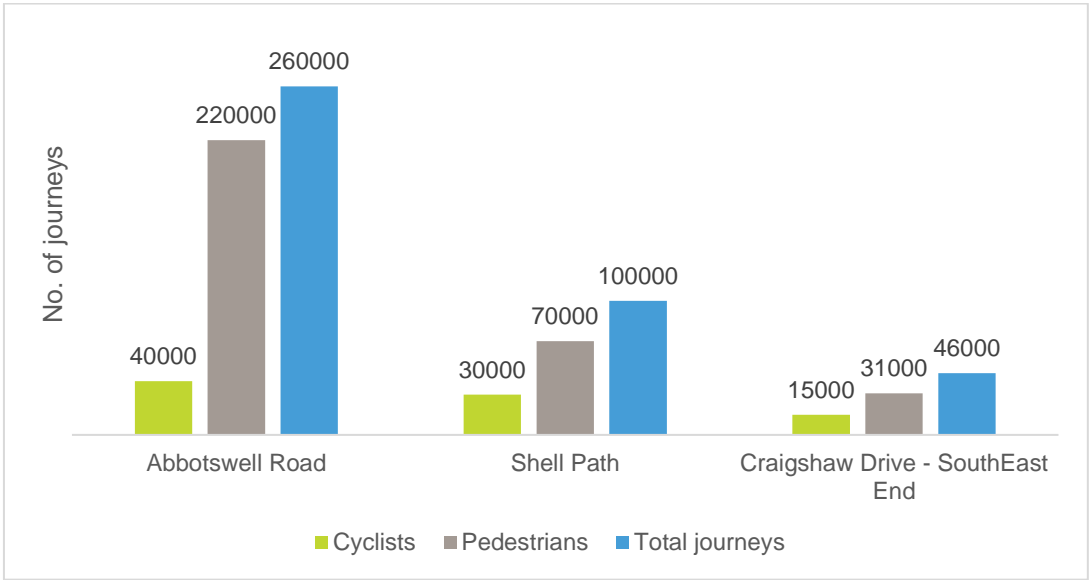
We conducted video manual counts at three locations in different parts of the project area.² Annual usage estimates (AUEs) show that Abbotswell Road has the highest active travel usage with an estimated 260,000 active travel journeys³ annually (Figure 2). This is notably higher than the other two locations, with 'Craigshaw Drive - Southeast End' being the least used route.

Breaking down the overall AUEs for cyclists and pedestrians shows a gap between them in number of journeys made. The proportion of journeys made by cyclists is low in all the monitoring sites ranging from 15% in Abbotswell Road, 30% in Shell Path and 33% in Craigshaw Drive – SouthEast End.

² All three count sites are located in different parts of the project area with Shell Path and Abbotswell in the northwest and the third location towards the end of Craigshaw Drive in the Southeast (in direction of Wellington Road).

³ Active travel journeys include the modes such as walking/walking with aid, cycling (electric/non-electric), jogging, other wheeled and wheelchair/pushchair use

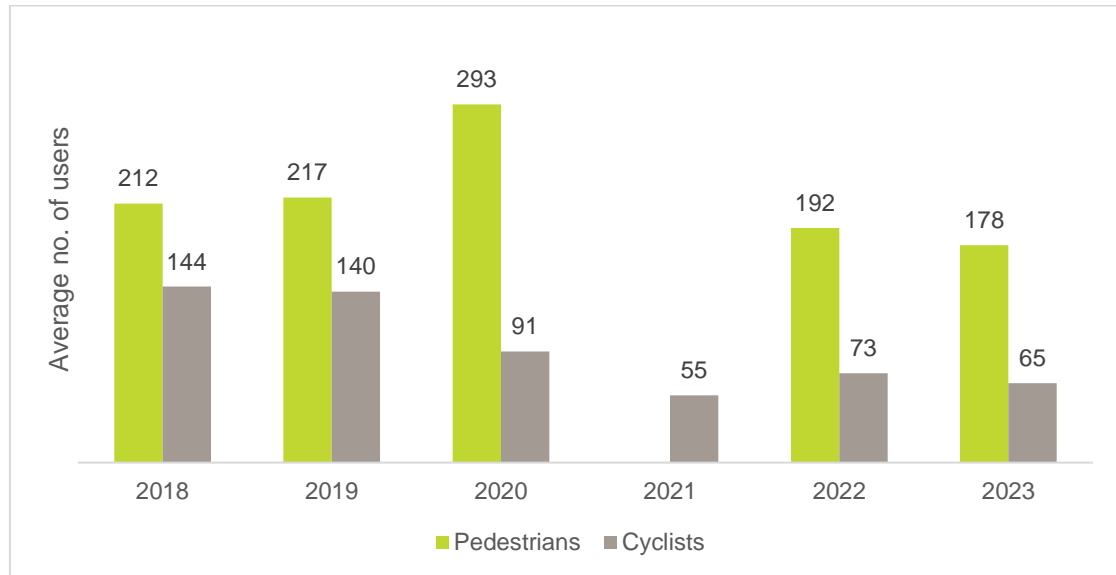
Figure 2: Annual usage estimates of active travel journeys in or around the project area



Automatic counter data obtained from ACC for 2018 - 2023 indicates usage trends for pedestrians and cyclists in the Shell Path. The automatic counters recorded pedestrian and cyclists movement continuously in this area.

The pedestrian annual median daily total (AMDT) increased between 2018 and 2020 from 212 to nearly 300 pedestrians per day (Figure 3). In contrast, the analysis showed a decreasing trend for cyclists from 144 in 2018 to 65 in 2023. The change in usage could have been due to the pandemic. Following a slight increase in the average number of cyclists between 2021 and 2022 (55 up to 73) it again drops down to 65 cyclists per day in 2023. This supports the low AUEs for cyclists discussed above.

Figure 3: Pedestrian and cyclists annual median daily total (AMDT)

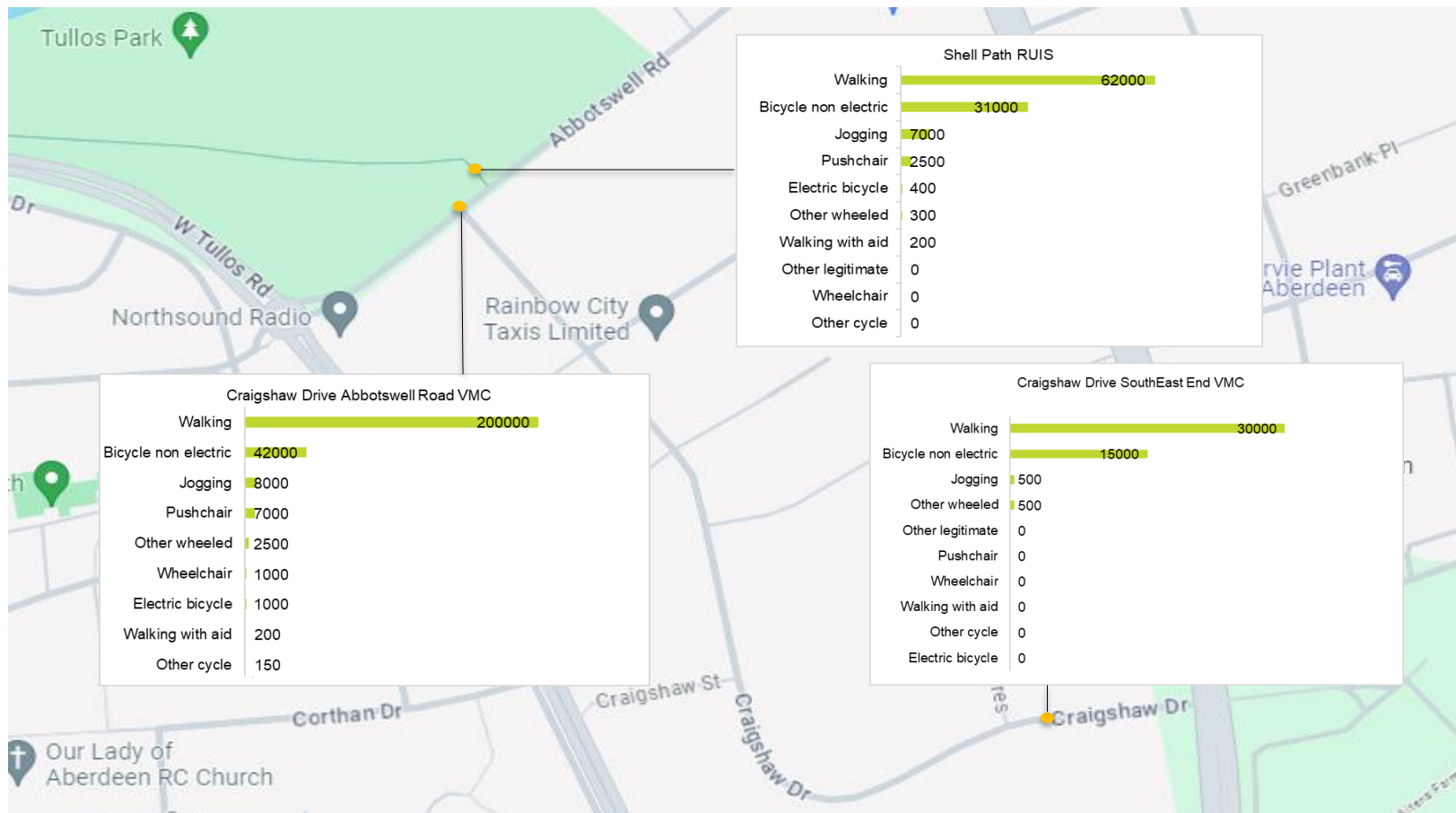


3.1.2 Active travel modes

As displayed in Figure 4, video manual count data highlights that:

- Walking was the most popular active travel mode at all three locations where counts were carried out, accounting for over 60% of journeys at each. The proportion of walking was highest at Abbotswell Road (76%) followed by Craigshaw Drive - Southeast End (64%) and Shell Path (60%).
- Bicycles (non-electric) were the second most common form of active travel in all count areas, ranging from 33% in Craigshaw Drive - Southeast End to 16% on Abbotswell Road. This shows that cycling is a popular mode in all areas, especially Craigshaw Drive – Southeast End and Shell Path, and likely to improve further after the cycling friendly infrastructure is in place.
- The other key mode after walking and cycling was jogging with 7% joggers counted in Shell Path, 3% in Abbotswell Road and 1% in Southeast End. The higher proportion of joggers in Shell Path could be due to the path leading to Tullos Park, a local greenspace that attracts people for leisure and exercise.
- The lower number of pushchair users counted in Shell Path indicates that the area is not suitable or welcoming for these users. See section 3.4 below for a full discussion on different travel modes with relation to accessibility’.

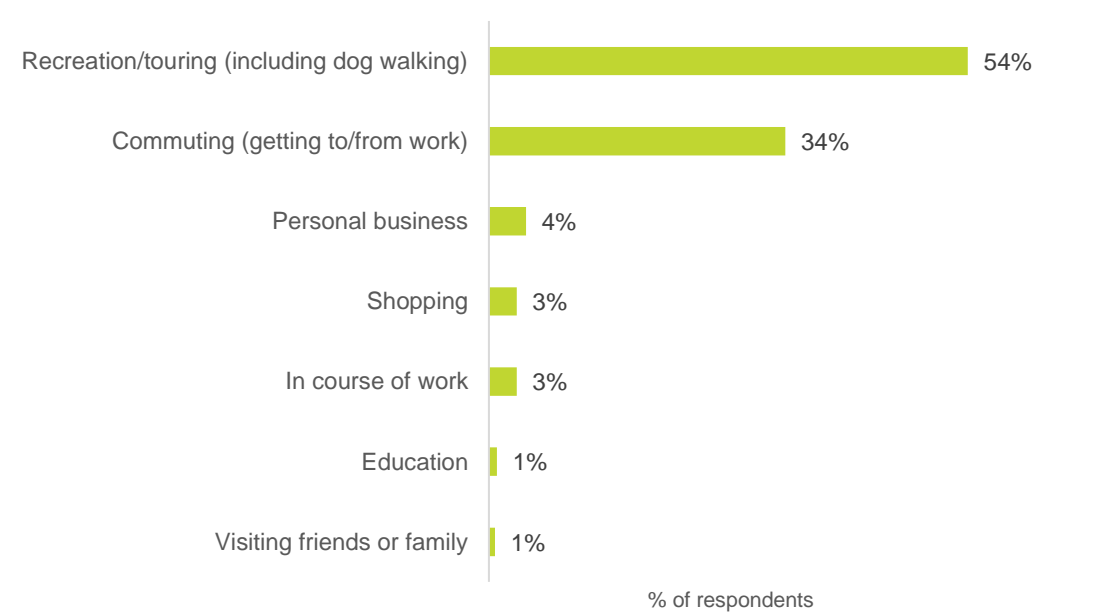
Figure 4: Mode share in or around the project area



3.1.3 Number of purposeful trips⁴

Recreation/touring (including dog walking) was the most common purpose for active travel journeys (54% route users) made through Shell Path followed by commuting (34%) (Figure 5). The high recreation/touring levels could be due to the path connecting to the Tullos Park area (local greenspace) in the northwest of Craigshaw Drive as shown in Figure 4 above. The proportion of people travelling for personal business, shopping, in course of work, education and visiting friends or family were each below 5%.

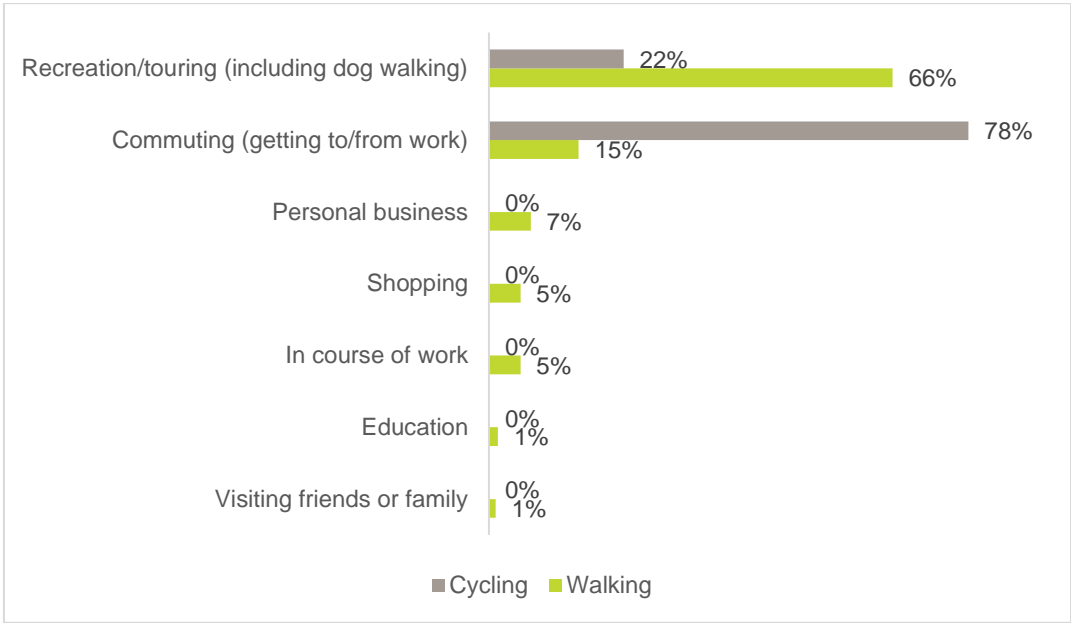
Figure 5: What is the purpose of your current journey? (RUIS, n=107)



Journey purposes differed between the pedestrians and cyclists using the Shell Path (Figure 6) though the small sample sizes mean these results should be treated with caution. Cyclists made journeys through the Shell Path for two purposes, the vast majority for commuting (78%) and the remaining 22% making ‘recreational’ journeys. In contrast, 66% pedestrians were making ‘recreation’ journeys, followed by 15% commuting.

⁴ Everyday journeys are defined as those which are short, regular trips made in day-to-day life, such as when you travel to work, school, or the shops.

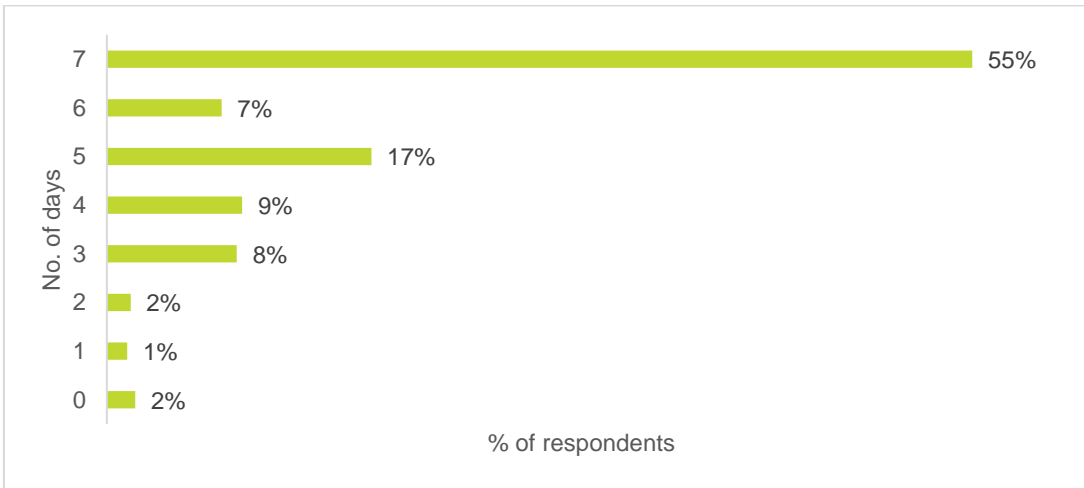
Figure 6 – Journey purpose of pedestrians (n=34) and cyclists (n=66)



3.1.4 Levels of physical activity

The majority (79%) of route users in Shell Path were completing 30 minutes or more of physical activity on at least five days per week, thus aligning with NHS guidelines⁵ (Figure 7). Over half (55%) of route users completed such activity on all days of the week. In contrast, 22% of route users were not completing NHS recommended levels of exercise per week.

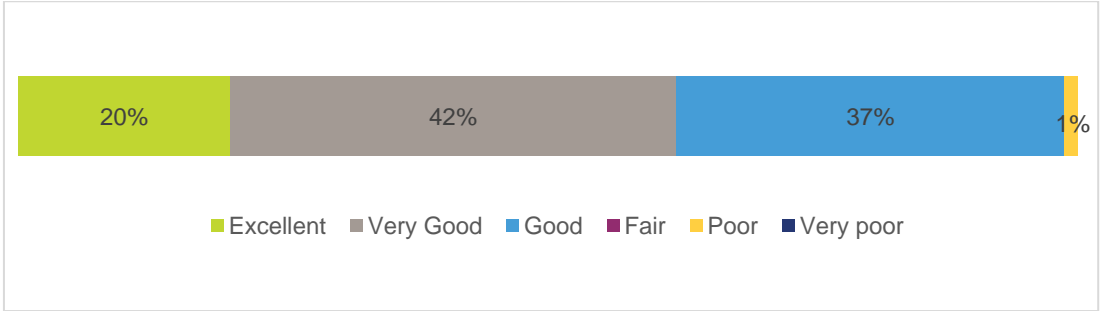
Figure 7 – In the past week, on how many days have you completed 30 minutes or more of physical activity that was enough to raise your breathing rate? (n=107)



⁵ As per [NHS guidelines](#) adults should aim to do at least 150 minutes moderate intensity activity a week evenly spread across 4 to 5 days

Likewise, Figure 8 shows how people rate their general health over four weeks before the survey period. Most route users rated their general health positively, with 20% rating it excellent, 42% very good and 37% good. A very small proportion (1%) rated their health to be poor.

Figure 8 – Overall how would you rate your general health over the last four weeks? (n=107)



3.2 Quality of place

3.2.1 Net Promoter Score

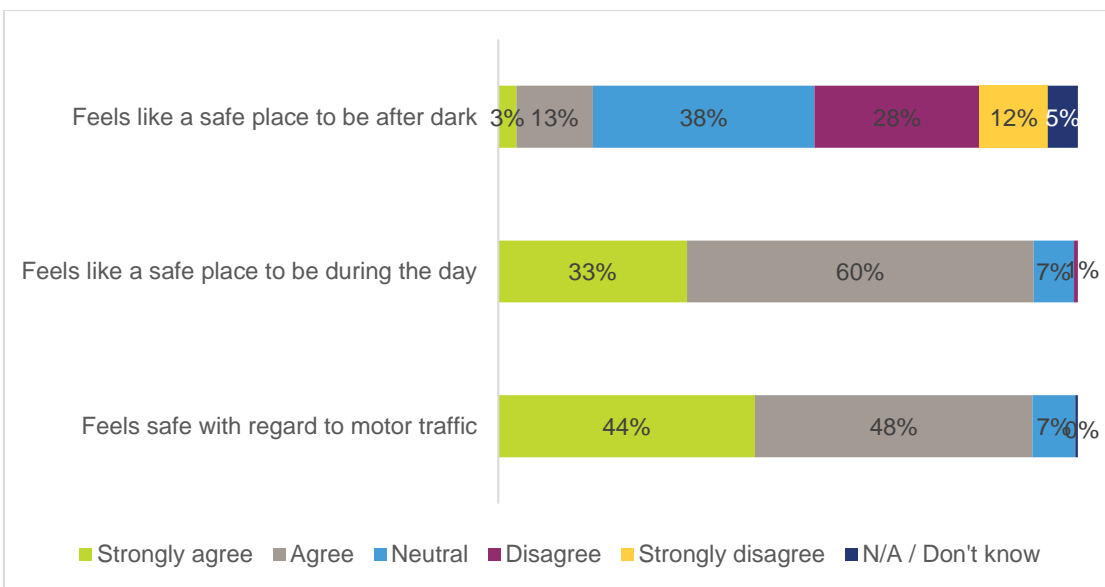
In order to calculate a NPS, route users were asked how likely it is that they would recommend this route to a friend, on a scale of 0 (very unlikely) to 10 (very likely). The Net Promoter Score (NPS) is the percentage of promoters (those who give a score of 9 or 10) minus the percentage of detractors (those who give a score of 0 to 6), giving a score ranging from -100 to +100. Amongst all route users in Shell Path the NPS was +60 suggesting the majority, on average, would recommend the route. There were 63% promoters and 3% detractors.

3.2.2 Safety of Space

Perceived safety

RUIS respondents in the Shell Path were asked how much they agreed with a series of statements relating to the route’s safety. Over 90% of route users in the Shell Path area felt it was safe with regard to motor traffic and a safe place during the day (Figure 9). However, only 16% felt it a safe place to be after dark, with 40% disagreeing with this statement.

Figure 9 – How much do you agree or disagree with the following statements about the route? (perception of safety statements) (n=107)



Observed safety

Over 10 days⁶ in September 2022, video monitoring was carried out in Craigshaw Drive (at the site of the new controlled crossing) to assess interactions between different modes of transport. This exercise recorded 12 hours of video footage each day (120 hours in total). Each recorded interaction was given a score from 1 to 5 based on safety considerations (see Table 3). It was found that the interactions displayed '*generally safe, normal behaviour*'. Out of 23 interactions recorded the majority (n = 18, 78%) occurred with precautionary or anticipatory braking/slowing down when risk of collision was minimal (score 1). There were a few interactions (n=5, 22%) that occurred with controlled braking, slowing down or stepping aside to avoid collision (but with ample time for manoeuvre) (score 2).

In terms of interactions between different modes of travel, most interactions were recorded between pedestrians and motor vehicles (n=20, 87%) while trying to cross the road, while a small number of interactions took place between cyclists and motor vehicles (n=3, 13%).

Table 3: Interaction scale and distribution of scores from observed interactions

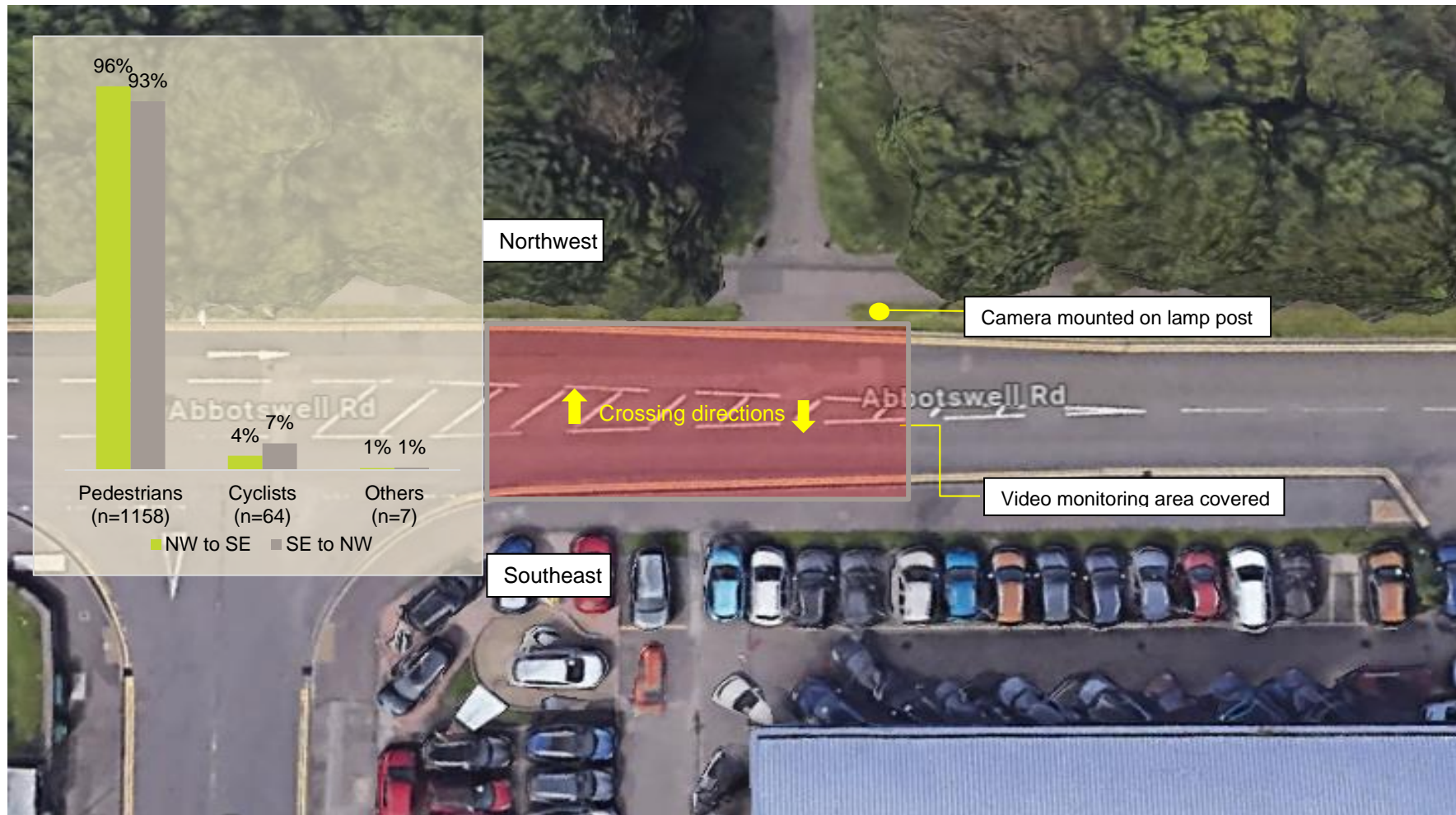
Score	Safety consideration	Safety level	% of interactions recorded
1	Precautionary or anticipatory braking/slowing down when risk of collision is minimal	Green: Generally safe, normal behaviour	78% (n=18)
2	Controlled braking, slowing down or stepping aside to avoid collision (but with ample time for manoeuvre)		22% (n=5)
3	Rapid deceleration, stopping or quickly moving aside to avoid collision, resulting in a near miss situation	Amber: Generally unsafe; near-miss situation	0% (n=0)
4	Emergency braking, violent serve or movement to avoid collision resulting in a near miss situation		
5	Emergency action followed by collision	Red: Collision	0% (n=0)

Video monitoring also recorded the footage of cyclists and pedestrians crossing the Abbotswell Road and recorded 1,229 crossings made over a period of 13 days⁷ with an average of 95 crossings per day (Figure 10). Higher average number of crossings were recorded in weekdays (103/day) than weekend days (68/day). The majority of crossings were made by pedestrians (94%) followed by cyclists (5%) and others (1%). As shown in the figure below the video recorded crossings made from Northwest to Southeast and vice versa. The distribution of crossings was nearly equally split between these directions with slightly higher proportion (52%) of crossings made from SE to NW.

⁶ No interactions recorded for 2 days out of total video monitoring days

⁷ Video monitoring was carried out for 14 days but due to a very high flow of people on one day we excluded that data from both crossing and interaction analysis

Figure 10: Crossing analysis in Abbotswell Road, Craigshaw Drive

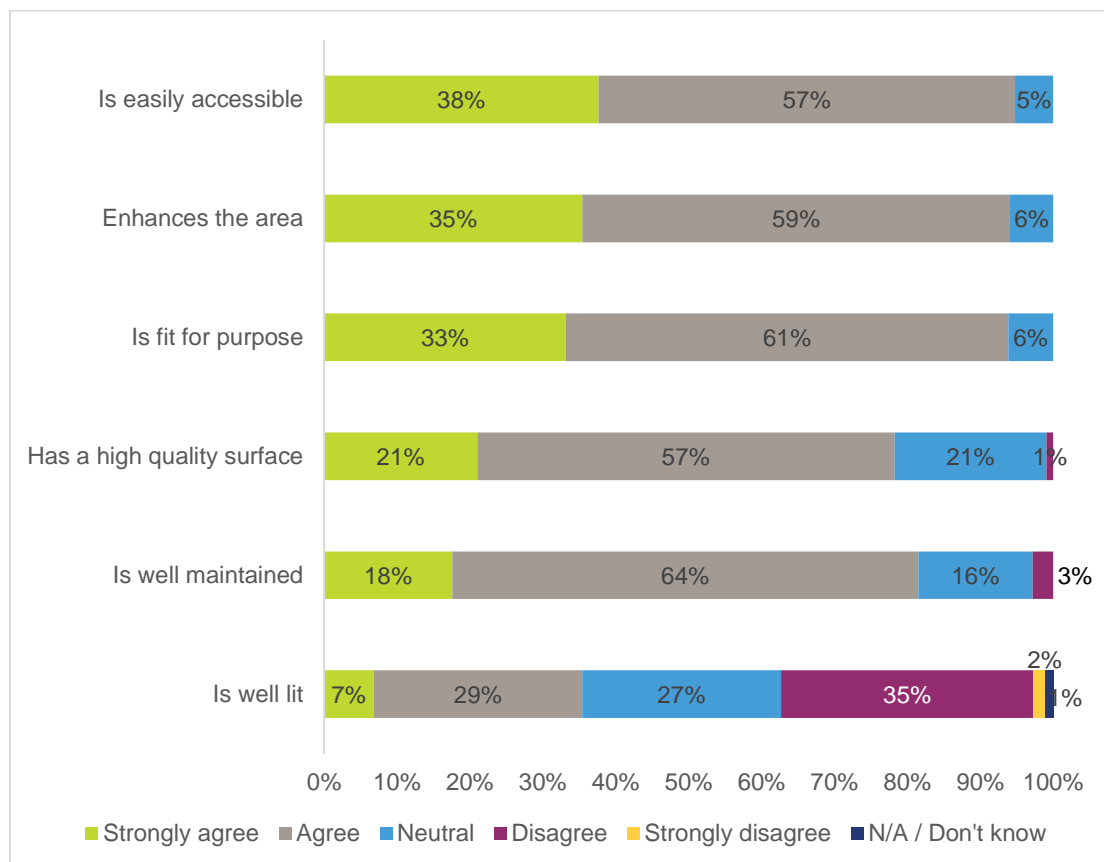


3.2.3 Comfort of Space

In addition to the safety of space in Shell Path, we also asked the RUIS respondents how much they agreed with a series of statements about comfort. Accessibility is rated highly with 95% of route users agreeing (38% strongly agree) that the route is easily accessible (Figure 11). Similarly, 94% of route users in Shell Path agreed that it enhances the area (35% strongly agree) and is fit for purpose (33% strongly agree).

More than 80% of the route users agreed that Shell Path has a high quality surface. The statement the place 'is well lit' was rated far lower, with just over a third (35%) of route users agreeing with this statement and 38% disagreeing. This might be a factor in the low proportion of route users who felt the space was 'a safe place to be after dark' (see 3.2.2).

Figure 11 – How much do you agree or disagree with the following statements about the route? (perception of comfort statements) (n=107)



3.3 Dedicated space for active travel

3.3.1 Fewer motor vehicles and lower traffic speeds

The traffic speed & volume monitoring data was collected in Craigshaw Drive over 7 days in September 2022. On average 3,000 vehicular movements per day was recorded over the monitoring period (Figure 12). The average volume of vehicles on weekdays (3,000) was twice the average on weekend days (1,500), and the average speed was also slightly higher on weekdays (22mph) compared to the weekend average (19mph). While both of these averages were below the speed limit of 30mph, on weekdays 11% of the vehicles were recorded speeding above the limit between 30-40mph.

Figure 12 – Average vehicle flow and speed in Craigshaw Drive

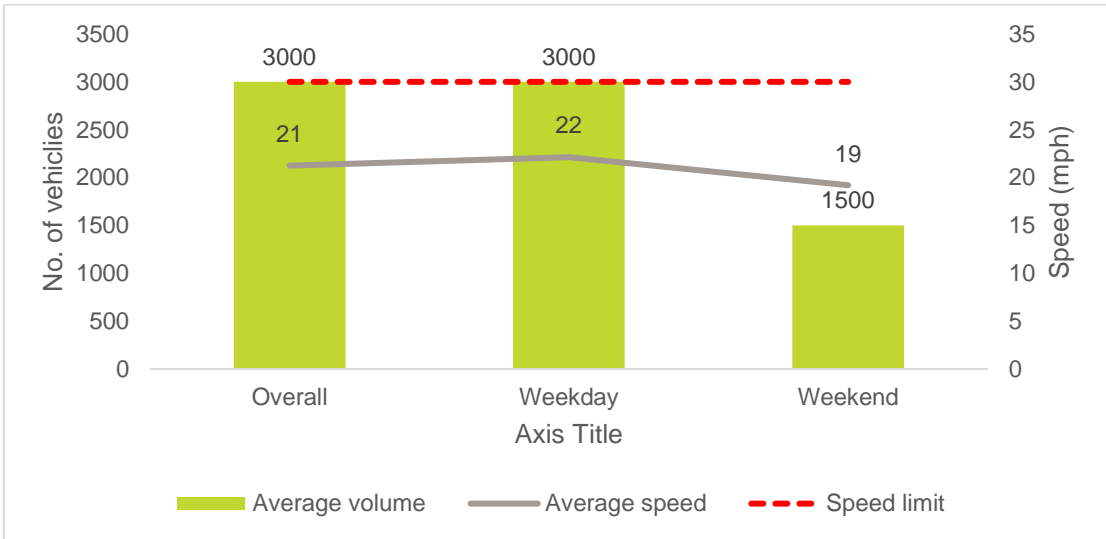
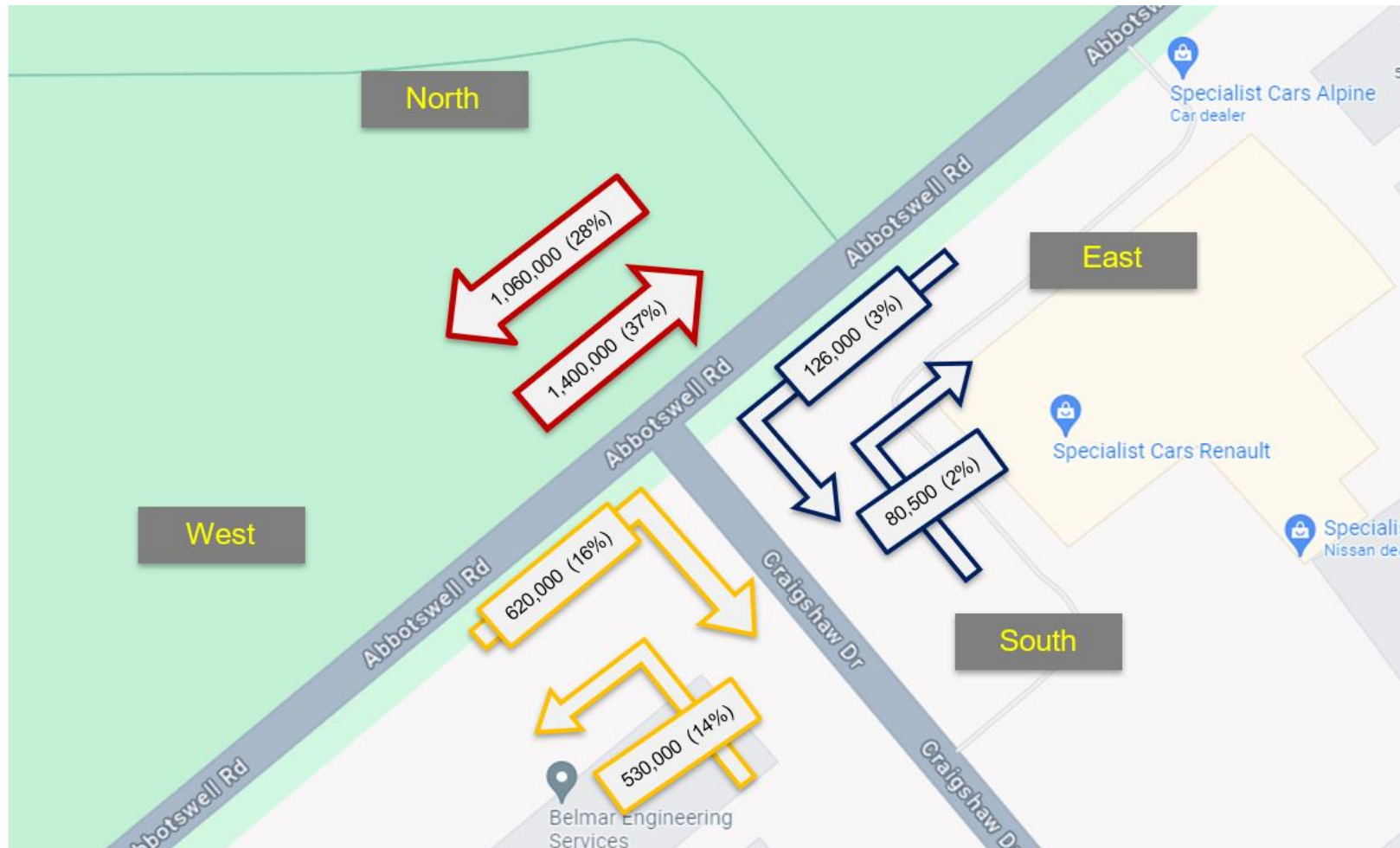


Figure 13 shows the AUEs of motor vehicles in Abbotswell Road across various directions recorded through video manual count. The data was collected at Abbotswell Road over seven consecutive days for a 12 hour period recording 16 directions of traffic movement. There was a heavy vehicular movement along Abbotswell Road. The volume was estimated to be the highest for movement from west to east (37%) with nearly 1.5 million AUEs and over one million AUEs estimated from east to west (28%). The vehicular movement estimates were relatively lower for vehicles moving from the North and South i.e. Abbotswell Road to Craigshaw Drive and vice versa.

Figure 13 – Vehicular traffic AUEs for various directions in Craigshaw Drive - Abbotswell Road (total AUEs=3,800,000)



3.3.2 Priority for users of active travel

As displayed in Figure 14, video monitoring recorded crossing patterns of cyclists and pedestrians along Abbotswell Road:

- Out of 1229 crossings made, 95% had to wait before completing the crossing with an average waiting time of 6 seconds, with a range from 1 second to 56 seconds.
- The majority (70%) of the travellers waited between 1-5 seconds with an average (median) of 3 seconds.
- Pedestrians took nearly 7 seconds to cross the road and it took around 5 seconds for cyclists to do so on average.

The results show that crossing is an issue at Abbotswell Road for active travel users suggesting they have less priority. Due to the unavailability of a crossing at this road, the majority of the people were observed waiting before crossing the road. Many had to wait in the middle of the road, further adding to the safety risk for active travellers. The construction of a parallel crossing is expected to make it safer and more convenient for active travel users to cross the road.

As discussed under 3.2.2 above, video monitoring also recorded the interactions taking place between active travel users and motorised vehicles in Abbotswell Road. The majority (18 interactions) took place with precautionary or anticipatory braking/slowing down when risk of collision is minimal (scoring 1) and the remaining 5 interactions occurred with controlled braking, slowing down or stepping aside to avoid a collision (scoring 2). This shows that all of the interactions were generally safe with normal behaviour.

Figure 14 – Crossing analysis at Abbotswell Road



3.4 Improve accessibility

3.4.1 Accessible for people with different abilities

There are three modes of active travel which give an indication of observable mobility and how accessible the infrastructure are: use of pushchair, wheelchair and walking with an aid.

Overall results for people with different abilities do not look encouraging as very low number of users were recorded. AUEs from manual counts estimated the number of pushchair journeys was the highest of the three modes observed. Over 7,000 journeys (3% of all active travel journeys) per year were estimated at Abbotswell Road and 2,352 journeys (2.3%) at Shell Path.

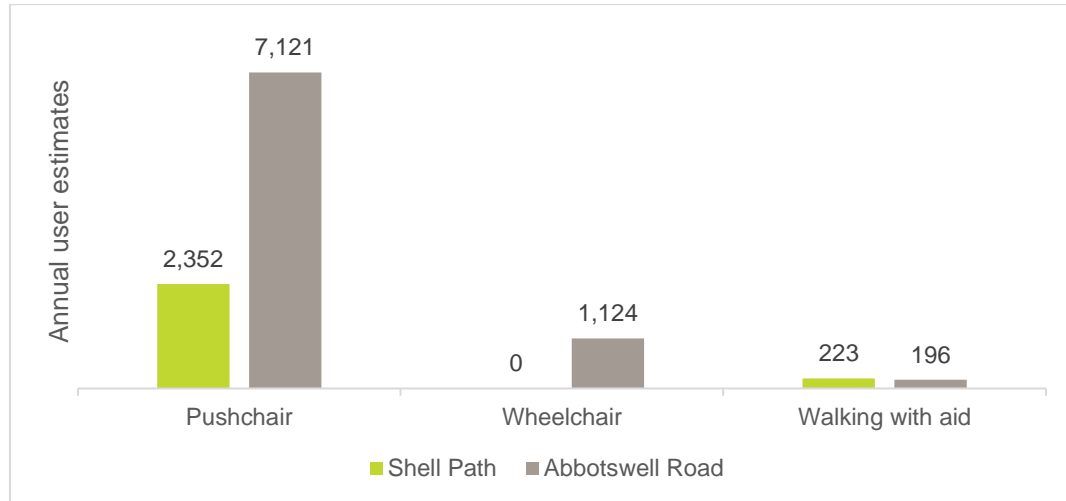
There were 1124 wheelchair journeys per year at Abbotswell Road which is 0.4% of all active travel journeys at this location (Figure 15). No wheelchair journeys were observed at the two other count locations. In comparison, the Walking and Cycling Index (WACI)⁸ for Aberdeen (2023) found 0.84% of people using a wheelchair in Aberdeen.

There were 223 journeys (0.2% of all active travel journeys) made by people walking with an aid⁹ per year at Shell Path followed by 196 journeys (0.1% of all active travel journeys) at Abbotswell Road. The WACI reported 3.82% of people using a walking stick or frame in Aberdeen.

⁸ [Aberdeen Walking and Cycling Index - Sustrans.org.uk](https://www.sustrans.org.uk)

⁹ Walking with aid includes people using walking sticks, walking frames or crutches, white canes, service (including guide) dogs, and others.

Figure 15 – Annual usage estimates for people using pushchairs, wheelchair users and people walking with aid at various locations



3.4.1 Perceptions of accessibility

The majority (95%) of route users in Craigshaw Drive (Shell Path) agreed that the route is easily accessible. Route users' responses on other aspects of the route such as safety and comfort are discussed in sections 3.2.2 and 3.2.3 above respectively.

3.4.2 Diversity of users

Manual count results showed higher usage amongst males in Shell Path and Southeast End (Figure 16). Out of total estimated annual journeys in Shell Path, 73% were made by males and 27% by females. Likewise, 85% of journeys were made by males and 15% by females in Southeast End of Craigshaw Drive. Usage comparison with the Aberdeen City census data shows that females are under-represented and males are over-represented in both the locations¹⁰.

¹⁰ [Census data](#) from Aberdeen City for 2022 (N=224,019)

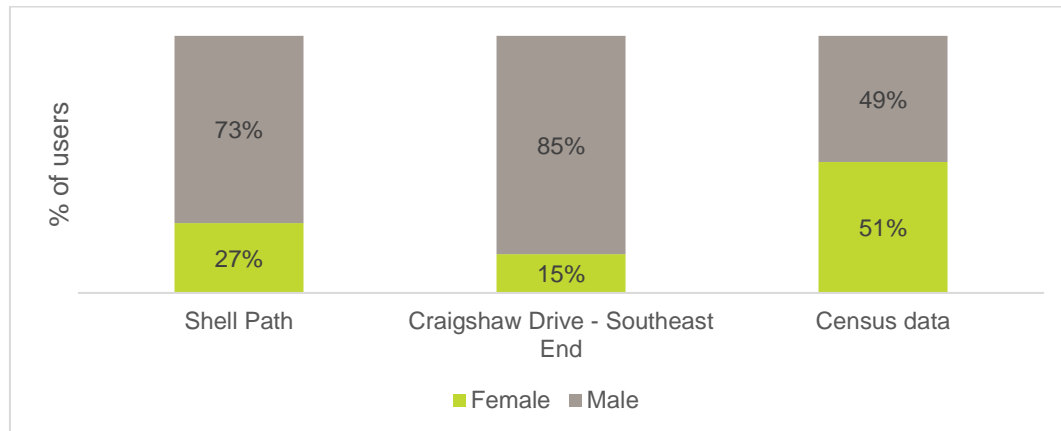
Figure 16 – Annual usage by gender (adults only) at two locations

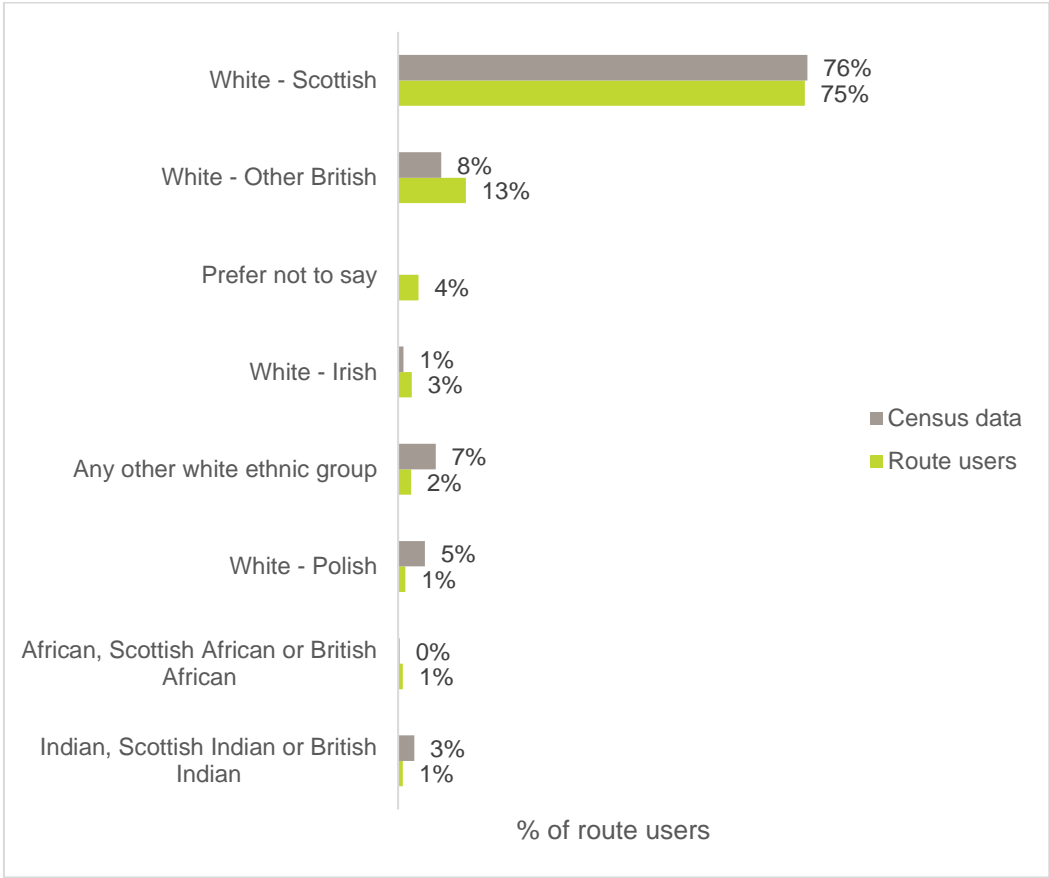
Table 4 below shows overall AUEs by broad age categories in Shell Path and Southeast End of Craigshaw Drive. The majority of journeys were made by 18–64-year olds in both the locations. When compared with census data, children under 18 and people over 65 are under-represented in Shell Path and Craigshaw Drive – Southeast End. In contrast, people between 18-64 age category are over-represented in both the locations.

Table 4: Annual usage by age group at two locations

	Shell Path (AUE=102,832)	Craigshaw Drive - Southeast End (AUE=45,945)	Aberdeen city population
Under 18	6%	1%	17%
18-64	88%	97%	66%
Over 65	6%	2%	17%

The RUIS survey respondents (n=107) in Shell path were mostly White – Scottish (75%) which is well represented compared with the census data (76%) (Figure 17). Other respondents were British (13%), Irish (3%) and others from white ethnic group (2%).

Figure 17 – Route users by ethnicity in Shell Path compared with census data



4. Discussion of findings

The results suggest that there is an opportunity for active travel journeys to increase in Craigshaw Drive – Southeast End and Shell Path once the scheme is complete, facilitating increased cycle and pedestrian movements. The journey purpose for the majority of current route users is recreation/touring, despite the area being close to a Business Park. However, commuting is the main purpose for cyclists.

While survey respondents felt safe with regard to motor traffic, the area could be improved in terms of safety after dark. This will encourage more people to use Shell Path throughout the day.

A large number of active travellers are crossing Abbotswell Road travelling Northwest towards the Shell Path or the Southeast towards Craigshaw Drive. Due to the unavailability of a crossing at the busy Abbotswell Road, 95% of the people were observed waiting before crossing the road. Many had to wait in the middle of the road, further adding to the safety risk for pedestrians, cyclists and other users. This also indicates that there is less priority on this road for active travel users. The construction of a parallel crossing will make it much safer which is also likely to encourage more people to active travel.

Although the perception of accessibility is high among the route users it does not look encouraging in terms of the accessibility for people with different abilities. Very few wheelchair users were counted in Abbotswell Road and none in the two other count locations that were monitored.

5. Future monitoring

Following completion of the project and after a suitable bedding-in period, Sustrans RMU will revisit the scheme to conduct follow-up monitoring in collaboration with ACC. The monitoring will focus on measuring the impact of the scheme by using similar tools to those used in baseline monitoring. Follow-up monitoring will take place at the same time of year as the baseline monitoring i.e. summer of 2024. This section considers expectations and suggestions for the follow-up monitoring to assess the scheme.

Levels of active travel

Manual counts will be repeated at the same locations as baseline which will allow us to assess whether or not active travel journeys have increased in Craigshaw Drive. The count locations will include Shell Path, Abbotswell Road and Craigshaw Drive – Southeast End. The Shell Path counter data will also be obtained from the Council to compare the change in active travel usage before and after intervention.

Quality of place

A repetition of the RUIS at the Shell Path will provide insight into any changed perceptions of safety and comfort the route connecting Tullos Park and Abbotswell Road – Craigshaw Drive. Video monitoring will also be carried out in Craighsaw Drive at the site of new controlled crossing to assess interactions between different travel modes and for pedestrian/cyclist crossing analysis. A focus group is planned to provide qualitative data on these perceptions.

Dedicated space for active travel

Repetition of traffic speed & volume and video manual counts at the same locations as baseline will provide insight into any route displacement as a result of the project. Besides, crossing and interaction analysis done through video monitoring will provide insight into how priority for active travel users has changed after intervention.

Accessibility and active travel

Perceptions of accessibility, and any changes to the diversity of users, will be assessed by a follow-up RUIS and video/manual counts in the same locations as baseline. A focus group for accessibility will provide qualitative data.

6. Methodology

6.1 A note on rounding

The percentages and numbers on graphs and in-text have been rounded to whole numbers in most of the cases in the report. For annual journey estimates, where the estimated value is in the thousands, the figure has been rounded to the nearest 500, where a figure is in the 10 thousands it has been rounded to the nearest thousand, where a figure is in the 100 thousands, it has been rounded to the nearest ten-thousand. Numbers have been presented according to this same rounding convention in figures, tables and in-text.

6.2 Shell Path RUIS / VMC

A Route User Intercept Survey (RUIS) and video manual count (VMC) was carried out at the end of the Shell Path where it meets Abbotswell Road (see Figure 1 for location). This was done for four days in September 2022 from 7am to 7pm each day. A RUIS is a tool frequently used by RMU to provide insight around a number of scheme outcomes. The survey of active travel users over 16 years includes questions about journey purpose, travel behaviour and perceptions of the area and infrastructure, alongside demographic information. A video manual count was conducted alongside the survey, recording all movements for user category (broken down by age, mode and gender).

6.3 Video Monitoring

Video monitoring was carried out capturing the footage from video cameras at the junction of Craigshaw Drive and Abbotswell Road to analyse a range of behaviours of people crossing Abbotswell Road and interactions between various traffic modes. The video monitoring was conducted for fourteen consecutive days from 8th – 22nd September 2022. This monitoring was conducted to carry out the following analyses:

Crossing analysis

- Pedestrian crossing delay and wait time
- Pedestrian crossing speed (time taken to cross the road)
- Cyclist crossing location/crossing method

Interaction analysis

- Interaction between active travel route users and motorised vehicles
 - Active travel (non-motorised) route user interactions
-

6.4 Video Manual Count

Video manual counts were carried out at two locations: Craigshaw Drive – Abbotswell Road and the Southeast End of Craigshaw Drive (see Figure 1 for location) for four days in September 2022 from 7am to 7pm each day. Volume of active travel route users moving through the road including their direction and time of travel was subsequently counted, along with basic demographic information (age, mode and gender).

6.5 Automatic Pedestrian/Cyclist Counter

A permanent automatic counter on the Shell Path provides data on usage of this path for travel from and into Abbotswell Park from Abbotswell Road. This is an ACC-owned counter which has been in place since August 2017 and collects continuous data on pedestrians and cyclists. The major advantage of automatic counters is that they can give long term usage trends, a year-round picture of usage and are therefore more reliable than route user surveys as they are less susceptible to weather and local events. The counts data spanning between 2018 and 2023 was utilised for analysis in this report.

6.6 Traffic speed & volume

Traffic speed & volume data was used to gather information about current levels of motorised traffic on Craigshaw Drive. This is a form of on-road automatic traffic monitoring to record volume of vehicles with a breakdown of vehicle type and speeds across the 24 hour day. The traffic speed & volume survey was carried out over seven days in September 2022.

Appendices

Full monitoring framework

Table 5: Logic framework table showing outcome monitoring and responsibilities

Objective	Outcome	Indicator	Monitoring Tools	Stage
1. Increase the number of people and trips for walking, cycling and wheeling for everyday journeys.	Higher levels of walking and cycling	Levels of walking & cycling on the route	VMC (2 sites: Abbotswell Road [Analysis method 1: Route user counts]; Southeast End of Craigshaw drive)	Pre & Post
			Automatic Pedestrian/Cyclist counter	Pre & Post
			RUIS (question on activity undertaken)	Pre & Post
	Modal Shift to active travel	Percentage of route users also travelling by car	RUIS question (other mode used)	Pre & Post
		Modal shift amongst people using the route	VMC (Craigshaw Drive- Abbotswell Road site [Analysis method 1: Route user counts])	Pre & Post
			Traffic speed & volume survey	Pre & Post
	Increased proportion of purposeful trips	Number of purposeful trips	RUIS (question on journey purpose)	Pre & Post
	People are more	Levels of physical activity	RUIS (question on increased physical activity)	Pre & Post

Objective	Outcome	Indicator	Monitoring Tools	Stage
	physically active			
2. Improve the quality of place	Increased perceptions of safety and comfort	Perceptions of the safety of the space	RUIS (questions on perceived safety and comfort)	Pre & Post
			Walking focus groups	Post
			Video footage crossing analysis (Analysis method 1: Crossing delay and wait time. Analysis method 2: Crossing speed.)	Pre & Post
		Perceptions of the comfort of the space	RUIS (questions on perceived safety and comfort)	Pre & Post
			Walking focus groups	Post
			Video footage interaction analysis (Analysis method 2: Active travel route-user interactions)	Pre & Post
		Cyclist crossing method	Video footage crossing analysis (Analysis method 3: Cyclist crossing location/crossing method)	Pre & Post
			VMC (Craigshaw Drive-Abbotswell Road site [Analysis method 2: Cyclist crossing])	Pre & Post
		Ratings of the protection from traffic	RUIS (questions of perceived safety)	Pre & Post
			Walking focus groups	Post
3. Provide dedicated, safe spaces for people to walk, cycle and wheel through	Fewer motor vehicles and lower traffic speeds	Traffic speed & volume data	Traffic speed & volume survey	Pre & Post
			VMC (Craigshaw Drive-Abbotswell Road site [Analysis method 1: Route user counts])	Pre & Post
	Increase in dedicated active travel infrastructure (proportion of	Linear meters of segregated cycle track and footway	Site survey: Review of the original scheme area layout compared to 'as built' designs	Post

Objective	Outcome	Indicator	Monitoring Tools	Stage
	space set aside for active travel in the scheme area)	(originally an ACC indicator) Percentage of space set aside for active travel is higher than in the original scheme area layout (originally a Sustrans RMU indicator)	(final scheme design cross section)	
	Priority for users of active travel	Movements of active travel users	Video footage crossing analysis (Analysis method 1: Crossing delay and wait time. Analysis method 2: Crossing speed.)	Pre & Post
			Video footage interaction analysis (Analysis method 1: Interactions between active travel route users and motorised vehicles indicators)	Pre & Post
	Increased safety for vulnerable route users	Frequency and severity of interactions at Abbotswell Road crossing location	Video footage interaction analysis (Analysis method 1: Interactions between active travel route users and motorised vehicles indicators)	Pre & Post
4.Improve accessibility	Accessible for everyone	The project area is accessible by people with different mobility needs	RUIS (question on barriers to walking and cycling on this route/area)	Pre & Post
			Walking Focus Group	Post
		Proportion of: wheelchair; walking with aid; pushchair users on this route	VMC (2 sites: Abbotswell Road [Analysis method 1: Route user counts]; Southeast End of Craigshaw drive)	Pre & Post
		Diversity of users	RUIS (Age and gender proportion using the route)	Pre & Post