Places for Everyone

2024-25 Infrastructure Impact Report

Walk Wheel Cycle Trust
08/12/2025

Image credit: Walk Wheel Cycle Trust- Bioquarter Edinburgh Active Travel Gap project

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Executive summary

This year's Places for Everyone (PfE) report represents the final interim report as the programme draws to a close. Over nearly a decade of work (including the predecessor programmes of Community Links and Community Links Plus), PfE has been the flagship programme for building and enhancing active travel infrastructure in Scotland. This report assesses the impact of PfE set against Transport Scotland's Active Travel Framework (ATF). In addition, the programme has a set of outcomes which are specific to the PfE programme. These outcomes have been jointly agreed between Walk Wheel Cycle Trust and Transport Scotland. This report assesses PfE programme impacts against both ATF outcomes and PfE outcomes.

+78%

The increase in users across 27 PfE sites following project completion.

A core outcome of PfE is to increase the number of people choosing to walk, wheel or cycle in Scotland. Across 27 projects with long term data (2-5 years after project completion), we found a 78% increase in users from before project completion to 2-5 years after, from 1.2 million users to 2.1 million users. When broken down by mode, this equated to a 118% increase (+400,000 users) in cyclists, and a 60% increase (+500,000 users) in walkers.

190km

The amount of new or upgraded infrastructure that has been funded through PfE.

This increase has in large part been made possible by the over 190km of high quality dedicated active travel infrastructure created through PfE funding. This includes 97km of new infrastructure as well as 96km of upgraded infrastructure. As a result of this, just over 10% of the Scottish population now live within 500m of PfE funded high quality cycling infrastructure. People's perceptions of routes have also improved. The proportion of people who agreed that the route was more attractive, more direct, more convenient, safer, and the best transport option increased 2-5 years after project completion (when compared to before project completion).

10%

The proportion of the Scottish population that now live within 500m of high quality PfE funded cycling infrastructure.

However, PfE aims not only to increase the number of people choosing active travel. An important outcome of PfE is making active travel accessible to all. When looking at demographics of survey respondents, the most notable change was among those with an ethnic minority background, with respondent numbers increasing from 1% to 4% (albeit remaining underrepresented when compared to the Scottish population of 7%). While other demographics including the proportion of female users, those who are not employed, disabled respondents and those from more deprived backgrounds all increased, these were all slight increases and remain below what we would expect, indicating there is more work to be done to create more equitable access to active travel.

+7km

The median increase in cycling trip distance 2-5 years after project completion.

We performed analysis to estimate the number of road casualties potentially prevented by PfE, comparing observed casualties over a three-year period before and after project completion to predicted figures using national casualty data. This found that over a three-year period across 51 sites, an estimated 28 road casualties were prevented in PfE project locations attributable to the impact of PfE interventions. This analysis looked only at direct road traffic accidents. However, shifts to active travel have other health benefits. Median total trip distance increased by nearly 7km for cyclists from before project completion to 2-5 years after project completion, while walking distances remained the same. The proportion of people who reported getting at least 30 minutes of exercise on five or more days of the week also increased over the same period, from 58% to 65%.

230 tonnes

The amount of carbon saved each year as a result of people choosing to walk, wheel or cycle at PfE project sites instead of driving.

PfE projects also have indirect health benefits in terms of improving air pollution and decreasing carbon emissions. Modelling shows a potential 340,000 fewer car trips per year thanks to the increase in walking and cycling at PfE project sites. This has resulted in one million fewer road kilometres driven, saving 230 tonnes of CO_2e, 280kg of NO_x, 32kg of PM_{10} and 18kg of $PM_{2.5}$ per annum*.

As well as these programme wide results, we also present four case studies to provide a more in-depth look at selected PfE projects:

- In Dumfries, new crossing points, segregated cycleways and footpaths, and a public placemaking area have helped to increase active travel in the area by 13 percentage points, resulting in 56,000 additional active

* CO_2e stands for Carbon Dioxide equivalent and is used to compare the emissions from various greenhouse gases (such as methane, nitrous oxide and fluorinated gases) based on their global warming potential. It is a way of normalizing the fact that different GHGs have different physical properties. NO_x stands for Nitrous oxides, while PM refers to particulate matter (with the numbers 2.5 and 10 referring to the maximum size of this matter.

travel trips. People's perceptions of the area improved; it felt safer and more accessible, while also providing a more pleasurable place for people to meet.

- A segregated cycle route in Aberdeen helped to increase active travel rates by 4%, both for recreational and commuting purposes, while also reducing vehicle traffic levels by 27% and increasing perceptions of safety.

- North Berwick Safer Routes to School improved perceptions of safety and children's ability to travel actively. While surveys after project completion suggested an increase in active travel (from 54% to 73% of students), the Hands Up Scotland Survey (HUSS) shows a more mixed picture and provides some potential lessons around the benefit of including behaviour change aspects alongside infrastructure schemes such as this one in the future.

- Our Arbroath case study focuses on the development of a new, more inclusive method of evaluation to effectively engage with members of the disabled community around the topic of accessible transport infrastructure.

Overall, these findings illustrate the impact which PfE has had in multiple areas, including strong increases in active travel rates, improved accessibility, safety, and wider health and environmental benefits. There is also opportunity to reflect on areas for improvement and future focus.

Introduction

Places for Everyone

Places for Everyone (PfE) is a grant fund that enables the creation of infrastructure to make it easier for people to walk, wheel and cycle for everyday trips. The programme is funded by the Scottish Government through Transport Scotland and is administered by Walk Wheel Cycle Trust (formerly known as Sustrans). It is open to a range of organisations in Scotland, including local authorities, public bodies and community groups.

We would like to thank Transport Scotland for their funding support and our various Places for Everyone partners for their cooperation on monitoring and evaluation, much of which is displayed in this report and on our Evidence Library.

PfE was launched in March 2019, replacing previous Walk Wheel Cycle Trust administered grant fund programmes such as Community Links (2010 to 2019) and Community Links Plus (2016 to 2019). The PfE programme is currently in a period of transition and due to close in December 2025, to be replaced by the Active Travel Infrastructure Fund (ATIF), administered by Transport Scotland.

PfE enables the development of infrastructure that supports all active travel modes. As such, the programme works to achieve the outcomes of Transport Scotland's Active Travel Framework (ATF). PfE itself also has a set of outcomes over and above the ATF outcomes, and together these underpin monitoring and evaluation at a project and programme level. This report assesses PfE programme impacts against several of these outcomes, as listed below:

Active Travel Framework Outcomes and Strategic Objectives*

- Outcome 1: Increase the number of people choosing walking, cycling and wheeling in Scotland

* Note- only ATF and PfE outcomes which are included in this report are listed here; outcomes which do not make up part of this report are not listed. Some outcomes which were covered in last years report were not included in this report as there has been insufficient new data to update them.

- Outcome 2: High quality walking, cycling and wheeling infrastructure is available to all
- Outcome 3: Walking, cycling and wheeling is safer for all
- Outcome 4: Walking, cycling and wheeling is available to all
- Strategic Objective: Cutting carbon emissions and other pollution
- Strategic Objective: Better health and safer travel for all

Places for Everyone Outcomes

- Fewer barriers for everyone to make journeys actively
- Increase in walking, wheeling and cycling for those facing inequalities.
- Produce cost effective walking, wheeling and cycling measures For Everyone

Each outcome has at least one associated indicator which we have used to evidence the outcome (see Table 1 below). Indicators can apply to more than one outcome; for example, the indicator "Rate of casualties by mode before and after project completion applies to both ATF Outcome 3: "Walking, wheeling and cycling is safer for all" and the Strategic Objective "Better health and safer travel for all". Where this is the case, we have only reported that indicator under one outcome.

Table 1: List of outcomes and indicators

Outcome	Indicator
Outcome 1: Increase the number of people choosing walking, cycling and wheeling in Scotland	• The number and proportion of short everyday journeys by walking, wheeling and cycling • Attitudes towards/propensity to walking, cycling and wheeling
Outcome 2: High quality walking, cycling and wheeling infrastructure is available to all	• Kilometres of high-quality segregated infrastructure • Distance to high quality cycling infrastructure • Quality of place in Places for Everyone projects • Quality of walking and wheeling level of service • Quality of cycling level of service • Extent to which the infrastructure is inclusive in use
Outcome 3: Walking, cycling and wheeling is safer for all	• Rate of casualties by mode before and after project completion • Improved perceptions of personal safety
Outcome 4: Walking, cycling and wheeling is available to all	• Proportion of people identifying barriers to walking, wheeling and cycling • Extent to which the completed infrastructure is inclusive in use (discussed under "Outcome 2: High quality walking, wheeling and cycling infrastructure is available to all")
Strategic Objective: Cutting carbon emissions and other pollution	• Air quality (modelled) • Carbon emissions (modelled)
Strategic Objective: Better health and safer travel for all	• Increased physical activity • Rate of casualties by mode before and after project completion (discussed under "Outcome 3: Walking, wheeling and cycling is safer for all") • Improved perception personal safety (discussed under "Outcome 3: Walking, wheeling and cycling is safer for all")
Fewer barriers for everyone to make journeys actively	• Kilometres of high-quality segregated infrastructure (discussed under Outcome 2: High quality walking, cycling and wheeling infrastructure is available to all)
Increase in walking, wheeling and cycling for those facing inequalities.	• Number and proportion of people using walking, wheeling and cycling from deprived groups • Number and proportion of people using walking, wheeling and cycling from protected characteristic groups- see the discussion under "Extent to which the completed infrastructure is inclusive in use" in "Outcome 2: High quality walking, wheeling and cycling infrastructure is available to all" for further details relating to this indicator.
Produce cost effective walking, wheeling and cycling measures For Everyone	• Value for money measurement

Monitoring and analysis

The main findings in this report come from Walk Wheel Cycle Trust monitoring and evaluation activities. Walk Wheel Cycle Trust aims to provide evidence on sustainable and active travel that is transparent and authoritative, and which influences and shapes policy, practice and behaviour in Scotland and across the UK.

Walk Wheel Cycle Trust conducts primary monitoring and evaluation on a sample of PfE projects, as well as looking at aggregated data at a programme level. This report presents a summary of the evaluation of the PfE programme up to the 2024-25 financial year. It draws on programme level monitoring data, aggregated data from a sample of projects and data from case studies, to demonstrate the impact of the PfE programme against outcomes. This is the last PfE infrastructure impact report, before a final end-of-programme report is provided in 2026.

As the PfE programme has developed and individual projects have become more embedded to their community, our ability to conduct long term analysis has increased. In most cases, we conduct our monitoring at three points in time:

- **Before project completion**: monitoring before project completion to establish a baseline (also called pre-monitoring).
- **After project completion**: Short term follow-up monitoring after completion but allowing for a bedding in period (monitoring takes place ~6-12 months after construction is completed- also called post monitoring).
- **2-5 years after project completion**: Long term follow-up monitoring (also known as legacy monitoring), taking place 2-5 years after project completion.

In this report, we primarily use data from projects with long-term data when reporting against each indicator. Although this limits the sample size, it offers stronger evidence of the sustained impact of the PfE programme. Where long-term data is insufficient, we rely on short-term data collected before and after project completion.

Impact of Places for Everyone

This report provides information on the key impacts of PfE updated for the 2024-25 financial year. The evidence here demonstrates the programme's contribution to addressing Transport Scotland's Active Travel Outcomes and Strategic Objectives, as well as specific PfE outcomes. For each outcome, we discuss the indicators which have been used to evidence that outcome in detail (see Table 1 above for list of indicators).

The report also presents evidence on several outcomes from four PfE project case studies. These have been chosen because they demonstrate scheme-specific impact and learnings which we have reported on over the last year.

Where necessary, a brief overview of the methods is given. However, a detailed breakdown on the methodology used to gather data for each indicator is given in a separate methods appendix.

Active Travel Framework Outcomes

Outcome 1: Increase the number of people choosing walking, wheeling and cycling in Scotland

Increasing the number and proportion of short everyday journeys made by walking, wheeling and cycling is one of the core goals of the PfE programme. Annual usage estimates from an aggregation of active travel counts across a sample of PfE projects allow us to see how route usage has changed from before to after project completion. Out of 27 different projects with long term (2-5 year) data, 22 of them showed an increase in users. **Overall, there was a 78% increase in usage across monitored sites, from 1.2 million users to 2.1 million users** (see Figure 1). **The number of cyclists has increased by over 400,000 (+118%) while there were nearly half a million additional walking trips (+60%).** As such, this is a clear indication that the number of people walking, wheeling and cycling increases substantially at PfE project sites following construction, with this increase being sustained over at least 2-5 years.

Figure 1: Aggregated Annual Usage Estimates across PfE projects.

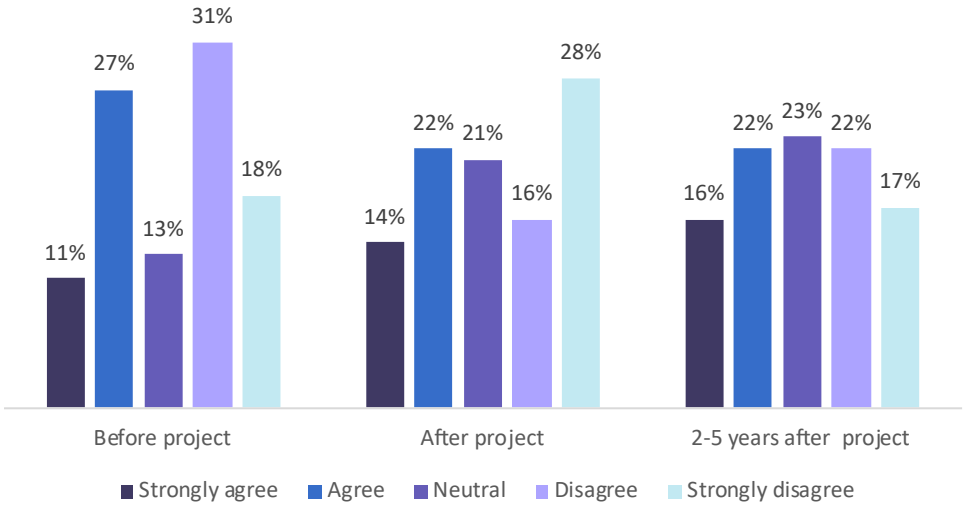
AUEs have been calculated based on manual counts of 1,285 users before, 1,756 users after, and 1,720 users 2-5 years after project completion across 27 sites.

When evaluating behaviour change, we examine the degree to which individuals express the intention to walk, wheel or cycle, as an initial aspect of the change process. This is done through one of our main monitoring tools- Route User Intercept Surveys (RUIS). One of the questions in our RUIS asked respondents about their intentions to travel actively over the next 12 months (see Figure 2 and 3 below).

While the proportion of respondents who said they intended to cycle more remained the same before and after completion (38% either agreed or strongly agreed – see Figure 2 below), the proportion who strongly agreed increased from 11% to 14% and then to 16%, indicating a sustained impact on active travel intentions. Neutral responses increased steadily over time, from 13% to 21% and then 23%, which could indicate more openness to the idea of cycling more. This is backed by a gradual decline in overall disagreement from 49% before completion to 44% after and 39% after 2–5 years.

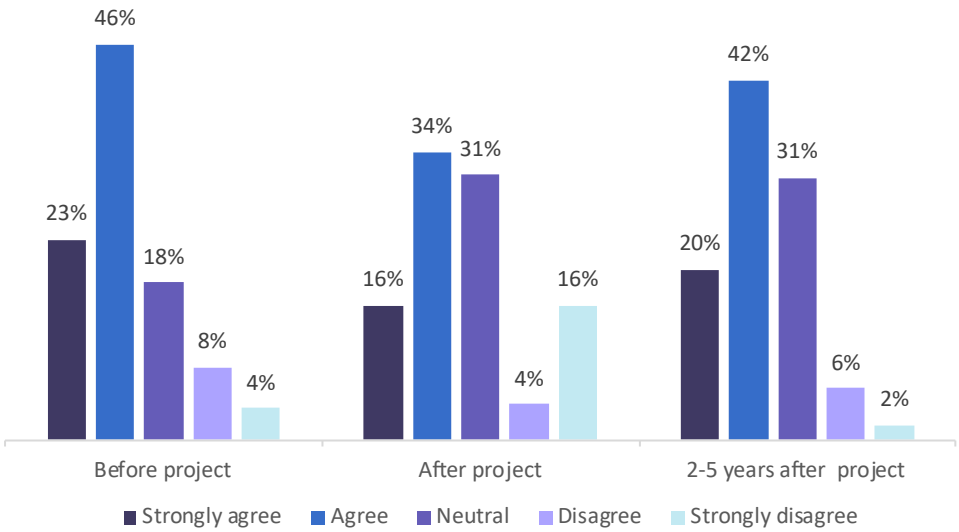
Walking intentions showed little change at the 2–5 year follow-up, with agreement levels declining slightly from before project completion (Figure 3). The proportion of respondents who disagreed fell from 12% before to 8% after 2-5 years, while neutral responses increased from 18% to 31%. Similar to cycling trends (Figure 2), these findings suggest an opportunity to shift neutral attitudes toward agreement over the medium to long term.

Figure 2: Extent to which survey respondents agree that they intend to cycle more in the next 12 months.



Based on 1,994 survey respondents across 10 sites; 439 before, 739 after, and 816 2-5 years after project completion.

Figure 3: Extent to which survey respondents agree that they intend to walk more in the next 12 months.



Based on 1,994 survey respondents across 10 sites; 439 before, 739 after, and 816 2-5 years after project completion.

In last year's report, we examined the impact of active travel rates at schools with PfE infrastructure versus schools without. Through this, we found that **schools with PfE infrastructure had substantially higher active travel rates**.

- Assuming a single year impact, looking only at sites that had infrastructure constructed in the previous year. Through this, we found that active travel rates were nearly 9 percentage points higher at schools with PfE infrastructure (58% versus 49.5% at those without).
- Assuming a more sustained cumulative impact over time*, the difference was 6.5 percentage points (56% at schools with PfE infrastructure v 49.5% at schools without).

We have not updated these figures for this year's report as there is a separate ongoing Scottish Research Project which is investigating active travel rates to school in more depth. This will be available in Spring/Summer 2026.

Outcome 2: High quality walking, wheeling and cycling infrastructure is available to all

One of the biggest barriers to active travel is a lack of high-quality infrastructure, with concerns about personal safety regularly cited by user and non-user groups as a barrier to active travel. **Through PfE funding, over 190 kilometres of high quality dedicated active travel infrastructure has been constructed** (Table 2 and Figure 4 below)†. This includes brand new infrastructure as well as upgrades to existing infrastructure.

The amount of infrastructure constructed has varied in recent years due to factors such as Covid and increased project complexity. In 2023-24, almost 30 kilometres of paths were constructed, representing the highest single year figure on record‡ (see Table 2 and Figure 4 below). While this figure has decreased substantially in 2024-25, this is due to the transition of the PfE programme to ATIF. As such, any constructed paths from ATIF funding will not be captured here.

* i.e., if we looked at active travel rates in 2019, we included schools with infrastructure from all preceding years (2016, 2017, 2018, etc.). Our first method would include only infrastructure constructed in 2018 in this example, only infrastructure constructed in 2019 when looking at 2020, etc.

† This figure excludes on-road cycle paths.

‡ The figure given here for pre 2017 is higher but represents the amalgamation of several years of construction.

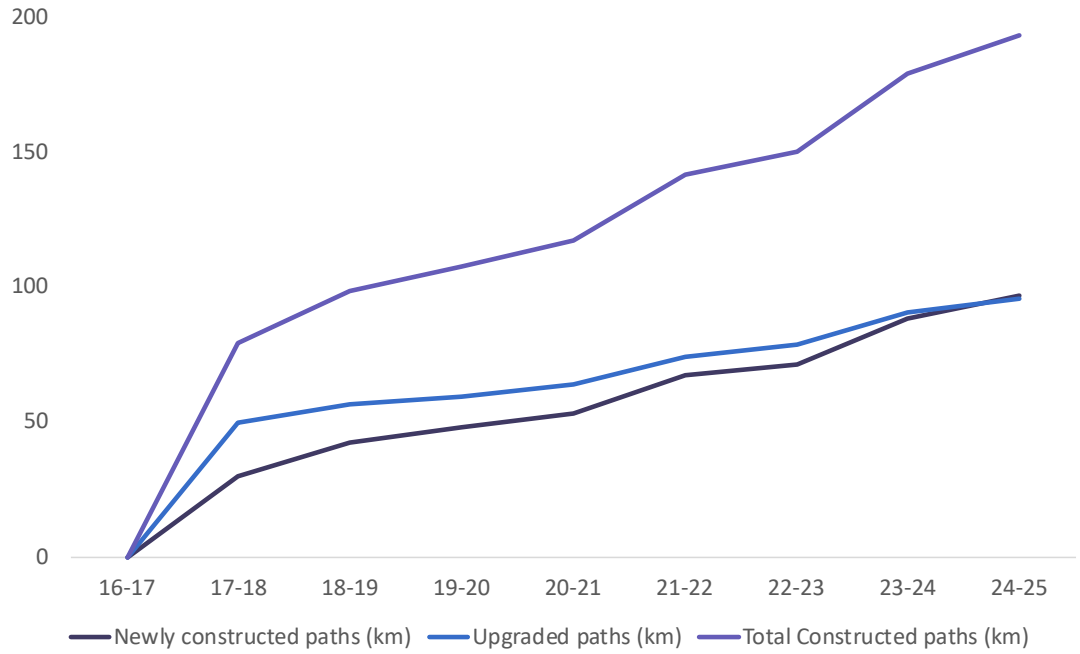
As of the 2024-25 financial year, the cumulative total of newly constructed paths has overtaken the cumulative length of upgraded paths (97km versus 95.9km). This has been driven by a year-on-year prioritisation of building new infrastructure rather than upgrading existing infrastructure. This can be clearly seen if we look at the individual years from 2017-18 onwards where the kilometres of new infrastructure constructed each year is on average 51% higher than the kilometres of upgraded infrastructure.

As such, if we exclude older pre-2017 years, there have been 51% more kilometres of new infrastructure constructed compared to upgraded infrastructure (83.6km versus 55.7km respectively). This demonstrates the impact of the PfE programme in driving the delivery of new infrastructure where none previously existed as opposed to widening or upgrading existing paths.

Table 2: Kilometres of constructed high quality cycling infrastructure per year

	Pre-2017	**17-18**	**18-19**	**19-20**	**20-21**	**21-22**	**22-23**	**23-24**	**24-25**	**Total**
Newly constructed paths (km)	13.4	16.3	12.6	5.5	5.3	14.0	4.4	16.7	8.8	**97**
Upgraded paths (km)	40.2	9.5	6.6	3.2	4.4	10.4	4.2	12.4	5.0	**95.9**
Total constructed paths (km)	**53.6**	**25.8**	**19.2**	**8.7**	**9.7**	**24.4**	**8.6**	**29.1**	**13.8**	**192.9**

Figure 4: Cumulative kilometres of constructed high quality cycling infrastructure



As a result of the 190km of infrastructure that has been built, **just over 10% of the Scottish population (560,000 people) now live within 500m of high quality cycling infrastructure*** (see Table 3 below). Previous research has demonstrated that proximity to cycling infrastructure is an important factor in increasing active travel rates[1,2,3] (notably, these studies have also noted the importance of having a network of infrastructure, as opposed to various one-off individual projects. Providing more infrastructure that is near people's homes helps to make active travel journeys more accessible for everyone.

* This represents a substantial revision upwards from last years figures. This is mainly due to an error noted from last year's methodology, which we have updated and corrected for this year.

Table 3: Growth in the number of people and households with access to high quality cycling infrastructure (HQCI), 2016-25

	Pre-2017	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	Total
Households within 500m of HQCI (000s)	73	58	25	9	13	34	17	23	25	**230**
Population within 500m of HQCI (000s)	150	120	53	19	25	71	32	45	47	**560**

While the above figures define high quality in terms of routes being segregated from traffic (i.e., dedicated walking and cycling facilities rather than on road cycle lanes), the views of route users and their perceptions of infrastructure is also an important factor in helping to ensure that high quality walking, wheeling and cycling infrastructure is available to all. We measured this through a series of questions in our RUIS surveys which examined people's perception of their surroundings, including whether:

- the attractiveness of the surroundings on the route influenced their decision to use the route
- they can get straight to their destination using this route
- the route feels safe
- this is the best transport option
- this is the most convenient route.

The results can be seen in Table 4 (walkers) and Table 5 (cyclists) below. In general, opinions improved across all factors over the long term (2-5 year after project completion). Interestingly, in some cases there was a slight decrease (or minimal positive change) in the short term before this improvement, suggesting that some changes may take time to bed in.

Table 4: RUIS walking respondents views on infrastructure before, after, and 2-5 years after project completion.

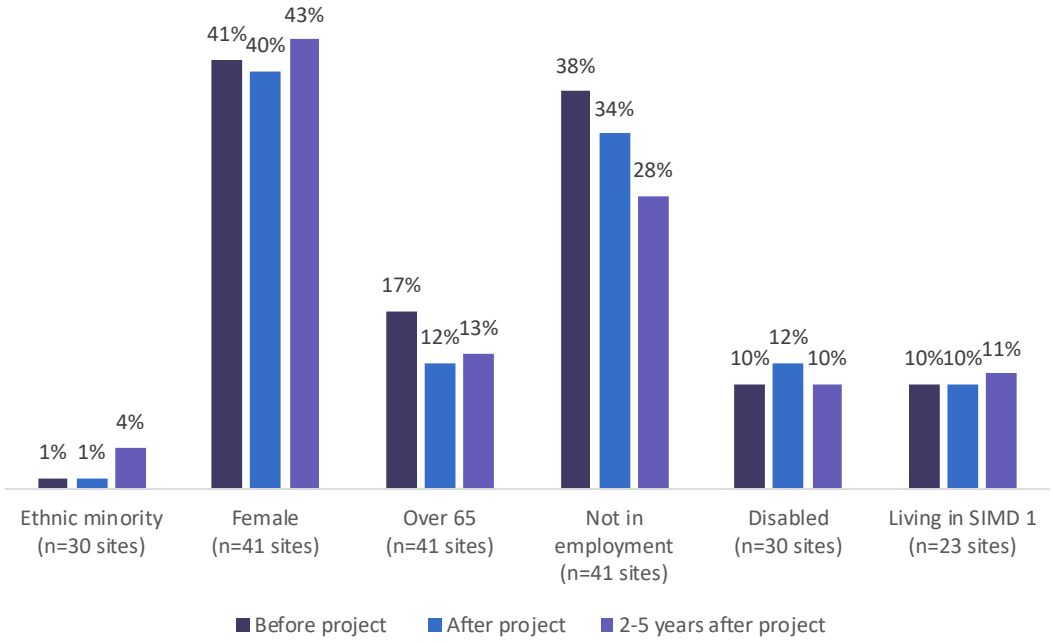
% of walking respondents who agree…	Timescale	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
…that the attractiveness of the surroundings on the route influenced their decision to use the route.	Before project	51%	38%	9%	2%	0%
	After project	53%	38%	8%	1%	0%
	2-5 years after project	67%	27%	5%	1%	0%
…that they can get straight to their destination using this route.	Before project	24%	42%	25%	8%	1%
	After project	28%	42%	26%	3%	1%
	2-5 years after project	30%	43%	20%	7%	0%
…that the route feels safe.	Before project	37%	39%	17%	4%	3%
	After project	32%	50%	15%	2%	1%
	2-5 years after project	50%	39%	9%	2%	0%
…that this is the best transport option.	Before project	21%	38%	32%	8%	1%
	After project	18%	39%	38%	5%	1%
	2-5 years after project	31%	36%	26%	6%	0%
…that this is the most convenient route.	Before project	35%	45%	16%	4%	0%
	After project	29%	44%	21%	5%	1%
	2-5 years after project	39%	45%	12%	4%	0%

Table 5: RUIS cycling respondents views on infrastructure before, after, and 2-5 years after project completion.

% of cycling respondents who agree...	Timescale	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
...that the attractiveness of the surroundings on the route influenced their decision to use the route.	Before project	61%	24%	13%	1%	0%
	After project	70%	20%	8%	2%	1%
	2-5 years after project	67%	28%	3%	2%	0%
...that they can get straight to their destination using this route.	Before project	41%	36%	15%	8%	0%
	After project	43%	37%	18%	2%	1%
	2-5 years after project	35%	47%	13%	4%	1%
...that the route feels safe	Before project	48%	30%	10%	6%	6%
	After project	58%	27%	8%	3%	3%
	2-5 years after project	56%	35%	5%	4%	0%
...that this is the best transport option	Before project	58%	25%	12%	6%	0%
	After project	42%	38%	19%	1%	0%
	2-5 years after project	52%	33%	13%	2%	0%
...that this is the most convenient route	Before project	48%	35%	11%	6%	0%
	After project	46%	37%	14%	3%	0%
	2-5 years after project	50%	37%	11%	2%	0%

The above indicators give an insight into the perceived quality of a path. However, infrastructure also needs to be accessible. One of the key outcomes of PfE is to ensure that infrastructure is accessible to all members of society, including the most marginalised and vulnerable groups. Figure 5 below shows a comparison of the demographic profile of RUIS respondents for various categories before and after PfE project completion*.

Figure 5: Demographic profile of survey respondents before and after project completion



The biggest change has been that **the proportion of people who report being from ethnic minority backgrounds has tripled, going from 1% to 4%**. However, this is not yet representative of the Scottish population as a whole, with the Scottish census reporting 7% of people as being from an ethnic minority.

Similarly, the proportion of respondents who were female has also increased slightly, from 41% before project completion, to 43% 2-5 years after project completion. **In absolute terms, given the growth in overall users, this has meant an increase from around 490,000 female users, to around 900,000 female users.**

The proportion of route users who are over 65 has decreased across all sites, from 17% to 13%, remaining below the Scottish average of 20% of people being over 65. It is unclear what has led to this reduction. One potential cause

* There have not been sufficient additions to the number of projects with long term follow up data to update for this year; therefore, we have focused on shorter term results for this indicator.

is the impact of monitoring from 2020-2022 (i.e., during Covid), when more elderly people may have been more likely to avoid being out in public, and this may have impacted figures.

The proportion of users who are disabled or from SIMD1 remained relatively similar, while the proportion of people not employed (either full or part time) has dropped by 10 percentage points, from 38% to 28%.

Taken together, this analysis indicates that while there have been some changes in the demographic profile of route users, there is room for improvement, with all categories being underrepresented when compared to national averages- the single exception to this is people who are not in employment, who remain overrepresented.

Outcome 3: Walking, wheeling and cycling is safer for all

This year, for the first time we performed an analysis to estimate the number of road casualties potentially prevented by PfE. Our analysis examined changes in casualty counts* at PfE sites (including a surrounding 25-meter buffer of PfE project sites) by comparing observed casualties over a three-year period before and after project completion. To account for wider trends, the analysis used national casualty data to calculate a casualty ratio and predict the expected number of after construction casualties. This predicted figure was then compared to the actual observed after -project data, allowing the analysis to estimate the possible impact attributable to PfE interventions by identifying any reduction in casualties beyond what would be expected from national trends alone.

After adjusting for the national trend, **the total reduction in casualties at 51 PfE sites across all travel modes and road types was 28 people**. This figure includes slight injuries, serious injuries, and fatalities. It represents the estimated number of road casualties prevented in PfE project locations over a three-year period that could be attributed to the impact of PfE interventions. Urban A roads saw the largest decrease, with 17 fewer casualties. Rural A roads and urban minor roads saw reductions of 5 casualties and 6 casualties, respectively, following PfE project implementation. No additional reduction (nor increase) on top of the national trend, was seen in rural minor roads.

* Using STATS19 data. STATS19 is the official dataset used in Great Britain to record personal injury road collisions reported to the police. It includes detailed information on the location, severity, and type of casualties. More information can be found here: https://www.gov.uk/government/collections/road-accidents-and-safety-statistics

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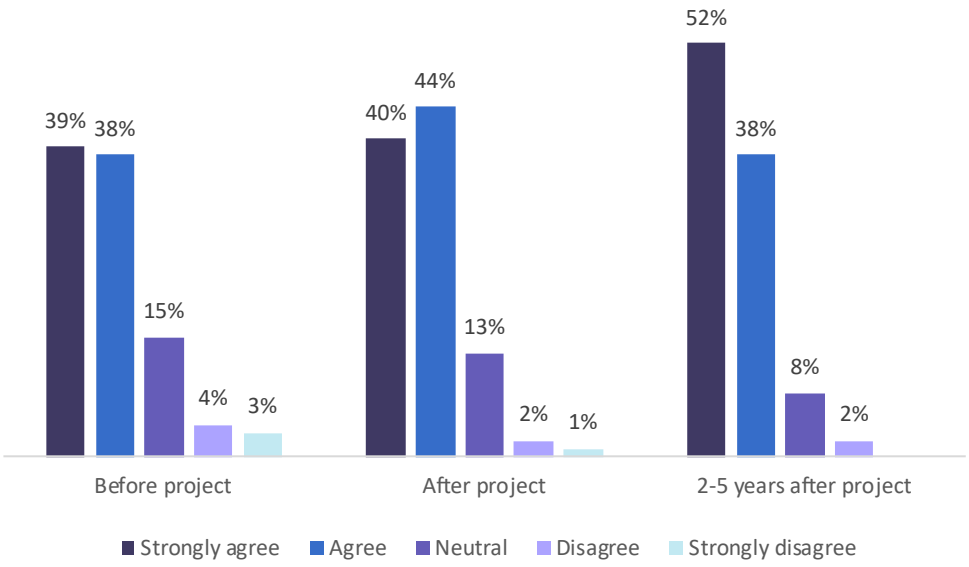
The reduction in casualties at PfE sites

There are some limitations to this analysis. While national trends are accounted for, not all external influences can be controlled. Other local infrastructure investment, changes in enforcement of legislation, or behavioural campaigns may have influenced casualty rates outside of the direct influence of the PfE infrastructure projects. The use of a fixed 25-meter buffer may misclassify incidents depending on local road layouts. A further limitation lies in how casualty counts are counted. We used the STATS19 dataset, which is the main source of data on road collisions in the UK. However, this relies on personal injury collisions reported to police, meaning any incidents which are not reported will not be counted. This means smaller accidents or ones where people managed to avoid injury are likely to be underreported.

This analysis only considers direct casualties (i.e., those injured or killed in road accidents). There are other indirect impacts of active travel schemes which reduce casualty rates through decreasing disability-adjusted life years- for example through improved air and noise pollution and decreased carbon emissions. See the section under the strategic objective of "Cutting carbon emissions and other pollution" later in this report for a more detailed discussion of these indicators.

As well as these more objective measures of casualty rates, peoples' perceptions of how safe a route is plays an important role in their decision to travel actively or not. Responses from RUIS across 20 sites show an **increase in the proportion of respondents who agreed or strongly agreed that they feel safe, rising from 77% before project completion to 89% 2-5 years after project completion** (Figure 6 below).

Figure 6: Extent to which survey respondents agree PfE infrastructure feels safe.



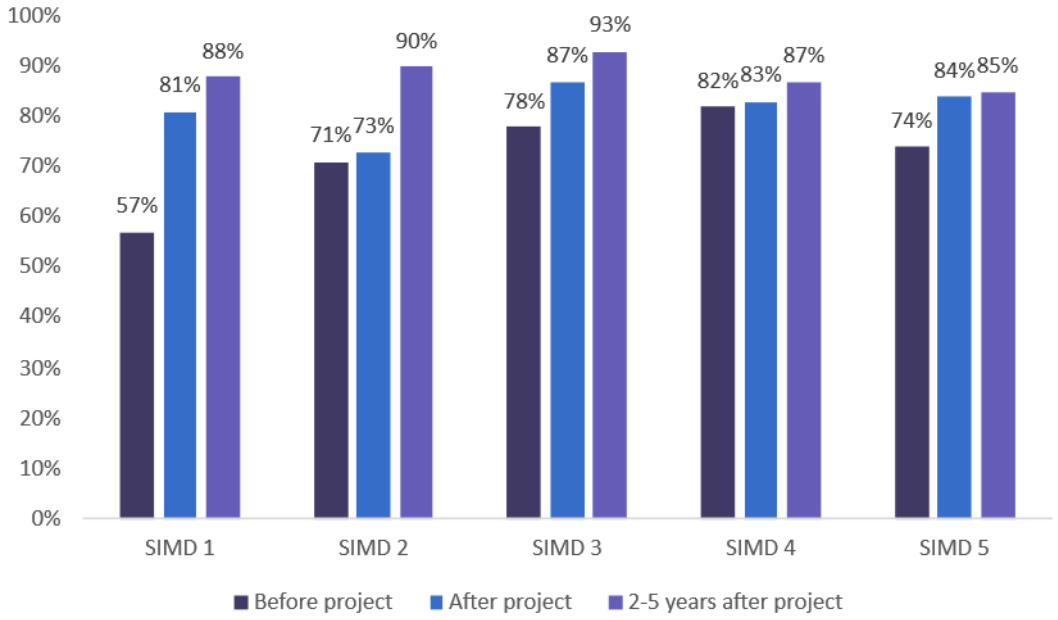
Based on 3,970 survey respondents across 20 sites; 1,056 before, 1,449 after, and 1,465 2-5 years after project completion.

These results were similar when broken down to look separately at both males (76% rising to 91%) and females (78% to 88%).

Regarding different age categories, a similar proportion of users across all three categories (16-34, 35-54 and 55+) felt safe 2-5 years after project completion (ranging from 87%-91% across the different age categories). However, younger people (aged 16-34) showed the biggest increase to reach these levels, from 65% of people before project completion to 87% 2-5 years after. The comparable before figures for 35-54 and 55+ year olds were 78% and 81% respectively, indicating that efforts to improve perceived safety may have had a bigger impact among younger people.

There was also a noticeable increase in perceived safety among those coming from the lowest Scottish Index of Multiple Deprivation (SIMD) quintile (those from the 20% most deprived areas in Scotland- see Figure 7). Just over half (57%) of those from SIMD 1 agreed or strongly agreed that they felt safe (most of the remainder (33%) were neutral, with only 10% disagreeing/strongly disagreeing that they felt safe). This rose to 88% agreeing or strongly agreeing that they felt safe 2-5 years after project completion, bringing SIMD 1 in line with other quintiles which ranged from 85%-93% agreement. This suggests that PfE projects may have had a bigger impact in improving perceived safety for those living in more deprived areas.

Figure 7: Improved perceptions of personal safety



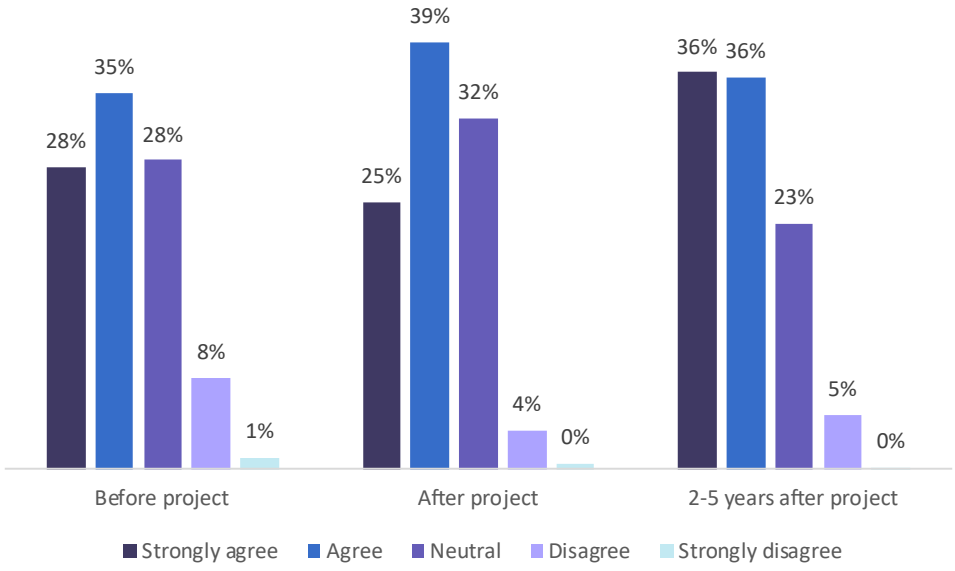
Outcome 4: Walking, wheeling and cycling is available to all

People's views on what barriers are present (or absent) to walking, wheeling and cycling give an indication whether or not PfE projects are available to all. Barriers can take several forms, for example, physical barriers or psychological/ social barriers, such as perceptions of safety (as discussed under "Outcome 3: Walking, wheeling and cycling is safer for all"). Here, we do not look at any specific type of barrier, rather we look more broadly at whether people feel that a route is the best transport option, and if it goes directly to their destination. This can be seen as an indication of how many barriers there are to active travel e.g., if a cycling route is considered the best transport option, it suggests there are fewer barriers to travelling this way than by other modes such as by car.

The proportion of people who agreed or strongly agreed that their route was the best transport option for their journey rose **from 62% before project completion to nearly three quarters of people (72%) 2-5 years after completion** (see Figure 8 below). The proportion of people who agreed or strongly agreed that they could get straight to their destination rose by a similar amount - **from 66% before project completion to 76% 2-5 years after project completion** (see Figure 9 below). Combined, these results show that more people find PfE-funded routes to be direct and appropriate routes. Taken together with indicators discussed elsewhere – specifically, those based around safety (see "Outcome 3: Walking, wheeling and cycling is safer for all") and an increase in availability of high quality infrastructure (see "Outcome 2: High quality walking, wheeling and cycling infrastructure is available to all") -

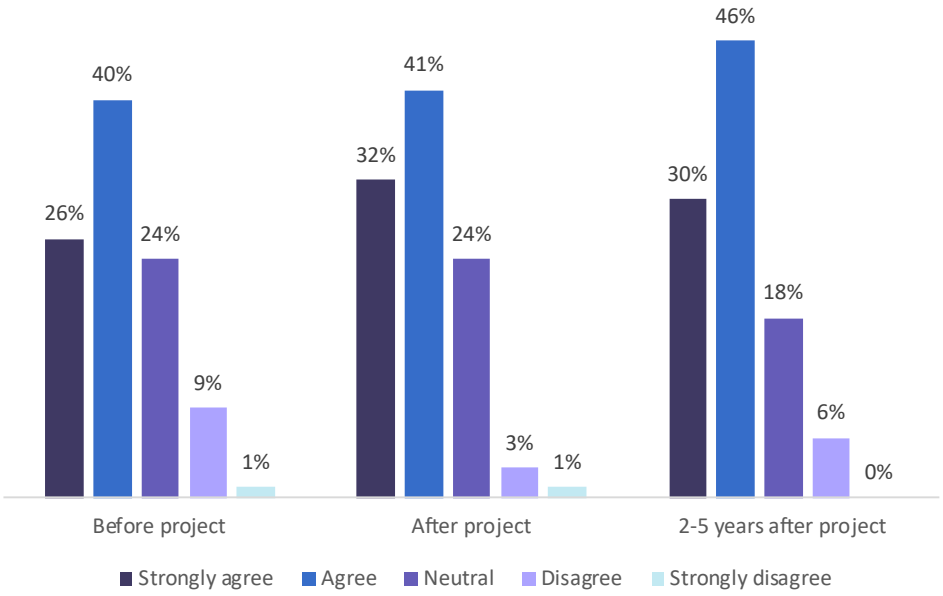
these results suggest that fewer people are identifying barriers, indicating that cycling, walking and wheeling is becoming more available to all.

Figure 8: Extent to which survey respondents agree active travel is the best transport option.



Based on 4,380 survey respondents across 21 sites; 1,177 before, 1,611 after, and 1,592 2-5 years after project completion.

Figure 9: Extent to which survey respondents agree that they could get straight to their destination



Based on 4,381 survey respondents across 21 sites; 1,178 before, 1,611 after, and 1,592 2-5 years after project completion.

Strategic objective: Cutting carbon emissions and other pollution

While Scotland has ambitious targets for cutting carbon emissions, we are currently far off the pace: in 2024 the Scottish Climate Change Committee (CCC)* noted that progress required to meet the 2030 interim carbon emissions target was 'deemed to be beyond what was credible'[4,5]. As a result, the interim emissions targets outlined in the 2009 Climate Change (Scotland) Act were repealed and replaced with carbon budgets, which are 'legally binding caps on greenhouse gas emissions in Scotland over five-year periods'[5]. Carbon budgeting entails reductions across various sectors, relative to 1990 levels. While most sectors have had substantial reductions, transport emissions have barely dropped since 1990 and now represent the biggest source of carbon emissions in Scotland[5]. Modal shift away from cars forms a key part of the CCC's recommendations to achieve Net Zero by 2045.

As part of this year's PfE report, we modelled the estimated impact PfE projects have had on carbon emissions. This analysis was based on 52 PfE projects with before and after project active travel counts. Across these projects active travel trips have increased by a combined ~1.9 million trips a year. It is estimated that 30% of these new trips replace trips that would otherwise be made by car or taxi†. As a result, this means there have been about **340,000 fewer car and taxi trips, resulting in 1 million fewer kilometres driven** (analysis adjusted for average vehicle occupancy). **This amounts to a saving of 230 tonnes of CO_2e‡ per year**.

230

The number of tonnes of CO_2e saved each year through active travel at PfE sites replacing car journeys

*An independent body established under the Climate Change Act 2008 to advise the UK on reducing emissions and adapting to Climate Change.
† Based on estimates provided in the Department of Transport's Active Mode Appraisal Toolkit (AMAT).
‡ CO_2e stands for Carbon Dioxide equivalent and is used to compare the emissions from various greenhouse gases (such as methane, nitrous oxide and fluorinated gases) based on their global warming potential. It is a way of normalizing the fact that different GHGs have different physical properties.

As well as modelling CO_2e savings, we also modelled the impact of mode shift due to PfE projects on air pollutant emissions, including particulate matter* ($PM_{2.5}$ and PM_{10}) and nitrous oxides (NO_x). Air pollution is the biggest environmental risk to public health, both in the UK and worldwide[6,7]. It contributes to 28,000 to 36,000 deaths per annum in the UK[6]. Road transport alone makes up 12.4% of $PM_{2.5}$ and 33.6% of NO_x emissions.

As a result of the 1 million fewer kilometres driven because of PfE, **we have avoided emitting 280kg of NO_x, 32kg of PM_{10} and 18kg of $PM_{2.5}$** (see Table 6 below). Causes of air pollution tend to be very localised. As such, in locations where PfE projects have led to modal shift, they are likely to have a substantial impact in that area (for example, the introduction of School Streets will lead to a substantial reduction in air pollution on that street during operating hours).

Table 6: Yearly reduction in air pollutants

Pollutant	Emissions saved (kg)
NO_x	280
PM_{10}	32
$PM_{2.5}$	18

While the results for both air pollution and carbon emissions are positive, these are challenges that PfE alone cannot address and require wider cross-sector urgent and efficient collaboration to help decarbonise the transport sector. For example, by improving the links between active travel and public transport, more substantial long-distance journeys can be taken by combinations of train or bus, and bike to replace long car journeys.

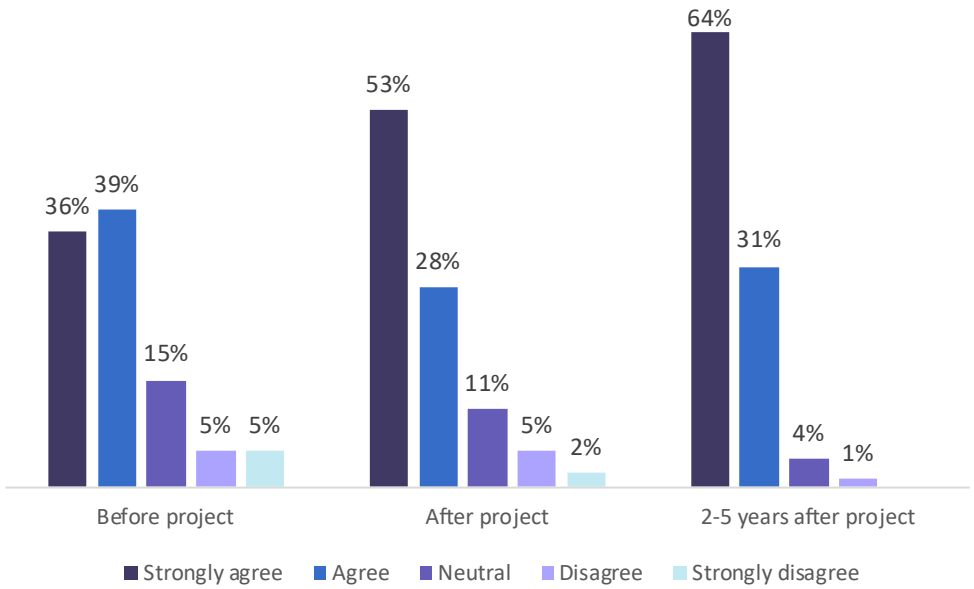
* A generic term used to describe a complex mixture of solid and liquid particles of varying size, shape, and composition. These are usually classified according to size, with PM2.5 meaning particles that are less than 2.5µm in diameter; PM_{10} refers to particles that are less than 10µm in diameter. As such, $PM_{2.5}$ is a subset of PM_{10}.

Strategic objective: Better health and safer travel for all

Increased physical activity is a key component of ensuring better health for all. By making areas more accessible, enjoyable and safer to travel in, PfE projects aim to encourage people to travel actively more often, thus increasing levels of physical activity. Before project completion, three quarters (75%) of respondents agreed or strongly agreed that "to get exercise" was an influence on why they had chosen this route. **This figure rose to include almost all respondents (95%) 2-5 years after project completion** (see Figure 10 below).

While the recommended physical activity guidelines from the National Health Service remain below what is needed for optimal health, they provide a yardstick by which we can measure the levels of physical activity people are getting. Current guidelines suggest at least 150 minutes of moderate activity (with suggested activities including a brisk walk or cycling) spread over four to five days a week (i.e., ~30 minutes per day at least five days per week)[8]. Before project completion, 58% of respondents reported getting at least 30 minutes of exercise on five or more days in the week. 2-5 years after completion, this figure was 65%, indicating an improvement in the amount of exercise people were getting.

Figure 10: Extent to which survey respondents agree that the route increased physical activity



Based on 4,376 survey respondents across 21 sites; 1,174 before, 1,610 after, and 1,592 2-5 years after project completion.

Similarly, across six measured sites, the **median total trip distance (as self reported by RUIS respondents) for cyclists increased by nearly seven**

kilometres, from 12.9km before project completion to 19.3km 2-5 years after project completion (median walking distances remained the same). When looking at short term data (which brings our sample size from six up to fourteen), both **the median cycling and walking trips increase from before project completion to after project completion, from 6.4km to 9.7km (cycling) and 1.6km to 3.2km (walking) respectively.**

12.9km to 19.3km

The increase in the median cycling trip distance from before to 2-5 years after project completion

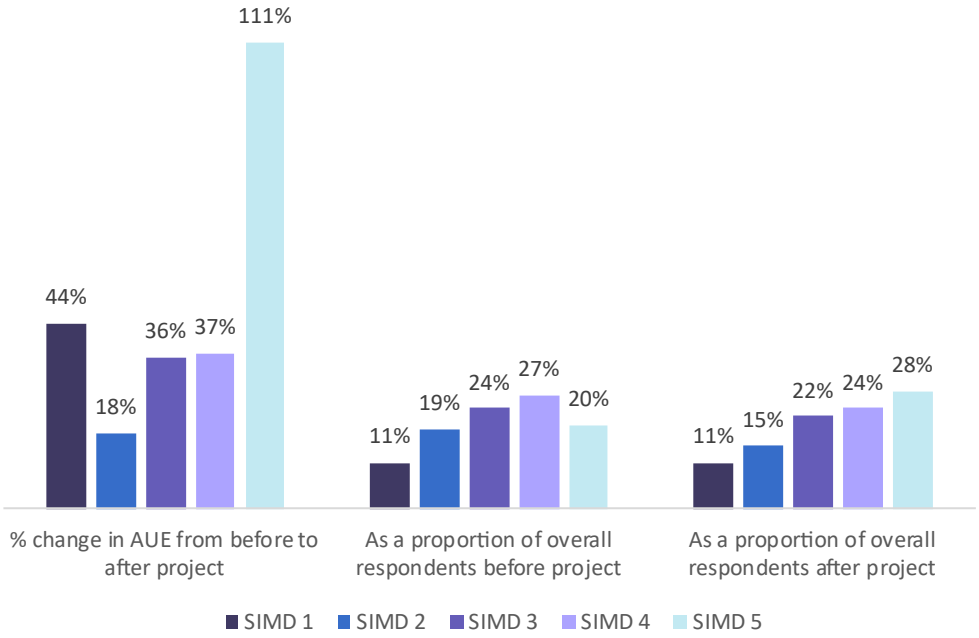
Places for Everyone Outcomes

Increase in walking, wheeling and cycling by those facing inequalities

PfE does not merely aim to increase the number of people walking, wheeling and cycling. A core value and outcome of the PfE programme is ensuring that those who face more inequality have the same access and opportunity to active travel as everyone else. We examine this by looking at the proportion of route users from different SIMD backgrounds. This analysis looks only at usage of infrastructure; it does not delve into the measures necessary to help ensure equitable access to this infrastructure. Infrastructure alone is not sufficient to ensure change; infrastructure projects need to be supported by complimentary behaviour change work. Behaviour change and social change are equally as important as infrastructure in getting people walking, wheeling and cycling, but is often targeted separately (e.g., through capital v revenue funding) or as an afterthought.

Our analysis highlights that while absolute usage increased across all 5 SIMD quintiles from before to after project completion (substantially in most cases, with all quintiles bar quintile two having at least a 50,000 increase in users), proportionally, only Quintile 5 increased (see Figure 11 below). This means that the increase in active travel usage at PfE schemes is disproportionately due to increases amongst those from the least deprived quintiles. Before project completion, Quintile 5 made up 20% of all users (which is what would be expected if usage was distributed evenly), but this increased to 28% following project completion. All other quintiles either decreased or (in the case of Quintile 1) maintained their share. The two lowest quintiles remain well below what we would expect in an even distribution, making up just 11% and 15% of users (Quintile 1 and 2 respectively). It is clear that while there are positives (i.e., annual usage estimates increased for all quintiles, with Quintile 1 having the second highest percentage change at +44%), there is substantial work to be done: proportionally, annual usage estimates decreased or remained the same for people from a lower SIMD background after project completion, with estimates for SIMD quintiles 1 and 2 being only ~50% and 75% respectively of what would be expected from an even distribution of users across all quintiles.

Figure 11: Changes in Annual Usage Estimates, broken down by SIMD score



Produce cost effective walking, wheeling and cycling measures For Everyone

Having cost effective projects means resources are used optimally to achieve the best possible outcomes. This is one of the hardest outcomes to measure, particularly when it comes to valuing less tangible impacts, such as improvements to the local environment, the mental and physical health benefits of active travel, or the long-term quality of life gains from growing up in a more active setting. These are factors that are often quite intangible; any effort to quantify values that are more qualitative in nature should be interpreted with caution, and only represent a limited picture of the impact of a scheme.

It is important to try to understand how cost effective a project is, as this can help ensure future projects are more impactful and make better use of funding and resources. As part of this year's report, we have undertaken a Value for Money (VfM) calculation across four sites. This looks to balance the cost, quality, and impact of a project to ensure that what is spent delivers meaningful benefits. To determine VfM in PfE we have used The Active Mode Appraisal Toolkit (AMAT)*. AMAT is a spreadsheet-based tool developed by the Department for Transport (DfT) that evaluates mode shift benefits, health benefits, and journey quality benefits against the costs of walking and cycling

* Full overview and user guidance is available here- https://assets.publishing.service.gov.uk/media/631744188fa8f50220e60d1a/active-model-appraisal-toolkit-user-guidance.pdf

interventions. AMAT provides a measure of VfM of an intervention, in the form of a benefit-cost-ratio (BCR).

The four PfE sites used were:

- Wishawhill Woods, North Lanarkshire
- Loch Leven, Perth and Kinross
- Lade Braes St Andrews, Fife
- Riverside Way (Inverness City Active Travel Network), The Highlands

The sites were in part chosen due to the availability of suitable before and after project data. For each site, we collated a variety of input data including the number of trips with and without the proposed intervention, the average number of walking and cycling trips expected to use the intervention, various infrastructure details before and after project completion (e.g. street lighting, kerb level, signage) and investment and operating costs. The full list of user input data can be found in our separate methods file. Besides this input data, AMAT operates with certain assumptions (e.g. average speed of trips, car occupancy rate) from DfT- again, full details can be seen in our separate methods file.

The projected benefits over the next 20 years for each of the four projects in PfE are shown in Table 7 below. Based on results from AMAT, Wishawhill Wood is expected to generate approximately £364,000 in overall benefits, Lade Braes £384,000, Loch Leven £175,000, and Riverside Way £6,005,000.

The benefit cost ratio (BCR) indicates the relative cost and benefit of an intervention. A BCR of one, means that every £1 spent delivers at least £1 worth of benefits. AMAT assigns the following VfM categories according to BCR:

- Very high: BCR greater than or equal 4
- High: BCR between 2 and 3
- Medium: BCR between 1.5 and 2
- Low: BCR between 1 and 1.5
- Poor: BCR between 0 and 1
- Very poor: BCR less than or equal to 0

Table 7: Projected benefits in thousands of pounds (£) over the next 20 years

	Cost (£000s)	**Total Benefit** (£000s)	**BCR**	**VfM**
Wishawhill Woods	723	364	0.73	Poor
Loch Leven	982	175	0.26	Poor
Lade Braes	442	384	1.42	Low
Riverside Way	5,472	6,005	2.12	High

**BCR: Benefit-Cost Ratio. VfM: Value for Money*

Riverside way showed a high VfM with a BCR of 2.12, suggesting that for every pound invested in this scheme, there are at least £2.12 worth of benefits. Lade Braes had a low but positive VfM with a BCR of 1.42, whilst Loch Leven and Wishawhill Woods had a poor VfM with a BCR smaller than one.

Table 8 below looks at the benefit cost ratio for each of the four sites in more detail, breaking it down into the individual sections of mode shift, health, and journey quality.

Mode shift refers to the benefits gained when individuals switch from using cars or taxis to walking and cycling. These benefits include lower road maintenance due to decreased wear and tear from traffic congestion, fewer road accidents, and improved air quality. Wishawhill Wood, Lade Braes, and Riverside Way all showed positive mode shift benefits. Loch Leven showed a negative mode shift benefit of approximately -£3,000. This result is likely due to adverse weather conditions during monitoring after project completion, which affected cyclist and pedestrian counts. Since mode shift benefits are calculated based on the change in active travel trips, these reduced figures, compared to a higher baseline, may have negatively impacted the result.

Health benefits refer to the risk reduction of premature death through increased active travel, as well as decreased absenteeism at work. Similar to mode shift, Wishawhill Wood, Lade Braes, and Riverside Way showed positive health benefits. Loch Leven showed a negative health benefit. Again, this is

likely due to adverse weather while conducting monitoring after project completion leading to lower cyclist and pedestrian counts.

Journey Quality refers to the benefits experienced by cyclists and pedestrians because of changes to the infrastructure (e.g. surface quality, lighting etc…). These benefits are linked to the perception of a safer and comfortable journey. All four projects showed a positive journey quality benefit. This indicates that cyclists and pedestrians using these routes perceive tangible improvements in their travel experience, which can be translated into economic value.

Table 8: Benefit Cost Ratios and Value for Money

	Mode shift (£000s)	Health (£000s)	Journey Quality (£000s)	Total Benefit (£000s)
Wishawhill Woods	15	282	68	364
Loch Leven	-3	-193	372	175
Lade Braes	4	348	32	384
Riverside Way	389	4868	748	6005

One limitation to this work is that AMAT relies on estimates of infrastructure use, which can be affected by weather. For example, in Loch Leven, the low benefit scores and poor value for money were influenced by rainy and overcast conditions during the post monitoring period, which led to lower usage estimates than before project completion.

A further consideration lies around the use of a BCR itself. While some of the BCRs are low and indicate poor or low VfM, it is important to note that there are other economic benefits missed by AMAT, such as the economic uplift that businesses experience from being close to improved public spaces, and areas becoming more attractive for investment. More importantly, value for money is just one piece of a wider picture that includes substantial non-monetised benefits that are not captured by AMAT, such as improved mental health, community cohesion, and social equity.

This analysis is a trial for applying AMAT to Scottish projects. While the tool uses data assumptions (e.g. average trip length, occupancy rates) and area types from England, it still provides a useful measure of the potential benefits experienced by pedestrians and cyclists in Scotland, as well as an estimate of the project BCR.

A more detailed overview of AMAT, its limitations, and the process we undertook is available in our methods file. A more substantial report on Value for Money will be presented in our 2026 reporting, with work ongoing to expand the number of sites included to provide a more representative picture of the PfE programme as a whole.

Project Case Studies

Four case-studies are included which put the spotlight on scheme-specific impact and learnings reported on over the last year.

Two of the case-studies are impact evaluations of PfE Schemes which took place before and after project completion, one summarises the in-depth evaluation of a scheme's impact on local schools, and one showcases the development of a new inclusive method for engaging with members of the disabled community in evaluation research.

In each case study we have drawn out the key impacts the scheme had, along with a description of our evaluation approach, and commentary on what made the scheme successful and/or what transferable learnings we observed. The findings section of the case studies are structured around scheme-relevant ATF and PfE outcomes.

Case Study 1 - Active Travel Links to Dumfries New Hospital

A market-town's flagship junction-redesign scheme.

Project overview

New Abbey Road - the site of the intervention - is a key junction located in the south/west of Dumfries. Prior to the intervention the New Abbey Road layout was wholly vehicle-oriented, with most space taken by the road carriageway, with no cycle infrastructure or pedestrian crossings. The junction experienced high volumes of traffic as a key part of the road network linking local trip generators: large residential areas, leisure and recreation sites such as sports clubs, workplaces, the primary school and shops. The impetus for redesigning the junction came with the opening of a new Dumfries & Galloway Royal Infirmary (DGRI) hospital in 2017 – another trip generator requiring active travel provision.

Dumfries and Galloway Council secured funding through the PfE fund and construction took place from November 2022 to June 2023.

Changes included a new 336-metre segregated cycle and foot path along New Abbey Road, six new crossing points (two zebra-crossings; four Toucan controlled crossings), creation of a new public placemaking area (which includes benches, bike racks and green planting), and carriageway redesign

for traffic management (including introducing filter lanes and 'build-out' of the pedestrian curb at junctions). These changes are shown in Figure 12 below.

Figure 12: Overview of New Abbey Road showing before (left) and after (right) project completion

Photo credit: Google Maps.

Delivery details

- Total PfE funding: £887,091
- Construction start/finish dates: November 2022 – June 2023
- Delivery partners: Dumfries & Galloway Council

The evaluation

Our evaluation of this project's impact involved a before and after comparison, with data collection, analysis and reporting delivered by Walk Wheel Cycle Trust. The monitoring tools used were video manual counts (x6) and crossing analysis, automatic counters, a route-user intercept survey, residents' focus groups (x2), a workplace travel survey and Hands Up Scotland (HUSS) data.

Project impact

ATF Outcome 1: Increase the number of people choosing walking, cycling and wheeling in Scotland

Following construction, the number of people using New Abbey Road per year has increased by 13 percentage points. Data from control sites (locally comparable sites where no intervention took place) shows that active travel levels either stayed the same or decreased, strengthening the conclusion that the increased active travel at New Abbey Road is attributable to the PfE works.

Most people are visiting the area for leisure purposes: 71% of those interviewed were using the area for recreation (such as exercise and dog walking). 29% of those interviewed used the area for an everyday journey, including accessing shops, family or friends, and workplaces. HUSS data shows that active travel modes are the main way children travel to the local Troqueer Primary School, comprising 56% of all journeys after the infrastructure changes in 2023, up from 53% in 2020 (however, HUSS data over a longer year-on-year analysis from 2008 to 2023 shows undulating patterns across different modes, with no clear increase in active travel attributable to the intervention).

ATF Outcome 2: High quality walking, cycling and wheeling infrastructure is available to all.

What was once a wide and busy junction is now a meeting place and stopping point for residents (Figure 13 below). People now view the quality of the area more favourably: 50% of survey respondents now spend more time on the route, 91% agreed that they used this route because they like the surroundings and 90% agreed this route enhances the area.

The consensus from focus groups with local residents was positive, with participants giving complimentary comments about the overall quality of the

placemaking area and the design. They described how the changes have transformed what was primarily a road junction into a pleasant space for local communities to travel through, rest and enjoy.

> "It is actually a destination in itself, a good meeting place: 'I'll meet you at the New Abbey benches.' And it is a pleasant place just to sit down, just stop on your bike, or on your walk."

Figure 13: Images of changes to Park Road/New Abbey Road junction

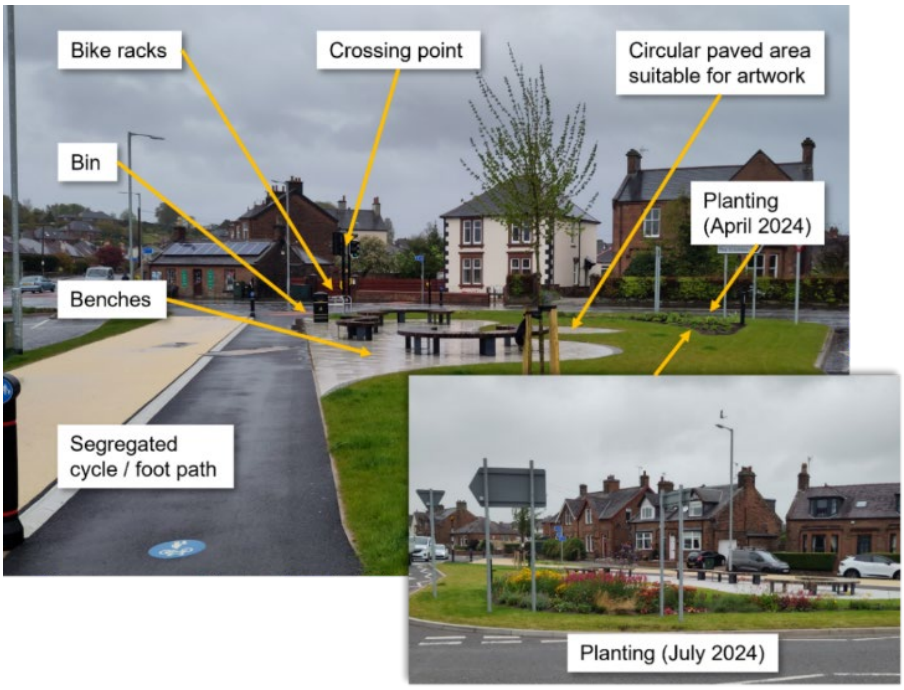


Photo Credit: Walk Wheel Cycle Trust

ATF Outcome 3: Walking, cycling and wheeling is safer for all

The project has improved safety by providing 6 new crossing points and a 336-metre segregated path.

Respondents to the RUIS revealed marked increases in perceptions of safety: 84% agree this route feels safe regarding motor traffic compared to 48% before project completion. These results were mirrored in the focus groups, where participants unanimously agreed the area was safer both in terms of personal safety and safety from motor traffic. Participants highlighted the crossing facilities, the traffic-calming effects of the new road layout, the new

cycle/footpath and the lighting as reasons that it is now a pleasant and safe place.

Observational data shows that the new crossings have enabled people to cross where they need to. The total number of crossings has increased, by 102 crossings at Pleasance Avenue and 111 crossings at Park Road (during the monitoring period). More vehicles are now giving way at the new zebra crossings, evidencing improved priority to active travellers.

> "I used it for years, before there was the new crossing. It has made a big difference in terms of it's safer…it was a bit harem scarem before."

ATF Outcome 4: Walking, cycling and wheeling is available to all

Our results show that the new infrastructure is more accessible based on both 'perception-based' and 'observational' data.

As an indicator of how accessible the infrastructure is for everyone, we have monitored the number of wheelchair users who make a journey through the project area. Overall, wheelchair usage on New Abbey Road increased by 120% during an observed period, from 10 users before project completion, to 22 users after.

96% of survey respondents agreed the route is easily accessible after project completion, compared to 64% beforehand. Focus group participants added further insights about how and why the infrastructure is now inclusive. They commented that it is well-used by children travelling to the nearby Primary School, and that they had observed more diversity in users, such as people with prams, with recumbent cycles, by children travelling independently, and by elderly people.

> "Having now got parents in their 80s, I'm evangelical about benches, because dad will just collapse if he can't sit down, so you're kind of looking around panicking, where can he sit?"

Key Lessons

The results from the evaluation broadly show a very positive impact against all the scheme's outcomes.

The scheme is notable for intelligent optimization of space in junction redesign. The incorporation of a 'placemaking' area into the new design has proved a great incentive for active travel, despite being a modest addition. Furthermore, the redesign is notable for improving the experience of travelling there for both motorists and active travellers.

Nevertheless, there were some ambiguous results with regards to whether the scheme has increased active 'everyday journeys' (see 'Outcome 1'). One explanatory factor came through in the residents' focus groups: that while the improvements themselves are brilliant, the new segregated path returns cyclists to the road when it ends. This underlines the importance of connectivity when delivering high-quality active travel infrastructure schemes.

The monitoring was compromised due to timings overlapping with Covid-19 restrictions, nonetheless the evaluation is notable for the breadth of tools, and the use of focus-groups and the use of counterfactuals which add depth and weight to our conclusions. The success of the evaluation was greatly aided by key contacts who enabled a strong partnership (WWCT officer embedded in D&G Council; and local I Bike officer).

Further Information

Full report available online here: Active Travel Links to Dumfries New Hospital

Case Study 2 – Craigshaw Drive: Cycle Lanes

A fully segregated cycling intervention in Aberdeen enhancing active travel connectivity.

Project overview

The scheme is located within the West Tullos Industrial Estate to the south of Aberdeen. It provides a quality active-travel connection between key paths and roads. Segregated cycle lanes along Craigshaw Drive were constructed and controlled crossings of Craigshaw Drive and Abbotswell Road were installed (see Figure 14 below).

The project aimed to facilitate cycle movements south of Aberdeen and improve access to a range of services and employment sites for people travelling by cycle. It is also expected to 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 provide a safe crossing for pushchairs, mobility scooters and wheelchairs.

Delivery details

- Total PfE funding: £1,076,239
- Construction start/finish dates: October 2023 – April 2024
- Delivery partner: Aberdeen City Council

The evaluation

Our evaluation of this project's impact involved a before and after comparison, with data collection, analysis and reporting delivered by Walk Wheel Cycle Trust. Various monitoring tools used for data collection before and after completion included RUIS, video manual counts, traffic speed and volume survey, video monitoring (crossing and interaction) and automatic pedestrian/cyclist counter.

Figure 14: Overview of Craigshaw Drive before (left) and after (right) project completion

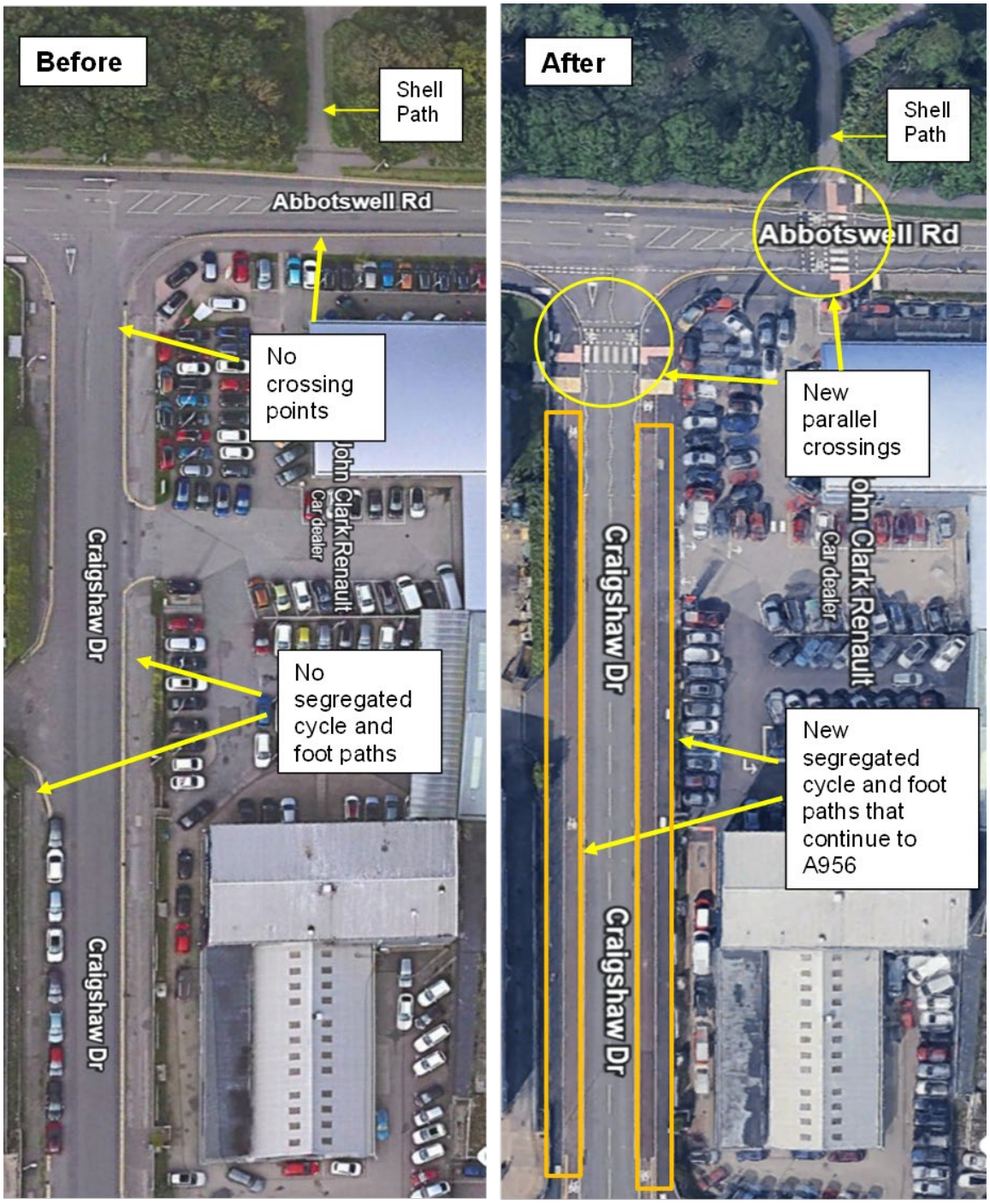


Photo Credit: Google Maps

Project impact

ATF Outcome 1: Increase the number of people choosing walking, cycling and wheeling in Scotland

Monitoring from three count locations indicates that there has been a 4% increase in the overall number of active travel trips in Craigshaw Drive. We estimate that the annual usage estimate (AUE) of active travel trips has increased from 406,000 to 424,000. These figures will be affected by local employment trends, for instance, several employment sites along Craigshaw Drive and beyond have closed between before (2022) and after project monitoring (2024).

Walking was the most popular active travel mode at all three locations where counts were carried out, accounting for over 65% of journeys at each location before (2022) and over 75% after (2024) project completion. All three count sites saw an increase in the proportion of walking journeys.

Recreation/touring (including dog walking) was the most common purpose for active travel journeys made through the Shell Path area both before (54%) and after (65%) project completion. Commuting was the second most common purpose.

ATF Outcome 2: High quality walking, cycling and wheeling infrastructure is available to all

Following the infrastructure changes in Craigshaw Drive overall vehicle flow along the route fell by 27% from a daily average of 3,000 to 2,182. Crossing was an issue at Abbotswell Road for active travel users, who had less priority before construction of the parallel crossing. Due to the lack of a crossing at this road, most pedestrians (95%) were observed waiting before crossing the road. Many had to wait in the middle of the road on the carriageway, further adding to the safety risk for active travellers. This has gone down to 63% after project completion. The construction of the parallel crossing has made it safer and more convenient for active travel users to cross the road.

The new crossings have enabled people to cross where they need to. The total number of crossings has increased by 14% (from 1,229 to 1,406) at Abbotswell Road. Also, more vehicles are now giving way at the new crossing, evidencing improved priority to active travellers.

ATF Outcome 3: Walking, cycling and wheeling is safer for all

Over 90% of route users in the Shell Path area felt it was safe regarding motor traffic and a safe place during the day after project completion. There is a big increase in the proportion of respondents who felt it a safe place to be after dark with a rise of 20 percentage points (16% before and 36% after project completion).

The infrastructure has generally had a positive impact on the comfort of the space. Route users found the area improved in several ways. The RUIS found a 31-percentage point increase in those who agreed the Shell Path area is well lit, rising from 35% to 66%. The changes in lighting are likely contributing to the increased perceptions of safety on the route when it is dark, as reported previously. Over 85% of users agreed the area is well maintained with an increase of 5 percentage points (from 81% to 86%) and 95% agreed that it is fit for purpose.

Key lessons

From a monitoring perspective, the typical approach of a before and after project completion comparison is vulnerable to external factors other than the new infrastructure affecting results. For instance, in this evaluation, our before and after results reflected the effects of local employment site closures in the scheme's vicinity, which is a primarily business-focused area. This presented challenges with interpreting results, for example, on Craigshaw Drive Road itself, all count sites recorded a decrease in cycling journeys alongside a higher number of walking journeys, which may be linked to the recent closures of employment sites in the area, including Belmar Engineering.

In terms of understanding the impacts of the new infrastructure there were some unexpected results seen in motor traffic patterns. Namely, the traffic survey indicates that lower traffic volumes do not automatically result in better compliance with speed limits or safer driving behaviour. Despite fewer vehicles being recorded (as expected), average speeds rose from 21 mph to 24 mph, and the proportion of drivers exceeding the 30-mph limit increased from 11% to 24%. This highlights the need for targeted speed-management measures, as reductions in traffic alone may not effectively address speeding behaviour.

Further Information

Full report available on request.

Case Study 3 – North Berwick safe routes to school

Encouraging active travel to school in North Berwick.

Project overview

North Berwick Safer Routes to School was an infrastructure scheme aimed at promoting active travel to school in North Berwick (East Lothian). Completed in December 2022, the project involved the construction of controlled crossing points near Law Primary and North Berwick High School. These included a signalised crossing and a zebra crossing near the school campus (see figure 15 below).

Delivery details

- Total PfE funding: £383,044.
- Construction start/finish dates: Completed December 2022.
- Delivery partners: East Lothian Council & Stantec.

Figure 15: Before and after photos of the zebra crossing constructed near the schools

Photo Credit: Walk Wheel Cycle Trust

The Evaluation

Initial monitoring for this scheme took place prior to construction in Spring 2022, with monitoring after project completion conducted in Spring 2024.

Monitoring included surveys distributed to Law Primary School and North Berwick High School for three key beneficiary groups: pupils, teachers, and parents/carers. The surveys asked questions about the school commute and local infrastructure, covering behaviours, attitudes and perceptions.

In addition to the surveys, Hands Up Scotland Survey (HUSS) data was used to explore changes in pupil's modes of travel to the primary and secondary school.

Project Impact

ATF Outcome 1: Increase the number of people choosing walking, cycling and wheeling in Scotland

Nearly one-fifth of parents/carers whose children use the new controlled crossings reported that their child now travels actively to school more often because of the crossings. There was also a notable rise in pupils reporting active travel as their usual way of getting to school, increasing from 54% at before to 73% after project completion.

However, data from the Hands Up Scotland Survey (HUSS) shows a more mixed picture. At Law Primary, walking dropped by 7% between 2021* and 2023, while cycling increased by 7%, suggesting a shift between these two modes. At North Berwick High School, walking fell by 4% between 2022 and 2023 (down to 46%) and cycling remained low (2%). Further monitoring of HUSS data is needed to help explain the medium to long-term impacts of the scheme.†

ATF Outcome 3: Walking, cycling and wheeling is safer for all

Parent/carer surveys showed a notable increase in perceived safety of the school route. 55% agreed that the route is safe after project completion, up from 36% beforehand. The most notable change related to children travelling on their own, with 74% agreeing that the crossings made the journey safer when their child was travelling independently.

We did not observe significant change among pupils' safety perceptions, as 87% of pupils reported they feel safe when walking/wheeling to school, up slightly from an already high 85% prior to project construction.

* 2022 HUSS data was not available for Law Primary School.
† The full report discusses methodological differences between the HUSS surveys and the Pupil surveys which may account for this difference. The difference in travel patterns found by the two surveys highlights the need to triangulate data sources and look at longitudinal data to understand impacts of infrastructure schemes.

> "I feel safe because there is no real danger on the way. This is because the crossings are all safe and all the drivers are kind and stop when they should..." - Pupil

Parents/carers also reported increased confidence in their child's ability to travel actively to school. After project completion, 66% felt confident in their child's ability to travel to school on their own, up from 57% beforehand. Additionally, nearly half (47%) reported confidence in allowing their child to cycle to school independently, up from 39% beforehand.

Key Lessons

The surveys completed by parents/carers and pupils after project completion highlight the positive impact of the two controlled crossings on perceptions of safety, and confidence in pupils' ability to travel to school using active modes.

To further support behaviour change and encourage a shift to active travel, initiatives such as guided walks and bike rides could run alongside the opening of the crossings. These activities would showcase the benefits of the new infrastructure for the school commute. Although this scheme focused solely on infrastructure changes, such complementary initiatives could help maximise its impact on active travel.

Additionally, led rides or cycle training could further promote cycling as a viable mode of travel, boosting both pupil and parent/carer confidence and improving perceptions of cycling safety, which currently remain notably lower than those for walking.

Parents/carers continued to see high traffic levels and insufficient safe cycle paths as the main barriers to active travel to school for pupils, with over half expressing these concerns.

Further Information

Full report available on request.

Case Study 4 – Arbroath: Accessible Design in 'A Place for Everyone'

A new inclusive method for evaluation.

Project overview

The 'Accessible Design Interviews and Focus Groups' method has been developed by Walk Wheel Cycle Trust PfE Evaluation team to effectively engage with members of the disabled community around the topic of accessible transport infrastructure. We used this method in the Arbroath: A Place for Everyone scheme evaluation to capture perspectives from people with a variety of disabilities and health conditions.

The scheme opened for use in Summer 2025 and Walk Wheel Cycle Trust have completed baseline monitoring only, so this case study focuses on method development rather than project impact. This case study presents key findings from the Arbroath baseline evaluation, as well as our recommendations and actions on promoting future use of the method.

The 'Arbroath, A Place for Everyone' scheme is considered a 'once in a lifetime transformational project'1 for the Scottish coastal town, which aims to unlock active travel potential and considerably enhance accessibility and liveability throughout the town.

The redevelopment has reallocated road space from the dual carriageway and created a 1.5km active travel corridor (see Figure 16 below). It has capitalised on the town's seafront and historic assets by bringing green infrastructure into the centre of the town with the creation of safe and connected active travel links and public areas.

Delivery details

- Total PfE funding: £10,655,771
- Construction start/finish dates: April 2024 – Summer 2025
- Delivery partners: Angus Council

Figure 16: Road-space reallocation in creating the new routes

Credit: David's Drone Pictures

The Evaluation

The scale and ambition of the scheme in terms of making a particular impact against ATF Outcome 5: Walking, cycling and wheeling is available to all meant that Walk Wheel Cycle Trust evaluation placed particular emphasis here. It was in the context of the scheme's evaluation that we developed the Accessible Design Interviews and Focus group method.

Prior to construction commencing, we conducted accessible design focus groups and interviews with 30 members of Arbroath's disabled community as part of the scheme evaluation*. The aim of these sessions was to gain insight into what it is like for disabled people to travel through and spend time in the project area, with qualitative data providing a baseline for understanding the impact of the scheme. This data forms part of a wider evaluation of the project which uses several monitoring tools.

* Some participants travelled from other towns in Angus or Dundee to participate in the interview sessions.

Findings: baseline evaluation

The research underlined the need for transformations to Arbroath's built environment in favour of inclusive and liveable spaces and travel options.

Overall, the focus group discussions emphasise how low-quality or poorly designed and maintained pedestrian infrastructure disproportionately impacts disabled people. Other key issues experienced in Arbroath by participants were:

- **Crossing** the four-lane dual carriageway (and other roads) was a dangerous and anxiety-inducing experience for many. Participants felt there was a lack of controlled crossings and those which existed did not have sufficient audio support or crossing time windows.

- The proximity, speed and high volumes of **vehicles** made active travel feel unsafe and unpleasant.

- The **pavement quality could be poor** and often render walking and wheeling uncomfortable. Having surfaces which are even and with greater visual contrast benefits all, and addressing insufficient widths and availability of clutter-free pavement space would particularly benefit wheelchair/ mobility scooter users, or those walking with an aid.

- **High-quality public spaces** hugely enhance the attractiveness of active travel for the disabled community as well as the viability of these journeys. Places to sit and rest, accessible public toilets and greenery are top priorities.

Many of these changes will be delivered by the 'Arbroath, A Place for Everyone' scheme and should meet the community's mobility needs, as this focus-group quotation highlights:

> "It was just a case of take your chance. Busy road, cars going fast, you have to be careful with those crossings – they really could do with traffic lights on them."

Key Lessons

There have been many calls for improving the involvement of disabled people in active travel research[3], however the sector is limited by capacity shortages which restrict the use of research methods such as we used here. The Arbroath Accessible Design report therefore offers an approach which can be replicated and can be used for involving and elevating the voices of disabled people in infrastructure research and delivery.

Used in the context of the PfE evaluation, the tool provided rich insights into barriers to walking and wheeling along Arbroath's infrastructure, and how members of the disabled community variously perceived the comfort and quality of public space. This method allows us to capture insights primarily oriented towards the ATF outcome 'Walking, cycling and wheeling is available to all'.

We recommended that this tool is used as an evaluation method for all high-value infrastructure projects, and/or those with a focus on accessibility.

Walk Wheel Cycle Trust has developed a 'delivery guidance practice note' to promote the use of this method more widely across our work.

Further information

Full 'Accessible design qualitative report' and blog post available here:

Perspectives on accessible infrastructure in Arbroath – Walk Wheel Cycle Trust Showcase

Full scheme baseline report available here: Arbroath – A Place for Everyone

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