BCP Bike It Plus & School Streets Annual report - September 2022 to August 2023



Longfleet Primary learn to ride







Executive Summary

Sustrans were commissioned by Bournemouth, Christchurch and Poole (BCP) Council to deliver a Bike It Plus and School Street project. The report covers the 2022/23 academic year, from September 2022 to end August 2023.

The project aimed to increase levels of walking, cycling, wheeling and scooting to school, and thereby reduce car journeys. It also aimed to increase awareness of the benefits of active travel and to foster a culture of active travel within the school. The School Streets project aimed to increase levels of active travel for all or part of the school journey, as well as improving air quality and feeling of safety and to create more accessible and pleasant environment for the wider school community.

The project engaged with 23 schools to identify opportunities, barriers and challenges to active travel. The Officers then worked to address these by devising and delivering a bespoke planned programme of activities for each school, designed to bring about long-term behaviour change. Two new School Streets were also launched, and four existing school streets were continued to be supported.



Key findings include:

Active travel **increased by 4.0 percentage points**, from 55% to 59%.

Pupils usually travelling to school by car reduced by **7.4 percentage points**, from 21.8% to 14.4%.



The majority of schools staff surveyed agreed that the project has raised awareness of environmental and health benefits of active travel and increased enthusiasm.

Fifteen schools recorded a total of **50 activities** they lead themselves, with 2,849 attendances.

Two new School Streets were launched.



35% of pupils at Pokesdown Community Primary reported they **actively travelled more often** now that the road outside their school is closed.

82.6% of pupils at Pokesdown stated they would like their School Street to continue and 82.6% stated they would like their School Street to continue.



217 events delivered*



26,292 attendances*

*Officer and school led

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Background

The Bike It Plus and School Street Projects

The Sustrans Bike It Plus and School Streets project works with schools to get more young people walking, wheeling, cycling and scooting more regularly.

Bournemouth, Christchurch and Poole (BCP) Council commissioned Sustrans to deliver a Bike It Plus project in March 2021. Initially for six months, the project was extended for a further year to end August 2022 and then again until December 2023. The project aimed to increase levels of active travel, raise awareness and create a culture of active travel in the school. See project aims. This included the continuation of four existing Schools Streets and launch of two new School Streets.

Over the academic year there have been a number of staff changes on the project. Hugh joined the team in November 2022 to replace Issy (School Streets Officer) who left at the start of September. Hugh took on a joint role of Bike It and School Streets Officer. As part of this change Amanda also took on half of the School Street role alongside her Bike It role. During the summer Amy also left her Bike It role and was replaced by Kate, who was previously working on the Clean Air Schools Project, which had come to an end. Amanda then left her position at Sustrans and was replaced by Denise who joined in May 23.

Bike It Plus

By the end of the academic year 2022/23 the project worked with 23 schools at vary levels of engagement, this included five new schools, see Appendix 1.

Bike It Plus Project Aims

- **1.** To increase levels of pupils and their families actively traveling to and from school. As a result, reducing the number that travel by car.
- **2.** To raise awareness of the benefits of active travel.

 To create a culture of active travel within project schools that can be sustained once the project Officer has departed.

The Officers supported 'champions' within schools to take the lead on active travel within the school community and where possible were signposted to local authority resources and services, such as Bikeability training and school travel plans. A mix of activities were delivered at each school (detailed through the report) to raise awareness, enable active travel and motivate, enthuse and reward positive behaviour change. Schools were also encouraged to take part in Sustrans' national competitions, the Big Walk & Wheel and Cycle to School Week, as well as themed days and weeks such as Road Safety Week and Clean Air Day.

Background

The Bike It Plus and School Street Projects

School Streets

The BCP School Streets pilot project was launched during Spring 2022. As part of this first phase of the project four School Streets were launched in Bournemouth and Poole. The aim of the School Street was to reduce road danger and increase the feeling of safety around the school gates, encourage more people to travel actively for at least part of the school run, and as a result reduce congestion and improve the air quality around schools.

In the second phase of the project, two new School Streets were identified and launched. Oakdale Juniors, previously a Bike It Plus school, and Pokesdown Community Primary School, a newly engaged school (see Case Study 1 and 2).

The School Streets Officers engaged with the schools to ensure they were onboard and supportive of the project and liaised with BCP Council to put in place the required processes and procedures to run the street closures safely. The Officers engaged with the school communities, residents and businesses and supported the schools with the recruitment and training of volunteer stewards. The Officers worked with each school to help educate and enthuse the children and their families about active travel, to help to adjust to the School Street.

The Officers continued to work with the existing four School Streets, providing ongoing support alongside Bike It Plus activity. They also helped the Sustrans Design and Engineering Team to deliver a Schools Streets codesign project, to support the School Streets to become permanent, reported separately.

Project Aims for School Streets

4.

6.

- Encourage more people to walk, cycle and scoot for at least part of the school run
- **5.** Improve air quality on the street outside the school
 - Reduce road danger around the school sites and increase perceptions of 'feeling' safe
- **7.** Improve the health and wellbeing of young people.
- 8. Provide a safer and more accessible space



Case Study 1

Pokesdown Community Primary School Street

The Challenge

Pokesdown Community Primary School Street launched in February of 2023. Livingstone Road is a residential one way through road with some businesses. Due to this it was important to engage the community as much as possible.

What we did

We worked with the school in a variety of ways to ensure the launch of the School Street went as smoothly as possible:

- Provided a paid lead steward to staff the closure for six weeks. The school continued to then fund this role for a further six weeks.
- Offered engagement sessions to the school community and residents. Both in person at the school and online evening sessions.
- Letter dropped to local residents and businesses to keep them informed of developments prior to the launch and inviting feedback after the launch.
- Worked with BCP Council, the School, and stewards to respond quickly to concerns as the trial continued.
- Supported the school to recruit volunteers (both parents and residents) and train them to be stewards.
- Ran a school poster competition for the pupils to help promote the School Street.

It's undoubtedly safer, people are no longer crammed onto the pavement. It's created a nicer and more social atmosphere. I like volunteering at the barrier, it creates a welcoming presence to the road. It's surely having an impact on air quality too with so many less cars here! Parent and volunteer steward



Case Study 2 Oakdale Juniors School Street

The Challenge

School Lane is directly off of a roundabout and leads into the school entrance. The School Street is a cul- de-sac with a small number of houses. During school pick up and drop off times the road would see vehicles parked on both sides of the road, leaving little room for vehicles to travel along it. This particularly caused issues as a number of families had permission to drive their children into the school for various mobility and safety reasons. Dangerous vehicle manoeuvres caused regular road safety concerns for the school and parents which needed to be addressed. Oakdale's School Street was launched in March 2023.

What took place

To support the school to run the School Street, BCP Council funded a school crossing patrol officer to steward the closure in the mornings, with the caretaker or a volunteer stewarding the afternoon sessions. Sustrans helped the school to advertise for volunteers and trained the stewards to safely run the closure.

Soon after the launch it became clear that the location of the school bus stop, needed to be relocated as it blocked the visibility of the School Street and caused safety concern on the roundabout. The bus stop was relocated onto Sterte Road, with school staff walking the children to the school entrance.

There have been ongoing safety concerns at the School Lane entrance due to dangerous parking and stopping on the roundabout, enforcement and communications to the school community have been used to support the school to prevent this, which has helped to improve the situation.

The school have had changes to their senior leadership team and reduced staff capacity to support the scheme. This has led to limited communications with the school and their community. The school have agreed to run a second trail with a signage only closure to explore if an alternative model can work effectively.



The Project Monitoring Bike It Plus

Hands Up Surveys (HUS)

HUS ask pupils how they usually travel to school and about access to a cycle. These help to identify changes in pupils' travel behaviour. They also ask how they would like to travel to school, which can show the potential for change and any increase in understanding and enthusiasm for active travel as a result of the project.

We request that all schools we work with provide a pre HUS when they first start, before any delivery is undertaken. An annual post survey is then taken at the end of the school year. This report presents data from schools that undertook a post survey in summer 2023 to compare against their pre HUS.

At the end of the summer term 2023, 15 schools undertook a post hands up survey which was comparable with a pre survey. This may have been their first or second survey depending on when they engaged on the project. See **Appendix 2** for information on which schools completed these surveys.

School Surveys

The online survey asked teachers (and other school staff associated with the project),what they thought the influence of the project was on pupils' awareness and active travel behaviour. It also asked about any changes to their awareness and enthusiasm for active travel as a result of the project.

The teacher survey was completed by 21 members of staff from 15 schools. Not all of them answered all the questions.

Aims	Indicator	Monitoring tool
Increase the number of pupils actively traveling to school.	Decrease in cars on the school run. Increase in pupils travelling actively to school.	Hands Up Survey. Teachers survey.
Increase awareness of the benefits of active travel.	Pupils and their families are more informed and motivated to change their travel behaviour.	Activity log. Teachers survey.
Embed an active travel culture.	Schools continue to deliver active travel activity without the presence of an Officer.	Hands Up Survey. Activity log – number of school led activity. Teachers survey.

Activity Logs

Officers log each activity they, or the school (where known), deliver. It helps to show the types of activities delivered by school and the number of attendances to those activities.

Please note, due to rounding, percentage change calculations may not always correspond exactly with percentage values displayed in charts and tables throughout this report. Further detail about the way Sustrans monitor and report on schools work can be made available through your Sustrans contact.

The Project Monitoring School Streets

Hands Up Survey

Baseline travel behaviour and data post launch is collected as part of the Bike It Plus project. We used the results from the question on usual travel behaviour for the School Streets schools to see how the project may have influenced the way children travelled to school. It is however not possible to determine to what extend a change in travel behaviour is solely due to the School Streets. As Oakdale had already been a Bike It Plus school the year before, to try and determine the impact of the School Streets a second baseline survey was undertaken in March 2023 to look at separately in relation to the School Street.

Diffusion Tubes

Diffusion tubes are an affordable way to measure concentrations of a Nitrogen Dioxide (NO_2) to give an indication of air quality. We positioned three tubes on the roadside for three weeks before and during the project, once it had time to 'bed in', at each School Street school and also at two control schools.

Pupil Perception Survey

The Officers undertook pupil perception surveys at Pokesdown Community Survey involving 242 pupils. The survey included four questions covering safety and travel behaviour and if they wanted the School Street to continue. We were not able to undertake the survey at Oakdale Juniors in the time period for this period.

As part of the trial BCP Council ran a six month consultation survey for parents, staff, residents and local business for both School Streets. The questions asked through this will also help to determine if the aims of the School Streets has been met. This is reported separately by the Council.

Objectives	Outcomes	Monitoring		
Increase perceptions of 'feeling' safe.	Reduced congestion.	pupil perception surveys, collection of anecdotal		
	People using the road feel safer.	feedback.		
Improve air quality on the street outside the school.	Decrease in pollution levels.	Air quality monitoring using diffusion tubes.		
Encourage more people to walk, cycle and scoot for at least part of the	Increased active travel.	Hands Up Survey data.		
school run	Fewer motorised vehicle trips.	Pupil perception surveys.		
Improve the health and wellbeing of young people.	Increased physical activity.	Hands Up Survey data.		
	Increased access to sociable public space.			
Provide a safer and more accessible space for wheelchair users or those	More inclusive and welcoming places.	Case studies and anecdotal feedback.		
with limited mobility	Reduced inequality of access and mobility.	BCP Council Consultation		

Aim 1 - Increase levels of pupils and their families actively traveling

Hands Up Survey

Overall, from the schools who provided a pre and a post HUS during summer 23, we can see that active travel has increased by 4.0 percentage points, from 55.0% to 59.0%. The previous year (post undertaken in summer 22) an increase in 2.3 percentage points was seen, showing a positive improvement. A slight increase was seen in all active travel modes, particularly cycling. Park and stride (where families drive part way to the school and walk, wheel, scoot or cycle the remaining distance) is not included in the active travel figures. This also saw an increase of 3.2 percentage points, from 20.9% to 24.3%. These increases have resulted in a reduction in the percentage of pupils usually travelling to school by car, 7.4 percentage points, from 21.8% to 14.4%. Figure 1.

When looking at the change in the frequency pupils' cycle to school, figure 2, we can see positive results with a slight increase in those cycling at least once a week to school by 2.9 percentage points. There is also a decrease in those never cycling to school by 3.4 percentage points.



Figure 2 – How often do you cycle to school

Figure 1 - How do you usually (or most often) travel to school



7.4 percentage point decrease in those usually travelling by car

Aim 1 - Increase levels of pupils and their families actively traveling

Table 1 - Individual school achievements

School	Mode	Pre %	Post %		entage change					
Active Journeys (increase in positive)										
Somerford Primary	Cycling	3%	17%	13						
Canford Heath Junior school	Active Travel	46%	58%	12						
Highcliffe St Mark Primary	Active Travel	36%	53%	17						
Oakdale Junior School	Active travel	27%	39%	11	1					
Car Journeys	(decreas	e in pos	sitive out	come)						

Hamworthy Park Junior	Car	18%	1%	-17	1
Heatherlands Primary School	Car	19%	6%	-13	\checkmark
Oakdale Junior School	Car	48%	7%	-42	₽
Pokesdown Community	Car	18%	3%	-14	1
St Michael's CofE Primary	Car	21%	6%	-15	1

Looking at individual school changes in travel behaviour, some positive results can be seen. Table 1 shows a selection of schools which have seen a significant increase in general active travel or cycling, or a reduction in car journeys, when comparing their post 23 HUS with their pre HUS. The full list of school's results can be seen in Appendix 2. Of specific note:

- Somerford Primary saw the biggest percentage point increase in cycling, by an impressive 13 percentage points, from 3% to 17%.
 - Highcliffe St Mark's, a new school to the project, had the biggest increase in active travel, by 16.8 percentage points from 35.8% to 52.6%. The school saw a doubling of cycling from 4.7% to 9.1% and an increase in scooting and skating to school from 0.2% to 9.7%, with walking also increasing by 2.8 percentage point from 30.9% to 33.75. Canford Heath Juniors and Oakdale also showed impressive increases from their baseline (+10 percentage points)
 - Oakdale Juniors saw the biggest decrease in pupils being driven to school from their baseline, a 42 percentage point reduction. Their active travel also saw a big increase (11 percentage points) however, the main increase was due to a 30.3 percentage point increase in park and stride. Similarly, Pokesdown's has seen a large decrease in the percentage of pupils travelling by car, 14 percentage points, mainly due to park and stride. These reductions are both likely to have been influenced by the introduction of a School Street this academic year (see Results School Streets).
- It should be noted the large decrease in car use seen at Hamworthy Park, Heatherlands and St Micheal's are due to an increase in park and stride, with St Michael's and Hamworthy Park both being existing School Streets.

Overall, all but two schools increased their active travel levels, with only four schools seeing a reduction in cycling or an increase in those travelling by car.

Aim 1 - Increase levels of pupils and their families actively traveling

The results from the HUS show that overall, the number of children who have regular access to a cycle has stayed similar at around 81%. If we look on a specific school bases however, half the schools have seen a decrease in having access to a cycle. The most noticeable ones, with a 5 percentage point drop or more, are shown in Table 2. Of particular note is Heatherlands, with a 7.1 percentage point decrease from 82.1% to 75.0%, and Talbot, 9.7 percentage point decrease from 81.4% to 71.7%. The Bourne Academy, although they didn't complete a response at pre survey stage, the post survey shows just 61% of children have access to a cycle. This is a significant barrier to allowing children to cycle to school. Helping schools to buy their own school cycles, setting up bike loan schemes or signposting families to affordable cycles can help to ensure children are not excluded from cycling to school, Bikeability or cycling activities and clubs, if they wish too.

Table 2 – Regular access to a cycle

School	Pre	Post	% point change
Heatherlands Primary	82.1%	75.0%	-7.1%
St Michael's C of E Primary	77.0%	71.4%	-5.6%
Talbot Primary	81.4%	71.7%	-9.7%
The Bourne Academy	not provided	61.2%	n/a

Activity Delivered

As detailed under Aim 3, several activities delivered during this year were designed to specifically increase active travel. For example, delivering 31 Dr Bike sessions helped to remove barriers to cycling to school by ensuring that 641 bikes were in good working order. Delivering 21 cycle and scooter skill days helped over 296 pupils' to increase their confidence to cycle and scoot to school. The Officers encouraged their schools to take part in active travel challenges, such as Leg It to Lapland, The Big Walk and Wheel and Bike to School Week, and set up their own specific active travel days, to give families opportunities to try out active travel options. They supported the schools to set up activities, such as a golden lock competition, to reward those actively travelling, and to motivate people to change their travel behaviour.

The Officers also worked with the schools to improve cycle and scooter storage, by supporting with funding applications, so that families have a safe place to store them during the day. The Officers also encouraged all their schools to sign up for Bikeability sessions to allow students the opportunity to learn how to ride safely on the roads.

The Golden Lock was a great success and I noticed a lot more scooters and bikes in the shed. Teacher Somerford Primary

Case Study 3 Getting More Pupil Cycling

There appears to be an increasing number of children who are not able to ride a bike or don't have access to a cycle.

An example of this was seen when a pupil attended an afterschool Bike Club, set up to prepare those who were less confident cyclists for Bikeability training. The pupil was unable to ride a bicycle and didn't have a cycle of their own, and no one to borrow one from. This Year 5 pupil walked the 1.7 miles to school each day and as a result was regularly late to school.

So that the pupil could carry on attending the club, extra colleagues supported Bike Club. This allowed the Officer to focus on teaching him to ride. He learnt after just three sessions. Bikes were borrowed from the Council's Bikeability scheme for the club. This ensured everyone could access the club if they wished.

Additional bike confidence sessions were set up at the school for him and a Year 4 child (who had attended a 'learn to ride' session and was keen to do more).

The route to school for the pupil meant that some on road cycling was needed. The pupil did not have all the skills and experience needed to do this safely e.g. he didn't feel confident to look behind him 'in case he wobbled off'. The Officer supported the parents, who were not English speakers, to book Bikeability sessions and arranged a lift with another parent to be able to attend the session, so that he could get the extra cycling support he needed.

The pupils now cycles to school every day and is on time most days!

I don't want to go to break, I just want to keep riding my bike Year 5 pupil



Bike confidence sessions

Before learning to ride he was regularly 30 mins to an hour late. Now he's significantly more punctual and is therefore missing less learning time. Class Teacher



Aim 1 - Increase levels of pupils and their families actively traveling

School Survey

The School Survey also demonstrates that the project has had a positive impact on the way pupils travel to school with 14 out of 20 stating it has increased walking a little or a lot, 15 out of 19 for cycling and 15 out of 20 for scooting / skating. Also 16 out of 20 respondents felt it had increased park and stride a little or a lot, allowing more pupils to actively travel part of the way to school. Almost half, nine out of 20, felt it had decreased car journeys to school a little or a lot. See figure 3.

Figure 3 – Project impact on pupil's travel behaviour

Respondents were also asked whether the project had changed the way they travelled to school. Of those that responded , seven out of 20 stated the project has helped or influenced them to change the way they travel. Of those who stated this, two walked more often, four cycled more often and one stated they park and stride more often. Although 15 out of 21 usually travel to school by car, six stated they usually actively travel to their work, yet 17 out of 21 respondents would like to actively travel to their work. With 12 out of 21 staff living within five miles of their work there is a potential to increase this further.



14 out of 20 schools staff stating **the project** had increased the number of pupils walking

15 out of 19 had increased the number of pupils cycling



15 out of 20 had increased the number of pupils scooting / skating

Aim 2 – Raising Awareness

School Survey

Responses to the School Survey show that the project has been successful in raising awareness of the various benefits of active travel, see Figure 4. Out of the 20 respondents who answered the question, 17 agreed that the project has raised awareness (a little or a lot) of environmental benefits, and 16 of health and air quality benefits of active travel and eight out 20 for economic benefits. When asked whether the pupil's enthusiasm for active travel had increased as a result of the project the majority, 17 out of 19 responses, stating it had increased a little or a lot. Figure 4.

Figure 4 – Pupils awareness for active travel



Figure 5 – School staff awareness and enthusiasm for active travel



Similarly, when asked how their own awareness and enthusiasm had been impacted by the project, 17 out of the 20 stated their enthusiasm had increased a lot or a little. Also 14 stated an increase in their awareness of health, 14 of air quality, 13 of environmental and 12 for economic benefits of active travel. Figure 5.

Children have become more aware of the impact that idling their cars has on the environment, through banners outside school, leaflets and working with our Eco Warriors.

Teacher at Courthill

Case Study 4 Networking with Academy Trusts

The Officers work with several schools in the BCP area and generally do so in isolation from one another. Yet, large groups of the schools are united by being part of the same academy trusts. To improve our efficiency and reach, the leaders of one of these (the Coastal Learning Partnership) were contacted and the Bike It Plus Officer, along with BCP Council Officers, were invited to present to the partnership at some of their group meetings.

The first meeting was focused on the reasons for addressing school travel and what support there was available. This was delivered to all site managers. The success of this led to a second meeting where an Officer and BCP colleagues met with the Headteachers of all schools to explain how to generate school travel plans.

The meetings gave an invaluable opportunity to raise the challenges and opportunities regarding school travel with all sixteen headteachers and their site managers. It gave them knowledge and practical advice on how they could enable more active travel to and from their schools.

The partnership team have asked all schools to produce a School Travel Plan for September 2023. Seven of the 12 schools in BCP have subsequently contacted the Council to request support to create their travel plans. One third of the schools have sent out travel surveys.



16 schools engaged



32 Headteachers and site managers have increased awareness of how to enable more active travel



7 of the 12 BCP schools have since begun to create School Travel Plans



1 school requested Bikeability training for first time ever

Thank you very much for your time today! The premises team all thought it was a very comprehensive and useful presentation and are keen to raise the profile of travel plans with their school leaders. Meeting attendee

Aim 2 – Raising Awareness

Activity Delivery

As detailed under Aim 3, the project delivered 19 activities classed as Education, having over 5,270 attendances, 4,100 of those pupils. Officers raised awareness through, for example, sessions with pupil eco groups, assemblies and distributing air quality awareness leaflets other activities covering topics such as air quality, the environment and the benefits of active travel.

A further 86 activities were classed as promotion, information and special events, with over 10,300 attendances, and 49 activities grouped under interest and enthusiasm, which had over 8,165 attendances. These included events such as active travel weeks, Clean Air Days (case study 5), smoothie bike sessions and School Streets promotions and codesign workshops. Competitions, such as the golden lock, active travel bingo and bling your ride, and incentives, such as active travel breakfasts sessions, were all designed to encourage pupils and their families to take part in active travel activity. These activities not only raised awareness but also encouraged pupils and their families to learn first- hand the benefits active travel can bring.

It has provided us with guidance and support to become a more 'active travel' aware school. Longfleet Primary

Figure 6 – Results from the Big Walk and Wheel



Case Study 5 Clean Air Day June 2023

Air pollution is now recognised as the biggest environmental threat to our health. Children are amongst the most affected.

One of the main contributors to poor air quality is motorised vehicles. At drop off and pick up times air pollution outside and around schools significantly worsens, due to the large number of vehicles that gather at the same time. Often cars are needlessly left idling. This significantly impacts the quality of the air, not to mention wasting fuel and money. Research carried out for <u>UNICEF</u> shows that children are exposed to higher doses of pollution during the school run and whilst they are at school.

The Officers ran a Clean Air Day competition for schools in BCP. They used the council's weekly communication email to send out information about the competition to all headteachers.

The aim was to raise awareness of Clean Air Day on 15th June and to encourage schools to use BCPs '<u>Clean Air Schools</u>' toolkit. The Officers did this by suggesting simple activities for Clean Air Day promotion. The competition instructions signposted teachers to resources in the toolkit. Schools displayed the idling banners; shared 'idling impact' leaflets; incentivised active travel; ran poster competitions and ran assemblies – all by using materials from the toolkit. The schools got an entry for every activity they did.

Three schools won prizes. These included a Dr Bike, a Science lesson based on 'The World we cannot see' and signed books about environmental issues by the award-winning author and illustrator Neal Layton (banner illustrator). These will all continue to spread the word.



NI,

12 schools took part and delivered:
24 activities took place
3,600 children learnt about air pollution
1,500 idling leaflets were distributed
16 banners are now displayed



We have seen a significant reduction in idling - lots more students are walking to school which is positive. Teacher

Results

Aim 2 – Raising Awareness

Seven schools took part in Cycle to School Week in September 2022, and 11 schools took part in Leg it to Lapland in December 2022 (see case study 6). Additionally, eight schools with over 4,000 pupils took part in the Big Walk and Wheel in March 23 (Figure 6). As part of these challenges and competitions like Clean Air Day (case study 5) the schools were provided with daily activities they could take part in, and various resources they could use to further raise the awareness of active travel and its benefits. This included assemblies, presentations, videos and newsletter content. Taking part in these challenges gave families the opportunity to consider and try out active travel journeys to school.



Bling your ride at Oakdale Juniors

Children are much more aware of the impact their actions are having on the environment both locally and globally. They are also more aware of the benefits active travel will have on their health and well being.

Teacher Highcliffe St Mark Primary School

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Clean air school banner as part of Clean Air Day

Aim 3 – Creating a culture of active travel

Activity Delivered

In total from the start of the project until August 2023 the project delivered 217 activities (Officer and school led), which had over 26,290 attendances (pupils, school staff, adults, parents and siblings). Figure 7. These were designed to create and maintain a buzz and provide opportunities to experience the enjoyment of walking, wheeling, cycling and scooting.

Figure 7 – Number of attendances to activities and events



We can split the activities down into seven categories, Figure 8. Of the total 217 events and activities delivered 24 were skills and training, providing over 400 pupils with the skills and confidence they need to cycle and scoot safely, and to undertake general checks and basic maintenance on their own bikes. The Officers also delivered 34 services including Dr Bikes and equipment sales to 781 attendees.

Two new School Streets were also launched during Spring 2023 to create safer and more pleasant environments to actively travel to school (see Results School Streets). All of this helped children and their families to travel actively to school on a regular basis.

Figure 8 – Number of activities and events per activity type and number of attendances



Aim 3 – Creating a culture of active travel

The Bike It project model starts off with Officers working intensively with their schools, providing resources and delivering the sessions. The Officer supports the school, building their confidence and knowledge about the project until they are able to deliver some of the activities and events themselves.

This progression is essential to ensure that active travel behaviour is sustained in the long term and allows the Officers to take on additional schools. Fifteen schools recorded a total of 50 activities they lead themselves, with nearly 2,850 attendances. The activities ranged from delivering Leg It To Lapland, Cycle to School Week and Big Walk and Wheel (and their associated activities) running the golden lock, air quality poster competitions and eco groups running assemblies.

The projects reach, however, is likely to be far greater than we are able to demonstrate, as not all activities delivered by the school are recorded. For example, resources are provided throughout the year to take part in themed weeks, such as Children's Mental Health Awareness Week, but often schools do not confirm they have used the resources in school.

We thoroughly enjoyed participating in Leg it to Lapland and it was this scheme that really got us going and kept going.

Teacher - Canford Heath Juniors

The Officers supported a number of their schools to take part in the Big Walk and Wheel, Figure 6. This year, 8 schools, took part, logging an impressive 20,011 active travel journeys.

Schools taking part in activities such as Leg It to Lapland, Cycle to School Week and the Big Walk and Wheel, and running a weekly golden lock competition, help to motivate pupils and their families to actively travel to school. By doing it over a sustained period, it helps to embed the activity into their daily routine.



A new home at Canford Heath for Bournemouth Universities no longer needed cycle racks

Officers have also supported schools to improve their secure storage facilities for cycles and scooter. The lack of secure storage can be a significant barrier for families to cycle and scoot to school. Officers have helped schools to apply for funding through the Community Infrastructure Levy Fund as well as find new homes for unwanted cycle stands for the University of Bournemouth. Ensuring schools have sufficient storage helps to build a legacy for the project by supporting active travel in the longer term.

Aim 3 – Creating a culture of active travel

Hands up survey

Pupils' preferred mode to travel to school can help to demonstrate that a culture of active travel is starting to be adopted in the school. Figure 9 shows a 6.3 percentage point increase, from 74.5% to 80.8%, of those who would like to actively travel to school. The greatest increase is seen for those wishing to cycle, increased from 26.3% to 31.8%, a 21% relative increase. This demonstrates by far the majority of pupils wish to actively travel. An increase from the baseline could suggest the project has helped to raise awareness and enthusiasm for active travel. Those wishing to travel by car decreased from 9.7% to 6.1%, which is reassuring as this saw an increase the previous year.

We have felt extremely supported by Sustrans and their positive approach towards encouraging change. Highcliffe St Mark Primary School

81%, of pupils would like to actively travel to school



Figure 9 - How would you most like to travel to school



We have a lot more children using active travel methods to come to school each day. When our school road is shut during drop off and pick up times , children feel safe to play in the road before school which is lovely.

Teacher Livingstone Road Junior School

Case Study 6 Leg It To Lapland

The winter months can present a challenge with enthusing children and their families to travel actively. Leg it to Lapland was a two-week active travel challenge that gets schools competing against each other to complete as many active journeys as they can to and from school. The children were challenged to see if they could collectively, virtually, travel the 2,116 miles from Bournemouth to Lapland.

The challenge ran for the first time in BCP during December 2022, with 11 schools signed up. Schools were sent a pre-recorded assembly for them to introduce the event and engage the children.

Children were given a Lapland passport at the start of the challenge that they used to record their active journeys. Classes were also encouraged to do additional activity during school time to boost their miles. They were given a class recording sheet to record their efforts.

At the end of the event, the passports were used as raffle tickets and pupils had the chance to win a selection of extra prizes, including: a scooter, gift vouchers and a number of smaller prizes. The prize for the school with the highest average miles per pupil was a stunt scooter display in school and the opportunity to join in with the fun. The element of competition mixed with the chance to win prizes certainly got the children excited and traveling actively.

During the challenge, schools also ran a Rudolph's nose incentive. A red nose was left on a randomly selected cycle or scooter and the recipient won a prize that they could choose. Prizes were awarded for this across six of the schools. These included bike locks and rechargeable bike lights, bobble hats, snoods, snap bands and t shirts.



Over 51,600 miles in two weeks – the same as 21 trips across the USA

44,800 of these journeys were to and from school



Christchurch Junior School won the challenge with 21 miles averaged per pupil

Overall, it was a fantastic experience and something we would love be involved with again.

Teacher at Leg it to Lapland participating school

Aim 4 - Increase levels of pupils and their families actively traveling

Schools Street

Baseline HUS were collected prior to the commencement of the School Streets. For Pokesdown this was their first baseline survey, being a new school to the project. As Oakdale Juniors baseline was collected the year prior to this and having undertaken a number of Bike It activities and events since their last post HUS, a second baseline was taken just before the launch of the School Streets. This would allow us to specifically measure the impact of the trial on travel behaviour.

For both schools, the percentage of pupils usually travelling by car has decreased, see Figure 10a and b. Pokesdown seeing a decrease of 14.2 percentage points (17.6% to 3.3%) and Oakdale by 3.7 percentage points (10.4% to 6.7%). Pokesdown did see a slight increase in active travel by 2.1 percentage points (62.3% to 64.4%), however Oakdale saw a decrease in active travel by 5.0 percentage points (43.5% to 38.5%). The drop in car use can mainly be attributed to an increase in park and stride / ride at both schools. An increased by 12.9 percentage points at Pokesdown and 4.0 percentage point at Oakdale.

When Pokesdown pupils were asked about changes to their travel behaviour as a direct result of the School Street (pupil perception survey), over a third, 35%, reported they walked, wheeled, cycled or scooted to school more often now that the road outside the school is closed.

This suggests that the introduction of the School Streets have had an impact on increasing levels of active travel for home at one of the schools (Pokesdown). It has however encouraged more pupils at both schools to actively travelling for part of their journey, by parking further away from the school and using active modes to travel the remaining journey to the school gates.

Figure 10a - How do you usually (or most often) travel to school – Pokesdown Community Primary



Figure 10b - How do you usually (or most often) travel to school – Oakdale Juniors



Case Study 7 School Streets Banner Competition

With the upcoming launch of two new School Streets the Officer was looking for ways to get children enthused and thinking about what the School Street would mean for them and their community. As well as raised the profile of the School Streets and act as a reminder to the schools' families.

It was decided to launch an art and design competition during the School Streets launch assembly. The Officer invited students to create an illustration that could be used for an eye-catching banner that would motivate more people to walk and cycle.

We used some designs that had been created by children in other schools working with Sustrans, as examples to inspire and enthuse the pupils. Prizes were awarded for the entries selected to be used for the banners.

At each of the schools we used three winning designs over two banners. One larger banner signifying the road as a School Street and another smaller banner including information about the trial and a call to action for adults to support the schemes. The banners included QR codes which linked to the BCP School Streets landing pages for more information.

This approach meant children had a chance to express their own ideas and concerns and hopes for what the School Street would be like. The designs received took a particular interest in the environmental aspect.



Winning designs On the Pokesdown Banners

Aim 5 - Improve air quality on the street outside the school.

Measuring air quality

We used diffusion tubes to measure nitrogen dioxide (NO₂) levels on the road of the new School Streets, Oakdale Juniors and Pokesdown Community Primary, before and during the trial, to give an indication of the impact of the road closures on air quality. To help determine if there had been any changes in air quality as a result of the trail, diffusion tubes were also placed at two control schools (without a School Street or Bike It activity), Queens Park Academy and Stanley Green Infants.

Three diffusion tubes were positioned (placed in the same location) at each at the four schools. The monitoring period lasted for three weeks each time, from the 20^{th} January to 10^{th} February 2023 and 9th June to 30^{th} June 2023. Once the sampling period was over, the tubes were returned to the laboratory to determine the average concentration of compounds that were present in the air over the monitoring period. For each school, the mean average NO₂ levels were calculated, as was the percentage change that was seen between monitoring periods. An average change (60.1%) was calculated for the control schools, this allowed seasonal variation to be removed from the School Streets results.

Considerations and Limitations

Many factors impact air quality including weather, road structure and vegetation. In particular, weather conditions: wind speed and direction, temperature, humidity, rainfall and solar radiation can impact readings. NO₂ concentrations also show natural seasonal variation (1). For this reason air quality was also measured at the two control schools. We also opted for tubes with a wind protection cap, in line with Defra recommendations, to adhere to more rigorous standards for EU reporting. The polyethylene filter prevents wind turbulence in what would otherwise be the open end of the tube. Please note that compared to other monitoring tools, diffusion tubes are categorised as an 'indicative' monitoring technique defined by relatively high uncertainty.(2)

Results

Both the School Streets schools saw a reduction in NO₂ levels between pre and post launch readings, Oakdale 61.5% and Pokesdown 62.0%. This however is also the case for the control schools, which saw similar reductions (Queens Park (60.0%) and Stanley Green (60.2%). Figure 11. In order to remove other external factors, as detailed above, the average change for the control schools was calculated to be 60.1%. To try to determine the impact of the School Streets on air quality, by removing other variables, if we eliminate this 60.1% reduction for the School Streets levels it indicated that both School Streets schools have a minimal reduction of 1.4% and 1.9%, which is felt too low to determine if air quality has improved as a result of the scheme.

Aim 5 - Improve air quality on the street outside the school.

Figure 11: The average NO₂ levels recorded before and after the launch of the School Streets and the percentage change





61.5% 62.0% 60.0% 60.2%

Percentage decrease in NO₂ between before and after readings

NO2	A nitrogen oxide associated with combustion sources.
ug/m3	The concentration of an air pollutant (e.g. NO ₂) in micrograms (one-millionth of a gram) per cubic meter air. Allows comparison to WHO guidelines.
ppd	The concentration NO ₂ as the ratio of its volume if segregated pure, to the volume of the air in which it is contained expressed in parts per billion.
WHO guideline	World Health Organisation air quality guideline of 10 ug/m3 (annual mean) serves as a global target for national, regional and city governments to work towards improving their citizen's health by reducing air pollution. Our results are not directly comparable as the WHO guidelines represent an average for the whole year, our monitoring period was much shorter (2 x 3 weeks in total). This level is simply to put levels into context. The national annual air quality objectives is higher at 40ug/m3, again these results are not comparable as this is an annual average, and would be expected to be well within this objective.

Aim 6 - Increase perceptions of 'feeling' safe

Pupils at Pokesdown Community Primary, who took part in the pupil perception survey, stated that half (50.4%) felt safer on the street outside their school since the introduction of the School Street. Of the remaining 41.7% stated it felt the same and just 4% less safe.

Figure 12 shows the words that pupils at Pokesdown used when asked to describe how they feel about the School Street. The bigger the size of the word the more often it is used. The most popular words are linked to the feeling of safety such as 'safer' and 'safe'. Out of the 69 words given only 11 (16%) had negative connotations. This suggests the School Streets, for pupils, has mainly provided a positive improvement. This is also indicated by 82.6% of pupil's stating they wished for the School Street to stay closed.

Anecdotal feedback from adults of the street at Pokesdown also suggest that they also feel safety using the street.



50.4% of the pupils stated they felt safer on the street outside their school

82.6% stated they would like their School Street to continue Anecdotal feedback from adults on the street at Pokesdown:

"It's undoubtedly safer, people are no longer crammed onto the pavement. It's created a nicer and more social atmosphere." Parent and steward

"A much safer and calmer start and finish to the school day." Parent

"It's now a much safer, calmer environment to drop kids off, my daughter now scoots in and is much happier being on her scooter. It was an accident waiting to happen before." Parent

Figure 12 - What word would you use to describe how you feel about the School Street at your school?



Aim 7 & 8 Improve the health and wellbeing and improve mobility

Aswell as indications of improved safety on the Pokesdown School Street, some feedback also suggests that it has made the street more inclusive, sociable and a more welcoming and pleasant environment:

"I come with a buggy and a blind dog every day, it's much nicer to be able to walk in the road now. Before the School Street started vehicles would often park badly and block the pavement." (Parent)

"There's less tension outside the School now, it's helped to create a nicer environment. I think there's a social value to having a School Street, the whole mood here has changed and I hope it carries on." (Parent and steward)

"The temporary street closure has transformed our walk to School. It provides a much safer route and allows a much calmer pickup. We would be 100% in support of it continuing." Parent

Yet the same may not be the case outside of the School Street:

"It's so much better during pick up and drop off times but it feels dangerous outside of the closure. I would like to see it continue and even extended to after school club pickup. There are too many cars on the pavement. It would be great to see more safe cycle routes in the area too." Parent

The increase in active travel at Pokesdown and increase in those parking further away and actively travelling the remaining journey to school (park and stride) as detailed in figure 10a and b, also suggest that more pupils and their families are benefitting from increased physical activity, as part of the school run.



Family actively travelling down Pokesdown School Street

Conclusion

Bike it Plus

The results show that good progress has been made towards all three aims. The HUS and Staff Survey both indicating an increase in active travel and reduction in car use. Yet it should be noted that reduction in car journeys is also due to an increase in park and stride / ride, not included as active travel. This indicates that more families are building active travel into all or part of their school commute. It is also very positive that the increase in the number of pupils usually actively traveling, compared to the baseline survey, has almost doubled from the previous year (an increase of 2.3 percentage points summer 22 and 4.0 percentage points in summer 2023)¹. The overall level of active travel also increased from the previous years from 57.1% for 21/22 to 59% for 22/23¹. This is only a small increase, however when you look at increases at a school level some significant improvements have been made (Table 1).

The School Survey showed that the majority of people responding felt that the project had increased the pupils', and their, awareness and enthusiasm for active travel and the various benefits that it brings. The range of activities delivered have helped to build awareness and enable and motivate change with nearly 23,600 attendances by the school community (pupils, staff, parents etc.) to 217 events and activities. Positively 15 schools have also delivered their own activity, which shows that the schools are beginning to take on more responsibility and build an active travel culture within the school. Figure 13 shows model projections of predicted benefits for next year, if behaviour change is maintained. Unlike the rest of the report these figures take into account all schools with a baseline HUS and a post HUS in either 2021/22 or 2022/23.

Figure 13 – Model projects of predicted benefits for next year² – see appendix 3 for explanation

Positive impact	Primary schools (predicted values per year)	Secondary schools (predicted values per year)
Car trips saved	75,000	6,800
Car miles reduced	79,000	28,000
CO ² e saved (Kg)	21,000	7,300
CO ² e saved (£)	4,200	1,500
PM (10+2.5) saved (kg)	6	2
NO _x saved (kg)	36	10
Fuel saved (£)	11,000	3,700

¹Annual overall figures are based on the schools that have completed the post HUS for the current year of the report. This is not the same schools for both years. ²This is an estimate of the predicted benefits for next year, if behaviour change is maintained. These calculations are based on regional numbers wherever possible, but some aspects of them use national averages (for example, fleet split and trips per day).

Conclusion

See Appendix 3 for further details of how Figure 13 is calculated. This shows that overall, 81,800 car trips could be saved next year, which would reducing 28,300 kg of CO_{2} , being released into the atmosphere, helping to tackle climate change. The air quality would also be improved with 8kg of PM (10+2.5) and 46kg of NO_x being stopped from being released.

School Streets

Monitoring of behaviour change for the School Streets does show some positive improvements to increasing active travel, with Pokesdown Community Primary (Figure 10a) showing a small increase in those usually travelling actively to school. Both schools however have shown an increase in park and stride, with Pokesdown showing a significant increase. School Streets therefore have led to families building in an increased element of active travel as part of their school journey, which was also backed up by the pupil survey. This suggests that Aim 4 has been met This is to be expected as the majority will no longer be able to access the road outside the school.

Feedback is limited to just Pokesdown Community School but both responses from the pupils' survey, and anecdotal responses from parents and stewards does suggest that the School Street feels safer and more pleasant and is more accessible for people to walk, wheel, cycle and scoot. BCP Council have been collecting feedback from parents, residents, staff and business as part of the trial which will provide greater insight into these area. However, it does give an indication, for Pokesdown, that Aims 7 and 8 are being achieved. Air quality is much more challenging to monitor, particularly when the School Street closure is only for approximated 8% of the total day. Diffusion tubes are an affordable option to measure NO₂, they are however not best placed to specifically monitor the impact of a School Street as it does not allow us to see changes in air quality at regular points throughout the day. We also need to take into account other influencing factors on air quality (both natural and man-made). The use of control schools have helped to remove changes that may occur to air quality not related to the School Street, from the data. This did suggest that there was a very minimal improvement in the air quality, when comparing samples taken pre-launch and those taken once it had time to be established and removing the control school average percentage change. The increase however is too minimal to be confident of an impact.

It is fair to say that by removing the majority of motorised vehicles on the School Street during the closure, as seen in the before and after shots in Case Study 1 and 2, it will lead to a reduction of car fumes and particulate matter being released from vehicles into the air within the closure period on the School Street, creating cleaner air around the school gates. As detailed in Case Study 5, Research carried out for UNICEF shows that children are exposed to higher doses of pollution during the school run.

Appendix 1

School Engaged levels and activity logged

		Attendances					
	_	Total					
	Engagement	activities				.	
School	levels	Logged*	Pupils	Staff	2	Siblings	
New - Avonbourne Girls Academy	Intensive	3	976	2	60	0	0
Bethany Church of England Junior School	Intensive	11	624	21	0	0	0
New - Canford Heath Junior school	Light Touch	29	2,352	32	638	0	0
Christchurch Infant school	Intensive	2	492	1	0	0	0
Christchurch Junior school	Intensive	13	1,633	27	1	0	0
Courthill Infants	Intensive	19	2,468	65	368	0	1
Hamworthy Park Junior School	Light Touch	10	674	11	1	0	0
Heatherlands Primary School	Light Touch	17	1,734	24	0	0	0
New - Highcliffe St Mark Primary School	Intensive	7	1,817	27	65	0	0
Livingstone Road Infant School	Light Touch	1	120	0	0	0	0
Livingstone Road Junior School	Light Touch	10	1,320	25	26	0	1
New - Longfleet Primary School	Intensive	28	1,520	59	308	34	3
Manorside Academy	At Distance	1	24	1	1	0	0
Mudeford Junior School	Light touch	13	964	15	0	0	0
Oakdale Junior School	Intensive	30	2,487	49	135	24	2
Pokesdown Community Primary School	Intensive	7	712	23	30	0	4
Somerford Primary Community School	At Distance	3	252	18	0	0	0
St Clement's and St John's Church of England							
Infant School	Light Touch	7	30	8	22	0	4
St Michael's Church of England Primary School	Light Touch	15	204	14	30	0	5
Stourfield Junior School	disengaged	1	8	0	0	0	0
New -Talbot Primary	Intensive	10	1,845	25	2	0	0
The Bourne Academy	Light Touch	5	182	1	0	0	0
Winton Primary School	At Distance	3	663	1	0	0	0
*includes achool planning mostings							

*includes school planning meetings

Appendix 2 School Engaged and HUS results

	Most recent	Most		Usually travel actively Usually cy		ally cyc	cycling Usually travel by car				Bike ownership			
Schools List	pre	post	First	Last		First	Last		First	Last	%PC	First		%PC
Canford Heath Junior school	21/22	22/23	46.1%	58.2%	12.0%	3.0%	7.7%	4.6%	10.5%	5.6%	-4.9%	89.1%	84.9%	-4.2%
Christchurch Junior school	21/22	22/23	64.6%	68.3%	3.7%	5.5%	8.1%	2.6%	12.5%	10.0%	-2.5%	90.1%	85.5%	-4.6%
Courthill Infants	22/23	22/23	61.3%	63.1%	1.8%	7.9%	8.4%	0.6%	12.7%	5.8%	-6.9%	67.2%	79.6%	12.4%
Hamworthy Park Junior School	21/22	22/23	57.9%	59.2%	1.2%	5.5%	4.2%	-1.3%	18.1%	1.4%	-16.7%	84.6%	84.5%	-0.1%
Heatherlands Primary School	21/22	22/23	66.8%	68.0%	1.2%	3.8%	4.1%	0.4%	18.8%	5.7%	-13.1%	82.1%	75.0%	-7.1%
Highcliffe St Mark Primary School	22/23	22/23	35.8%	52.6%	16.8%	4.7%	9.1%	4.4%	17.1%	10.9%	-6.3%	76.1%	75.0%	-1.1%
Livingstone Road Junior School	21/22	22/23	58.3%	66.3%	7.9%	1.3%	3.5%	2.2%	18.0%	9.3%	-8.7%	71.7%	92.6%	20.9%
Longfleet Primary School	22/23	22/23	60.1%	62.3%	2.2%	3.2%	5.1%	1.9%	24.7%	26.2%	1.5%	79.4%	81.1%	1.7%
Mudeford Junior School	21/22	22/23	68.2%	64.8%	-3.4%	7.9%	11.9%	4.1%	8.7%	10.8%	2.1%	92.5%	95.5%	3.0%
Oakdale Junior School	21/22	22/23	27.4%	38.5%	11.1%	3.6%	3.9%	0.3%	48.4%	6.7%	-41.7%	81.7%	86.7%	5.0%
Pokesdown Community Primary School	22/23	22/23	62.3%	64.4%	2.1%	2.9%	5.0%	2.1%	17.6%	3.3%	-14.2%	78.0%	81.4%	3.4%
Somerford Primary Community School									17.7%				80.8%	
St Michael's Church of England Primary School	21/22	22/23	61.6%	61.8%	0.2%	3.0%	2.7%	-0.2%	20.6%	6.1%	-14.5%	77.0%	71.4%	-5.6%
Talbot Primary	22/23	22/23	36.8%	19.9%	- 16.9%	7.5%	4.7%	-2.8%	40.2%	47.5%	7.3%	81.4%	71.7%	-9.7%
The Bourne Academy	21/22	22/23	68.1%	74.5%	6.5%	16.5%	16.0%	-0.5%	25.7%	23.6%	-2.1%	N/A	61.2%	N/A

Negative change (in relation to supporting active travel)

Model projects of expected benefits

The results in this tab are calculated using a model based on the Hands Up Survey Results. The model uses first-last values (i.e., baseline versus most recent survey) to predict the benefits of mode shift across the year, assuming each child travels by their usual mode twice a day, every day of the school year, accounting for average absence rates.

Regional reference values are used where available. For physical activity values, journey time is taken from the UK Government's Minimum Journey to Services data by cycling and by public transport or walking. Scooting is assumed to be the average of the two values.

For the car use benefits, average distance to school is taken from the National Travel Survey. Car fleet split, road type, multiple occupancy and average trips per day are all considered. Pollutant values are taken from National Atmospheric Emissions Inventory (NAEI) and Department for Transport (DfT) figures. Fuel costs are taken from the AA reports. Some fuel types (e.g. hybrid, other) are excluded from certain calculations due to lack of available data.

UK Chief Medical Officers' Physical Activity Guidelines, 2019: Children and young people should engage in moderate-to-vigorous physical activity (MVPA) for an average of at least 60 minutes per day across the week. This can include all forms of activity such as physical education, active travel, after-school activities, play and sports.

For more information, please contact emma.cocksedge@Sustrans.org.uk





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