Cycling and Walking Activation Programme- Interim evaluation report

Annex 1. Full Results School Streets Project

1. Project description and aims

A School Street limits the motorised traffic outside schools at drop-off and pick-up times, allowing safer spaces for children and families walking, wheeling, scooting and cycling. The aim is to create a safe, welcoming and attractive environment where children, parents and teachers can walk, cycle, scoot or park and walk to school with less risk of air pollution and traffic congestion.

The School Streets pilot programme in Oxfordshire aims to tackle the congestion, parking problems, poor air quality and road safety concerns that many school staff, parents and local residents experience during the school run. The project also enables physical distancing around the school gates, crucial during the Covid-19 pandemic.

Delivery of the School Streets programme was supported by Sustrans, who have significant expertise in this field, having implemented School Streets in several other local authority areas.

In order to identify suitable schools for the pilot programme, the Council launched a webinar to ask for expressions of interest from schools. They then identified a shortlist of schools based on location, current engagement levels, support from local Councillors, geographical spread, and fit with other active travel projects. This was followed by a desktop analysis of sites, site visits with council and school staff, to identify nine suitable schools across Oxford, Bicester, Witney and Abingdon to implement the trial street closures, each for a six-week period. The included schools are shown in figure 2.1.

The School Streets were managed by Experimental Traffic Regulation Orders (ETRO), which include a consultation element for local residents. Following consultation, a map and closure information for the ETRO was produced. Sustrans staff worked with schools to identify suitable park and stride locations for those families who needed to travel by car. Alongside this, school representatives were trained on the Modeshift STARS platform to encourage schools to create a school travel plan and further engage with promoting and enabling active travel.

The COVID pandemic and subsequent school closures delayed the project slightly. The first school streets launched in March and the final ones were running to the end of the summer term in July. See figure 2.2 for the full timeline of the school Streets project activities.

1. How this was assessed

The main objectives of the pilot School Streets programme were to:

- Increase the number/percentage of children/parents using active travel (walking, cycling and scooting) to get to school and back, and increased frequency of using active travel
- Reduce the number/percentage of parents using cars to get their child(ren) to school and back
- Create support for permanent School Streets
- *Specific to current Covid-19 restrictions- help children/ parents to safely social distance while travelling to school and back*

The main evaluation outcomes were

- Rates of active travel and non-active travel
- Number of pedestrian or cycling trips, and motorised vehicle trips, during the school closure times, comparing pre and post closure ('trip' monitoring)
- Change in air quality (at two sites Windmill School and St Ebbe's School)
- Perceived benefits including physical and social safety, air quality, enjoyment and general support for School Streets

In addition, a focus group was conducted at one school site, in conjunction with Coalition of Healthy Streets and Active Travel, to gather information to better understand the needs and perspectives of car driving parents.

Figure 2.1. Location of School Streets.

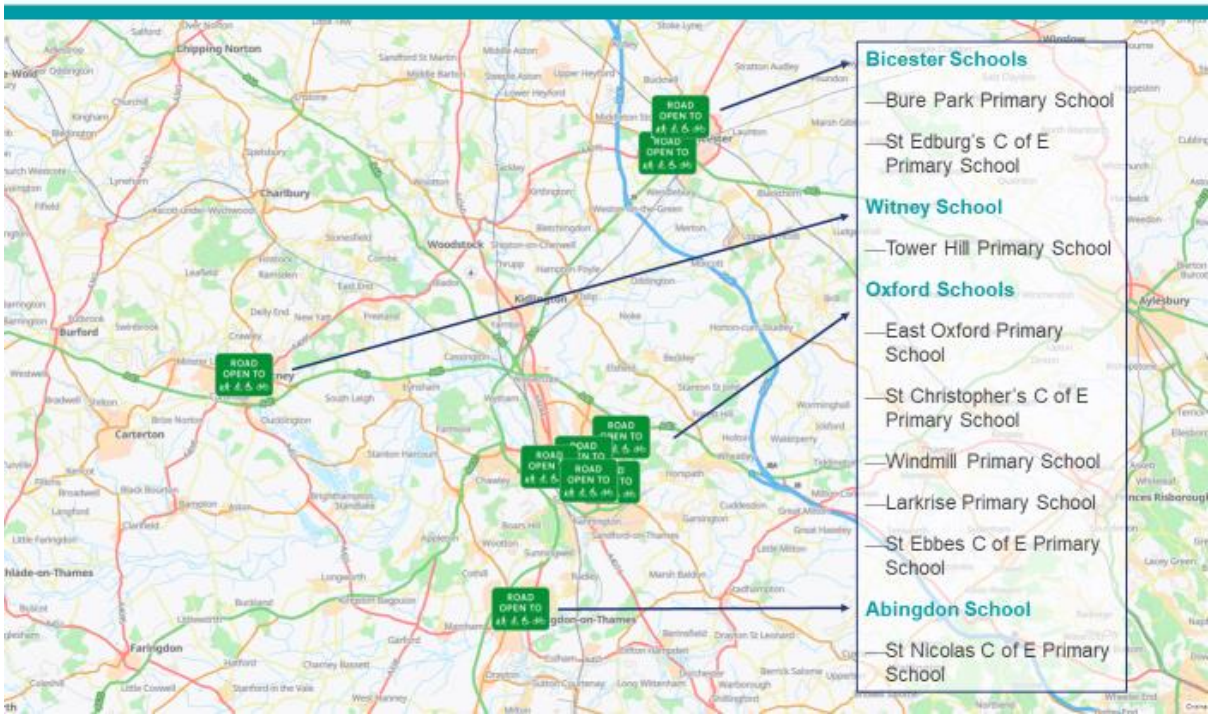


Figure 2.2. School Streets project timeline.

2. Results

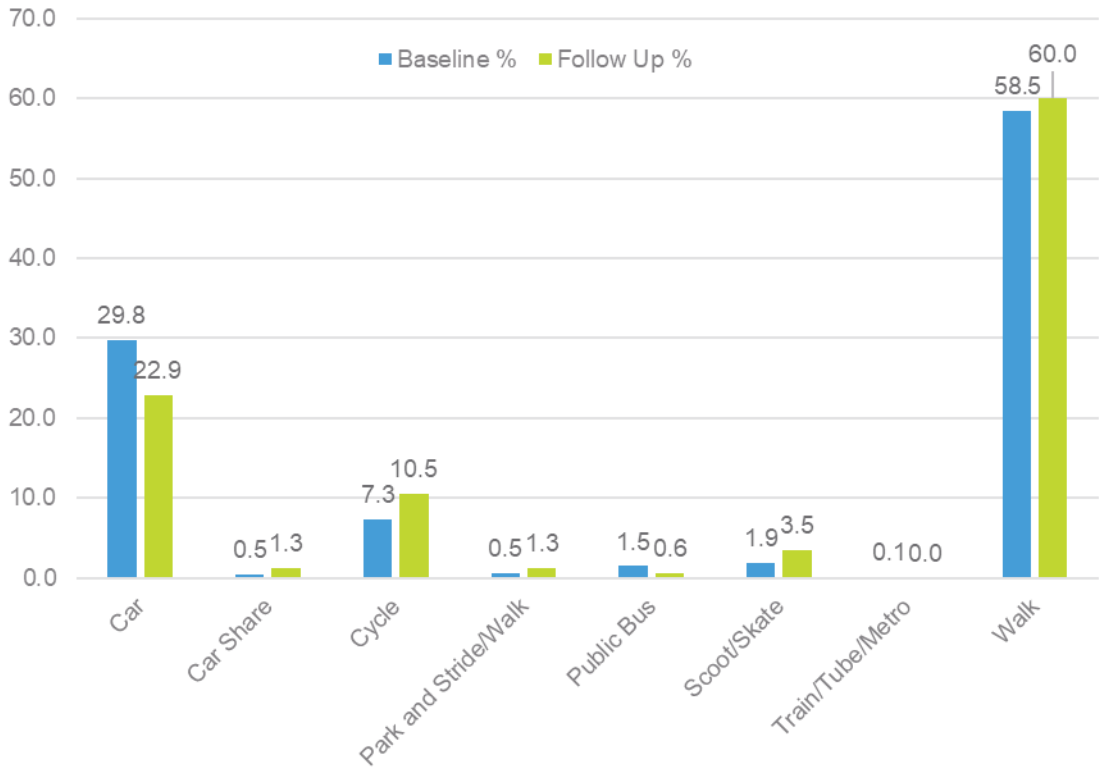
This report includes a summary of the comprehensive evaluation undertaken by Sustrans and OCC on the impact of the School Streets pilot. An in-depth report, compiled by Sustrans in conjunction with OCC, on the project including additional charts, technical details of the street closures, ward profile information for School Streets locations and case studies will be made publicly available in due course.

SURVEY RESULTS – KEY FINDINGS

Travel to school mode.

Over 1,300 baseline surveys and 315 follow up surveys were completed across the nine sites, reporting travel to school mode via Modeshift STARS. Few schools had enough data to determine significant findings on a per school basis, therefore, findings are grouped together across schools (figure 2.3). Before the street closure, the majority of families either walked or cycled to school (66%), however, a significant minority (~30%) drove. This reduced over the street closure period to only 22% driving at follow up, with a corresponding 6.2% increase in active travel (a combination of increases in walking, cycling and scooting). In comparison, results from a similar project in East Sussex showed a reduction in driving, but with less increase in active travel and a larger increase in park & stride.

Figure 2.3. Travel mode before and after the street closure.

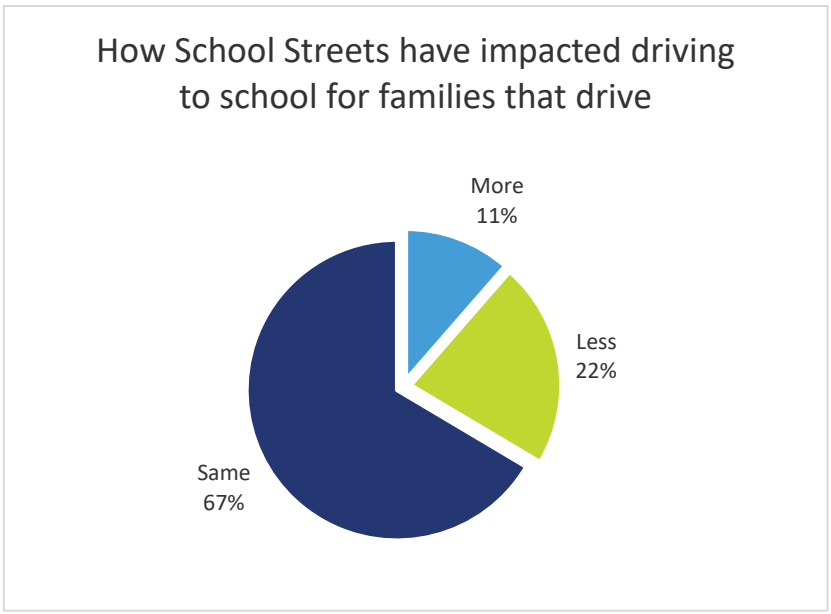


Distance from school and convenience were both important influences on choice of travel mode across all sites, with 43% citing distance from the school as a factor that impacted their mode of transport and 24.2% mentioning convenience. 17.1% also said that they selected the faster method of transport.

Driver behaviour.

Figure 2.4 indicates that the School Street impacted the behaviour of some families who typically drove to school before the street closure, with 22% driving less after the street closure. However, a significant percentage (67%) still drove to school as frequently as before the street closure.

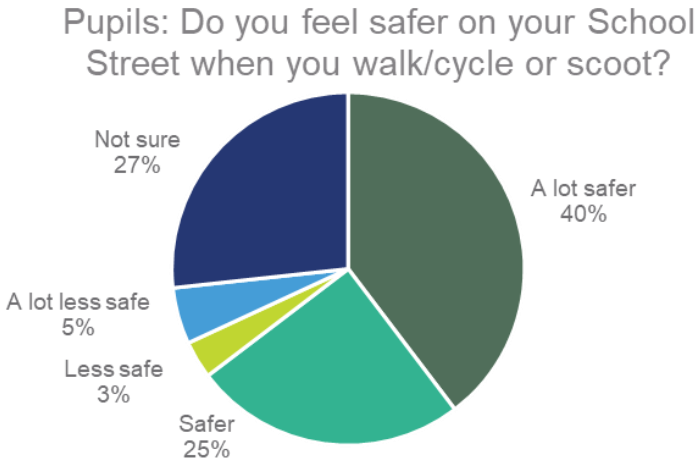
Figure 2.4. Driving to school behaviour.



Safety

The majority of parents, teachers and local residents reported that the street felt safer after the street closures were implemented. Of 116 pupils who responded to the question, 65% said they felt safter or much safer when walking, cycling or scooting to school after the school street closure (figure 2.5).

Figure 2.5. Pupils' perception of street safety.



A quote from one pupil: “I don't dislike anything about the School Street, but I like how I can cross the road a lot safer without worrying about a car zooming around the corner” (*Bure Park School pupil*)

General perceptions about the School Street

General perception survey: 684 adults completed the survey giving a range of feedback covering the nine sites and all permitted us to share their responses. Of the 444 who provided information about their link to the trial, 2% were teaching staff, 25% were local residents, 40% were parents and the remaining 33% were both parents and residents.

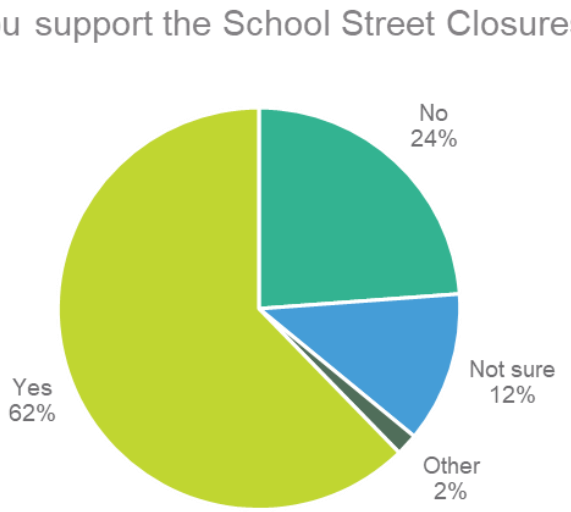
- 64.2% said their journey through the School Street was their end destination, 25% said it was a stop on their way to work (other responses were mixed multipurpose journeys)
- 50.3% agreed or strongly agreed that the street was now a more sociable place than before the closures (21.1% disagreed or strongly disagreed and the rest said it was the same/ didn’t know)
- 46.9% agreed that the air quality had improved at drop off and pick up times during the closure (17% disagreed or strongly disagreed and the rest said it was the same/ didn’t know)
- 40.4% agreed or strongly agreed that the street was a more inclusive place since the closure (23.5% disagreed or strongly disagreed and the rest said it was the same/ didn’t know)
- Overall, 46% of adults surveyed disagreed that the surrounding streets were less congested after the school street closure, 39.5% of those who identified as parents only; 56.8% of those who identified as residents only; and for those who said they were both residents and parents, 42.7%.
- 28.7% agreed that the street closures had strengthened relationships in the local community, whereas a slightly higher 29.5% disagreed or strongly disagreed (the rest said it was the same/ didn’t know)

Support

Survey respondents overwhelmingly supported the School Streets; 62% ‘yes’ compared to 24% ‘no’ (figure 2.6). Support was highest among parents, and parents who were also residents. Support was lowest amongst residents but still 46% of those who stated they were local residents only (i.e., not parents also), were in support of the school street, with 41% not in support. For comparison, a consultation survey for Low Traffic Neighbourhoods in one area of Oxford, found 44% were supportive and 33% against.

Overall, **54% of survey respondents said they wanted the School Streets to continue** beyond the six-week trial as they were, and a further 10.5% said they wanted them to continue with some changes. Only 25% did not want them to continue, and 9.2% were unsure.

Figure 2.6 Support for School Streets.



Summary of focus group findings

Focus Group- 2

Perspectives and needs of car driving families

Affects of Covid-19

A recurring theme among participants was how their travel has changed as a result of the pandemic.

Redundancies and job changes meant that parents were now working from home or alternate parents were dropping off children at school.

Due to reduced travel during lockdowns parents found it easier and quicker to drive as there was a reduction in traffic.

One parent noted how toll bridge staff being removed has significantly shortened his journey to the city.

Staggered drop off timings made the school run more restrictive and compressed the window of time parents could arrive at school

Participants perceived the School Street to have been implemented with bad timing when families were already having other issues to deal with as a result of the pandemic

Safety

School gates not opened before 8:20am, children can't be dropped off early to avoid traffic or road closure issues.

Concerns over cycling on narrow and busy roads on route to school

Alternative to cycling on the main roads involves cycling on tow path- larger perceived danger to young children due to risk of falling in the river as well as from other commuting cyclists

Families outside of catchment live in rural towns where there are roads with national speed limit and it would be very dangerous for a child or adult to cycle

Busy roads provoking asthma in parents cycling children to school, not a viable option for health reasons

Children are too young or are not confident cyclists

Findings

Positives of driving

Gives flexibility to allow families to manage work and family time

Allows parents to do the school run quickly and drive onto work

Families are able to maintain a reasonably timed routine in the daytime and have time free in the evening to spend with their family time

It can be the only option for families to get to school if they live outside of the school catchment area.

Time saving

Some parents need to drive for work

School Streets

A key learning from this focus group was the desire for enhanced consultation to include car driving families from the start of the planning process.

Families felt forced into the decisions and felt unfairly targeted due to their changed circumstances and distance from school

The school worked hard to provide exemption passes for families who needed to drive for a variety of reasons (behavioural issues affecting attendance, mobility issues or SEND) however distance was not a factor in receiving an exemption pass

Children felt embarrassed to be a family who needed to drive through the barrier

Some families were able to use the park and stride option at Hinksey Park car park and found this to be an agreeable compromise solution

VEHICLE TRAFFIC

Data was collected during the defined closure period for three of the School Streets schools over five weekdays for Bure Park, East Oxford and St Edburgs; nine weekdays for Windmill and 10 weekdays for St Christophers school. Baseline data was collected in March 2021, typically the week before a street closure was implemented and follow up data recorded between four and six weeks after the timed street closure was implemented (late April 2021). Follow up data for control sites was recorded in the same time period as for street clsoure sites but no street closure was implemented during this time. Counts were combined for the morning timed closure period and separately for the afternoon closure period.

There was significant variation in walking and cycling counts by school site, therefore, results are presented mostly at school level with some data combined to explore the differece between street closure walking and cyling counts compared to control schools. Mean daily counts are shown in Table 2.2.

Two School Streets schools increased their walking and cyling trips while one, Windmill school, saw a decrease, as did both the control schools. Mean daily walking and cyling by school are shown in Figure 2.7 (morning street closure). A similar patterns was found for the afternoon closure period. Percentage change in walking by school for the morning closure period, is shown in Figure 2.8. The pattern and magnitude is similar for the afternoon period.There was a small mean ***increase*** in morning daily walking counts and cycling counts across the combined group of schools with street closures, compared to a mean ***decrease*** across control schools (Figure 2.9).

Table 2.2. Average daily walking and cycling counts by school

School	Walking (Baseline)	Walking (Follow up)	*Difference*	Cycling (Baseline)	Cycling (Follow up)	*Difference*
St Christopher's AM PM	99 102	165 164	*66* *62*	28 31	58 37	*30* *6*
Windmill AM PM	537 898	469 764	*-68* *-134*	34 38	41 46	*7* *8*
East Oxford AM PM	101 98	109 118	*8* *20*	29 15	34 29	*5* *14*
St Edburg's (control) AM PM	205 192	136 115	*-69* *-77*	4 3	3 5	*-1* *2*
Bure Park (control) AM PM	502 585	482 562	*-20* *-23*	5 9	5 5	*0* *-4*

Figure 2.7. Average daily walking and cycling counts (morning) by school comparing baseline to follow up.

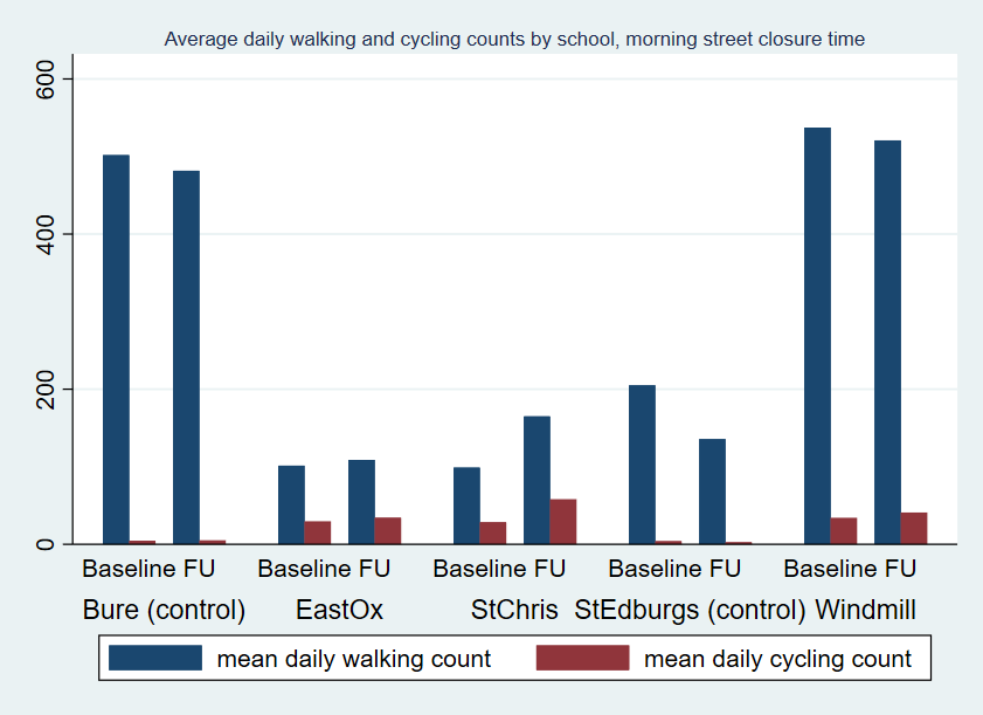


Figure 2.8. Percentage change in walking (am) across all schools

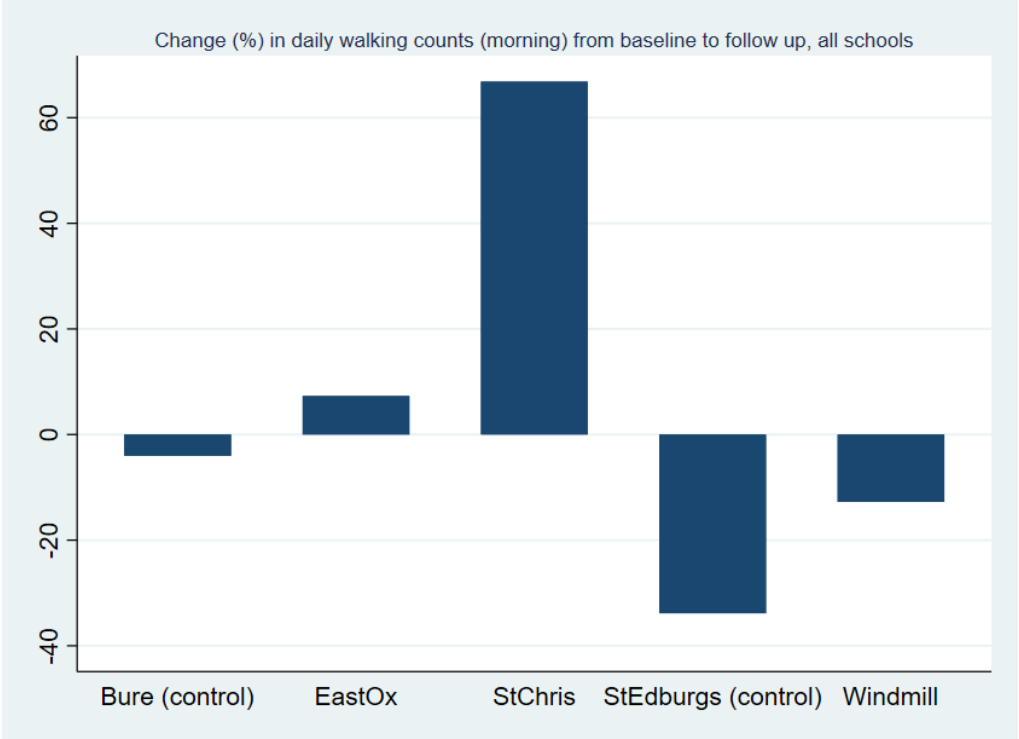
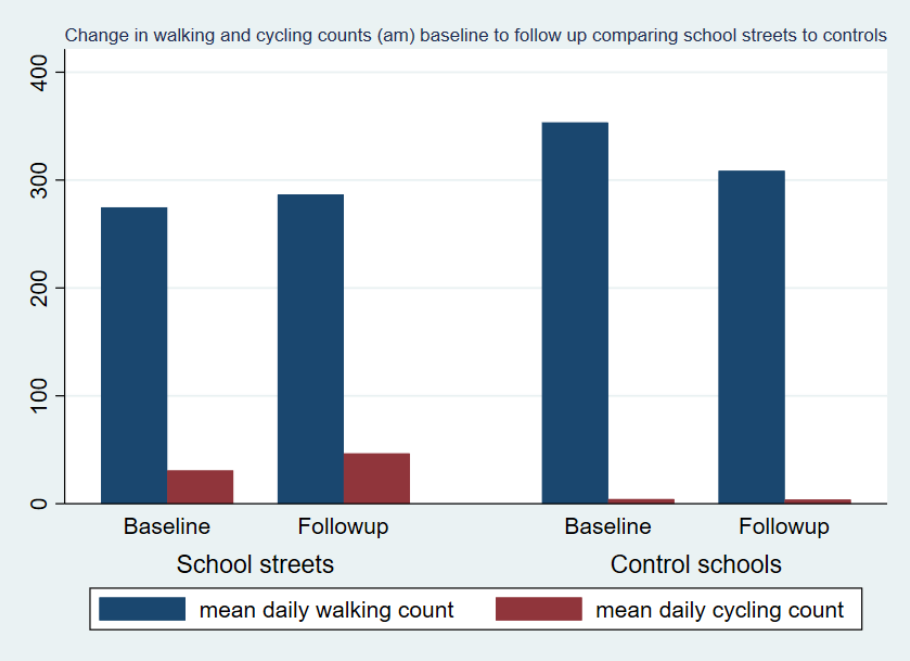


Figure 2.9. Comparison of School Streets walking and cycling, with control school.



At St Christopher's School and Windmill School, counts of vehicles were captured as well as cyclists and pedestrians. At both locations, a decrease in car counts at follow up was noted, both during the morning drop-off period and afternoon pick-up period (figures 2.10 and 2.11). Car count recorded at St Christophers School, for 10 weekdays at baseline and following up, showed a mean of 156 cars at baseline and 140 at followup (reduction of 16) during the morning street closure; and a mean of 165 at afternoon closure at baseline compared to 131 at follow up (a reduction of 34).

Figure 2.10. Average daily walking, cycling and car counts at St Christophers.

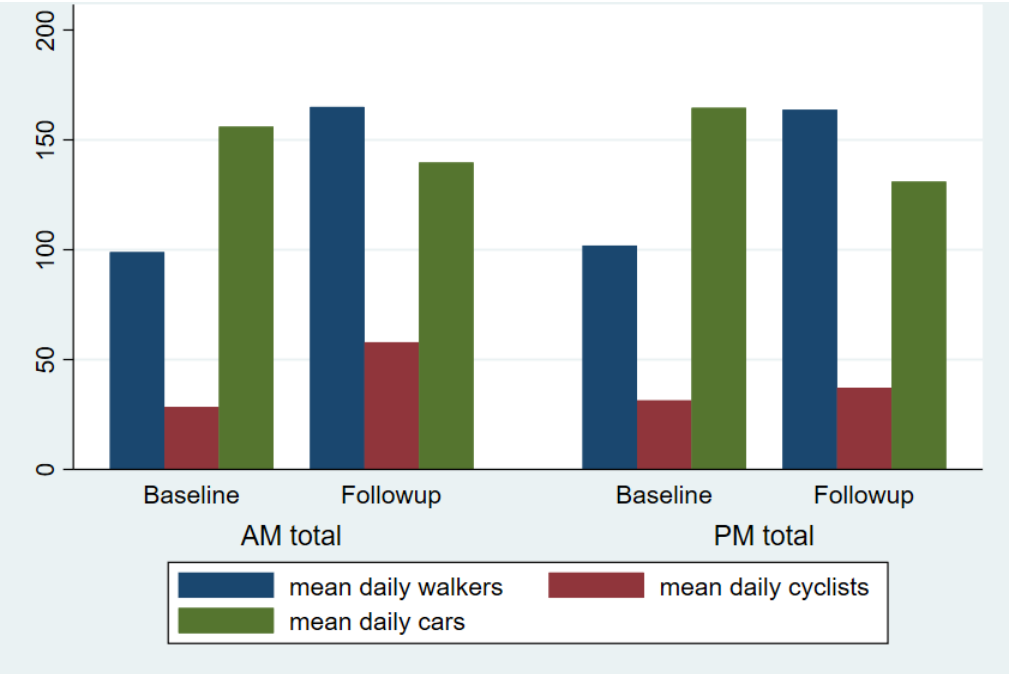
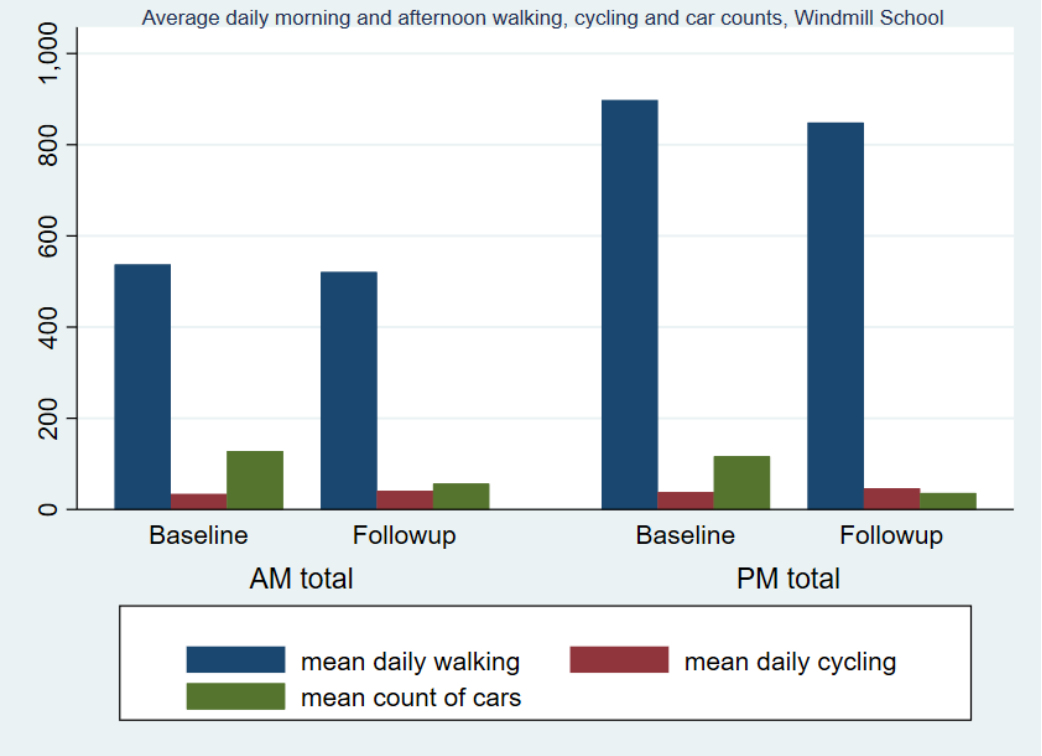


Figure 2.11. Average daily walking, cycling and car counts at Windmill School.



AIR QUALITY

Data on air quality is currently being analysed and will be included in the final Cycling and Walking Activation Programme report.

3. Conclusions

Across all schools, there was general support for School Streets. The impact on travel to school mode was beneficial, with an overall decrease in travel by car and an increase in walking and cycling. However, too few surveys on travel mode were completed in the follow up period, after the closures were in place, for any robust findings per school or to understand differences in the impact in different schools.

Several schools have decided to continue running the School Street however, volunteer capacity is an issue for many schools. For these to be sustainable in the long term, permanent signage and camera enforcement is required to limit the reliance on volunteer stewards to man the closure points. Some schools. At one school, Bure Park in Bicester, the pilot raised issues among residents, resulting in the discontinuation of the School Street. Despite a lot of positive feedback, the road was a major route into and out of the nearby estate and it became clear that ETRO consultation and communications hadn't reached far enough for residents to feel informed and engaged with the project. The School Street will be put on hold to gather more resident feedback and to explore alternative infrastructure design solutions to address the congestion issues.

Annex 2. Full Results Street Tag

2. Project description and aims

Street Tag is a feely available app that aims to encourage communities to be more active in the targeted areas by getting families to spend more time outdoors taking part in physical activities, driving community engagement, and maintaining positive mental health. It has the potential to increase population levels of physical activity. Virtual tags are placed in popular walking routes and areas with green space to encourage participatory and physical activities. App users can choose to walk, run or cycle to virtual 'tags' which are placed on the apps interface. Users collect 'points' for collecting tags. Once users are near or within a 40metre radius of a tag, the player receives the point; each tag being worth an average 10 points per tag. In Oxfordshire the Street Tag project was targeted towards families focussing particularly on schools.

Two competitions were organised: one for primary schools where families collected tags (points) for their school and a community competition. Each district in Oxfordshire had a separate leader board for its primary schools with the top three schools on the leader board in each district in each school term receiving a prize and the chance to participate in a county wide 'Street Tag School Games Final' in the summer term. There was a Cherwell Community leader board as the district council had already started to pilot the app and another community leader board for the other districts and Oxford City. The winners of each season received activity related prizes.

Aims

1) To encourage children and parents to be more active through gamification
2) To embed regular physical activity on a daily basis for children, parents and the wider community

4. How this was assessed

The primary objectives of the Street Tag project were to encourage residents in Oxfordshire to participate in more physical activity, including more time per week spent being physically active and increased frequency of physical activity.

Other objectives included.

- To make walking more enjoyable through the Street Tag app
- To enable targeted groups to realise the physical and social benefits of walking
- To engage schools in Street Tag using school league tables
- To increase the number of walking journeys to school
- To determine the impact Street Tag has on active travel

Data was captured by a participant completed survey, administered through the Street Tag app. Participants were required to complete a set of survey questions at registration (baseline survey) and then requested to complete this again at the end of each month (follow-up survey). This survey assessed physical activity in three categories: walking; cycling; and sport or other activity or dance. Demographic characteristics of respondents including age, ethnicity and gender were also collected. The Street Tag survey questions on physical activity mirror those in the

validated Sport England Active Lives Survey. Data on use of the app is recorded automatically within the app, providing measures of the number of points collected, location used, time of day and usage over the week and month.
Data was captured over the following time periods:

- 10th August 2020 to 13th July 2021 for the Cherwell Community leader board
- 20th October 2020 to 31st July 2021 for the Oxfordshire Community leader board (this includes residents from South Oxfordshire, Vale of White House, West Oxfordshire districts, Oxford City, and some Cherwell District residents who were not aware of the separate Cherwell community leader board.
- 5th October 2020 to 15th July 2021 for all school leader boards.

5. Results

Survey responses

A total of 9995 users were registered on Street Tag app during the specified periods, and 8630 users completed the baseline survey. In total, 4076 unique users completed the subsequent follow up survey at month one, and 2156 unique users completed the subsequent follow up survey at month two.

Number of distinct users per survey			
Schools' leader boards	**Survey 1 (at sign up on app)**	**Survey 2 (end of month 2)**	**Survey 3 (end of month 3)**
Cherwell (School)	1640	771	385
South Oxfordshire schools	982	475	227
Vale of White House schools	610	284	140
West Oxfordshire schools	886	422	220
Oxfordshire Schools Finals	3010	1816	1071
Community leader boards			
Cherwell (Community)	303	90	46
Oxfordshire	1199	218	67

Demographics of survey respondents

Ethnicity

A total of 2658 of the 8630 (31%) baseline survey respondents shared their ethnicity. Most users were of White British ethnicity (95%) and the least represented ethnic group are the Black, Asian and minority ethnic group. This is the same narrative across other locations where Street Tag has been deployed and not only peculiar to the Oxfordshire project.

Age
A total of 1292 participants (15%) shared their age. Respondents were segmented into age categories- 0-12, 13-25, 26-38, 39-60, 60-74 and over 75. Across all leader boards, the highest numbers of app users were in the age groups 39-60 (32.66%) and 0-12 (29.41%).

The least represented age category was the 75+. In the community leader boards, the highest number of participants were in the 26-38yr age group. Due to the low percentage of survey respondents who shared their age, this may not be representative of all app users.

Gender
A total of 5725 of the respondents (66%) provided their gender. **T**here were more females than male respondents that registered on the Street Tag app, **56.75%** of the respondents who reported their gender were females while **42.34%** were male. A small proportion of users chose the gender option "other".

Deprivation
Though no measure of deprivation was captured in the Street Tag baseline or follow up surveys, it is worth noting that nine of the schools signed up to the Schools leader board were in the top 10 most deprived wards in Oxfordshire, demonstrating the ability of this initiative to achieve some penetration into relatively more deprived communities.

Main outcomes

Summary

Overall, the users of the Street Tag app who completed the follow up surveys, reported an increase in **frequency** and **duration** of both cycling and walking. There was some variation across the school and community leader boards and for some outcomes, the improvements were small. However, there was a clear trend showing a beneficial impact for most outcomes.

For walking outcomes in particular, baseline levels of physical activity were higher than average for Oxfordshire. Public Health England data (captured via Sport England's Active Lives Survey) indicates that in Oxfordshire 73% of adults do at least 150 minutes of physical activity per week (an average of 30 min per day for 5 days)[1]. This includes all types of activity, walking, cycling, sport, fitness, dance and gardening. In comparison between 75-80% of respondents in the age groups spanning 26-74 years, reported doing more than this amount of walking alone each day at baseline. This may indicate a selection bias where more active individuals engage with the app.

Furthermore, given the 47% follow up rate at month 2, and 25% follow up at survey month 3, response bias is possible, with more active users who have engaged significantly with the app being more likely to complete the follow up survey; and

[1] https://fingertips.phe.org.uk/profile/physical-activity/data#page/3/gid/1938132899/pat/15/par/E92000001/ati/202/are/E09000002/iid/93014/age/298/sex/4/cat/-1/ctp/-1/cid/4/tbm/1/page-options/car-do-0

those who have not increased their physical activity opting not to complete the survey. However, a review of users' activity (using Street tag at least 3 times) showed that this is comparable between users who completed the follow up surveys and those who didn't.
It is worth noting that the number of respondents at follow up 2, may have resulted in small numbers of respondents for some questions when separated into separate leader boards.

Demographic data captured in the surveys shows a wide age range engaging with the app apart from the older generation – which could be anticipated given the wider lack of engagement with health and wellbeing apps in older adults. The gender split was towards more females than males and there was a lack of engagement with ethnic groups other than White British.

Walking – key results

Walking at least 10 min, at least once in the past 7 days (figure 3.1)

- Baseline levels of walking for 10 min at least once a week were high (typically ≥90%) among the 8,629 people who reported this at baseline.

- There was a small increase in this outcome from baseline to follow up at month 2, among respondents from all leader boards (a total of 4,064 responded). A total of 2,137 responded to the survey at month 3, and this increase compared with baseline was maintained for Cherwell Schools, Oxfordshire Schools, and Vale of the White Horse Schools, ranging from a baseline to final follow up change of between 4% and 8%. There was a drop from the first follow up survey to the second for South Oxfordshire and West Oxfordshire schools where the percentage completing a 10 min walk at least once a day returned nearly to baseline levels (figure 3.1).

- In the community leader boards, there was an increase in walking at least once a week for 10 min or more in both leader boards, ranging from 5% to 8% increase from baseline to final follow up, again from a high baseline level.

Number of days walked at least 10 min (figure 3.2).

- At baseline, 7819 reported ***how many days***, in the last 7 days, they did a walk lasting at least ten minutes, with approximately half this many responding at follow up 1.
- In the community leader boards, the percentage of respondents who walked at least 10 mins on 6 or 7 days a week increased from baseline to follow up and there was a corresponding decrease in the percentage who walked only once per week (figure 3.2).
- There was a similar pattern in schools with as much as an increase of 12% points for walking 7 days per week in West Oxfordshire schools. The biggest decreases were in walking on 2 or 3 days per week, which fell over the evaluation period in all schools.
- Across the leader boards, there was a notable increase in the percentage of respondents walking for more than 4 days from baseline to final follow up.

Figure 3.1. Percentage of respondents who have done a continuous walk for at least 10 min, at least once in the past 7 days, for Street Tag school respondents

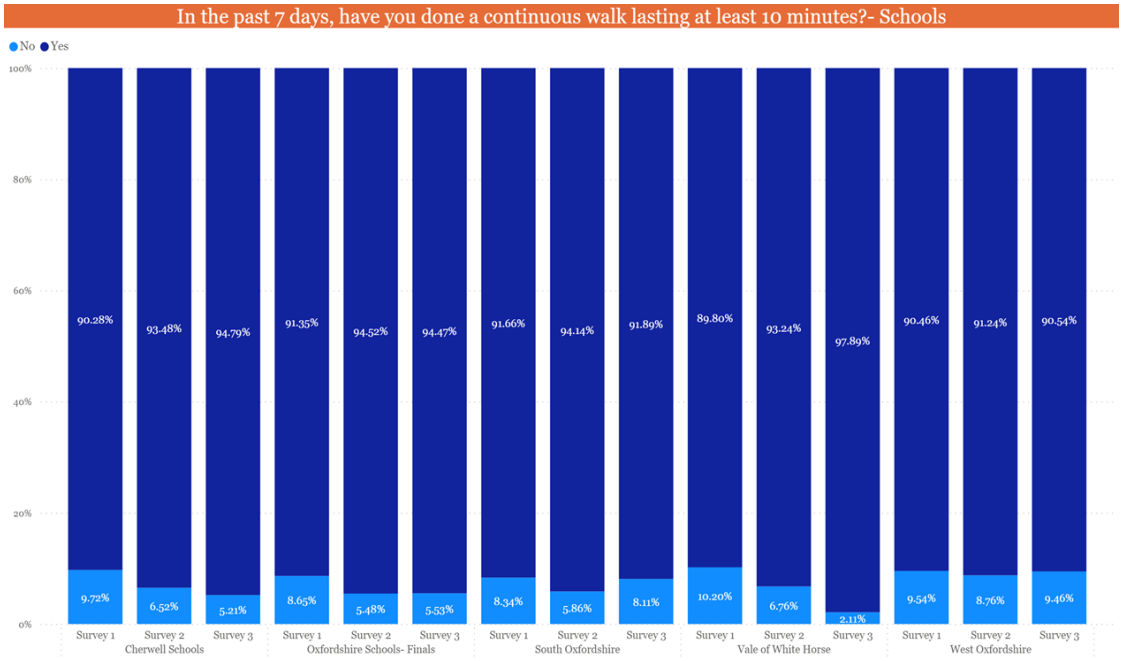
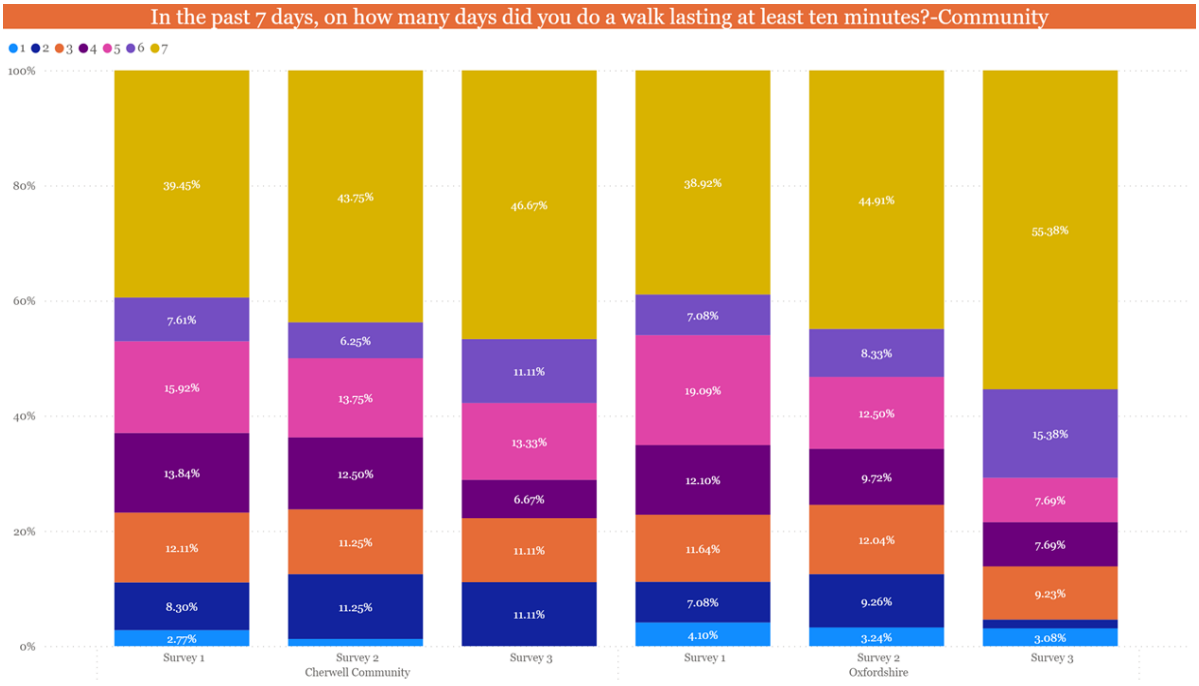


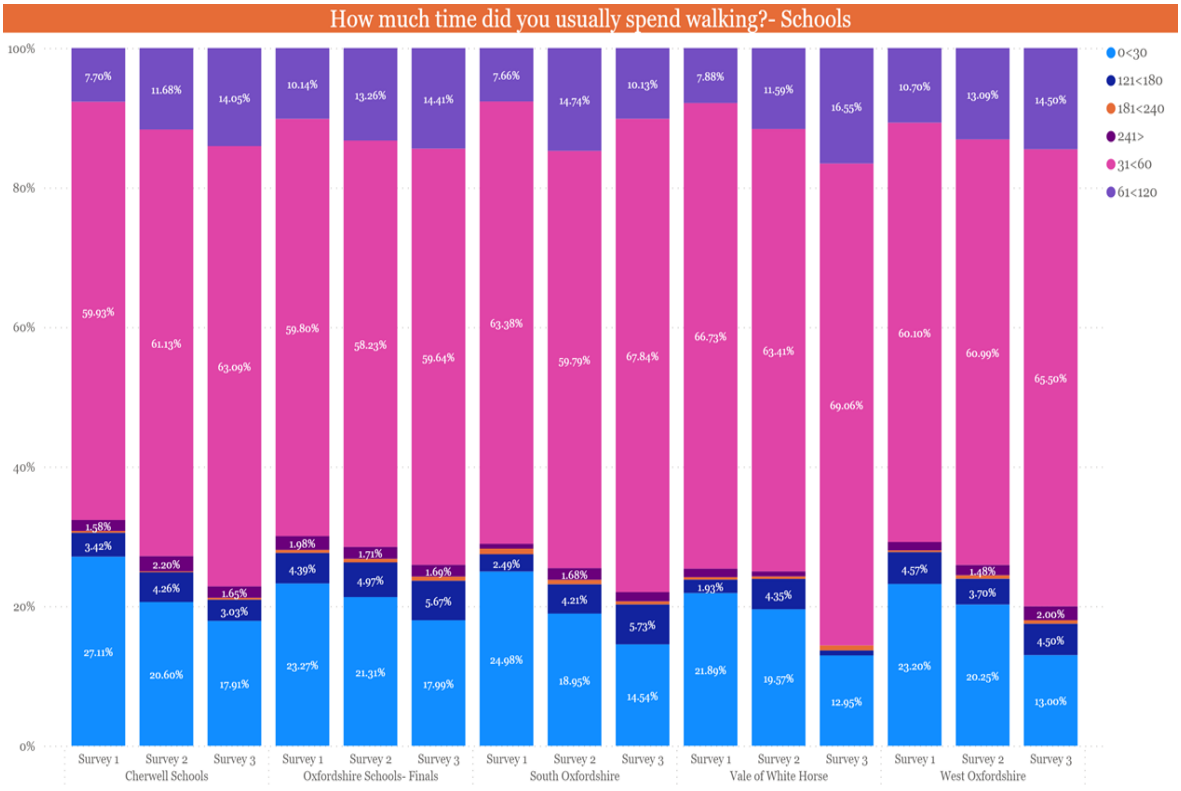
Figure 3.2. Number of days, in the last 7 days, they did a walk lasting at least ten minutes-Community leader board



Time spent walking per day

- Between 73-78% of those in the schools' leader board reported walking more than 30 mins per day (figure 3.3). Between 8-11% reported walking more than 60 min per day at baseline.
- The percentage of respondents who reported doing less than 30 min per day dropped in all school leader boards from baseline to final follow up, in some cases almost 10% (range 5% to 10%).

Figure 3.3. Time spent walking per day, schools' leader board



Walking- by demographic

- Most changes were replicated similarly when viewed in age or gender categories. However, fewer males had completed a 10 min walk in the past week than females at baseline (85% compared to 93%) and there was a more dramatic increase at final follow up (an increase of 10% compared to only 0.5% in females).
- By age, the proportion of those aged 13-25 and 26-38 who did at a continuous 10 min walk at least once dropped from baseline to follow up, whereas in other age groups, this proportion increased.
- Bearing in mind that only 15% of respondents reported their age so these numbers may be small, particularly for follow up surveys.

Cycling - key results

Cycling for 10 min at least once in the last 7 days

- Far fewer respondents reported cycling at least 10 min on at least one day in the past week (around a quarter in the community leader boards), compared to walking.
- The percentage of respondents who did cycle at least once, was between 18-24% at baseline. This increased in some schools and decreased in others from baseline to final follow up. This was similar in the community, with Oxfordshire community residents showing an increase from 23% cycling at least once per week to 30%; and Cherwell community residents reporting a decrease from 26% to 22%.

Time spent cycling per day

- The percentage of respondents who reported doing less than 30 min cycling per day declined from baseline to final follow up, and a higher percentage of respondents did between 31-120 mins of cycling per day

Figure 3.4. Time spent cycling per day, for Street Tag school respondents

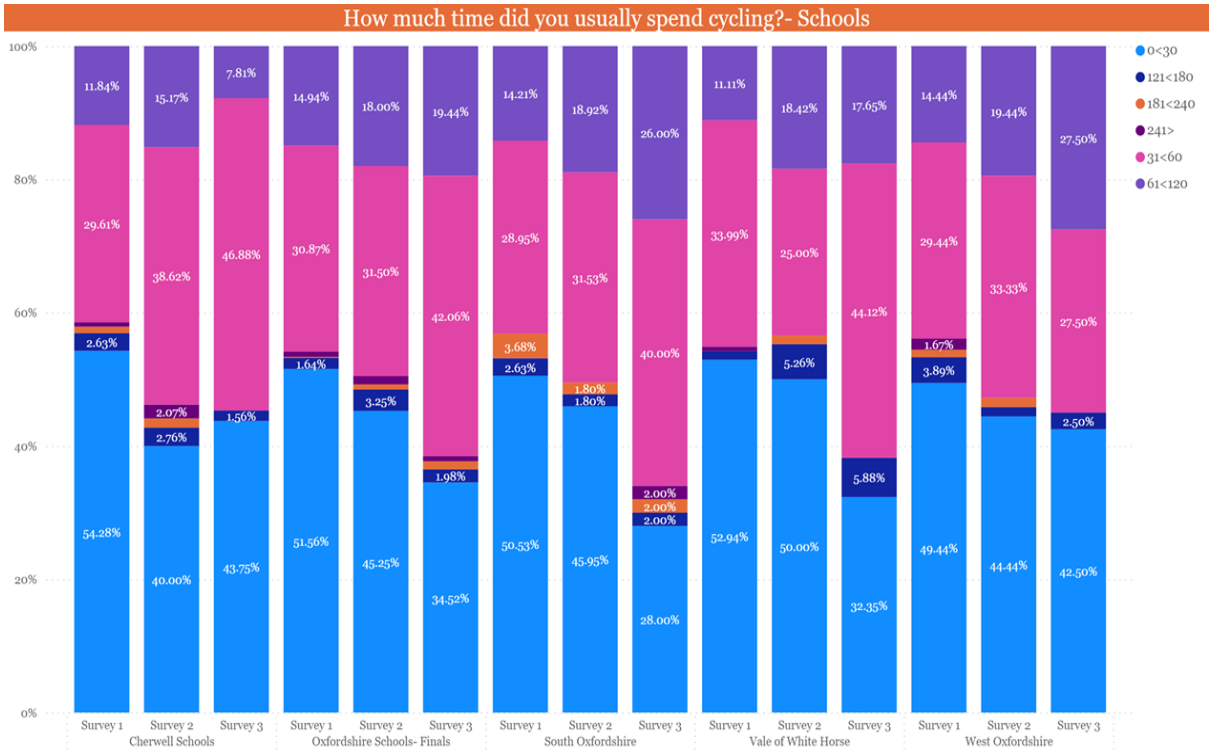
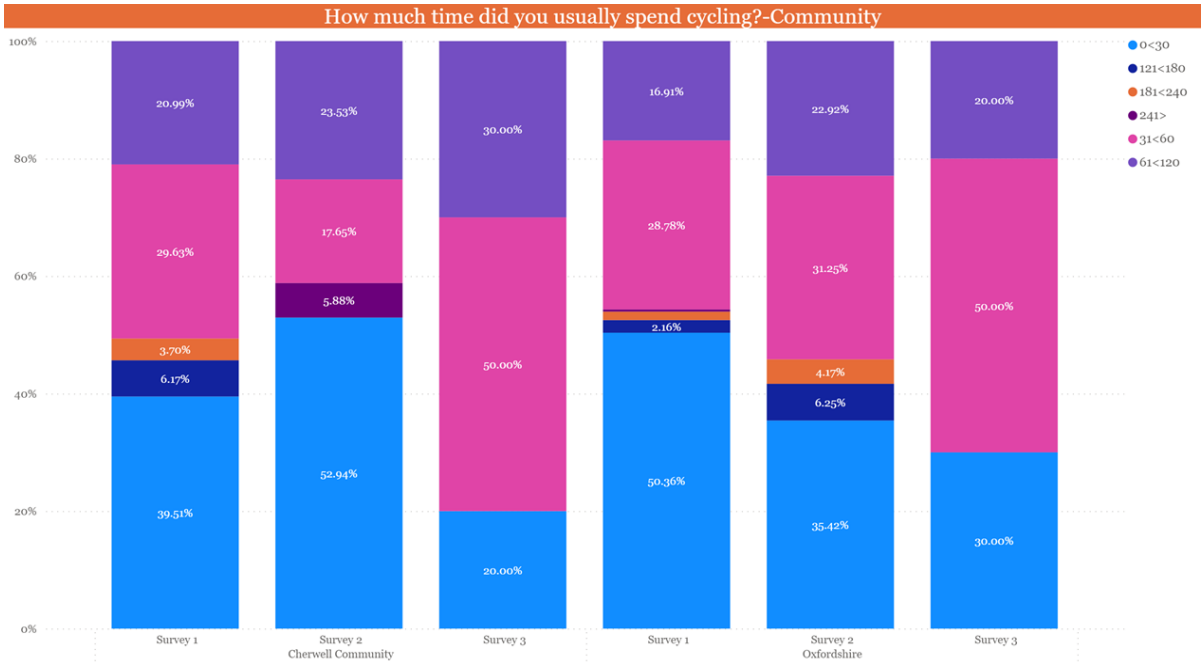


Figure 3.5. Time spent cycling per day, for Street Tag community respondents



Cycling - by demographic.

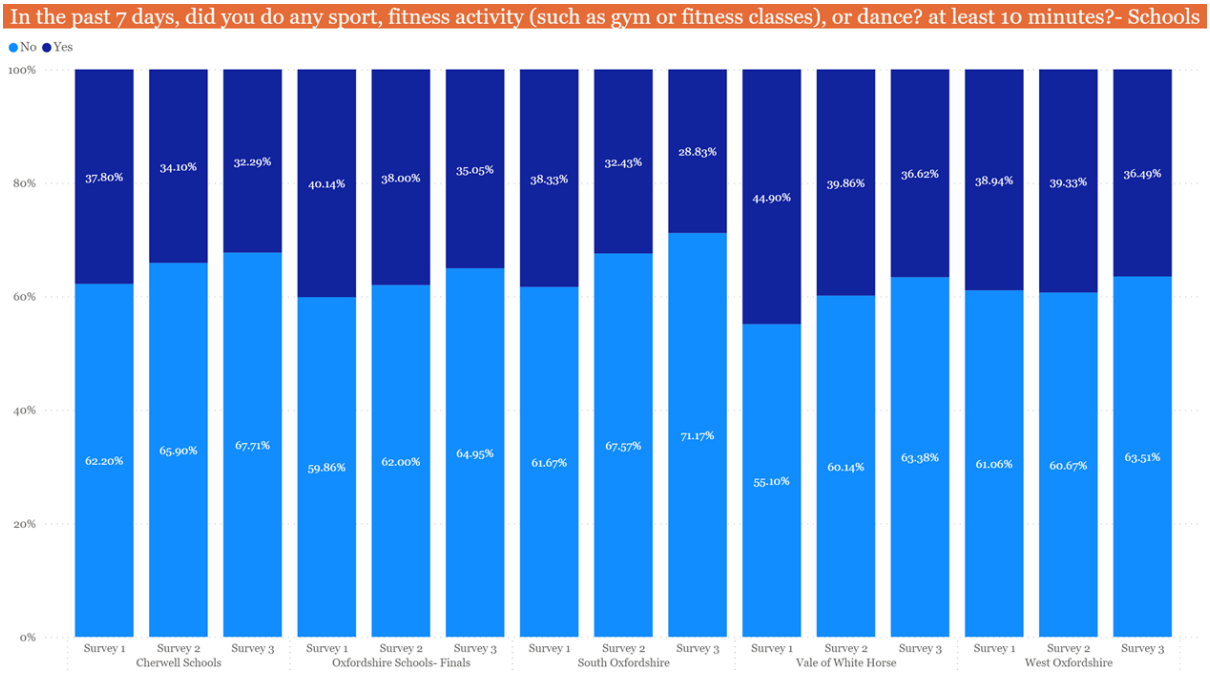
- The percentage of males who had done a cycle ride for more than 10 min at least once in the past week was higher than females, at baseline (Males: 26% Females:16%) and all follow up points (final follow up, Males: 31% females: 19%).
- The app was more successful in increasing cycling rates in males than females.

Sport, fitness activity or dance – key results

Sport or fitness at least once in the past 7 days

- The percentage of participants who reported doing sport, fitness or dance at least once a week for 10 min or more at baseline (out of 8,630 respondents), was between 38-45% in the school leader board (figure 3.6) and 28% to 33% in the community. This is higher than for cycling but still substantially less than for walking.
- Of note, in all the leader boards this percentage *decreased* from baseline to follow up or stayed the same (4064 respondents at first follow up and 2137 at final follow up).
- The main evaluation period of Street Tag was over the Autumn and Winter COVID-19 lockdown restrictions. Restrictions would have had a greater impact on sport, fitness and other activities such as dance which would have been required to close or limit numbers during this period, whereas walking and cycling activities would have been less affected.
- Further, given the focus of Street Tag on walking and cycling, it is possible that Street Tag led to a switch of activity type in some participants, with an increase in walking and a decrease in sport or fitness rather than an overall increase in physical activity.

Figure 3.6. At least 10 min of sport fitness or dance in the past 7 days, for Street Tag school respondents



Time spent doing sport, fitness or dance per day

- The percentage of respondents participating in sport, fitness, or dance between for more than 30 min per day, increased from the baseline survey to follow up, across several of the leader boards with the biggest increase in the Cherwell Community Leader board (10% increase) but other leader boards (e.g., Oxfordshire community and Cherwell School) showed a decrease.

Street Tag use and activity

- A total of **8365 unique users** participated in the Oxfordshire leader boards for the period under review from October 2020 to May 2021.

- Street Tag was used much more for walking and cycling than for Sport, fitness or dance activities.

- Activity recorded on Street Tag was highest in winter months and participation was consistent over the week and weekend with minimal difference across the 7 days, apart from a slight dip on Mondays in all leader boards.

- Activity peaked between 7am to 8am and 3pm to 5pm, it is also noted that an appreciable percentage of users also participate in activities between 11am and 12pm with roughly between 6-9% of users participating.