

Executive Summary: PHIRST Fusion Evaluation of COVID-19 Emergency Travel Schemes in South Gloucestershire Council

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Executive Summary

Background

In response to the COVID-19 pandemic, the UK government announced the introduction of an Emergency Active Travel Fund and issued statutory guidance around the implementation of emergency travel schemes (ETS). This was done to encourage local authorities across England to create new opportunities for commuters and other road users to take up active forms of travel, to make active travel safer, and to facilitate greater social distancing, particularly along busy high streets.

Following the announcement, South Gloucestershire Council introduced a range of ETS from mid-2020. These can be categorised into four groups:

- Cycle lanes – road lanes that segregate cyclists from car users helping to increase safety and the visibility of cycling.
- Low traffic neighbourhoods (LTN) – the creation of low traffic residential neighbourhoods by restricting car access through residential streets.
- School streets - the closure of roads near schools during drop off/pick up times.
- Widened pavements - the widening of pavements along busy High Streets to facilitate social distancing.

This report offers a formative evaluation of the impact of the ETS on travel behaviour and local communities. The evaluation looks at residents' perceptions and experiences of the ETS, to see if the ETS have increased active travel practices, and any consequential improvements in air quality.

Evaluation methods and data

The report employs a mixed-methods approach. Due to the lack of suitable routine data that can offer a robust baseline (pre-pandemic) to make temporal comparisons, a variety of primary and secondary data is drawn upon and employed to evaluate the impact of the ETS.

Primary data collection included: an Attitude Survey (a representative survey with a weighted sample to explore levels of awareness of the ETS, self-reported changes to travel behaviour, and views on similar schemes in the future); Intercept Surveys (targeted surveys to collect the perceptions and experiences at three travel scheme locations: a LTN at Signal Road and Charnell Road, a School Street at Abbotswood Primary School and a cycle lane at Station Road in Yate); Local Authority Officer Interviews (interviews with South Gloucestershire council officers who were involved in the decision making, design and delivery of the ETS, to look at their perceptions and reflections); and, a Citizens Panel Focus Group (an online group interview with South Gloucestershire residents to discuss reflections on emerging research findings as well as perceptions of the current ETS and thoughts on future interventions).

Secondary data included: the Travel to Work survey (an annual commissioned survey which provides insight into the commuting patterns of road users across the South Gloucestershire region); the Space to Move consultation survey (a survey targeted at ETS intervention sites which offered insight into people's experience of the ETS); contextual data from the 2011 census (to gain an insight into the number and proportion of residents in South Gloucestershire who used active means of travel to commute to and from work); and, air quality data from the Department for Environment, Food and Rural Affairs (DEFRA).

Results

Attitude Survey findings

Knowledge and awareness of the ETS were mixed - only cycle lanes had attracted a considerable level of reported awareness. This is not surprising from a representative sample (n = 1,352) over a wide geographical area (South Gloucestershire population = 285,000), when the ETS are typically relatively small and local in their application. Across the ETS, there appears to be a considerable proportion of those aware of the schemes having had experience and use of them, with around half of those aware of the widened pavements and school streets schemes reporting using them. Among those who reported awareness and use of the ETS, a majority (around sixty percent) were satisfied or very satisfied. The highest reported ETS experience was for cycle lanes and widened pavements schemes, with both having around fifteen percent reported use.

Whilst modes of transport were not reported as substantially changing in response to the ETS (with around ninety-five percent of respondents stating that they used their car at similar levels as pre-intervention), for those aware of the ETS, there is some evidence to suggest a modest increase in the number of people undertaking active forms of travel for work and leisure, with reported increases of around 10% in walking and cycling to work and leisure activities. However, it is difficult to distinguish if reported changes are consequences of shifts in wider public practices in response to the COVID-19 pandemic. It is also crucial to remember that the Attitude Survey was based on retrospective recall, without before and after samples. This means it is difficult to infer actual behaviour change.

Support for the hypothetical introduction of further travel schemes was mixed. School streets and road closures received the highest support, with just over half of respondents reporting support. Reduced road width and the removal of car parking spaces received the lowest levels of support. People generally reported that they did not believe that the introduction of a travel scheme would encourage them to walk and cycle more. A hypothetical road closure was perceived to have the greatest potential to encourage more walking and cycling, with around one-quarter of participants reporting such a scheme may encourage active travel.

Space to Move Consultation findings

There were high levels of perceived satisfaction for the LTN scheme at Signal Road/Charnell Road, but generally dissatisfaction at both sites employing a widened pavement scheme (Staple Hill High Street, Hatchet Road). Common negative themes across all sites included design issues, worsening journey conditions and decreases in safety (see the below table for a summary). Positive accounts across these themes were also found (albeit often in lower numbers). The findings highlight polarising and at times contradictory perceptions of the schemes. It is important to note that the Space to Move consultation was carried out early in the ETS implementation, and this resulted in some schemes being amended or removed. Thus, the findings may not reflect current ETS views.

Theme	Sub-theme
Positive Perceptions	<ul style="list-style-type: none"> • Improved Safety (e.g., perceived increased safety for cyclists, pedestrians, children) • Environmental (e.g., more pleasant area) • Traffic conditions (e.g., reduced speeding, reduced congestion, no negative impact on car journey)
Negative Perceptions	<ul style="list-style-type: none"> • Intervention layout/design(e.g., not used as intended, poor layout/design, not required for the area, not ambitious enough, no impact on social distancing, negatively affecting disabled, elderly, and buggy users) • Reduced safety (e.g., less safe for pedestrians, more difficult crossing road as a pedestrian, not safe for cyclists) • Traffic/Journey conditions (e.g., increased congestion, increased pollution, re-routing of traffic, Increased car journey time, Slowing traffic) • Lack of consultation • Business (e.g., adverse impact on businesses due to reduced access/parking)

The modifications to the road layouts have resulted in some cyclists and pedestrians reporting feeling safer and more confident in using the roadway to undertake active travel, but there were also reports of worsening traffic conditions (increased congestion and slower travel times particularly during busy travel times). An indirect result of this was perceived increased pollution from idling cars in tailbacks. Some respondents perceived that traffic simply diverted away from the scheme locations. There were perceptions of some ETS not being used as intended. The fidelity and adherence of the schemes from pedestrians, cyclists and road users appeared to impact upon perceived satisfaction and safety (e.g., cars queueing and blocking pedestrian crossings was noted to impact perceived safety). Some respondents suggested that aspects of the ETS (specifically the removal of car access and parking spaces) may reduce the use of public Highstreets, with this having detrimental impacts upon local businesses.

The small sample sizes and self-selecting nature of the sample in the Space to Move Consultation survey, as well as the nature of the reflective questions rather than data on behavioural practices, make drawing firm conclusions difficult.

Air quality data findings

The areas of poorest air quality are locations where many ETS are located, suggesting the decision to locate the schemes in such areas is justified based on air quality levels. Due to the small scale and localised nature of the ETS, and the limited granularity of the DEFRA modelled air quality data, it is extremely difficult to assess the impact of the individual travel schemes upon air quality.

Travel to Work findings

The impact of COVID-19 is evident in the changing work patterns of people undertaking the annual Travel to Work survey – with the percentage of people working from home moving from less than one percent in 2019, to around sixty percent in 2021. Looking specifically at people travelling to work between 2019 and 2021, car use increased from around fifty percent in 2019 to sixty percent in 2021, and public transport use decreased from around fifteen percent to less than ten percent over the same period. Slight decreases were also seen for both walking and cycling. These changes may more reflect the COVID-19 guidance and public concern for infection reducing their use of public transport, than the impact of the ETS.

The types and locations of businesses who responded to the Travel to Work survey changes each year, and the sample of companies participating in the survey changes, meaning the travel routes and locations are not consistent, nor thus easily comparable, year on year. Therefore, the changes in travel to work patterns could be largely explained by the types and locations of businesses who responded to the Travel to Work survey, and thus do not accurately reflect shifts in wider commuting behaviour at the population level.

Intercept Survey findings

Overall, there were positive perceptions and satisfaction with the LTN scheme at Charnell and Signal Road, the school street scheme at Abbotswood, and the cycle lane on Station Road in Yate. There was some evidence of reported increases in walking and cycling behaviour in response to the ETS. The LTN scheme at Charnell and Signal Road saw a nearly ten percent increase in the proportion of respondents walking 'daily' and '2-5 times per week'. The proportion of people cycling 'daily' and '2-5 times per week', also saw small increases. Around two-thirds of people surveyed about the LTN reported they were more likely to interact with their neighbours. The cycle lane scheme at Yate was reported to be encouraging people to use that area to cycle, with a small reduction in 'monthly' and 'never' cycling frequencies, and a slight increase in cycling '2-5 times per week'. The Abbotswood school street scheme was reported to encourage families to reduce their car use in favour of active travel, with around one-third of respondents reporting being more likely to use active travel modes.

Generally, there was little reported improvement to journey time by respondents, but the schemes were suggested to be increasing perceptions of safety, overall journey quality, and perceptions of local areas. Overarching issues included perceived displacement of traffic to other areas, with this having associated views of decreased safety and increased congestion (and pollution) in these areas. Also, the adherence of road users and pedestrians to the schemes (e.g., cars merging into the cycle lane, cars not adhering to school street parking rules), was noted to impact upon participant perceptions of scheme satisfaction and safety. Further, and specifically in relation to the LTN Schemes, scheme aesthetics (the bollards used to block the roads) were described as not being appealing and needing improvement.

When interpreting the data, the low sample numbers for the Intercept Surveys must be noted, but this is a common limitation of such methods due to their targeted and opportunistic nature. Also, the post hoc reporting of respondent's travel practices means there is no baseline data, thus changes in travel behaviours are based on retrospective recall. Nevertheless, they provide useful insight into the perspectives and experiences of people in the areas where schemes are being implemented.

Local Authority Officer Interview Findings

The nature of the ETS meant that they were delivered within very short timescales and followed different processes to 'business as usual'. It was suggested that for members of the public (who may have been used to being consulted about schemes in advance), the implementation of the ETS may have felt unexpected, despite effort being made to communicate and consult about their implementation.

The speed of implementation of the ETS was seen as both positive (e.g., allowing for rapid action, and for people to see and benefit from the schemes quickly) and negative (differences to the usual consultation process, changes that were needed after the ETS were implemented which were resource intensive). More broadly, the implementation of the ETS was seen, for some of the schemes, as a catalyst for discussion within communities about the long-term vision for their local area. However, it was acknowledged that there were no clear conclusions, and that some ETS caused polarised viewpoints. The Local Authority Officers made several policy and practice recommendations around the design, implementation and communication of travel schemes.

Recommendations for Planning and Project Management

- Sufficient time should be allocated in project planning to allow for communications and engagement, before, during and after implementation.
- Ensure there is adequate resourcing to allow for extensive additional workloads for staff to meet the short timescales required around emergency provision. Further, ensure resources are available for the business-as-usual functions within the team to continue while the emergency delivery team complete their work.
- Ensure adequate resourcing applies to the life of the scheme not just the initial implementation.
- Have a team of officers with a senior lead who are responsible for implementing emergency schemes, and who are able to quickly move from their business-as-usual roles to focus on delivering emergency schemes.
- For future emergencies, it would be useful to have a field/engagement team who are fully trained in engagement/conflict management/emergency responses. They could be quickly briefed, provided with PPE and deployed for community engagement.

Recommendations for Communication and Community engagement

- Having a robust evidence base (e.g., case studies), visual aids (e.g., artist's impressions), and justification for the implementation of schemes (e.g., baseline data and future projections) may help when presenting schemes to key stakeholder groups, including the public.
- Ensure open and transparent objectives behind schemes and reinforce these at all stages of the project lifecycle.
- Plan, agree and develop the key messages, clear headlines, terminology, engagement, online capacity, and how the public can engage with the Council about the schemes.
- To ensure clear and consistent messaging, include a dedicated communication staff resource and ensure corporate communications teams are regularly briefed about schemes, particularly in such a fast-paced environment.

Citizens Panel Focus Group Findings

Perceptions of the ETS were mixed. The participants raised concerns around the design of the schemes, and noted consequences they had perceived from their implementation including: traffic displacement to surrounding areas, increased congestion, reduced access to local shops/businesses through removing car parking spaces along roads, and general poor adherence and use of the schemes. There was a desire for the council to implement schemes to improve active travel, but for better consultation around these schemes.

Conclusions and Recommendations

Due to the speed with which the ETS were implemented, there was no baseline data collected on active travel behaviours. Therefore, much of the primary data is based on retrospective recall, recollections and interpretations of behaviour change, not using before and after intervention samples. Thus, it is difficult to make robust inferences about actual behaviour change in the population. Further, some of the data is based on relatively small and self-selecting samples. It is also important to appreciate our findings in the context of the COVID-19 pandemic, as it is challenging to isolate the impacts of the built environment changes on active travel beyond those of the pandemic itself. The findings must be read in light of these caveats. Nevertheless, there is important learning to guide decision making and future practice.

Our findings show that, whilst there have been changes in commuting and travel to work practices throughout the COVID-19 pandemic, there is limited evidence of the ETS changing active travel behaviour at a population level in South Gloucestershire. There is, however, some evidence of increases in reported active travel behaviour locally in response to the ETS (particularly the cycle lanes, low traffic neighbourhoods and school streets). Thus, the ETS may be having some small impacts on active travel behaviour where they are implemented, but there is insufficient evidence of them having wider population-level impacts. There were generally high levels of satisfaction with the schemes from those who were aware of and using them, but there were mixed perceptions around the design and experienced outcomes of all schemes. There was a suggestion from some respondents that the travel schemes in South Gloucestershire had a positive impact upon their perceptions of their local area (e.g., more pleasant and friendly, and creating a sense of community). Scheme fidelity (i.e., how schemes worked in practice, and if they were used as intended) influenced perceived satisfaction and safety from respondents. A lack of effective consultation (due to the required speed of the ETS implementation) may have had a role in perceptions of, and the use of, the ETS. Greater public consultation may have facilitated a clearer framing of the purpose and potential benefits of the ETS, and better exploration of the trade-offs and potential issues involved.

There were suggestions that schemes may be displacing and not ameliorating some of the intervention targets, with congestion (and associated pollution) moving to areas around intervention sites. Due to the small scale and localised nature of the travel schemes, and the limited granularity of the DEFRA air quality data, it is extremely difficult to assess the impact of the individual travel schemes upon air quality.

Overall, our findings highlight important considerations and learning for the implementation and evaluation of future travel schemes. Key recommendations include:

Recommendations for Future Data Collection

- Routinely available data (e.g., Travel to work data, DEFRA air quality data) can be used to explore and supplement data when ideal data sets are not available. But such data have limitations in terms of detail, geographical scale and reliability, making robust evaluative inferences challenging for local schemes. It is important to have baseline data before the implementation of future schemes to make temporal comparisons and enable evaluations of travel behaviour change. The survey data we have captured may be used as a baseline for future evaluations, and the methodologies may be replicated using the survey instruments in the appendix.
- To help understand the potential benefits, and to help mitigate unintended consequences of travel schemes, robust baseline data must be collected and utilised:
 - The use of traffic count data and automatic cycle counts (ACC) at intervention sites and locations near schemes (to capture diverted/displaced traffic and cycle flows) will shed more light on direct and indirect impacts, rather than relying on respondent recall.
 - The use of location-specific air quality monitors will help better map and provide a basis to model pollution levels and the changes due to the impacts of travel schemes.
 - Baseline data monitoring could include aspects of the travel schemes which were reported as causing concerns for respondents (e.g., Traffic conditions, journey times, congestion, pollution, use of any pedestrian crossings in the area, footfall on high streets).
- Future data collection should amend the survey tools/questions to capture missed and pertinent data (e.g., what would encourage respondents to engage in active travel more; exploration of the number of participants who had access to the ETS (beyond use and awareness of them) to see who could have/did use them).

- Local Authorities should identify a Team or individual who leads on the monitoring of all future travel schemes, with their role include including:
 - Ensuring that the data is held in central locations, and that there are accurate and easily accessible records of all available data for each travel scheme.
 - Ensuring that all monitoring conforms to the same standards so there can be comparisons between datasets.
 - Being responsible for the annual publication of all data relating to travel schemes in an appropriate location on the Council website.
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Design and Layout of Travel Schemes

- Effective local consultation may help better shape and frame the purpose/potential benefits of travel scheme changes, and exploration of trade-offs involved. A flexible approach to consultation, and co-designing schemes with local communities should be prioritised. It would be useful to have existing targeted community stakeholder groups who can feedback on scheme suggestions within very short timescales.
- Consulting on scheme ideas before implementation and ensuring an ongoing commitment to community engagement may help make adjustments and respond to potential issues. For example:
 - Before opening future cycle lanes, consultation and drawing on the expertise of local cycling communities may help ‘test drive/ride’ and provide critical comments to improve schemes before opening to members of the public. This may help appreciate and overcome any implementation issues (e.g., unintended consequences) for specific locations and different populations.
 - Consultation with local business owners in and around scheme locations could be undertaken to assess their perceptions of adverse scheme impacts.
- Accessibility issues (e.g., kerb height) for some groups (people with disabilities) were briefly noted as a consequence of the schemes. Greater consultation with such groups before scheme implementation may be beneficial. Similarly, seeking the reflections of emergency services around accessibility to and increased congestion around scheme locations, may help alleviate residents’ concerns.
- The aesthetics of the bollards used in the LTN were generally negatively received, and in consultation with local residents, future LTN could use alternatives such as planters, or seek community ideas for alternatives.

- Schemes that people see as appropriating and reallocating road space from parking appear to receive lower levels of support. This may be helpful for designing and presenting future travel schemes.
- Future schemes could be located in areas where active travel is relatively low to encourage uptake.

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For the full report please see: <https://phirst.nihr.ac.uk/evaluations/evaluating-covid-19-emergency-travel-schemes-across-south-gloucestershire-council/>

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