September 2024

# Evaluation of the Greater Cambridge Partnership Investment Fund

## Impact Evaluation Evidence Paper: Histon Road Project

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# 1. Introduction

## Introduction summary

*This paper considers evidence of the impact of the Histon Road Project. It is one of a series of evidence papers that will inform an evaluation of the Greater Cambridge Investment Fund undertaken by an Independent Evaluation Panel (IEP) for the Ministry of Housing, Communities and Local Government (MHCLG). Evaluation activities will be completed in October 2024 as part of a second Gateway Review to assure future Investment Fund allocation.*

*A Bus Priority and Active Travel Improvement Scheme was designed to improve the infrastructure along Histon Road, by providing enhanced priority and facilities for buses, new and improved cycling and walking routes, and greening and landscaping improvements to the public realm. The final design was approved in October 2019, and the scheme substantially opened in October 2021.*

## Purpose

**1.1** This evidence paper sets out the method and findings of the impact evaluation of the Histon Road Project supported by the Greater Cambridge Investment Fund, delivered as part of the evaluation of the Fund to inform the second Gateway Review (GR#2). The evaluation was conducted by SQW and ITP between May and June 2024.

**1.2** The contents of this Evidence Paper apply to the National Evaluation Framework (NEF) Performance Indicators summarised in Table 1-1.

**Table 1-1: Performance Indicators for GR#2 relevant to this Evidence Paper**

| # | Performance Indicator |
|---|---|
| | **Intervention impact** |
| 2B1 | Description and evidence that all evaluation activities set out in an area's evaluation plan have been completed. |
| 2B2 | Evidence that each element of an intervention's logic model (i.e., inputs, activities, outputs and outcomes) has been delivered or materialised.<br>Evidence can be quantitative or qualitative, but preference should be given to providing robust, quantitative evidence where possible. |
| 2B3 | Empirical evidence that the logic model has functioned as expected (i.e., that increases in the desired outcomes and impacts can be causally attributed to the intervention). |

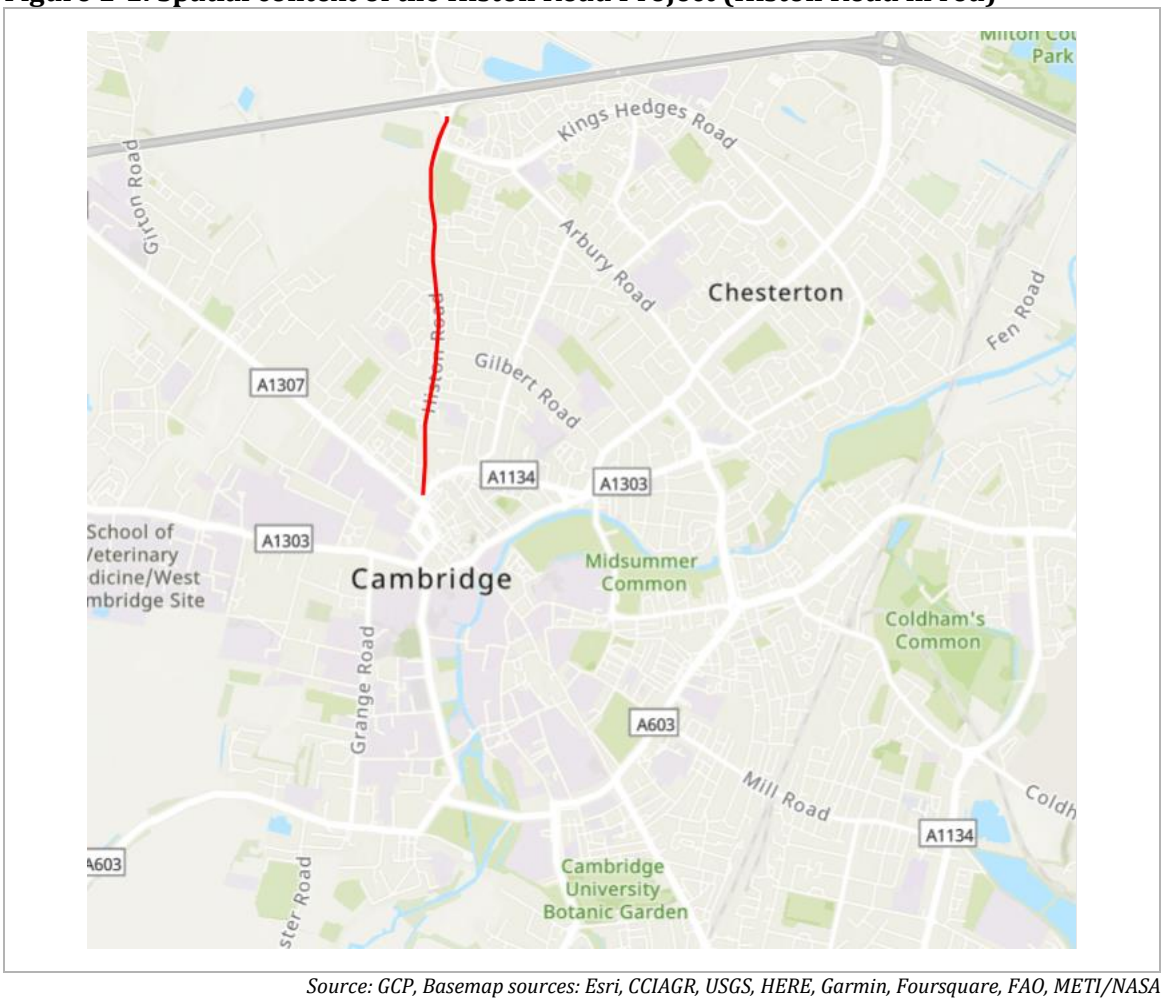
*Source: DLUHC (2023) National Evaluation Framework for Investment Funds*

# Histon Road Project: Overview

**1.3** Histon Road is one of the key radials into Cambridge to the north of the city, however it suffered from localised congestion at peak times, bus journey time reliability was poor, and safety issues had become more pronounced over time, including an increasing trend of cycle collisions. Given anticipated increases in travel demand over the next decade due to the population growth expected in the area (forecast to increase by 20% from 2022-2041 in Greater Cambridge[1]), these issues were anticipated to deteriorate further without intervention, acting as a barrier to future economic growth.

**1.4** Much of the growth anticipated locally is expected to occur in South Cambridgeshire, including parts of the Darwin Green development[2], just off Histon Road. The Histon Road Scheme is expected to encourage the new community here to adopt walking, wheeling and cycling as a key mode of transport once this development is complete.

**Figure 1-1: Spatial context of the Histon Road Project (Histon Road in red)**




*Source: GCP, Basemap sources: Esri, CCIAGR, USGS, HERE, Garmin, Foursquare, FAO, METI/NASA*

[1] Cambridgeshire County Council population forecasts: https://cambridgeshireinsight.org.uk/population/population-forecasts/
[2] See here for further details: Darwin Green (greatercambridgeplanning.org)

1.5 The aim of the Histon Road Project was therefore to design and construct a scheme to support planned growth (including developments at the planning or construction phase), whilst maintaining/improving journey quality and the local environment and creating the capacity for an increased level of sustainable trips to employment/education sites. At the time of writing (August 2024) much of the nearby housing growth is yet to be completed, with construction at Darwin Green underway but the new community not yet in place. It is therefore likely that the number of people using Histon Road will continue to change as new residents move into the area and are hopefully encouraged to travel more sustainably by the scheme.

1.6 The Histon Road Bus Priority and Active Travel Improvement Scheme aims to encourage sustainable travel by providing priority and improved facilities and infrastructure for buses, creating safer and more convenient (and segregated, where practical) routes for cycling and walking and enhancing the local streetscape.

1.7 Construction started in November 2019, with the Scheme substantially opening in October 2021, featuring:

- 540m of bus lanes and 3 floating bus stops;
- 8,000m$^2$ of new cycle lanes;
- Junction improvements (including a Cycle Optimised Protected Signals (CYCLOPS) junction where Histon Road meets Gilbert Road and Warwick Road);
- 6,400m$^2$ of new/improved footpaths and 2 additional pedestrian crossings;
- 8,200m of new and recycled composite material drainage kerbs; and
- The installation of 160m of green fence and 21 new trees

## Evidence paper structure

1.8 The remainder of this evidence paper is structured as follows:

- Section 2: Research approach.
- Section 3: Context, rationale and objectives.
- Section 4: Project delivery.
- Section 5: Outcomes and impacts.
- Section 6: Conclusions.

1.9 The following annexes are provided in a separate document:

- Annex A:  Approach to primary research surveys.
- Annex B: Analysis of bus passenger survey.
- Annex C: Analysis of cyclist intercept survey.
- Annex D: Analysis of residents survey.
- Annex E: Analysis of bus journey times data.
- Annex F: Analysis of bus patronage data.
- Annex G: Analysis of cycle, pedestrian and traffic counts.
- Annex H: Analysis of traffic collisions data.
- Annex I: Evidence Assessment Criteria.

# 2. Research approach

## Research approach summary

*The evidence in this paper meets the requirements of the National Evaluation Framework (NEF) which has been interpreted to the Greater Cambridge context in the Local Evaluation Framework (LEF). The principal focus of the evaluation was to assess whether the project can plausibly be considered to have led to reduced journey times by public transport, increased public transport reliability, increased use of public transport, and increased cycle usage and walking, and how this may have contributed to modal shift and enhancing safety.*

*A logic model and theory of change were articulated in the LEF and informed the research method.*

*Evidence has been collated from a mix of time series data from secondary sources, data from primary research surveys with cyclists, bus passengers and residents and qualitative research with stakeholders.*

*Analysis of this evidence is presented in a series of Annexes with key findings drawn from the evidence presented in the main body of the evidence paper. The evaluation adopted a theory-based approach, applying the principles of Contribution Analysis, to reflect both the complexity of the delivery landscape and routes to impact, and methodological considerations and limitations.*

## Method

**2.1** As set out in the Local Evaluation Framework (LEF), the impact evaluation of the Histon Road Project used a theory-based approach. Data were sourced using mixed-methods in line with guidance in the National Evaluation Framework (NEF). Contribution analysis was used to test the data against a set of research questions to inform an evaluative assessment.

**2.2** The principal focus of the evaluation was to assess whether the project can plausibly be considered to have led to reduced journey times by public transport, increased public transport reliability, increased use of public transport, and increased cycle usage and walking, and how this may have contributed to modal shift and enhancing safety.

**2.3** The project logic model proposed that there would be nine theme specific outcomes that should be explored in the evaluation. These were:

- Reduced journey times for public transport.

- Increased passenger numbers on public transport.
- Increased levels of cycling for all journey purposes.
- Increased walking for all journey purposes.
- Modal shift from car to sustainable (bus) and active (cycling, walking) modes of travel[3].
- Improved local air quality[4].
- Enhanced safety and reduction in collisions.
- Enhanced local environment and streetscape.
- Enhanced access to education/training and employment opportunities.

**2.4** In addition, the project logic model references a range of broader outcomes to be investigated including the improved attractiveness of employment and housing sites and longer-term positive effects on socio-economic conditions including improved business productivity[5] and improved public health (inferred, via whether people are cycling/walking more frequently as a result of the route).

## Sources of evidence

**2.5** The key sources of evidence for the evaluation are summarised below. The data collection methods and detailed data are presented in a series of annexes to this Evidence Paper. These annexes provide the evidence for our contribution analysis, and for IEP to generate their full evaluative assessment.

### Bus passenger survey

**2.6** A survey was conducted with bus passengers travelling on the Stagecoach operated Service 8 along Histon Road with the aim of:

- Gathering data on bus passengers' travel behaviours, including any changes in behaviours as a result of the Scheme focussing on bus use (to estimate quantitatively any change in usage and modal shift from car to bus). Plus, any factors influencing this, including related to the improvements to Histon Road and other factors (to estimate effects on usage for employment or education/training purposes).

[3] The logic model also identified $CO_2$ savings via modal shift. These are not covered in this impact evaluation, as set out in the agreed LEF.
[4] It is noted that potential impacts on air quality will be considered at a programme level.
[5] The LEF indicated that the potential longer-term effects of the scheme on improved business productivity would not be assessed quantitatively, rather via interviews with businesses located on or around Histon Road to understand if and how the improvements may have led to effects on their organisation.

- To gather data on the effects of the Scheme on the quality of the bus user experience, awareness of the improvements, perceptions of changes in journey times and reliability, safety, access to training, education and employment, and the local environment and streetscape.

**2.7** The survey also gathered data on satisfaction with the bus service aspects of the Scheme, to provide evidence on the potential wider effects and contribution of the Scheme to public transport in Cambridge.

**2.8** The survey was completed between 7am and 7pm on six days over a two week period in May 2024 (including weekdays and weekends) using a mixed-method approach, with interviews administered on-board buses with people travelling both towards and away from the city-centre, and also with those waiting at both inbound and outbound bus stops along the Service 8 route (see details in Annex A). The survey methodology involved either face-to-face interviews or, where time was limited to complete these interviews, the distribution of postcards with a link to an online survey for self-completion.

**2.9** The aim was to complete 400 survey responses[6] (200 in each direction). Table 2-1 shows that 387 survey responses were achieved in total (97% of the aim) within the defined fieldwork period (205 from passengers travelling outbound and 182 from passengers travelling inbound). Further details on the practicalities of undertaking the bus passenger survey can be found in Annex A with analysis of the survey results provided in Annex B.

### Cyclists Intercept Survey

**2.10** An intercept survey was conducted with cyclists travelling along Histon Road with the aim of:

- Gathering data on users' travel behaviours, including any changes in behaviours as a result of the Scheme focussing on cycling (to estimate quantitatively any change in usage and modal shift from car to bicycle). Plus, any factors influencing this, including related to the improvements to Histon Road and other factors (to estimate effects on usage for employment or education/training purposes).

- To gather data on effects of the Scheme on the quality of the cycling experience, awareness of the improvements, perceptions of safety, access to training, education and employment and the local environment and streetscape on Histon Road.

**2.11** The survey also gathered data on satisfaction with the cycling aspects of the Scheme, to provide evidence on the potential wider effects and contribution of the Scheme to active travel in Cambridge.

[6] Target sample size set to provide an expected deliverable, reasonable and proportionate level of confidence in the results (with 400 completions resulting in a 95% confidence interval of up to +/-5%).

**2.12** The survey was completed between 7am and 7pm on seven days over two weeks in May 2024 (including weekdays and weekends), and involved the distribution of postcards with a link to an online survey to cyclists at safe stopping points on both sides of the carriageway at the traffic lights at the CYCLOPS junction of Histon Road with Gilbert Road/Warwick Road. The survey methodology was therefore designed to gather survey responses from cyclists travelling in both directions along Histon Road (towards and away from the city-centre - see details in Annex A).

**2.13** The aim was to complete 200 survey responses[7]. Table 2-1 shows that 346 survey responses were achieved in total (173% of the aim) within the defined fieldwork period (171 from cyclists travelling outbound and 175 from cyclists travelling inbound). Further details on the practicalities of undertaking the cyclist intercept survey can be found in Annex A with analysis of the survey results provided in Annex C.

### Residents survey

**2.14** A telephone survey was conducted with residents living within a 2km east-west radius of Histon Road, to reflect the likely areas within which the Scheme improvements are likely to have influenced resident behaviour, with the aim of:

- Gathering data on users' travel behaviours, including any changes in behaviours as a result of the Scheme focussing on pedestrian use (to estimate quantitatively any change in usage and modal shift from car to walking/wheeling and car to multi-mode travel including walking/wheeling). Plus, any factors influencing this, including related to the improvements to Histon Road and other factors (to estimate effects on usage for employment or education purposes).

- To gather data on effects of the Scheme on the quality of the pedestrian experience, awareness of the improvements, perceptions of safety, access to training, education and employment and the local environment and streetscape.

**2.15** The survey also gathered data on satisfaction with the pedestrian aspects of the Scheme, to provide evidence on the potential wider effects and contribution of the Scheme to active travel in Cambridge.

**2.16** The survey was completed between 7am and 7pm over a four week period during May 2024 (including weekdays and weekends), using a Random Digit Dial (RDD) methodology and following a process of up to four call backs where no contact was initially made. The survey was the principal source of primary research evidence to inform the assessment effects of the Scheme on walking/wheeling due to the availability and location of the available pedestrian count data for Histon Road (as detailed in the LEF and below).

[7] Target sample size set to provide an expected deliverable, reasonable and proportionate level of confidence in the results (with 200 completions resulting in a 95% confidence interval of up to +/-7%).

**2.17** The aim was to complete 400 survey responses[8] to quotas set by age and gender, representative of the 2021 Census. Table 2-1 shows that 312 survey responses were achieved in total (78% of the aim). Owing to the number of households with landlines within the defined catchment area for the survey, and methodological issues around achieving a representative sample using a telephone survey methodology (as detailed below and in Annex A) the achievement of the proposed quotas in the sampling plan was not possible.

**2.18** Further details on the practicalities of undertaking the residents survey, including the reasoning for not topping up the telephone survey sample using a follow-up door-to-door survey methodology (also targeted at boosting under-represented age groups of respondents as a known issue with telephone surveys) as initially intended, can also be found below and in Annex A. Analysis of the survey results is provided in Annex D.

**Table 2-1: Survey response rates**

| Survey | Number of survey responses (95% confidence interval) | Direction of travel of respondent | |
|---|---|---|---|
| | | North (outbound) | South (inbound) |
| Bus passenger survey | 387 (±5%) | 205 | 182 |
| Cyclist intercept survey | 346 (±5%) | 171 | 175 |
| Residents survey | 312 (±6%) | N/A | N/A |

*Source: ITP. Figures include complete survey responses only*

### Bus journey times

**2.19** Time series 'real-time' information data was collated from the Vix database (sourced via Cambridgeshire County Council (CCC)) providing observed inbound and outbound bus journey times for the month of March for Service 8 on Histon Road. This data was sourced for a range of years both pre- and post-Scheme implementation, in comparison with the equivalent data for bus services on each of the chosen comparator corridors into Cambridge (Service 6 on Huntingdon Road and Service 3 on Newmarket Road). Analysis of the bus journey times data is provided in Annex E.

### Bus patronage data

**2.20** Time-series data on bus patronage levels was provided by Stagecoach for analysis. This included observed boarding passenger numbers for the month of March on the inbound and outbound Service 8 on Histon Road at specified times (covering morning and afternoon/evening periods on weekdays and weekends) for a range of years both pre- and post-Scheme implementation, as well as for the two services on the comparator corridors (as

[8] Target sample size set to provide an expected deliverable, reasonable and proportionate level of confidence in the results (with 400 completions resulting in a 95% confidence interval of up to +/-5%).

per above). The release of this data is subject to the limitations of a non-disclosure agreement with Stagecoach, which includes reference to the reporting of percentage changes in bus passenger numbers only (rather than absolute numbers of passengers or absolute changes in bus passenger numbers). Analysis of the bus patronage data is provided in Annex F.

### Cycle, pedestrian and motorised vehicle counts

**2.21** Time-series data on cycle, pedestrian and motorised vehicle counts was collated from two different sources for analysis to facilitate a comparison of the position on Histon Road pre- and post-intervention, and to compare any changes in the volume of pedestrians, cycles and motorised vehicles between Histon Road and the comparator corridors (Huntingdon Road and Newmarket Road):

- The Annual Cambridge Radial Survey, sourced from CCC, which involves an annual, one-day survey in October/November counting pedestrians, cycles, and motorised vehicles by type at half hourly intervals, 7am – 7pm.

- Vivacity sensors on Histon Road (sensors 62 and 63/151), Huntingdon Road (sensor 95) and Newmarket Road (sensor 43) providing pedestrian, cycle and motorised vehicle counts in 5-minute, 15-minute, hourly and daily intervals both in and out of the city centre.

**2.22** Note should be taken of the need for caution in the analysis of the Radial Survey data in relation to cycling and pedestrian outcomes (due to the data collection location) and that Vivacity data cannot be used to inform the pre-project period for the Scheme given changes in the sensor software and data quality. Analysis of the cycle, pedestrian and motorised vehicle count data is provided in Annex G.

### Data on traffic collisions

**2.23** Data on road traffic collisions in Cambridgeshire covering the period start-April 2017 to end-March 2024 was publicly available for analysis from Cambridgeshire Insight.[9] The analysis of this data was primarily concerned with exploring whether the Scheme had contributed to improved safety via a reduction in road traffic collisions involving pedestrians and cyclists. Therefore, the analysis focused on collisions that involved a bicycle as one of the vehicles, a cyclist casualty and/or had a pedestrian casualty. The severity of collisions – with each classified as either slight, serious, or fatal – was also analysed. Overall trends in the frequency of collisions on Histon Road were compared with trends in the frequency of collisions occurring on the comparators corridors (Huntingdon Road and Newmarket Road). This analysis is provided in Appendix H.

**2.24** Given the wide range of factors that contribute to the frequency of road traffic collisions, and also considering the modest volume of collisions, the evaluation did not seek to directly

[9] Available here: https://data.cambridgeshireinsight.org.uk/dataset/cambridgeshire-road-traffic-collision-data

attribute any changes to the Scheme in quantitative terms. Rather, data has been used to inform the theory-based assessment on whether it is plausible that the Scheme may have contributed to improvements in perceived safety, through triangulation with evidence from the surveys and stakeholder interviews.

### Stakeholder interviews

**2.25** Interviews with 9 project specific stakeholders were completed in total, including with local councillors and council officials, a local educational institution, key non-motorised user groups, and a developer located in close proximity to Histon Road. The primary focus of these interviews was to understand any post-Scheme effects of the Scheme on the attractiveness and deliverability of new housing and employment sites near the route, access to training and employment opportunities, and any wider organisational benefits or effects (both direct and indirect). In addition, the impact evaluation has drawn on evidence related to the Scheme from interviews conducted with a further 6 strategic stakeholders as part of the wider evaluation research for the Gateway Review (e.g. the Capacity Development and Partnership Working strand) where they referenced Histon Road specifically.

### Summary of sources of evidence and alignment with the LEF

**2.26** Figure 2-1 below summarises the sources of evidence used for the impact evaluation.

**Figure 2-1: Sources of evaluation evidence**

| | Secondary time-series data (pre- and post-) | | | | | Primary data / qual. interviews (post-) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Bus journey times | Cycle & ped. counts | Bus patronage | Vehicle counts | Road traffic collisions | Bus pax survey | Cyclists intercept survey | Residents survey | Stakeholder interviews |
| Reduced journey times for public transport | ✓ | | | | | ✓ | | | |
| Increased passenger numbers on public transport | | | ✓ | | | ✓ | | | ✓ |
| Increased levels of cycling | | ✓ | | | | | ✓ | | ✓ |
| Increased walking | | ✓ | | | | | | ✓ | ✓ |
| Modal shift | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |

| | Secondary time-series data (pre- and post-) | | | | | Primary data / qual. interviews (post-) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Bus journey times** | **Cycle & ped. counts** | **Bus patronage** | **Vehicle counts** | **Road traffic collisions** | **Bus pax survey** | **Cyclists intercept survey** | **Residents survey** | **Stakeholder interviews** |
| Enhanced safety and reduction in collisions | | | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Enhanced local environment and streetscape | | | | | | ✓ | ✓ | ✓ | ✓ |
| Enhanced access to education/ training and employment | | | | | | ✓ | ✓ | ✓ | ✓ |
| *Source* | *CCC (Vix Operator Reports)* | *CCC (Cambr. Radial Survey / Vivacity sensor data - (post-only))* | *Operator (Stage-coach)* | *CCC (Cambr. Radial Survey / Vivacity sensor data - (post-only))* | *CCC (via the Police)* | *SQW/ ITP (May 2024. On bus/at stop & online survey)* | *SQW / ITP (May 2024. Online survey)* | *SQW / ITP (May 2024. Telephone survey)* | *SQW / ITP (June 2024. Interviews via MS Teams)* |

*Source: GCP*

**2.27** The overall approach proposed in the LEF for the impact evaluation of the Scheme remained appropriate for the evaluation. However, an adjustment was made to the scheduling of the residents survey (previously planned to be conducted in April 2024) due to the timing of the May 2024 local elections and the need to observe pre-election period guidance and specific restrictions on communications with the public during this period.

### Challenges with data collection and analysis

**2.28** There were several challenges with the data collection and analysis processes that need to be considered when interpreting the evidence:

- Although the availability of bus journey time and bus patronage data for bus services 8 (Histon Road), 6 (Huntingdon Road) and 3 (Newmarket Road) was generally good, it was noted that data for Service 6 for March 2022 was inconsistent due to Stagecoach operating a reduced timetable for that service in the early part of that year. This data has therefore not been included in our comparative analysis of bus patronage.

- A lack of available data detailing the demographic characteristics of passengers on Service 8 meant that we were unable to evaluate how closely the bus passenger survey sample matched the population of users. Consequently, the bus passenger survey results have been calculated based on an unweighted analysis of the survey data.

- As noted in the LEF, there is a need for caution in the use of the Radial Survey data in relation to assessing active travel outcomes owing to the data collection location to the north of Histon Road near the junction with the A14. The count site is located some distance away from the main residential area and the location of the cycling and pedestrian improvements, and pedestrian levels in this location in particular are low. This highlights the importance of the primary research surveys in assessing the effects of the Scheme on cycling and walking / wheeling levels. Radial Survey data can however be used to assess motorised vehicle levels on Histon Road over time to complement the survey evidence on modal shift.

- In addition, CCC identified concerns regarding the quality of the Autumn 2022 Radial Surveys. For this reason, all sites were resurveyed in Spring 2023. The issues encountered in Autumn 2022 were resolved with the appointment of a new survey contractor, but the Autumn 2022 data has not been used in the evaluation.

- The multiple different locations for joining and leaving Histon Road (including between the Vivacity sensors) and the potential for users to be counted multiple times by individual sensors on the same and separate journeys (due to regular and repeat use of the corridor) mean that the Vivacity cycle count data does not reflect the number of actual unique users. Consequently, it was not possible to calculate how representative the behaviours of the survey sample of cyclists on Histon Road were compared to those of the population of cyclists along the corridor, and no data is available on the personal characteristics (e.g. age, and gender) of the population of Histon Road cyclists. The reporting of the results of the cyclist intercept survey is therefore based on an unweighted analysis of the survey data.

- As noted in the Mid-Term Evidence Paper, Vivacity data cannot be used to inform the pre-project period for Histon Road given changes in the sensor software and data quality prior to August 2022. The Vivacity data for Histon Road will therefore provide information on cycling and pedestrian flows in the post-project period only. Care is needed in interpreting this data when considering the contribution of the project to any observed changes in cycling/walking levels, and it should be seen as contextual only.

- In addition, CCC identified a limitation regarding the accuracy of Vivacity Sensor 63 counts from October to December 2023. Records show that Sensor 63 had lower than usual counts due to scaffolding on a building near the camera obstructing its view. These counts have therefore been excluded from the analysis.

- Obtaining representative samples using telephone surveys has been a particular challenge for researchers in recent years due to a high uptake in mobile phone use, particularly amongst younger segments of the population, and the corresponding decline in the number of households with telephone landlines more generally. The ability to achieve the telephone survey quotas set by age and gender within the relatively small catchment area for the residents survey therefore represented a known risk in administering and analysing a survey of this type. An approach to 'top up' under-represented groups in the telephone survey sample, using a face to face survey methodology (with survey questionnaires administered to households that had not already been contacted by telephone) was therefore agreed with the GCP as a mitigating factor when planning the survey fieldwork. However, the calling of the General Election on 22nd May 2024, and the need to then immediately observe restrictions on communications with the public during the pre-election period, effectively prevented the planned implementation of this strategy in the last week of May. Consequently, there was a much higher proportion of residents in the 65 years and above age groups within the sample when compared to the population. This also precluded the weighting of the survey sample data using 2021 Census population estimates due to the disproportionate size of the weights calculated to adjust the survey results to reflect the target population. The reporting of the residents survey results is therefore based on an analysis of the unweighted survey data. The findings should be viewed in this context, with an over representation of older residents in the sample, meaning that meaningful conclusions can only be drawn from the perspective of this cohort of respondents.

- The 7am-7pm fieldwork period for each survey may have influenced the results, with users outside this time not captured, and potential differences in the use/purpose of usage. However, these hours were considered to be the most appropriate and proportionate to cover both commuting (on weekdays) and leisure (on weekends) usage. Further, this period included the points when effects on modal shift were expected to be most pronounced i.e. including both the morning and evening 'rush hour' period for commuting, school-related travel etc.

- Consistent with the LEF and the Mid-Term Evidence Paper, the plan was to consult with businesses along Histon Road. Businesses were approached by the GCP to ask for their consent to be contacted by SQW/ITP. However, despite considerable efforts and a range of different opportunities for individuals to be involved, none of the individuals contacted responded to the GCP. Assessment of the observed/perceived effects of the project on improved business productivity is therefore not included in this paper. The number of project specific stakeholder interviews conducted (x9) was largely in line with the approach outlined in the LEF (x10).

- Consideration of the potential influence of the similar scheme on Milton Road on conditions and outcomes observed on Histon Road will be a particular focus of the Contribution Analysis approach. For example, there may be diversions of traffic from

Milton Road onto Histon Road and Newmarket Road, and changes to individual travel movements, over the evaluation period, which may offset the potential effects of the project on Histon Road and the performance of the comparator route on Newmarket Road. These will therefore need to be taken into account when considering the contribution of the Scheme, relative to other factors which will also include the legacy of Covid-19, the effect of other transport investments or developments in the city and broader social and economic drivers and conditions influencing behaviours.

## Analytical approach

**2.29** Within this Evidence Paper the data sources are analysed using a range of techniques. Approaches to analysis include:

- Quantitative analysis of closed questions from the three primary research surveys using SPSS and Excel. See Annexes B, C and D.

- Quantitative analysis of secondary data on bus journey times, bus patronage, cycling, pedestrian and vehicle counts and traffic collisions for Histon Road and the two comparator corridors using Excel. The approach to analysing these datasets is set out in detail in Annexes E, F, G and H.

- Thematic analysis of qualitative evidence from the open survey questions and the stakeholder interviews. On the latter, each interview was written up by the interviewer from the SQW/ITP evaluation team using a standard template in Excel. All interview notes were then analysed thematically for consistency of key messages or any differences across all interviewees.

- Contribution analysis for the impact evaluation. This used the evidence collected to test the logic model and theory of change, to assess the contribution of the Scheme to the outcomes observed. It does this by assessing the contribution of the project relative to other factors, drawing on relevant quantitative and qualitative data. This provides the basis for our evaluative assessment of the impact of the intervention. A 'contribution story' has been developed for each of the key outcomes and this is presented in the final section.

# 3. Context, rationale and objectives

## Context, rationale and objectives summary

*Through improvements to the road infrastructure including creating enhanced priority and facilities for buses, new and improved cycling and walking routes, and greening and landscaping improvements to the public realm, the Histon Road Bus Priority and Active Travel Improvement Scheme will support planned growth, whilst maintaining/improving journey quality and the local environment, and creating the capacity for an increased level of sustainable trips to employment/education sites.*

*Broader outcomes listed in relation to the attractiveness of employment and housing sites can be expected to be realised following scheme opening, but it will take several years for this to be realised fully.*

*Stakeholder engagement and survey evidence from users suggest the case for the project was strong. Key explanations for use of Histon Road from cyclists and pedestrians included that it was more comfortable / pleasant than alternatives (partly due to traffic congestion experienced when driving), easier to complete the journey than using alternatives, safer than the available alternatives and that there were health benefits associated with active travel use. The bus was also felt to be quicker, more comfortable / pleasant and easier to use but for many users it was the transport mode of choice due to a lack of available/cost effective alternatives.*

**3.1** In this section we provide background to the Histon Road Project by outlining why the intervention was needed, and the anticipated outputs and outcomes to be generated, based on the 'logic model' for the intervention.

## Context

**3.2** Effective transport infrastructure is key to local economic growth, but poor or sub-optimal transport connections can act as a barrier to growth, due to congestion, inconsistent and unreliable journey times, infrequent services, or a lack of accessibility to areas of opportunity. Transport schemes have the potential to address these barriers and unlock economic and social opportunities. Histon Road is one of the key radials into Cambridge and is identified as an important public transport corridor. However, it suffered from localised congestion at peak times, bus journey time reliability was poor, and safety issues had become more pronounced over time, including an increasing trend of cycle collisions.

**3.3** Given anticipated increases in travel demand over the next decade due to the growth of the area, these issues were anticipated to deteriorate further without intervention. Through improvements to the road infrastructure (including creating enhanced priority and facilities and infrastructure for buses, new and improved cycling and walking routes) and greening and landscaping improvements to the public realm, the Histon Road Bus Priority and Active Travel Improvement Scheme aims to support planned growth, whilst maintaining/improving journey quality and the local environment, and creating the capacity for an increased level of sustainable trips to employment/education sites.

## Logic model

**3.4** In planning and evaluating publicly funded projects, it is good practice to develop a 'logic model' which articulates explicitly the relationship between inputs, activities, outputs, and outcomes:

- Inputs are the resources used by the project, including the investment fund resource.
- Activities are those tasks undertaken by the project.
- Outputs are the readily measurable results of those activities.
- Outcomes are the benefits attributable to the project including 'intermediate outcomes; for the direct beneficiaries of the project, and 'final outcomes' for the wider economy/society.'

**3.5** Logic models are useful devices to inform impact evaluation, as they encourage thinking about the steps required for a project to have its desired effects, and the nature of effects that can be covered in evaluation. Therefore, to be effective, a logic model should represent the causal theory about why and how a project might work over time, that is, the 'theory of change.'

**3.6** The logic model for the Histon Road Project is presented below. This was included as part of the Local Evaluation Framework to inform the impact evaluation, and the research methods adopted.

**Table 3-1: Histon Road project logic model**

| | |
|---|---|
| **Logic model title** | Histon Road Bus Priority and Active Travel Improvement Scheme |
| **Interventions / projects covered by logic model** | Histon Road |

**Theory of change**

Histon Road is one of the key radials into Cambridge and is identified as an important public transport corridor. However, it suffers from localised congestion at peak times, bus journey time reliability is poor, and safety issues have become more pronounced over time, including a current trend of cycle collisions. Given anticipated increases in travel demand over the next decade due to the growth of the area, these issues are anticipated to deteriorate further without intervention. Through improvements to the road infrastructure including creating enhanced priority and facilities for buses, new and improved cycling and walking routes, and greening and landscaping improvements to the public realm, the Histon Road Bus Priority and Active Travel Improvement Scheme will support planned growth, whilst maintaining/improving journey quality and the local environment, and creating the capacity for an increased level of sustainable trips to employment/education sites.

Key assumptions: there is scope to further increase both walking and cycling above the current levels achieved in Greater Cambridge; there is scope to improve bus journey reliability; the Scheme will enhance demand for housing and employment at key development sites.

Other Factors: the Scheme is part of the Transport Strategy for Cambridge and South Cambridgeshire (TSCSC), the Long Term Transport Strategy (LTTS), and a strategic focus on supporting housing and employment growth across the City Region. There are a range of other schemes to support active travel, bus priority measures, and enhanced city centre access (including the Making Connections Scheme), and the proximate Milton Road Scheme, which involves similar improvements to a further key radial route. Note there are likely to be short-term adverse effects during the construction period on Histon Road, and potentially in the initial period post-completion as the new infrastructure and travel patterns become established. Further, traffic conditions on Histon Road may be impacted by the developments on Milton Road which will be completed from Summer 2022- Summer 2024, with the potential for traffic displacement.

| Inputs | Activities | Outputs | Outcomes |
|---|---|---|---|
| *Investment Fund inputs*<br>• £10.36m from the Investment Fund<br><br>*Other inputs (including staffing and in-kind)*<br>• £0.24m in S106 funding | • Cycling infrastructure development / improvement<br>• Junction improvements (including a Cycle Optimised Protected Signals junction)<br>• Bus priority works and supporting infrastructure (e.g. bus lane, floating bus stops) | • Scheme is constructed and becomes fully operational<br>• Km of new or improved cycling infrastructure delivered<br>• Km of dedicated bus / public transport infrastructure delivered | **Theme-specific outcomes**<br>• Reduced journey times for public transport<br>• Increased levels of cycling for all journey purposes<br>• Increased walking for all journey purposes |

- Stakeholder /public consultation feedback
- Consultancy design team and early contractor engagement

- Key corridor improvements e.g. footway crossings, footways
- New cycle parking facilities
- Public realm improvement work, including greening

- Km of new or improved footways
- Junctions improved
- $m_2$ of improved public realm
- Cycling / bus infrastructure improvements delivered
- New or improved green infrastructure delivered (e.g. trees, green fencing)
- Construction years of employment (i.e. to build infrastructure)
- Metres data cabling installed

- Increased passenger numbers on public transport
- Enhanced safety and reduction in collisions
- Modal shift from car to sustainable (bus) and active (cycling, walking) modes of travel, with associated $CO_2$ savings, and maintained/reduced congestion for general traffic
- Improved local air quality
- Enhanced local environment and streetscape
- Enhanced access to education/training and employment opportunities

**Broader outcomes**

- Improved attractiveness of employment sites at Waterbeach barracks, Northstowe and wider city centre
- Improved attractiveness of housing sites at Waterbeach barracks and Northstowe

| | | | |
|---|---|---|---|
| | | | • Long-term positive effects on socio-economic conditions including:<br>➢ improved business productivity via travel time savings, agglomeration effects<br>➢ improved public health (via increased active travel, air quality) |
| **Expected timescales for inputs / activities / delivery of outputs and outcomes** | | | |
| • Stakeholder/public consultation – 2015-2016<br>• Consultant Design Team Inputs – 2016-2017 | • Detailed Design – 2018-2019 | • Construction – 2019-2022 (note that the main construction was completed in 2021 and the Scheme substantially opened in 2021, with only minor works completed in 2022). | • **Theme-specific outcomes** listed above expected to start from scheme opening. Given the seasonal variation in cycling the benefits are expected to increase over time and may not reach their **maximum until summer 2025**.<br>• **Broader Outcomes** listed above in relation to the attractiveness of employment and housing sites can be expected to be realised following scheme opening, but it will take several years for this to be realised fully. The long-term positive effects on socio- |

| | |
|---|---|
| | economic conditions are expected to take 3-5 years post-opening to start to be realised and observable. |

***Relationship to other interventions***

Other Investment Fund logic models:

- Milton Road – which aims to improve public transport, cycle, and walking infrastructure on a key route between the city centre, the A14 and A10, as well as the nearby villages of Milton and Waterbeach.
- Making Connections and Road Hierarchy Review, city-wide proposals to reduce vehicle travel and enable modal shift the walking, cycling and public transport

Other non-Investment Fund activities:

- Developer-led improvements at Northstowe and Darwin Green

*Source: Greater Cambridge Partnership*

## Reflections on the logic model

**3.7** It is not within the scope of the impact evaluation to assess formally the validity of the rationale for investment, or to comment on the appropriateness of the use Investment Fund resources for the project; these are not issues covered in the relevant Performance Indicators. However, this noted, it is highlighted that **both the stakeholder engagement completed for this evaluation, and the survey evidence from users, suggest that the case for the Scheme was strong.** This is important for the contribution analysis, and whether it is plausible that outcomes observed are associated with the Scheme.

**3.8** There was **consistent feedback from stakeholders that the project was needed**, both to help address levels of congestion and traffic flow (and the associated challenges this brings related to the quality of the local environment and quality of life and health for residents) thereby improving bus journey time reliability and addressing barriers related to safer cycling and walking/wheeling. These barriers included for example **the level of traffic on the road, the removal of parked vehicles, the lack of a segregated cycle route from north to south and a better designed active travel network more generally** including at key junctions and crossroads.

> **"There are road capacity limitations on the corridors into Cambridge … any infrastructure projects that can promote a modal shift away from car trips have a benefit in relation to making the case for new development"**
>
> **Stakeholder**

**3.9** Responding to **the need to enhance connectivity across the city, as part of the broader development of an effective and integrated active travel infrastructure**, was also highlighted as important by stakeholders. This included the case for ensuring improved connectivity generally related to **better linking the city centre and the wider sustainable transport networks of the city, but also its contribution in enabling development** to the North of Cambridge specifically. The need to improve access for people with limited mobility was also noted through the stakeholder engagement activity.

**3.10** To provide further insight into the case for the intervention, bus passengers, cyclists and pedestrian users were asked why they use the bus, cycle and walk/wheel on Histon Road as illustrated in Figure 3 1.

**3.11** For cyclists and pedestrians the most popular responses were:

- It was **quicker** than alternatives.

- It was **more comfortable / pleasant** than alternatives.
- For the associated **health benefits**.
- There is **too much congestion to drive**.
- It was **easier to complete the journey** than using alternatives.
- It was **safer** than alternatives.

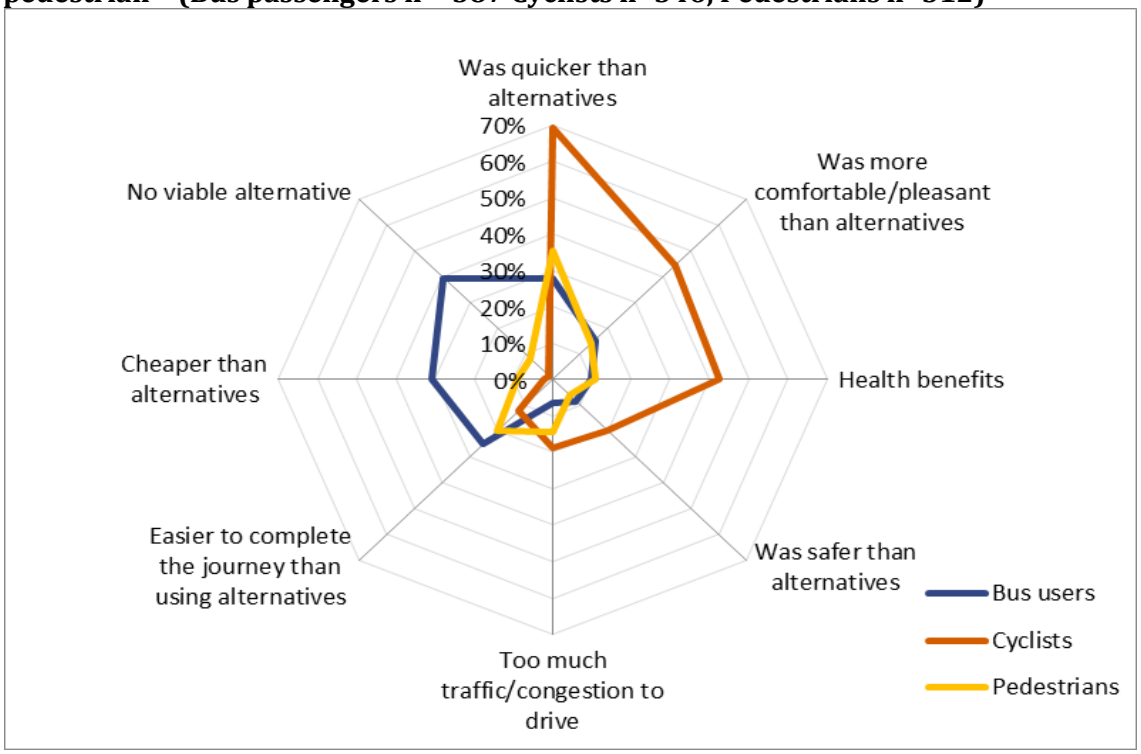
> **The priority should be to increase safety for pedestrians and cyclists, reduce cars and have clean, efficient buses and lots of trees and greenery**
>
> **Cyclist**

**3.12** These responses align strongly to the stakeholder perspectives set out above related to the case for the project from an enhanced connectivity perspective (quicker and easier to complete journeys) and for addressing barriers to active travel (more comfortable/pleasant, avoiding certain roads or stretches of road/safer than alternatives) and improved public health (via increased active travel).

**3.13** The main reasons for bus use were slightly different, relating more to **a perceived lack of available and cost-effective alternatives**. This may have been due to a **lower level of awareness of the Scheme amongst bus users (41%) compared to cyclists (82%) and pedestrians (94%)** However, the next most commonly cited reasons for bus use on Histon Road were again consistent with the other surveys in that:

- It was **quicker** than alternatives.
- It was **more comfortable / pleasant** than alternatives.
- It was **easier to complete the journey** than using alternatives.

**Figure 3-1: Reasons for choosing to use Histon Road as a bus passenger, cyclist or pedestrian[10] (Bus passengers n = 387 Cyclists n=346, Pedestrians n=312)**




*Source: ITP analysis of primary research survey evidence. Note the figure only includes categories common to all three surveys.*

[10] Bus passengers and cyclists were asked 'Why did you choose to use the bus/cycle for your journey on Histon Road?' Residents were asked 'Why do you choose to make this/these journeys on Histon Road as a pedestrian?'

# 4. Project delivery

## Project delivery summary

*Construction of the Histon Road Bus Priority and Active Travel Improvement Scheme started in November 2019. The works included enhanced priority and facilities for buses, new and improved cycling and walking routes, and greening and landscaping improvements to the public realm. The Scheme substantially opened to users in October 2021.*

*Actual Investment Fund expenditure was £11.48m (111% of planned expenditure). The project also received £0.45m in match funding from S106 contributions.*

*The data shows that Histon Road is consistently used by cyclists and pedestrians with average daily flows ranging between c.916 and 1,472 cycling journeys and c. 1,413 to 1,612 pedestrian journeys. There is also evidence that the 8 bus service on Histon Road has been increasingly used on Histon Road since 2022.*

*Overall, the feedback from survey respondents and consultees indicates a high level of satisfaction with the quality of the implemented Scheme including in relation to the quality of the surfacing, bus and cycle journey times, the separation of cyclists and pedestrians from motorised traffic, and perceived personal safety and security when walking to a bus stop.*

*Areas for improvement were identified including the scope to adjust the priority given to cyclists and pedestrians over motorised traffic at some traffic lights and junctions (including at the CYCLOPS junction) and in the design on the scheme overall. In this context, there is a need to recognise the challenges in satisfying the needs of all user groups in scheme design and implementation. The need for improved frequency, reliability and punctuality of the 8 bus service was also identified, although this is not directly within the control/influence of the Histon Road Project or the Greater Cambridge Partnership.*

**4.1** This evidence paper focuses specifically on the evidence of the impact of the Histon Road Project. Progress evaluation issues are considered in the Progress Evaluation Evidence paper, and recapped here to frame the evidence of impact which follows.

## Intervention chronology and coverage

**4.2** In January 2015, Histon Road was included in the GCP's five-year infrastructure investment programme along with a committed budget. Subsequently:

- In October 2019, the GCP's Executive Board approved the final design and agreed the appointment of the scheme contractor.
- Construction commenced in November 2019.
- Initial construction was impacted by the Covid-19 pandemic which delayed project delivery beyond its original completion date of Q3 2020-2021 i.e. by December 2020 (although reduced usage over the pandemic period enabled the scheme to accelerate delivery subsequently).
- Main construction was completed and the scheme substantially open by October 2021.
- Some minor works continued and were later completed in early 2022.

## Project expenditure

**4.3** Actual Investment Fund expenditure on Histon Road was compared with an anticipated spend of £11.83m by GR#2. The project also received £454,083 in match funding.

**4.4** This was more than the original LEF budget of £10.36m (see Table 4-1, column A) as additional resurfacing works were subsequently included in the cost. However, Investment Fund expenditure was lower than expected against the revised budget because of S106 monies additional to those originally expected.

**Table 4-1: Histon Road - Investment Fund Expenditure at Q4 2023-24**

| A: Planned Fund lifetime expenditure *(Source: LEF)* | B: Planned lifetime match funding *(Source: LEF)* | C: Planned expenditure by GR#2 Q4 2024-25 *(Source: GCP)* | D: Actual Fund expenditure by Q4 2023-24 *(Source: GCP)* | E: Actual match expenditure by Q4 2023-24 *(Source: GCP)* | F: % of planned Fund expenditure realised (D/A) |
|---|---|---|---|---|---|
| £10,360,000 | £240,000 | £11,834,775 | £11,482,917 | £454,083 | 111% |

*Source: Greater Cambridge Partnership*

## Project outputs

**4.5** The outputs delivered on Histon Road are presented in Table 4-2. Outputs were delivered as planned by the completion of the project including improved cycle or walking paths (4.4km and 5.1km respectively), 11 improved bus stops and 12 junction improvements.

**Table 4-2: Outputs**

| | Planned | Achieved | % |
|---|---|---|---|
| Schemes constructed | 1 | 1 | 100 |
| Km of new or improved cycling infrastructure delivered | 4.4 | 4.4 | 100 |
| Km of dedicated bus / public transport infrastructure delivered | 0.5 | 0.5 | 100 |
| Km of new or improved footways | 5.1 | 5.1 | 100 |
| Junctions improved | 12 | 12 | 100 |
| $m_2$ of improved public realm | 600 | 600 | 100 |
| Cycling / bus infrastructure improvements delivered (improved bus stops) | 11 | 11 | 100 |
| New or improved green infrastructure delivered (trees planted) | 21 | 21 | 100 |
| New or improved green infrastructure delivered (metres of green fencing) | 160 | 160 | 100 |
| Metres of data cabling installed (Citi Fibre and GBN) | N/A (additional output) | 4400 | N/A |

*Source: GCP Final Report – May 2021*

# Reflections on delivery

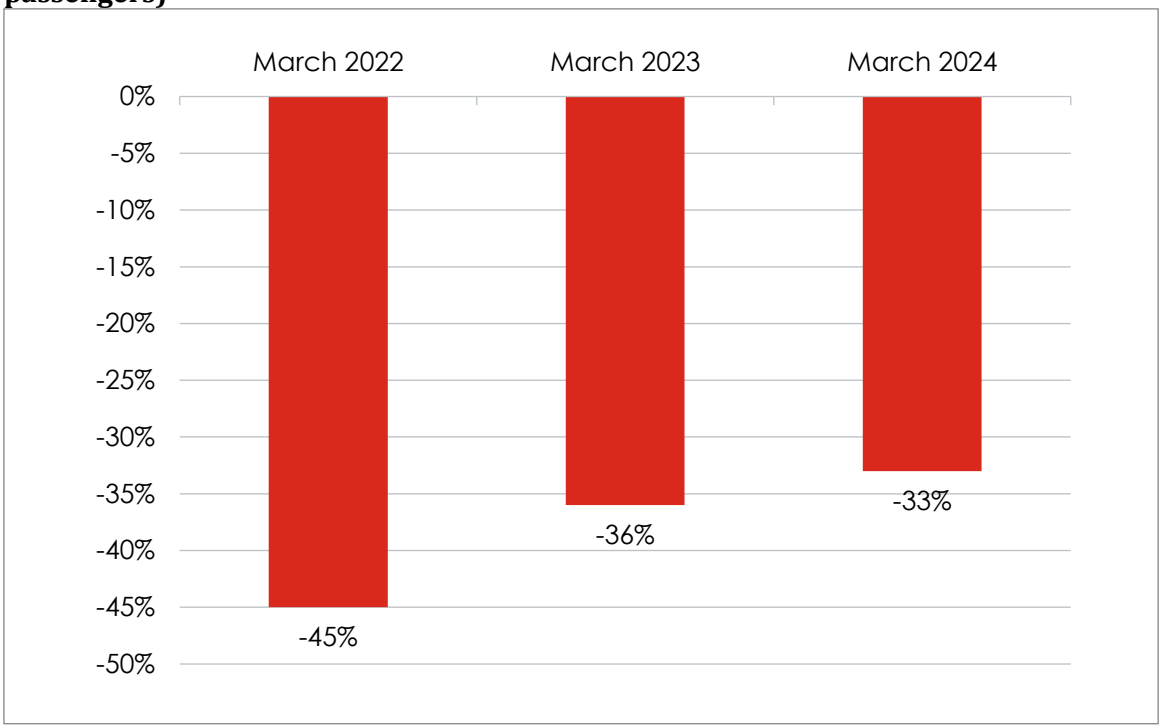
**4.6** This sub-section sets out headline evidence on usage of Histon Road drawing on the bus patronage and Vivacity data, and evidence from survey respondents on the purpose of their journey, regularity of usage, and perspectives on the quality of the Scheme. This is structured so that public transport (bus) is analysed first, followed by cycling and walking/wheeling.

## Public transport

**4.7** The 8 bus service on Histon Road provided a half hourly service frequency in both directions up until a recent timetable change came into effect on 14th April 2024, with a 40 minute service frequency now provided (as noted by some respondents to the bus passenger survey). Service 8 bus patronage data shows **buses have been increasingly used by passengers on Histon Road since 2022** following a sharp drop off after 2019 (attributed to the impact of the Covid-19 pandemic which led to significant reductions in bus use nationally[11] and also locally[10]) as seen below. In terms of delivery of the Scheme, this assumes that the buses would have used the bus lane developed as part of the Histon Road upgrades.

[11] Annual bus statistics: year ending March 2023 (revised) - GOV.UK (www.gov.uk)
[10] CCC Quarterly transport data updates: Cambridgeshire & Peterborough Insight – Roads, Transport and Active Travel – Transport Data Insights (cambridgeshireinsight.org.uk)

**Figure 4-1: Service 8 bus patronage % change from March 2019 base (total passengers)[12]**




*Source: ITP analysis of Stagecoach bus patronage data. Note: Stagecoach bus passenger volumes are considered to be commercially sensitive, restricting the publishing of percentage changes in bus passenger numbers only.*

**4.8** Bus passenger survey evidence shows the main purpose of the respondents' journeys on the day they were surveyed. **Overall, the most common journey purpose was commuting to/from work, the case for 39% of surveyed bus passengers.** The next most frequent journey purposes were going to/from the shops (23%) and going to/from a leisure activity (18%).

**4.9** The survey also indicates that 64% of the respondents that had undertaken this journey on Histon Road, prior to the survey being undertaken, first started more than a year ago. This suggests that **the route is well-embedded by bus users**. It also indicates that **Histon Road is being regularly used for bus journeys.** 56% of respondents stated that they make their bus journey at least 3 days a week.

**4.10** The bus passenger survey shows that **overall satisfaction of the bus journey was mixed depending on the aspect of the service**. On the positive side, 75% of respondents rated their personal safety/security when travelling to the bus stop on foot as 'good' or 'very good' and 78% of respondents stated that their journey time was either 'good' or acceptable'.

[12] This involved summing total passenger numbers for Service 8 for the months of March 2019, March 2022, March 2023 and March 2024. The totals for each year (each of which included patronage data for every day of the month) were then compared to the 2019 total as a baseline, with a percentage change figure calculated (from the 2019 passenger base number).

**4.11** In addition, 61% of respondents rated bus priority at traffic lights and junctions as either 'good' or acceptable' and 48% of bus passengers boarding at a stop on Histon Road rated the waiting facilities there as either 'good' or 'very good'.

**4.12** It is also noted for context that just over half of respondents rated the punctuality and reliability of their bus journey as 'poor' or 'very poor.' A majority (indeed, around three quarters) of the negative open question responses received from bus passengers also centred around issues of service frequency (as noted above, prompted by the recent timetable change). Although one of the objectives of the Scheme was to reduce bus journey times, which in itself can have a positive impact on bus service punctuality and reliability, these elements of bus service provision are principally influenced by bus operations on Histon Road and are not therefore completely within the control of the Scheme. However, it is important to recognise these factors to inform the contribution analysis in relation to whether outcomes have been realised and the potential role of the Scheme in influencing bus usage.

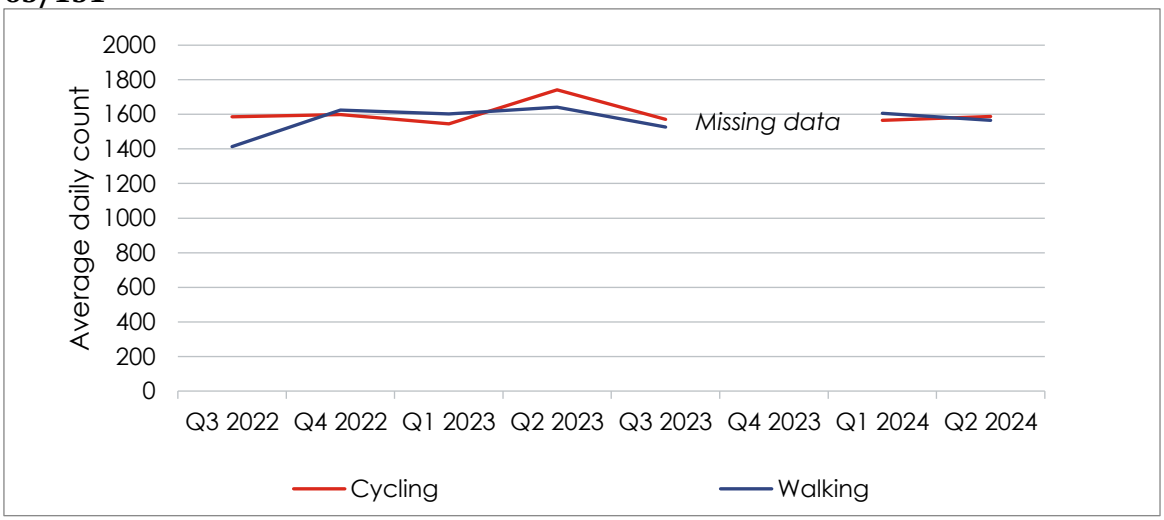
### Cycling and walking/wheeling

**4.13** Cyclist and pedestrian count data taken from Vivacity sensor 63/151, located to the south of Histon Road, near to the junction with Victoria Road, shows that **the southern end of Histon Road has been consistently used by cyclists and pedestrians since August 2022**. As expected, seasonality has had an influence on usage of Histon Road. Increased levels of cycling were seen over April, May and June before decreasing over the peak summer months, coinciding with students leaving the city and the summer holiday period, as well as during the winter months[13]. For pedestrians, usage increased in the autumn and was lower over the summer months. Average daily flows at sensor 63/151 ranged from 1,545-1,742 for cyclists and 1,413-1,642 for pedestrians.

**4.14** Data from Vivacity sensor 62, located at the north of Histon Road towards the A14 shows **consistent usage among cyclists and pedestrians**. Average daily flows ranged from 916-1,503 for cyclists and 244-345 for pedestrians, although the location of this sensor, away from the main residential area, presents a challenge in using this data as a source for assessing pedestrian usage related to Scheme delivery. These sensors have also been operational for less than two years, therefore it is not possible to comment on long-term usage trends at this point.

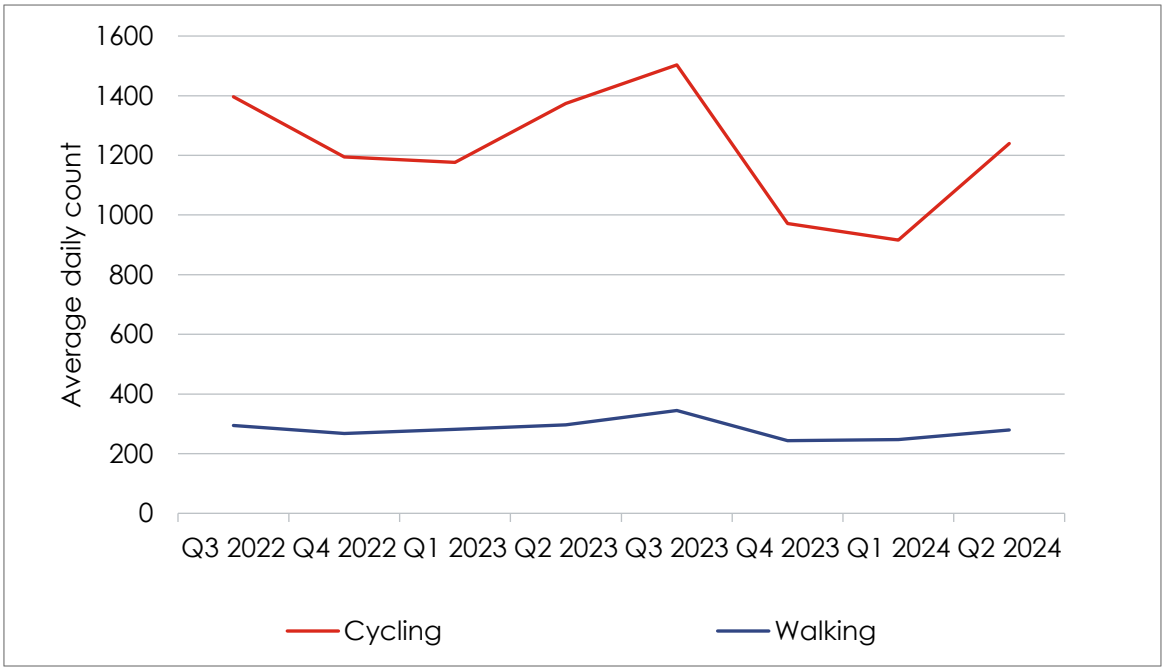
[13] CCC Quarterly transport data updates: Cambridgeshire & Peterborough Insight – Roads, Transport and Active Travel – Transport Data Insights (cambridgeshireinsight.org.uk)

**Figure 4-2: Average daily cycling and pedestrian counts: Histon Road (South) - Sensor 63/151**




*Source: ITP analysis of Vivacity data. Q1-4 refers to calendar quarters.*

**Figure 4-3: Average daily cycling and pedestrian counts: Histon Road (North) - Sensor 62**




*Source: ITP analysis of Vivacity data. Q1-4 refers to calendar quarters. Note that the location of Sensor 62, to the north of Histon Road and away from the main residential area, means that the pedestrian counts should not be used to assess pedestrian usage related to Scheme delivery*

**4.15** Cyclist intercept survey evidence shows the main purpose of the respondents' journeys on the day they were surveyed. Overall, **the most common journey purpose was commuting to/from work, the case for 45% of surveyed cyclists**. The next most frequent journey purposes were going to/from the shops (14%) and going to/from a leisure activity (12%).

**4.16** From the residents survey, **80% of respondents used Histon Road as a pedestrian for shopping** (which is expected given the focus was on local residents, and arguably reflecting

the age profile of resident survey respondents), with other frequent purposes being travelling to/from a personal appointment (28% of respondents), going to/from a leisure activity (25%) and for pleasure/exercise (22%).

**4.17** The cyclist intercept survey also indicates that **Histon Road is being regularly used by its users for cycle journeys**. 66% of cyclists stated that they make this journey at least 3 days a week. **Among the residents who were surveyed as pedestrians, usage is less regular** although just over a fifth of respondents (21%) reported they use it at least 3 days a week.

**4.18** For those respondents to the cyclist intercept survey that had undertaken the journey at least once before they were surveyed, **77% stated that they first started cycling on Histon Road for this journey more than a year ago**, suggesting this journey by cycle is well-embedded.

**4.19** **Overall satisfaction with the cycling journey on Histon Road was high amongst the respondents to the cyclist intercept survey.** 78% of cyclists rated the quality of the surfacing for cycling as either 'good' or 'very good'. 77% of cyclists rated the time the journey took as 'good' or 'very good', with 69% also rating the separation of cyclists from pedestrians as either 'good' or 'very good'.

**4.20** **For residents representing the views of pedestrians, the surfacing was rated as 'good' or 'very good' by 66% of respondents to the survey. Separation from motorised traffic was also rated highly by residents with 60% rating it as 'good' or 'very good'.**

**4.21** It is important however to note that a number of the open question responses received from cyclists and residents/pedestrians focussed on **perceived issues with a lack of priority given over motorised traffic at some traffic lights and junctions** on/with Histon Road, **including the insufficiency of signalised timings in favour of vulnerable road users** (including, for some, at the CYCLOPS junction).

**4.22** There were also responses received from residents/pedestrians related to **perceived issues with cyclists and electric scooter users either using the pavements instead of the cycle lane** or behaving in an unsafe way or with a lack of consideration for walkers/wheelers.

**4.23** A further key theme that emerged from the qualitative responses to both surveys was the **perceived quality of the initial construction on sections of the Scheme** including issues with drainage during wet conditions. It is highlighted explicitly that assessing formally the Scheme's design/engineering is not within the scope of this impact evaluation. GCP have indicated that issues were assessed by the contractor and resolved during the normal defect period that occurs in major schemes of this size and complexity.

## Stakeholder perspectives on delivery

**4.24** The interviews with stakeholders corroborated the survey evidence set out above. Feedback indicated that stakeholders consistently believed that Histon Road is well used by cyclists and pedestrians for both commuting and leisure purposes, but that bus use along the corridor has not yet recovered from the Covid-19 pandemic.

**4.25** **Overall satisfaction with the Scheme was high amongst stakeholders** and relatively consistent with the survey feedback. The role of the Scheme in providing enhanced facilities and infrastructure for cyclists, and the potential benefits in relation to safety, was a particular theme of the stakeholder feedback. The ability of the Scheme to support and help to de-risk the implications of the level of housing growth anticipated in the area was also important for stakeholders.

**4.26** Some areas for improvement were identified by some stakeholders, notably:

- Ongoing maintenance issues, with potential implications for the Scheme over the longer term. It should be noted that maintenance issues are not the responsibility of the GCP.
- A perceived compromise in the design in terms of road space reallocation to cyclists and pedestrians at the narrower sections of Histon Road.
- Elements of the scheme, such as the floating bus stops and flared junctions, not being designed with pedestrians in mind.
- A lack of consistency in pathway provision overall from a pedestrian perspective, including for those people that use wheelchairs.
- Issues with the insufficiency of signalised timings at crossings for pedestrians and cyclists, including at the CYCLOPS junction, although it is noted that there is always a compromise in satisfying the needs of all users of junctions in this respect.

# 5. Outcomes and impacts

## Outcomes and impacts summary

*There is good evidence to suggest that bus journey times post-Scheme implementation have reduced, with indications that the Scheme has contributed to this alongside other factors, including a post-Covid reduction in bus patronage impacting on bus stop dwell times. Bus patronage on the Service 8 on Histon Road, which had already declined prior to Scheme completion, has recovered modestly post-Scheme, but with passenger numbers remaining below pre-Covid levels.*

*A combination of cycle count data and primary survey evidence suggest that the upgraded cycling infrastructure on Histon Road has contributed both to more cycling, and a change in cycling behaviours, although there is also evidence of some displacement from cycling in other locations.*

*The residents survey provides some encouraging evidence of the Scheme contributing to increased walking/wheeling on Histon Road for some local residents. Given the scale of housing growth anticipated, the Scheme also has the potential to contribute to positive walking/wheeling outcomes in the future.*

*There is evidence of modal shift from car to bus, and also some evidence of a limited modal shift from car to active travel modes. Interestingly there is also evidence of modal shift from bus to active travel modes, which may suggest that the improved priority and facilities for buses on Histon Road offers more choice for users of non-car based modes of transport.*

*Road traffic collision data is inconclusive in assessing the anticipated safety outcomes of the Project. However, the quantitative and qualitative evidence from the cycling intercept survey aligns with stakeholder feedback in suggesting that the Scheme has contributed to enhanced perceptions of cycle safety.*

*The evidence also suggests that the Scheme has delivered a range of wider outcomes, including environmental and streetscape improvements, and enhancing the wellbeing of active travellers.*

**5.1** The logic model describes a set of core theme-specific outcomes that are the principal focus of the evaluation:

- Reduced journey times for public transport.
- Increased passenger numbers on public transport.

- Increased levels of cycling.
- Increased walking/wheeling.
- Modal shift from car to sustainable (bus) and active (cycling/walking/wheeling) modes.

5.2 Other outcomes also captured in the logic model which have been considered in the evaluation include:

- Enhanced safety and reduction in collisions.
- Enhanced local environment and streetscape.
- Enhanced access to education/training and employment opportunities.

## Core outcomes

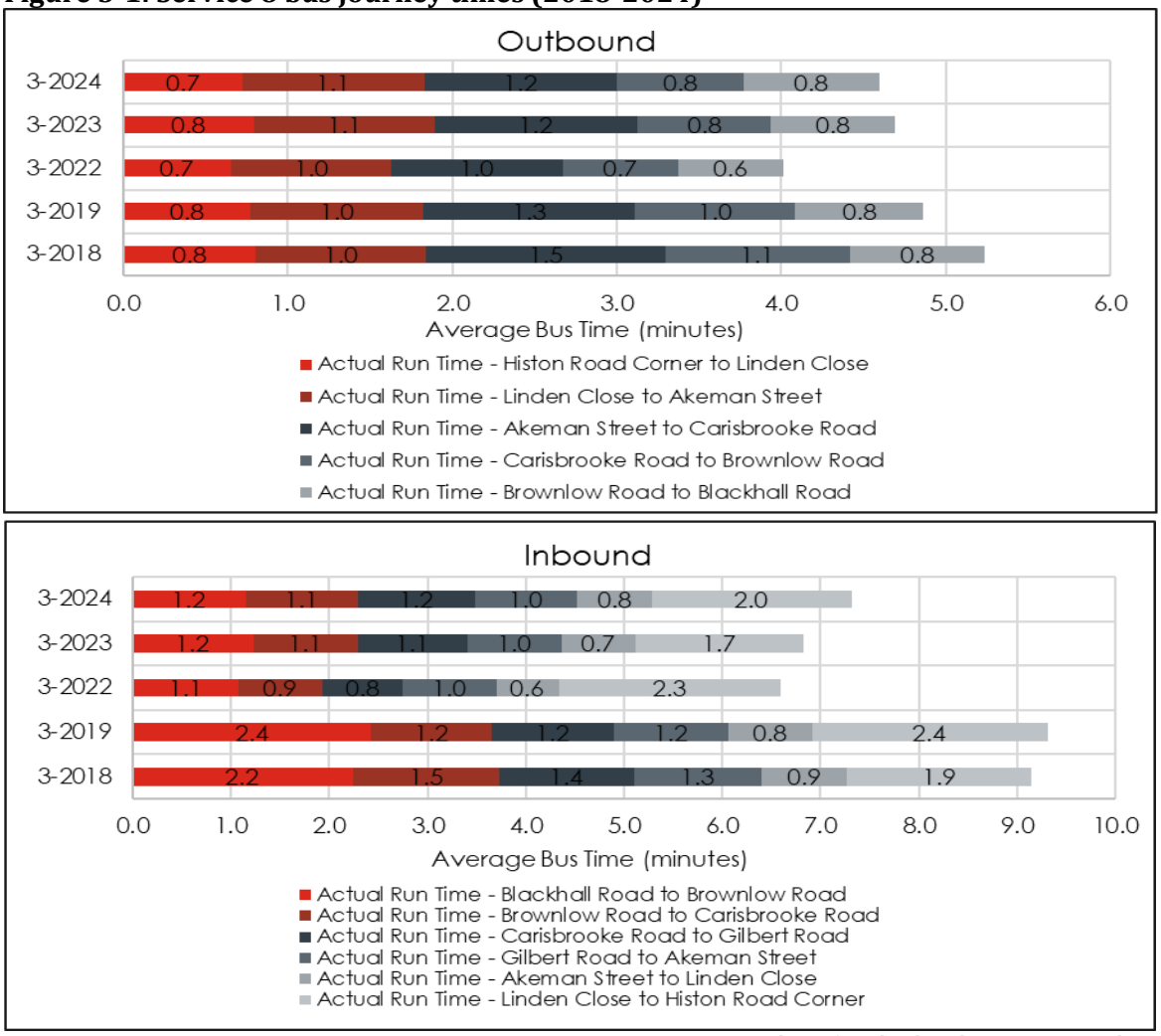
### Core outcome 1: reduced journey times for public transport

5.3 **Data from the Vix database indicates that there has been a reduction in bus journey times post-Scheme implementation.** Figure 5-1 provides a year-on-year comparison of observed average journey times from March 2018 to March 2024. This shows a marked decrease in journey times when comparing March 2018 and 2019 figures with those observed in March 2022, at which point the works to upgrade the bus infrastructure and facilities on Histon Road had been completed.

5.4 The average Service 8 journey time along Histon Road for the month of March in 2018 was 5.2 minutes for the outbound journey (also 5.2 minutes in 2019) and 9.1 minutes for the inbound journey (9.3 minutes in 2019). In comparison in 2022, the average March journey times were 4 minutes for the outbound journey and 6.6 minutes for the inbound journey.

5.5 Between 2022 and 2024, observed average bus journey times have then increased post-implementation. However, the March 2023 and March 2024 journey times were shorter overall than those observed in March 2018 and March 2019, for both the outbound and inbound journeys.

**Figure 5-1: Service 8 bus journey times (2018-2024)**




*Source: ITP analysis of Vix database bus journey time data.*

**5.6** Graphs showing the inbound and outbound bus journey times on the comparator corridors (Service 3 on Newmarket Road and Service 6 on Huntingdon Road) for the same time periods are provided in Annex E. The outputs from this analysis are summarised in Table 5-1 which further suggests that the upgrading of the bus facilities and infrastructure on Histon Road have contributed to a reduction in average bus journey times post-Scheme implementation, when compared to other routes which had not experienced similar improvements. As presented, the Service 8 (Histon Road) average journey time decreased by 12.2% for the outbound journey and 25% for the inbound journey, whilst the other services showed journey time increases (or in one case, no change) over the same period.

**Table 5-1: Change in average bus journey times for Services 8 (Histon Road), 3 (Newmarket Road) and 6 (Huntingdon Road) pre- and post- the Histon Road upgrades**

| Service | % change in average bus journey times (minutes) pre- and post-Histon Road upgrades |
|---|---|
| 3 Outbound (Newmarket Rd) | 4% |
| 3 Inbound (Newmarket Rd) | 7.8% |
| 6 Outbound (Huntingdon Road) | 6.6% |
| 6 Inbound (Huntingdon Road) | 0.0% |
| 8 Outbound (Histon Rd) | -12.2% |
| 8 Inbound (Histon Rd) | -25.0% |

*Source: ITP analysis of Vix database bus journey time data. Pre- journey times calculated as an average of March 2018 and 2019 bus journey times and post- journey times calculated as an average of 2022, 2023 and 2024 bus journey times for each service for comparison purposes.*

**5.7** It is important to recognise that there may have been other factors that contributed to the post-implementation average journey time reductions reported above. For example, local data suggests that lower bus patronage more generally, which has been observed locally, and nation-wide post-pandemic (as previously referenced), has resulted in buses stopping for shorter periods at bus stops[14]. This may also explain the slight upward trend in journey times in 2023 and 2024, seen across all three services, reflecting the trend of bus patronage recovery following the pandemic. However, the fact that journey time reductions have been observed on Histon Road, and not on the other comparator corridors (where journey times have generally increased), provides evidence that the upgrading of priority and facilities for buses on Histon Road have contributed to a reduction in bus journey times overall.

**5.8** The bus passenger survey provides some additional insight into the potential contribution of the upgraded bus infrastructure and facilities on bus journey times. Overall, 31% of respondents rated their journey time on the bus as 'good' or 'very good', whilst 54% rated it as 'acceptable'.

> **"It has improved. The bus lane has reduced the journey time. It's much better"**
>
> **Bus passenger**

**5.9** More pertinently, those respondents that were aware of the works to upgrade the bus infrastructure and facilities on Histon Road prior to completing the survey (n=160) were asked how they felt the bus elements of the Scheme had impacted them. 26% of this group felt that the works had reduced the time of their bus journeys (with 66% stating that they had not). Although a positive effect of the Scheme on

[14] Analysis conducted by GCP on average dwell times from the Vix database during the period 2018 to 2024.

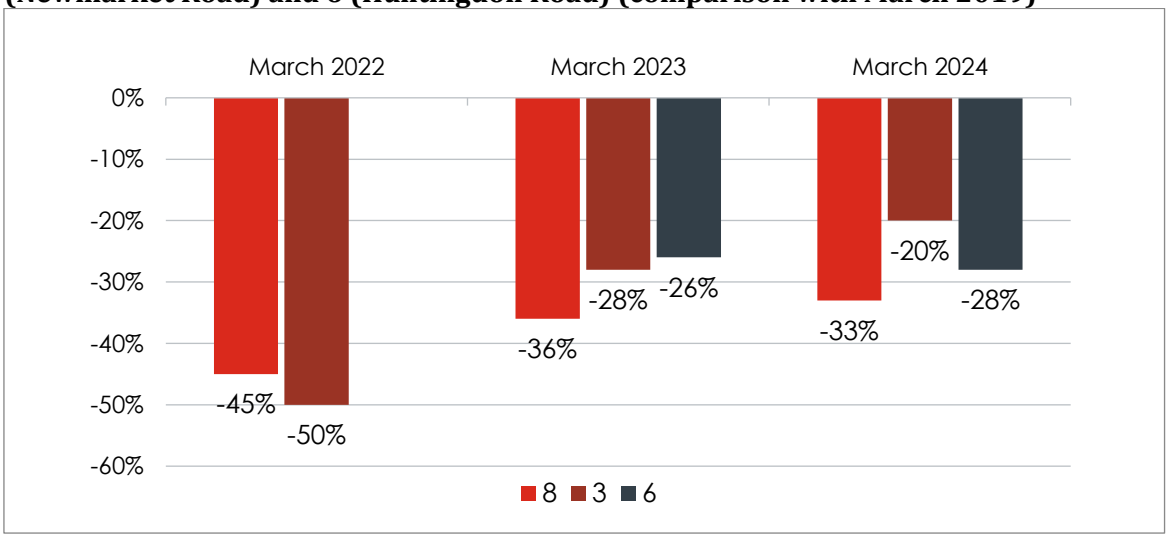
bus journey times was reported by around a quarter of respondents only, it is useful to view this in the context of some of the qualitative feedback regarding concerns over bus service frequency, punctuality and reliability issues more generally which were not principally within the control/influence of the Scheme or the Greater Cambridge Partnership.

## Core outcome 2: increased passenger numbers on public transport

5.10 **Stagecoach bus patronage data shows a modest increase in usage of the Service 8 bus route since the upgrading of the priority and facilities for buses on Histon Road**. Figure 5-2 shows changes in bus patronage on Histon Road and the comparators for the period March 2022 to March 2024, expressed as a percentage change compared to March 2019 levels.

5.11 All three services experienced a sharp drop-off in 2020 which has been gradually recovering. This again reflects the trend of slow bus patronage recovery following the Covid-19 pandemic. This graph also highlights that patronage on Service 8 (and Service 3 on Newmarket Road) did increase proportionately between 2022 and 2024, but remained below pre-Covid levels. It may therefore take time for the full effects of the bus journey time reductions observed above to be realised in terms of a more substantial increase in passenger numbers.

**Figure 5-2: Percentage change in bus patronage for Services 8 (Histon Road), 3 (Newmarket Road) and 6 (Huntingdon Road) (comparison with March 2019)**




*Source: ITP analysis of Stagecoach bus patronage data. Stagecoach operated a reduced timetable for Service 6 in March 2022 and therefore bus patronage figures for that month have not been included in this analysis.*

5.12 Data from the bus passenger survey provides some evidence of a relationship between increased bus usage and the implementation of the upgraded bus facilities and infrastructure. 18% of respondents that were aware of the upgrading works (n=160) prior to completing the survey, reported that this had encouraged them to use the bus more overall, but 79% of respondents stated that it had not. This should be seen in the context of the relative scale of the bus infrastructure improvements (500 metres of new bus lanes), when compared to the active travel improvements (9.5 kilometres of new footpaths and cycle lanes).

**5.13** Further, many other factors will influence this trend (e.g. cost, service quality, the wider economic climate, population growth and the observed increase in patronage on competing Park and Ride services across Cambridge in recent years[15]) so attributing change to the Scheme would be challenging. For example, respondents to the bus passenger survey that were aware of the works to upgrade the bus infrastructure and facilities on Histon Road prior to completing the survey (n=160) were asked about other factors that may have influenced their bus usage since October 2021 and their relative importance to the scheme. The one factor that was consistently rated as equally or more important than the scheme was the national £2 bus fare cap (introduced on 1 January 2023). Specifically, 25% said this was 'more important' than the scheme, and 34% 'equally as important'. For context, no other factor was identified as 'more important' than the scheme by more than 8% of respondents (see Annex B).

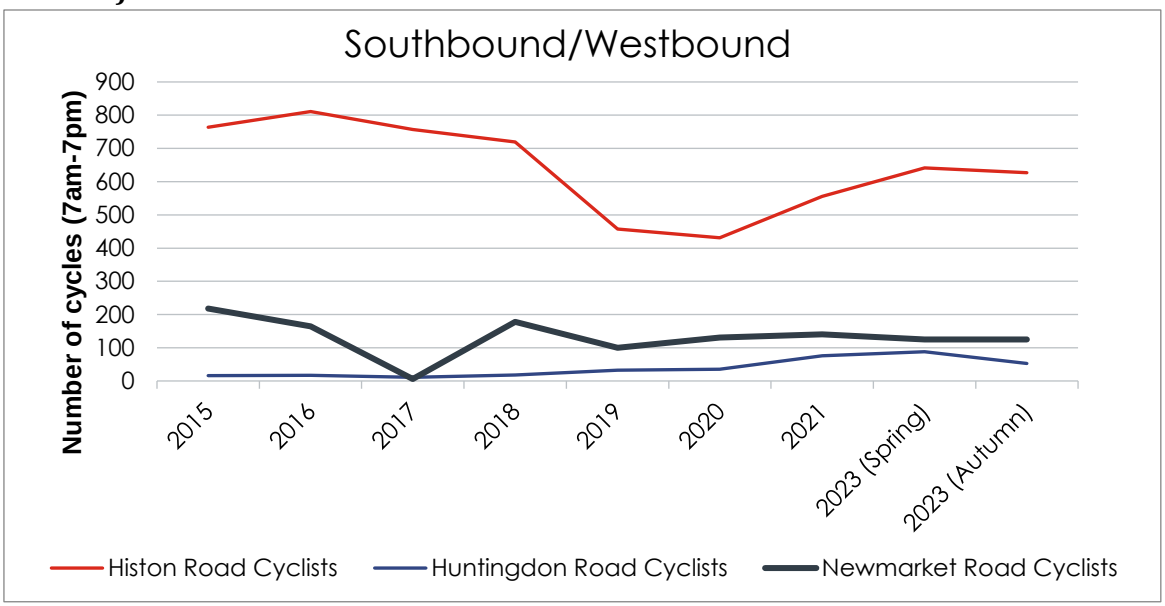
### Core outcome 3: increased levels of cycling

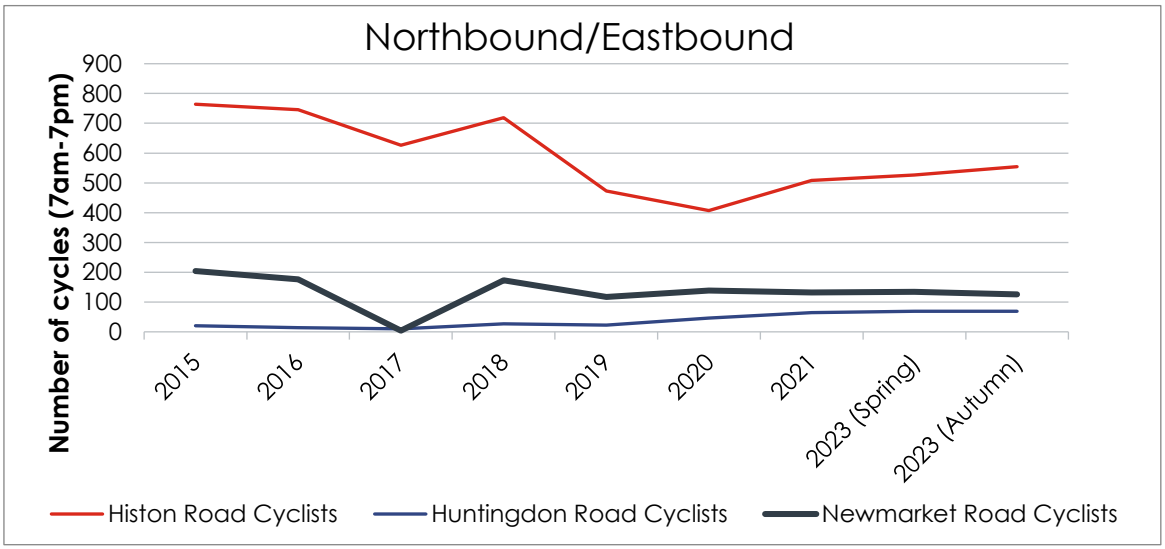
**5.14** **A combination of cycle count data and primary survey evidence suggest that the upgraded cycling infrastructure on Histon Road has contributed both to more cycling, and a change in cycling behaviours, although there is also evidence of some displacement from cycling in other locations.**

**5.15** The Radial Survey data, seen in Figure 5-3, indicates a relatively high level of cycling in 2015/2016 in both directions on Histon Road, before a significant drop-off in 2019 (potentially owing to weather[16]), and 2020 during the Covid pandemic when some regular journeys in Cambridge ceased and others were substituted for different modes[17]. **However, from 2021 onwards, the number of cyclists trends upwards again, coinciding with the substantial opening of the Scheme from October of that year**. Although smaller numbers of cyclists are observed on the comparators overall, the trends observed on both comparator roads show comparatively more static patterns of cycle usage from 2021 onwards.

[15] CCC Quarterly transport data updates: Cambridgeshire & Peterborough Insight – Roads, Transport and Active Travel – Transport Data Insights (cambridgeshireinsight.org.uk)
[16] The particularly wet weather conditions observed on the survey day in 2019 (and also 2020) may also have contributed to this drop-off in cycling numbers when noting that the surveys in the other years were conducted in comparatively dry conditions.
[17] Patterson, Richard, David Ogilvie, and Jenna Panter. 2021. "Travel Levels Before and After COVID-19 Control Measures in Cambridge, UK." Findings, June.

**Figure 5-3: Radial Survey cyclist counts (Histon Road and comparators – continued overleaf)**




*Source: ITP analysis of Radial Survey data. Autumn 2022 data is excluded from this analysis due to known data quality issues*

**5.16** Triangulating the Radial Survey data with the cyclist intercept survey evidence provides further insight into the impact of the upgrades to the cycling infrastructure on Histon Road on cycling levels and behaviours. The key findings of the intercept survey question set administered to the sample of respondents that were aware of the Scheme works (n=283) includes the following responses:

- The Scheme had encouraged 40% of those respondents aware of the Scheme to cycle more often overall. Of this group (n=114), 38% stated that this was for six or more additional trips per month and 19% said this was for an extra 4-5 trips per month.

- 22% of those respondents aware of the Scheme said that it had encouraged them to cycle for new reasons/purposes. Of this group (n=63), over 52% said that this was for commuting, 52% for going to/from a leisure activity and 49% for going to/from the shops.

- 28% of those aware of the Scheme said that it had encouraged them to cycle further on some trips that they take. Of this group (n=79), 34% said they are now cycling for between one mile and 5 miles further each trip as a result of the cycling upgrades.

> **Previously I would have avoided Histon Road at all costs and certainly not used any stretch when I have my kids on their bikes with me**
>
> **Cyclist**

**5.17** There is also evidence from the cyclist intercept survey that upgrading the Histon Road cycling infrastructure may have led to some displacement from cycling in other locations. This reflects that 12% of all respondents stated that they would have still cycled but on a different route if the cycling facilities and infrastructure on Histon Road had not been upgraded. Of those respondents that were aware of the upgrading works (n=283), 45% said that they had led them to cycle less regularly on other routes in and around Cambridge.

> **Terrific upgrade. Quicker and safer to get to town now so that I now cycle almost exclusively. Thank you for your upgrade!**
>
> **Cyclist**

**5.18** The survey evidence also suggests that upgrading the Histon Road cycling infrastructure has led to quicker cycling journeys, which may encourage higher levels of cycling in the longer-term. 53% of respondents that were aware of the Scheme reported that the Histon Road cycling upgrades had reduced the time of their cycling journeys. Of this group (n=84), 56% stated that this represented a reduction in journey time of up to five minutes per journey and a further 21% stated that this represented a more significant journey time reduction of between five and 10 minutes per journey.

**5.19** The cyclist intercept survey therefore provides further evidence that upgrading the Histon Road cycling infrastructure has contributed to increased levels of cycling on Histon Road. However, it is important to acknowledge that other factors may have also contributed to this increase. Of those aware of the works to upgrade the Histon Road cycling infrastructure (n=283):

- 28% stated that investments in other active travel infrastructure in Greater Cambridge were equally or more important in influencing their cycling patterns on Histon Road.

- 22% stated that changing societal expectations and attitudes to active travel were equally or more important

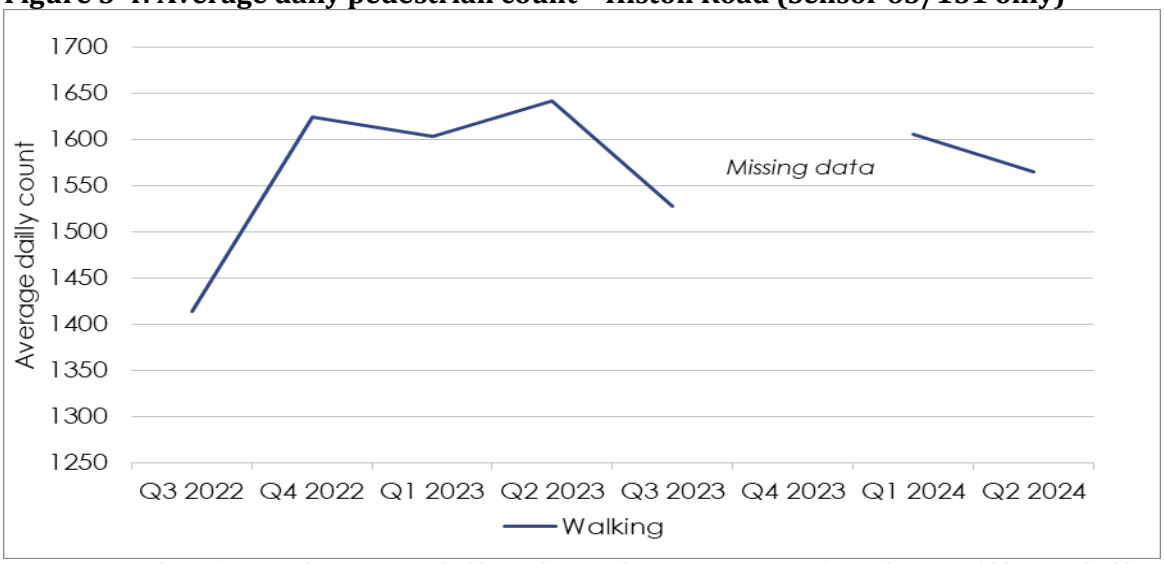
- 21% stated that the upgrading of the infrastructure works on Milton Road[18] were equally or more important.

### Core outcome 4: increased walking/wheeling

**5.20** As previously noted, there are **limitations in using both the Vivacity pedestrian counts and Radial Survey to draw any meaningful conclusions on whether the upgrades to infrastructure on Histon Road have contributed to increased walking/wheeling.**[19]

**5.21** The location of the Radial Survey data collection point and Vivacity sensor 62, both to the north of Histon Road and away from the main residential area, means that using these data sources to assess pedestrian outcomes is challenging. Further, although Vivacity sensor 63/151 does provide a snap-shot of post-Scheme pedestrian count data in a relevant location, the exclusion of data for Quarter 4 of 2023 (due to the view of this sensor being obstructed during this period) means that this post-period time series analysis is incomplete (as shown in Figure 5-4). However, the remaining data suggests that pedestrian flows at the southern end of Histon Road have been stable, except for some seasonal variation, when viewed in the context of post-pandemic walking behaviours in Cambridge[20].

**Figure 5-4: Average daily pedestrian count – Histon Road (Sensor 63/151 only)**




*Source: ITP analysis of Vivacity data. Sensor 63 had lower than usual counts in Quarter 4 of 2023 due to scaffolding on a building near the camera obstructing its view. These counts have therefore been excluded from the analysis.*

[18] Apart from the perceived displacement of some cycling movements as evidenced here (and through some of the open responses received to the surveys) the influence of the Milton Road Scheme on the traffic conditions observed on Histon Road was not directly raised as a factor impacting Scheme outcomes through the responses received to the primary research surveys.
[19] Note that the Vivacity sensors are trained to recognise a person walking and classify it as a 'pedestrian.' Therefore, the Vivacity data does not include other types of pedestrians such as wheelchair users.
[20] CCC Quarterly transport data updates: Cambridgeshire & Peterborough Insight – Roads, Transport and Active Travel – Transport Data Insights (cambridgeshireinsight.org.uk)

**5.22** Alongside the data limitations, it is also important to recognise the nature of the intervention when considering this outcome, with the provision of *improved* pedestrian infrastructure on an existing and well-established radial route, rather than *new* infrastructure.

**5.23** In this context, the residents survey provides some encouraging evidence of the Scheme contributing to increased walking/wheeling on Histon Road for some local residents. Of the respondents that recalled what Histon Road was like prior to the implementation of the Scheme (n=281), 10% indicated that the Scheme had encouraged them to walk/wheel more often overall, with 89% indicating it had not.

**5.24** There was also encouraging evidence that the Scheme had influenced wider pedestrian behaviours for some survey respondents (n=281). Specifically:

- 9% said that the Scheme had encouraged them to walk/wheel for new reasons/purposes; this was most commonly for shopping or pleasure/exercise.
- 9% said they have been encouraged to travel further as a pedestrian on some trips they take; this was most commonly travelling up to 1 mile further for each trip made.

### Core outcome 5: modal shift from car to sustainable (bus) and active (cycling, walking/wheeling) modes of travel

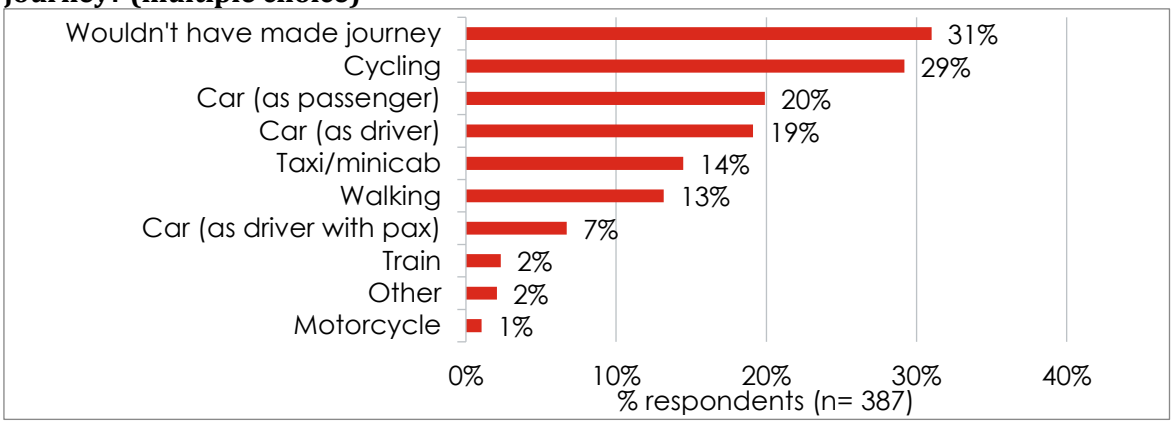
#### Public transport (bus)

**5.25** Respondents to the bus passenger survey were asked a set of questions to indicate whether a modal shift had been stimulated as a result of upgrading the priority and facilities for buses on Histon Road. These are set out below in Figure 5-5 and Figure 5-6.

**5.26** **Both perspectives suggest that the upgrading of priority and facilities for buses on Histon Road has led to some modal shift.** Car (as passenger and driver) were common alternative options cited for the journey made by bus. Further, 13% of respondents indicated that they would have travelled by car or taxi/minicab on the day they were handed the postcard, if the bus facilities had not been upgraded. There is also evidence that the upgraded bus facilities on Histon Road has encouraged people to use the bus for their journey rather than cycle (and in a few cases walk). This suggests that the upgraded bus infrastructure and facilities on Histon Road offers more choice for users of non-car based modes of transport (and for moving people around the city more generally).

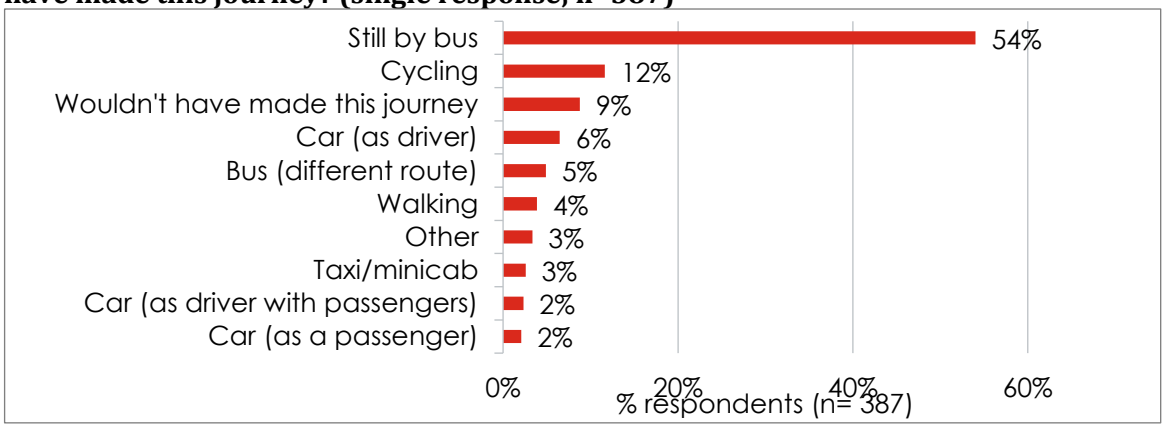
**5.27** Similarly, when those respondents to the bus passenger survey that were aware of the Scheme (n=160) were asked about the impact of the upgrading of priority and facilities for buses on Histon Road, 22% said that this had encouraged them to use the bus instead of a car/taxi. 17% of these respondents said that the upgraded works had encouraged them to use the bus instead of walking/wheeling and cycling, again indicating evidence of a modal shift from active travel modes to bus.

**Figure 5-5: Which other modes of transport could you have used to make this journey? (multiple choice)**




*Source: ITP analysis of bus passenger survey*

**Figure 5-6: If the bus facilities on Histon Road had not been upgraded how would you have made this journey? (single response; n=387)**



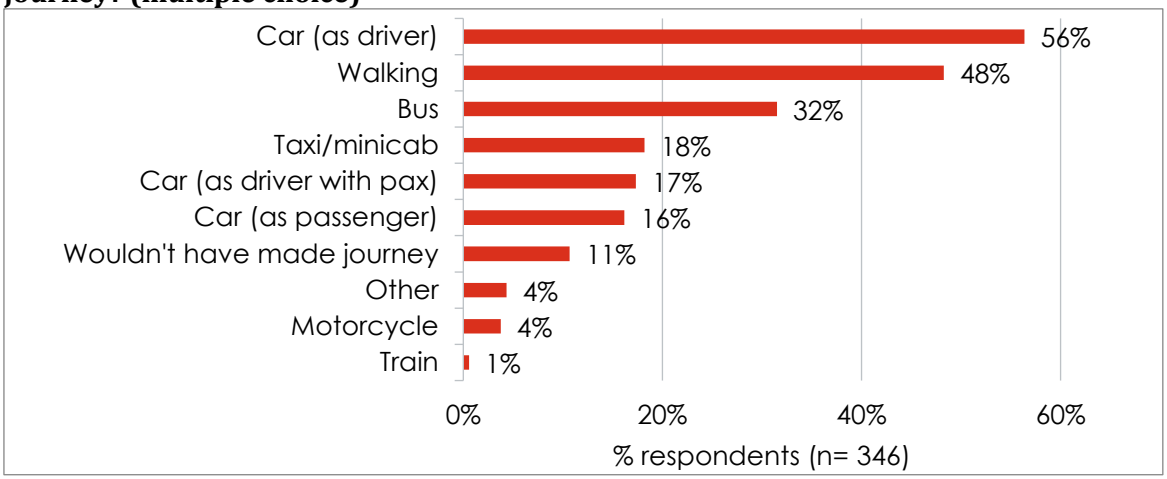

*Source: ITP analysis of bus passenger survey*

## Cycling

**5.28** The cyclist intercept survey also suggests **modal shift towards cycling associated with the Histon Road cycling upgrades for some respondents.** Figure 5-7 shows that car (as driver) was the most common alternative option cited by respondents and Figure 5-8 suggests that if the cycling facilities and infrastructure on Histon Road had not been upgraded, 3% of survey respondents would have used a motor vehicle for their journey instead. The vast majority of respondents to this question (89%) stated that they would still have cycled, either on Histon Road or on another route.

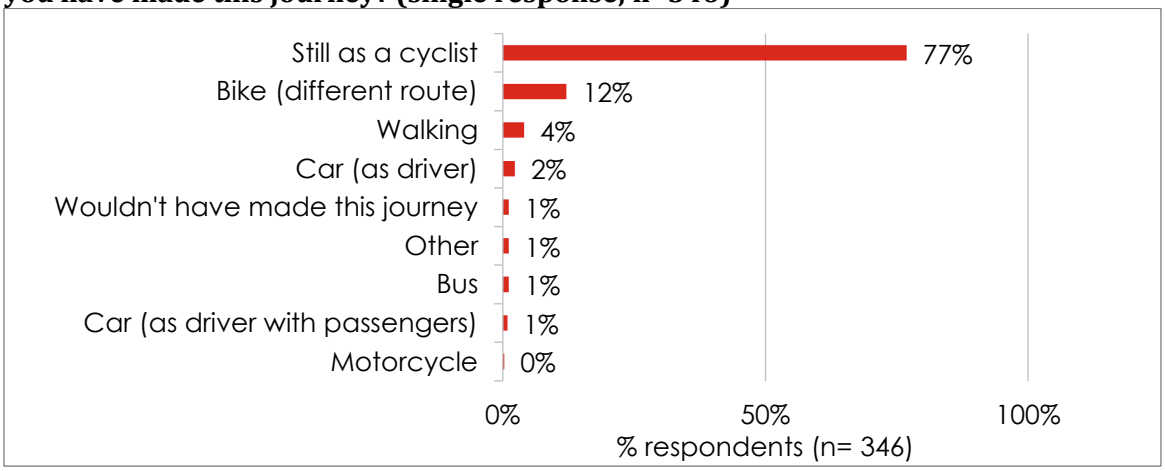
**5.29** It should be noted however that this latter figure may have been influenced by the fact that 86% of the cyclists surveyed were regular cyclists in Cambridge (cycling for at least 3 days per week) and 45% were making a regular commuter journey when they were intercepted. Again, this result is not all that unexpected when considering that the Scheme involved the upgrading of an existing, and already popular, route for cyclists, rather than the provision of a new cycle route.

**Figure 5-7: Which other modes of transport could you have used to make this journey? (multiple choice)**




*Source: ITP analysis of cyclist intercept survey*

**Figure 5-8: If the cycling facilities on Histon Road had not been upgraded how would you have made this journey? (single response; n=346)**




*Source: ITP analysis of cyclist intercept survey*

**5.30** Interestingly, however, when those respondents that were aware of the Scheme (n=283) were asked if the upgraded cycling infrastructure had encouraged them to cycle instead of using another means of travel since October 2021 overall (i.e. not just on the specific journey when they took the postcard), 41% said it had. On the face of it this seems contradictory when viewed alongside the fact that 89% of respondents to the modal choice question would still have made their specific journey by bike. It does however indicate that the behaviours of a notable number of respondents have been reinforced by the Scheme in the longer term, rather than just for the single journey in question.

**5.31** Of the group that stated that the upgrades had encouraged them to cycle instead of using another means of travel (n=116), 74% stated that they had either stopped or reduced driving a car and 29% said they had stopped/reduced travelling as a passenger in a car or taxi/minicab. But 42% also said they had stopped or reduced using the bus, and 35% had stopped or reduced their walking (as this was a multiple response question). **This provides additional evidence that the upgrades have contributed to a net positive modal shift towards cycling, alongside also providing a range of options for travelling around Greater Cambridge.**

> **I commute more now (as a cyclist) on Histon Road but carrying on linking to the wider network for longer weekend cycling would be great**
>
> **Cyclist**

### Walking/wheeling

**5.32** Of those respondents to the residents survey that could recall what Histon Road was like, prior to the completion of the upgraded works (n=281), **10% indicated that the pedestrian elements of the Scheme had encouraged them to walk/wheel instead of using another means of transport.** Further, the majority of this, albeit limited, cohort (n=29) stated that they had either stopped or reduced either driving a car or travelling as a car passenger as a result of the Scheme.

**5.33** The relative scale of this result is encouraging when viewed in the context that the Scheme involved upgrading the existing pedestrian infrastructure. This said, none of the stakeholders interviewed perceived material modal shift towards walking/wheeling associated with the Scheme. For example, one stakeholder commented:

*"There's probably been a neutral impact in terms of walking/wheeling as there was already a footway on both sides and the pedestrian crossings have been maintained."*

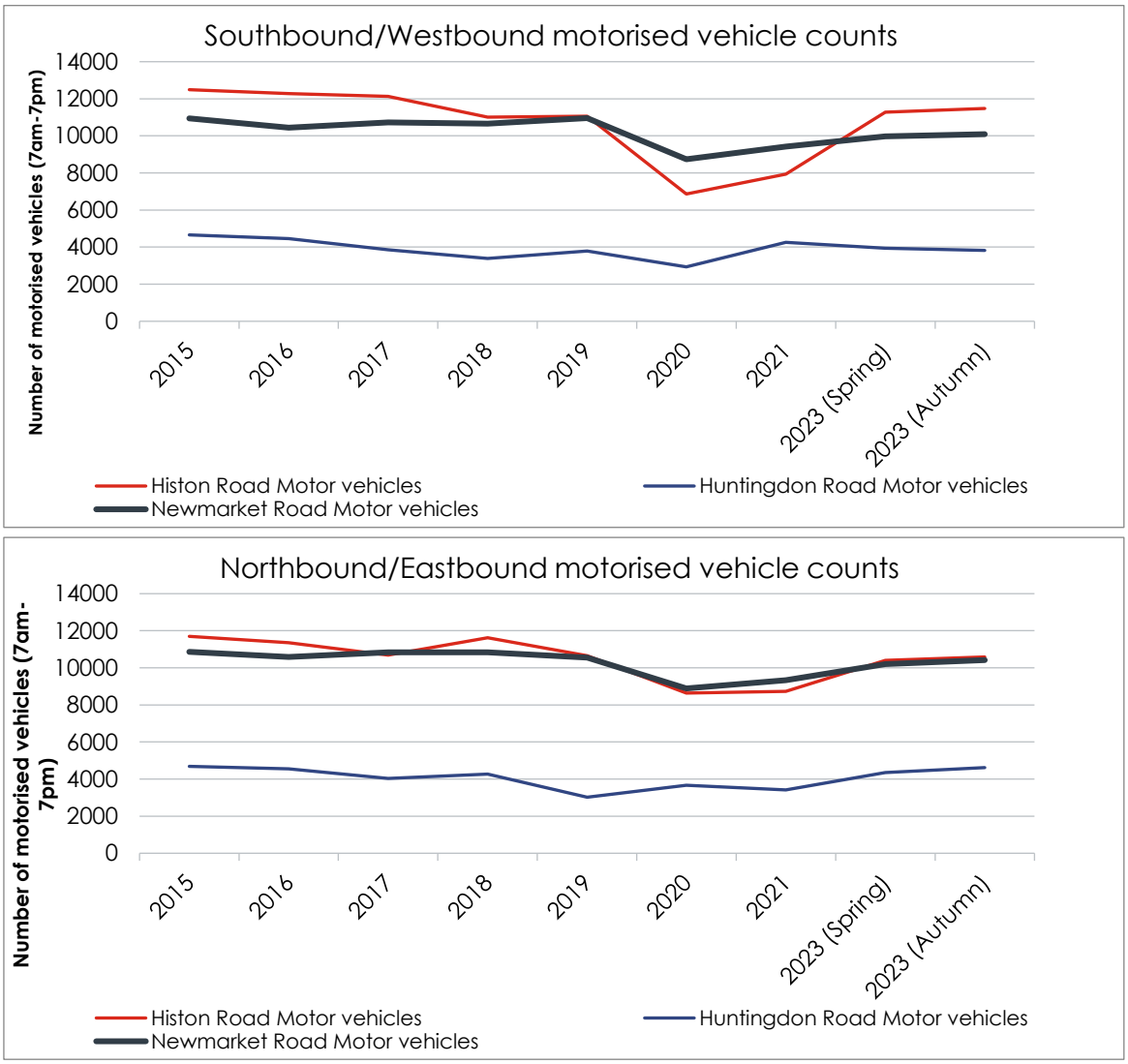
### Motorised vehicle levels

**5.34** Motor vehicle count data is a complementary indicator to the sources of modal shift evidence detailed above, with maintained or reduced motorised vehicle counts indicating potentially (although not solely attributable to) a shift away from car to sustainable (bus) and active (cycling, walking/wheeling) modes of travel.

**5.35** Figure 5-9 shows the Radial Survey motorised vehicle counts for Histon Road alongside those observed on the comparator corridors (Huntingdon Road and Newmarket Road) for the period 2015 to 2023. This shows that for all three roads, and in both directions, there is an observed trend of a decrease in motorised vehicle levels up to 2020 (with the 2020-21 period influenced by the Covid-19 pandemic), followed then by an increase in motor vehicle usage in the period from 2020 to 2023.

**5.36** Contrary to the findings of the primary research evidence, this might indicate that significant modal shift away from motorised vehicles and towards sustainable and active travel modes has not been observed on Histon Road in recent years. However, the relative scale of usage is important context here, with under 1,000 cyclists a day on Histon Road in both directions over recent years, compared to over 10,000 motorised vehicle counts.

**Figure 5-9: Radial Survey motorised vehicle counts (Histon Road and Comparator Corridors)**




*Source: ITP analysis of Radial Survey data. Autumn 2022 data is excluded from this analysis due to known data quality issues.*

**5.37** These findings are interesting when set within the context of the reduced bus journey times reported above on Histon Road. This outcome on Histon Road (i.e. reduced travel times for public transport) has been realised despite the backdrop of increasing traffic levels, which was not the case on the two comparator corridors, and does suggest the potential contribution of the Scheme.

# Other outcomes

## Enhanced safety and reduction in collisions

**5.38 There is mixed evidence from the primary research surveys that the Scheme has enhanced the perceived safety of its users, although both the quantitative and qualitative evidence base is relatively strong in terms of demonstrating safer cycling outcomes overall, including for families cycling together.** Several points are noted (with more details set out in Annexes B, C and D) as follows:

- Of those bus passengers that were aware of the Scheme (n=160), 17% perceived that the upgrades had made them feel safer while using the bus, and 16% felt that had made them feel safer when travelling to/from the bus stop.

- Of those cyclists that were aware of the Scheme (n=283), 75% of respondents perceived that the upgrades had improved the safety of their cycling activity.

- Of this group (n=213), 89% reported that separation from motorised traffic and pedestrians had helped them to avoid collisions, 84% stated that the quality of the surface had helped to reduce the chance of falls / accidents and 65% stated that the width of the cycle lane had helped to avoid collisions with other cyclists. In addition, 58% of these respondents stated that they felt safer because they are now given priority over motorised traffic at junctions.

> **As the parent of young children, the upgrade has had a huge, positive impact on us as a family. Histon Road is now a considerably safer place for my kids (and me) to cycle**
>
> **Cyclist**

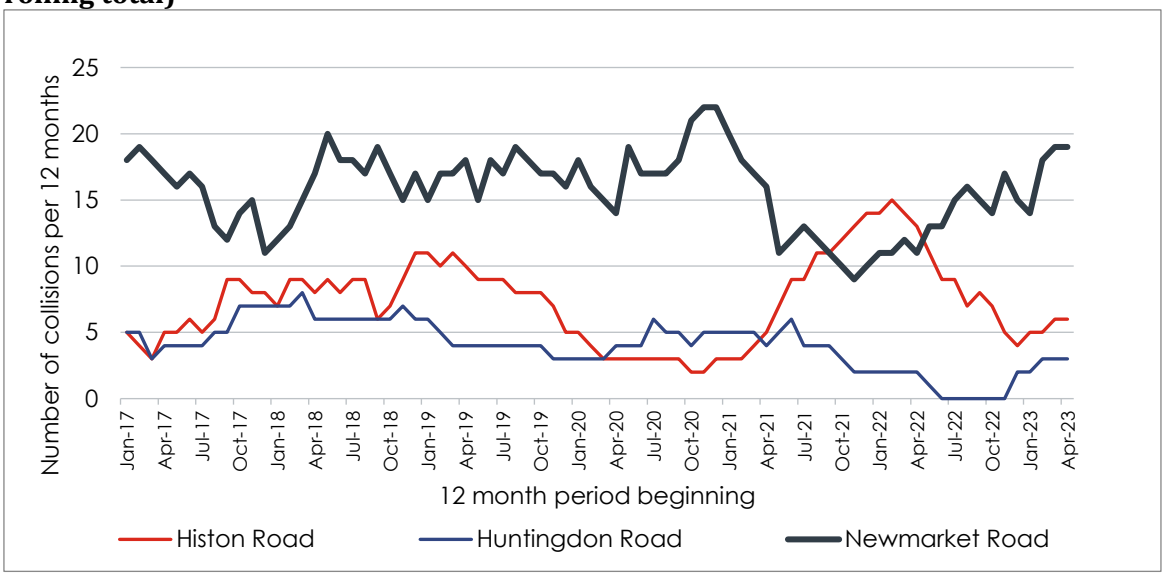
> **I do appreciate the safety improvements by providing a more consistent path away from vehicles**
>
> **Cyclist**

- Of those residents that recalled what Histon Road looked like prior to the implementation of the Scheme (n=281), 32% 'agreed' or 'strongly agreed' that the Scheme had reduced road traffic collisions involving pedestrians and cyclists. Further, 42% of this group strongly agreed/agreed that the upgrading of the pedestrian facilities on Histon Road had improved their overall sense of safety.

**5.39** To complement the primary evidence on perception of safety for individuals, we have also considered secondary data on road traffic collisions on Histon Road and the comparator

corridors, covering the period from 2017 through to 2023 as detailed in Figure 5-10 (with more details set out in Annex H).

**Figure 5-10: Total number of collisions on Histon Road and comparators (12 month rolling total)**




*Source: ITP analysis of Cambridgeshire Insight road traffic collisions data*

**5.40** Due to the comparatively low absolute number of collisions that have occurred across all three roads overall during this period it is difficult to draw any robust conclusions from this analysis which shows a relatively erratic pattern of collisions year on year. As a result the **evidence in relation to collisions observed on Histon Road in the period 2017 to 2023 is inconclusive.**

**5.41** Evidence from the interviews conducted with stakeholders provided further insight into the effects of the Scheme on safety. The feedback was consistent in supporting the above view that the Scheme had generally benefitted cyclists the most through the provision of dedicated cycle lanes and priority measures at signalised junctions. Examples of specific feedback from three separate stakeholders is set out below.

*"The Scheme provides a segregated north/south cycle route which wasn't there in its entirety throughout beforehand. There was some provision, but this tended to be mainly in line with advisory cycle route provision (signs and lines only) and there were issues with vehicles parked across where even this was provided. From a safety perspective this was not conducive to promoting cycling on the route, particularly for beginner cyclists. The benefits of the scheme are therefore now evident."*

*"Cycling along Histon Road is much better now from a safety perspective due to the physical separation from motorised vehicles, rather than just based on a white line in the carriageway. South of the Linden Close junction, the road was previously quite narrow and so the improvements have made quite a bit of a difference along that stretch (and also in terms of the removal of parked cars). The CYCLOPS junction has also improved safety for cyclists."*

*"Histon Road is one of the main roads into the city and prior to the works, it just didn't have a lot of segregated space at all. Pedestrians had some narrow pavements and cyclists had nothing. Now as a result of the project, there is a wonderful allocation of space. It is efficient and a fabulous design. The junctions are completely transformed and it is safer for cyclists too because of the CYCLOPS junction."*

### Enhanced local environment and streetscape

**5.42** Considering evidence from the primary research surveys, **the findings suggest that the Scheme has contributed towards an enhanced local environment and streetscape** as evidenced by the points below. This is consistent with the rationale to ensure green elements and landscaping improvements to the public realm were incorporated into the Scheme design:

> **"I think it's really improved the look and regenerated the area. It looks much nicer and it's more pleasant to walk"**
>
> **Resident**

- Of the respondents to the cyclist intercept survey that were aware of the Scheme (n=283), 71% 'agreed' or 'strongly agreed' that the upgraded works had enhanced the local environment and streetscape.
- Of those residents that recalled what Histon Road looked like prior to the implementation of the Scheme (n=281), 61% 'agreed' or 'strongly agreed' that the upgraded works had enhanced the local environment and streetscape.
- The response from bus passengers in this respect were neutral overall although around a third of respondents that were aware of the Scheme (n=160) 'agreed' or 'strongly agreed' that the upgraded works had enhanced the local environment and streetscape.

**5.43** Evidence from the interviews conducted with stakeholders provided further insight into the effects of the Scheme on the local environment as follows:

*"The local environment has also definitely improved with new trees. The scheme consultation took years … but as a result, the design was much less engineering heavy and took better account of environmental factors, ending with a better balance in design terms."*

### Enhanced access to education/training and employment

**5.44** The primary research survey evidence suggests that the **Scheme has had a limited impact on enhancing access to training and employment opportunities.** However, this finding may have been influenced by the high proportion of respondents in the residents survey

sample that were economically inactive (only 23% were in part-time or full-time employment). The main points to note from the three surveys are:

- The response from the full sample of residents was relatively neutral. Of those residents that recalled what Histon Road looked like prior to the implementation of the Scheme (n=281), 14% 'agreed' or 'strongly agreed' that it had enhanced access to education/training and employment opportunities, while 10% either 'disagreed' or 'strongly disagreed' with this statement.

- Taking account of the under representation of working people within the residents survey sample, the response to this question was analysed from the perspective of the cohort of residents in employment only (n=70). 27% of this group agreed that the Scheme had enhanced access to education/training and employment opportunities while 17% disagreed with this statement.

- The response from cyclists was also relatively neutral. Of those respondents to the cyclist intercept survey that were aware of the Scheme (n=283), less than a fifth (19%) stated that they 'agreed' or 'strongly agreed' that it had enhanced access to education/training and employment opportunities, with a third either disagreeing or strongly disagreeing with this statement.

- Of the respondents to the bus passenger survey that were aware of the Scheme (n=160), 14% stated that they 'agreed' or 'strongly agreed' that it had enhanced access to education/training and employment opportunities but 46% of these respondents either 'disagreed' or 'strongly disagreed' with this statement.

**5.45** Evidence from the stakeholder interviews provided further insight into the effects of the Scheme on training and employment opportunities as follows:

*"It's hard to say that the Scheme has improved access to jobs and training for people in the Ward, but it certainly would be expected to have an impact for people travelling into Cambridge from further afield. Again, it's important to think about the wider benefits in terms of how it enables better linkages within the wider sustainable transport networks of the city."*

*"It will be a good thing for Cambridge City. It provides a mandate for better sustainable transport provision and plays its part as part of the wider sustainable transport network, which will help to facilitate employment growth in Cambridge as whole."*

### Wider impacts - Wellbeing, physical health and sense of independence

**5.46** The primary research surveys also included questions around the wider impacts of the Scheme upgrades on bus, cyclist and pedestrian users in terms of their wellbeing, physical health and sense of independence.

> **Overall it's a good thing for me and others. Improving walking provision helps with mental health**
>
> **Resident**

**5.47** **Survey respondents that were users of active travel modes, and were aware of the Scheme, indicated that it had made a positive contribution in respect of their overall wellbeing**. 54% of this cohort of cyclists and 25% of the same group of residents (representing the views of pedestrians) 'agreed' or 'strongly agreed' that the Scheme had improved their overall sense of wellbeing. This compared with 18% of bus passengers who were aware of the Scheme, although this group may not have benefited to the same extent in health and wellbeing terms as those supported in travelling more actively.

**5.48** **The survey responses indicated that the Scheme had also made a positive contribution in respect of the physical health of those people that were aware of the Scheme and were cyclists**. 39% of cyclists that were aware of the Scheme 'agreed' or 'strongly agreed' that it had improved their physical health (compared to 17% for the same groups of both residents and bus passengers).

**5.49** **Less than a third of respondents to each survey that were aware of the Scheme indicated that they felt it had made a positive contribution to their overall sense of independence** 31% of cyclists, 20% of bus passengers and 17% of residents in this group 'agreed' or 'strongly agreed' that this had been the case. However, evidence from the stakeholder interviews provided some further insight into the effects of the Scheme in terms of improving the independence for people with limited physical mobility as follows:

*"The Scheme has definitely helped improve the independence of disabled and older people living locally which has consequently improved the wellbeing of local residents."*

### Wider strategic perspectives

**5.50** In addition to the outcomes discussed above, a key theme that emerged throughout the evidence was that the Scheme had given people more options to get into the city by sustainable transport modes. A **notable proportion of respondents who were asked in each survey – bus passengers (32%), cyclists (49%) and residents (58%) – 'agreed' or 'strongly agreed' that the Scheme had given them more options to get into the city, other than by car.**

**5.51** This aligns with the aim of the Scheme to support planned growth, whilst maintaining/improving journey quality and the local environment, and creating the capacity for an increased level of sustainable trips to employment/education sites. In addition, the stakeholders asked concurred that the Scheme had its part to play in improving connectivity across the city's sustainable transport network and in improving the wider sustainable transport network in the City:

*"The Scheme has also definitely improved connectivity and it plays its part, as part of a wider sustainable transport network that is more cohesive and better to use, which has a wider positive impact on investment and development more broadly which will help to facilitate employment growth in Cambridge as whole."*

**5.52** The project's strategic contribution is also important. The evidence on improved journey times on public transport, encouraging active travel options over the longer term and providing different options and solutions for travel into and out of the city centre, demonstrates strong alignment to the strategic deployment of the Investment Fund by the GCP into enhancing transport infrastructure to relieve the congestion constraints stifling growth.

**"Without the Histon Road Project congestion would probably be far worse had the issue of parking and priority for cyclists not been addressed"**

**Stakeholder**

**5.53** Whilst the evaluation is not seeking to quantify (i.e. in GVA terms) the impacts of the Scheme on local economic growth directly, **the evidence indicates a potential longer-term contribution of the Scheme in helping to unlock and enable further economic growth in Cambridge.**

# 6. Conclusions

6.1 This section sets out the conclusions of the impact evaluation of the Histon Road Project to inform the overall evaluation of the Greater Cambridge Partnership Investment Fund at the second Gateway Review stage. The conclusions are structured around three key questions consistent across all impact evaluations and the outcomes anticipated in the logic model. It finishes with a response to the assessment criteria used in the NEF to appraise the quality of the evidence used in the evaluation.

## Findings and evaluative assessment

6.2 Below we outline the conclusions against each research question identified by the NEF for impact evaluations. The conclusions on the first question are set out in the form of a 'contribution story' for each core outcome and other outcomes drawing on the contribution analysis. This is based on the triangulation of both quantitative and qualitative data across different sources as detailed in the main body of the paper and supporting Annexes.

6.3 The 'contribution stories' reflect the timing and context of the Scheme: the evaluation research was completed around 2.5 years following completion of the Scheme, and significant development is on-going on and around Histon Road, including the new community at Darwin Green, for which Histon Road will be a key route for active travel, public transport access and other transport movements. The full contribution of the Scheme may therefore not yet have emerged.

### Is there evidence of positive economic outcomes at this stage, that would not have occurred without the intervention?

#### Core outcomes

*Has the intervention led to reduced journey times for public transport?*

6.4 **Findings from the primary and secondary data sources indicate that the Scheme has contributed to reduced bus journey times on Histon Road. There may be other contributory factors at play here, including the post-Covid reduction in bus patronage impacting bus stop dwell times.** This conclusion is based on:

- Vix journey time series analysis which suggests the upgrades have contributed to reduced journey times post-Scheme implementation.
- Evidence from the bus passenger survey, suggesting general satisfaction with bus journey times on Histon Road, and around a quarter of respondents that were able to comment indicating that the priority for buses has contributed to reduced journey times.

- Evidence from the motor vehicle counts which indicates that this outcome has come about despite the backdrop of increasing traffic on Histon Road, contrary to the experience on comparator radial corridors.

**6.5** The underpinning theory in relation to reduced journey times for public transport is clear, with the dedicated bus lane and traffic signal measures providing bus priority along Histon Road, causing less conflict with private vehicles, and consequently leading to reduced bus journey times. Other factors, including the impact of Covid-19 on bus patronage, may have also influenced this outcome. However, taken alongside the survey evidence, the reduction in journey times observed on Histon Road, and the lack of observed journey time reductions on the comparator radial corridors since the Histon Road Scheme was completed, suggest the upgrading of priority and facilities for buses on Histon Road has been a key factor.

*Has the intervention led to increased passenger numbers on public transport?*

**6.6** **The available primary and secondary sources suggest the outcome of increased passenger numbers on public transport has not been realised at this stage. As below, this can be attributed to issues outside of the GCP's control.** The Scheme successfully delivered enhanced priority infrastructure and facilities for buses. However, at this point there is no evidence of increased patronage overall. This said, the Scheme may have played a role for some in encouraging increased bus usage, albeit this has yet to be reflected in the secondary data. This conclusion is based on:

- Stagecoach bus patronage data showing a modest upward trend in the post-Scheme implementation period, following the sharp drop-off observed during the Covid-19 period. However, March 2022 to 2024 passenger numbers for Service 8 on Histon Road remained well below 2019 levels, mirroring the national trend of slow bus recovery (as also observed on the two comparator corridors).

- Evidence from the bus passenger survey to suggest that the upgrading of the priority and facilities for buses has encouraged a proportion of respondents to increase their bus usage, with approaching one in five respondents that were aware of the upgrading works prior to the survey, reporting this had encouraged them to use the bus more overall.

**6.7** The underpinning theory in relation to reduced journey times for public transport (as evidenced above) is clear, with the implementation of dedicated bus lanes and other supporting priority measures alongside new bus stop facilities (and enhanced infrastructure to support walking/wheeling to and from the bus stops) resulting in increased attractiveness of bus travel and an enhanced user experience overall. However, it may take time for the full effects of the bus journey time reductions observed to be realised in terms of increases in passenger numbers. The longer-term impacts of Covid-19 and other factors continue to influence bus patronage (including the national fare cap) are also important factors influencing outcomes.

*Has the intervention led to increased levels of cycling?*

6.8 **There is good evidence to suggest that the Scheme has contributed to increased levels of cycling on Histon Road, although the evidence suggests that there has also been some displacement of cyclists from other routes.** This conclusion is based on:

- The anticipated trend in increased cycling is observed from the Radial Survey data for Histon Road, post-Covid-19 and from 2021 onwards, while a corresponding uplift in cycling was not observed to the same level across the comparison corridors.

- Cyclist intercept survey responses which strongly suggest that the upgraded cycling infrastructure has led to a significant proportion of respondents cycling more often overall, cycling for new reasons/purposes and cycling further on some trips that they take. The survey indicated that other factors could also have contributed to the reported increase and change in cycling behaviours, but the scheme improvements were consistently most important. Displacement from other routes was also identified in the survey.

6.9 The underpinning theory in relation to increased levels of cycling is clear, with the new cycle lanes providing a safer, quicker and therefore more attractive environment for cycling on Histon Road, and thereby theoretically encourage increased levels of cycling. The range of evidence indicating that this has been realised in practice, and the lower relative influence of other factors means that a strong contribution claim can be made for the Scheme in realising this outcome.

*Has the intervention led to increased walking/wheeling?*

6.10 **The contribution of the Scheme to increased walking/wheeling appears to be modest at this stage. This is not unexpected, given the nature of the intervention, involving improved (rather than new) pedestrian infrastructure on an existing and well-established radial route.** This conclusion is based on:

- Resident survey responses that indicated that a small proportion of respondents had increased their level of walking due to the upgraded pedestrian infrastructure.

- Challenges in assessing walking/wheeling outcomes using the available evidence base owing to the incomparability of Vivacity data over time (due to hardware changes) and the edge of city location of the Radial Survey.

6.11 The underpinning theory in relation to influencing walking/wheeling behaviours is clear, with corridor and public realm enhancements, including improved footways and street greening, providing an upgraded route along Histon Road and subsequently creating a more pleasant environment for walking/wheeling. However, due to the fact that these improvements represented an enhancement of the existing pedestrian infrastructure, rather

than new, dedicated provision (as in the introduction of *new* bus and cycle lanes), the outcomes may be expected to be modest overall, and it may take time for the walking/wheeling benefits of the Scheme to take effect. In this context, the evidence from the survey that the Scheme had influenced the walking/wheeling behaviours of around 10% of local residents that responded to the survey is encouraging. The Scheme also has the potential to encourage the new community at Darwin Green (under construction, just west of Histon Road) to walk/wheel and more benefits may be realised upon completion of this site.

**6.12** Further it is noted that the resident survey findings reflect principally a sub-set of the population, with the majority of respondents aged 65 or over. The sample was not representative of all residents in the population, and particularly the cohort of younger residents who may have been more active and therefore more likely to use the Scheme infrastructure, and those of working age. The effects of the Scheme on walking/wheeling amongst this group remains uncertain; further research would need to be undertaken in future to explore whether the Scheme has delivered against this outcome. This said, stakeholder feedback did not provide evidence of a material impact on walking/wheeling on Histon Road amongst this group, although this was possibly influenced by the fact that other aspects of the Scheme (particularly the cycling infrastructure improvements) had, by virtue of the nature of their design, a higher profile than the walking/wheeling infrastructure improvements.

*Has the intervention led to modal shift?*

**6.13 There is limited evidence in relation to the contribution of the Scheme to modal shift.** This conclusion is based on:

- Primary research survey responses which indicate evidence of modal shift on Histon Road from car to bus (and also from active travel modes to bus), and also, but to a lesser extent, from car to bicycle and from car to walking/wheeling.

- Motor vehicle count data (as a complementary indicator to the sources of modal shift evidence detailed above) indicating an observed trend of an increase in motor vehicle usage in the period from 2020 to 2023, largely due to recovery in vehicular numbers following the Covid-19 pandemic, as observed across the City. Although this could indicate that significant modal shift away from motorised vehicles and towards sustainable and active travel modes has not been observed on Histon Road in recent years, a wide range of other factors will influence motor vehicle levels including other transport investment (including on the nearby Milton Road), and public transport service quality and frequency. The scale of potential modal shift is limited (particularly in relation to cycling) relative to the number of motorised vehicles using Histon Road. However, it should be noted that much of the housing growth expected on this corridor is yet to occur, so the full extent of mode shift benefits may be yet to be realised.

**6.14** The underpinning theory in relation to modal shift is clear, with the implementation of the Scheme encouraging bus and active travel journeys to replace those made by car, as the former journeys become easier, quicker, safer and more pleasant/comfortable to make. The infrastructure provided by the Scheme was seen as crucial to enable current and future users to make these different choices, for both commuting, and wider reasons for travelling. The survey evidence, supported by stakeholder feedback, represents plausible evidence that the Scheme may have made some contribution to modal shift but this does not appear to be reflected clearly in the motor vehicle count data at this point in time. However, this is not unexpected, given the relative volume of motor vehicle users compared to cyclists and buses, and the effects of wider trends and influencing factors on motorised vehicle usage.

### Wider outcomes

*Has the intervention led to wider outcomes?*

**6.15 The evidence suggests that some wider outcomes have been realised by the project, although the strength of the evidence base varies.**

**6.16** Evidence from surveys suggest that the Scheme is seen to have contributed to a range of positive outcomes including related to enhancing the local environment and streetscape, and improved wellbeing and physical health for users. The contribution of the Scheme to these outcomes varied across survey groups, however, generally these outcomes were seen to be pronounced for cyclists.

**6.17** The cyclist survey also suggests perceived safety improvements on Histon Road. Secondary data on the total number and severity of road traffic collisions observed on Histon Road in the period 2017 to 2023 and comparators used to complement the survey is inconclusive. However, the strong survey evidence – with 75% of cyclists that were aware of the upgrades to the cycling facilities indicating this had improved the perceived safety of their cycling activity – alongside corroborating evidence from stakeholders provides strong evidence that the Scheme has contributed to this outcome.

**6.18** The impact evaluation generated limited evidence of perceived enhanced access to education/training and employment opportunities through the responses received to the primary research surveys. However, this is likely to have been influenced by the high proportion of respondents in the residents survey sample that were of retirement age. It was not possible to engage with businesses located on and around Histon Road to gather evidence on perceived effects for their employees.

**Is it reasonable to expect that positive economic outcomes will be realised in the future, that would not have occurred without the intervention?**

**6.19** It is reasonable to expect that the Scheme will lead to positive economic outcomes in the future that would not have occurred without the intervention. This is based on the positive

evidence on transport-specific outcomes including increased cycling and improving bus journey times associated with the Scheme. Both have the potential to contribute to reduced congestion in/around Cambridge over the longer-term. There are also broader positive effects including improved perceived safety, which is also likely to encourage further take-up of active travel.

**6.20** At this stage, the outcome of increased bus patronage has not been realised. However, this may relate in part to the time required to change behaviours, with reduced times yet to lead to higher usage. Further, positive economic outcomes may be realised as the improvements to Histon Road align and complement other GCP interventions, and wider spatial and economic development activities, including for example the development at Darwin Green adjacent to Histon Road.

**6.21** A range of factors will influence the longer-term outcomes of the Scheme, including maintenance issues, service quality of buses, and the effects of other active travel and transport infrastructure schemes, including for example the completion of Milton Road.

**Is further evaluation evidence required in the future to provide a credible assessment of the overall contribution of the intervention to economic outcomes, and if so when should this be delivered?**

**6.22** Given the timing of this evaluation, and the spatial and transport network relationships between Histon Road and Milton Road, it may be appropriate to undertake further evaluation research in the future to provide a longer-term perspective on the impacts of the Histon Road, including once improvements on the Milton Road scheme are completed and had time to emerge, perhaps in 2-3 years post-completion of Milton Road.

**6.23** This could include time series analysis of bus journey time, bus patronage and modal shift outcomes and a large-scale survey of the local business community across Histon and Milton Roads, alongside an assessment of the performance of businesses in the areas affected, to provide evidence on business productivity effects that have not been assessed at this stage.

## Application and method

### Has the method used followed that set out in the Local Evaluation Framework?

**6.24** The evaluation method and approach followed was set out in the LEF and subsequently adjusted in the mid-term paper. Some changes were made to:

- The timing of planned research fieldwork (notably due to the timing of the May local elections and then subsequently, the calling of the General Election at the end of May).
- The coverage of secondary data used, owing to gaps in data coverage, notably for:

- One of the Vivacity sensors from Oct-Dec 2023 due to scaffolding obscuring the view of the sensor;
- Bus journey time data and bus patronage data for one month on one of the comparator radial corridors due to the service not running.

- Despite considerable efforts, no interviews with business stakeholders were conducted.

### Confirmation of quality of method (Nesta rating)

**6.25** The Nesta Standards of Evidence provide an approach to evaluate the quality of evidence used to measure the impact of a programme. The aim is to "*know how confident we can be in the evidence provided to show that an intervention is having a positive impact*"[21]. As outlined in the LEF, the evidence used in the evaluation of Histon Road was assessed at Level 2. At Level 2, the evidence shows positive change from the intervention but cannot confirm the intervention caused this change. This informed the contribution analysis approach.

### Is the method clearly described so that it could be replicated?

**6.26** A full method statement, relating to the use of contribution analysis, the sources of evidence required and the rationale for the exclusion of other approaches, is discussed in the LEF. The mid-term paper presented the scoping evidence and assessed the extent to which the method could be applied given the potential evidence available. The annexes to this evidence report detail the data collection methods and analysis.

### Are the sources of data used robust?

**6.27** Three primary research surveys were completed with bus passengers, cyclists and residents representing the core evidence base used in the evaluation. These surveys were completed at the time recommended by the IEP at the mid-term stage (April/May 2024). Secondary data was drawn from automated systems and annual surveys completed by Cambridgeshire County Council, and collision data reported by the police.

### If using a survey, is the sampling and response rate reasonable?

**6.28** The sample achieved of 346 cyclists exceeded the target agreed in the LEF, of 200. The bus passenger survey achieved 387 interviews (97% of the 400 target sample) and there were 312 resident survey completions (78% of the 400 target sample). The survey samples are within acceptable confidence intervals, around +/- 5pp for the cyclists and bus passengers and +/- 6 pp for residents. This provides a strong level of confidence in the representatives of the results. However, the residents survey sample was biased towards people aged 65 years and above as a result of the limitations of the survey methodology used.

[21] https://www.nesta.org.uk/feature/innovation-methods/standards-evidence/

### Have a sufficient number of interviews been conducted, with an appropriate range of participants?

**6.29** Nine project specific stakeholders were interviewed, including local councillors and council officials, a local educational institution, key non-motorised user groups, and a developer located in close proximity to Histon Road. In addition, the impact evaluation has drawn on evidence related to the Scheme from interviews conducted with a further six strategic stakeholders as part of the wider evaluation research for the Gateway Review (e.g. the Capacity Development and Partnership Working strand) where they referenced Histon Road specifically. Stakeholders were selected consistent with the approach set out in the LEF.

**6.30** It was not possible to engage with businesses along Histon Road. A number of stakeholders across these groups were approached by the GCP to ask for their consent to be contacted by SQW/ITP. However, despite considerable efforts and a range of different opportunities for individuals to be involved, none of the individuals contacted responded either to the GCP or SQW/ITP when contacting them to arrange an interview.

### Is it clear how quality assurance and independence have been ensured in the process?

**6.31** ITP working with SQW is an independent research consultancy, and the research team which conducted the evaluation is wholly independent of the Greater Cambridge Partnership. Conducting quality research is the responsibility of every researcher within the team. The research team was led by a Project Director who oversaw the quality of the research processes undertaken and quality assured the outputs produced.