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Date of issue: Wednesday, 6 July 2022

MEETING	**BERKSHIRE LOCAL TRANSPORT BODY**

Member	**Authority**
Councillor Brunel-Walker	Bracknell Forest Council
Councillor Fishwick	Wokingham Borough Council
Councillor Haseler	RBWM
Councillor Nazir	Slough Borough Council
Councillor Page	Reading Borough Council
Councillor Somner	West Berkshire Council
Stuart Atkinson	Thames Valley Berkshire LEP
Laura Fitzgerald	Thames Valley Berkshire LEP
Bob Mountain	Thames Valley Berkshire LEP
Nigel Nawacki	Thames Valley Berkshire LEP
Simon Ratcliffe	Thames Valley Berkshire LEP

DATE AND TIME:	**THURSDAY, 14TH JULY, 2022 AT 4.00 PM**
VENUE:	**VIRTUAL MEETING**
DEMOCRATIC SERVICES OFFICER:	**NICHOLAS PONTONE**
(for all enquiries)	**07749 709 868**

NOTICE OF MEETING

You are requested to attend the above Meeting at the time and date indicated to deal with the business set out in the following agenda.

GAVIN JONES
SBC Chief Executive

sustainable forest

AGENDA ITEM	REPORT TITLE	PAGE	WARD

AGENDA

PART 1

Apologies for absence.

1. Declarations of Interest -

It is a principle of the BLTB that the interests of the Thames Valley Berkshire area will take precedence over a member's own interests or those of their nominating authority. All members must declare, and take relevant action, if they believe they have a pecuniary or other interest on a matter to be considered at the meeting in accordance with the Code of Conduct of the nominating authority or LEP. The Chair will invite any member representing a local authority seeking financial approval for a scheme to declare that interest.

2. Election of Chair for 2022/23 -

To elect the Chair of BLTB for 2022/23 from amongst the Local Authority Members.

3. Election of Vice-Chair for 2022/23 -

To elect the Vice-Chair of BLTB for 2022/23 from amongst the TVB LEP Members.

4. Minutes of the Meeting held on 11th November 2021 1 - 6

5. Briefing Note - TVB/BLTB 'How We Work' 7 - 8

6. Thames Valley Berkshire Local Growth Deal 2015/16 to 2020/21 9 - 20

7. Evolving Role of BLTB and BSTF 21 - 22

8. Review of Approach to Impact Reports and One-year-on reports for schemes 23 - 150

- One-year-on impact report for 2.04 - Arborfield Cross Relief Road
- One-year-on impact report for 2.26 - Wokingham: Winnersh Relief Road
- One-year-on impact report for 2.43 – Wokingham: Barkham Bridge
- One-year-on impact report for 2.44 – Reading Buses: Completing the Connection

AGENDA ITEM	REPORT TITLE	PAGE	WARD
9.	BLTB Forward Plan	151 - 152	
10.	Date of Next Meeting - 10th November 2022	-	

Press and Public

Attendance and accessibility: You are welcome to observe this meeting which is open to the press and public, as an observer via the live stream. Please contact the Democratic Services Officer if you have any problems accessing the live stream.

Webcasting and recording: The public part of the meeting will be filmed by the Council for live and/or subsequent broadcast on the Council's website. The footage will remain on our website for 12 months. A copy of the recording will also be retained in accordance with the Council's data retention policy.

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Berkshire Local Transport Body – Meeting held on Thursday, 11th November, 2021.

Present:-	Councillor Anderson	Slough Borough Council
	Councillor Brunel-Walker	Bracknell Forest Council
	Councillor Clark	RBWM
	Councillor Jorgensen	Wokingham Borough Council
	Councillor Page (Chair)	Reading Borough Council
	Councillor Somner	West Berkshire Council
	Stuart Atkinson	Thames Valley Berkshire LEP
	Laura Fitzgerald	Thames Valley Berkshire LEP
	Bob Mountain	Thames Valley Berkshire LEP
	Nigel Nawacki	Thames Valley Berkshire LEP
	Simon Ratcliffe	Thames Valley Berkshire LEP

Also present:- Councillors Atkinson and Turrell

Adele Taylor – RBWM (LEP Accountable Body S151)

Apologies for Absence:- Malcolm Kempton

PART 1

11. Declarations of Interest

No declarations were made.

12. Minutes of the Meeting held on 15th July 2021

Resolved – That the minutes of the meeting of the Berkshire Local Transport Body held on 15th July 2021 be approved as a correct record.

13. Briefing Note - TVB/BLTB 'How We Work'

Members noted a briefing note that summarised the process by which Thames Valley Berkshire LEP and the Berkshire Local Transport Body operated in investing in local transport schemes.

Resolved – That the BLTB ‘How We Work’ briefing note be noted.

14. Thames Valley Berkshire Local Growth Deal 2015/16 to 2020/21

A report was received that set out the progress of the Thames Valley Berkshire Local Growth Deal schemes.

A correction to Table 1 of the report was noted, in that the sum for the Getting Building Fund (GBF) should be £3.8m not £2.1m as stated and that the reporting period was 2015/16 to 2021/22.

Table 1 showed the total Local Growth Deal funding for the period was £137.3m and £36m of BRRP funding for the two years of 2018/19 and 2019/20. The £3.8m GBF included the £1.6m for the Slough Langley High Street Phase 3 scheme and an additional £450k for Bracknell A332/A329 Corridor Improvements as approved at the last meeting. Table 2 provided a breakdown of the funding, including the £1.5m GBF funding in 2021/22. The figures in Table 3 set out the funding breakdown by type of scheme, and included the further clarity previously requested by Members such as active travel, regeneration etc. It was noted that 46% of spend had been on sustainable projects such as Mass Rapid Transit and rail & cycle schemes, which equated to more than £80m in total.

Updates were provided for uncompleted schemes by exception and the following was noted:

- 2.01 – Newbury: King's Road Link Road – there had been an outstanding planning issue to resolve. Work had commenced in September and was on track for completion.

- 2.27 – Maidenhead Town Centre: Missing Links – there had been some minor slippage but the scheme was nearing completion.

- 2.31 – Slough: Stoke Road Area Regeneration – the scheme was progressing well, including work on the northern forecourt of the station. The target completion date remained March 2022.

- 2.40 – Windsor: Town Centre Package – there had been a re-tender for the main contractor due to increased cost but the scheme remained on track.

- 2.45/2.26 – Slough: Langley High Street – expected completion had been delayed to March 2022 due to utility issues.

- 2.34 – Slough MRT Phase 2 – the BRRP scheme was progressing with highway widening and junction work progressing well. As previously reported, it was expected that the Park & Ride element would be resubmitted and this was expected to come to the next meeting in March 2022.

- TVB Smart City Cluster – there had been a slight delay which was expected to delay completion from December 2021 to January 2022. The scheme had won a national digital innovation award from the Municipal Journal.

A Member commented on the fact that a number of schemes had experienced delays due to utility issues and BLTB discussed whether any lessons could be learned for future schemes. Assurance was provided that the relevant pre-commencement preparation and searches had been carried out. Members discussed the engagement with utility companies and possible further protocols to strengthen due diligence. It was recognised that it was inevitable

that issues would be found once construction works started for many projects. It was agreed that Officers would give the matter further consideration to explore whether any further steps could be taken for future schemes.

Resolved – That the update be noted.

15. 2.10 Slough: A332 Windsor Road Improvements - One Year Evaluation Report

A report was considered on the one-year impact report for scheme 2.10 Slough: A332 Windsor Road Improvement Scheme.

The independent assessors report at Appendix B to the report concluded that Slough Borough Council's one-year impact report was well constructed and balanced, making good use of the available evidence.

It was noted that works on the scheme had started in January 2016 and there had been some delays which were attributed to utility issues and the replacement of the main contractor in 2017. There had been a slight cost overrun of £150,000 from the initial estimate of £5 million. Data had been collected prior to construction, mid-scheme and post-construction. The early evidence indicated a slight reduction in journey times at AM peak and a greater reduction at the PM peak. More detailed data would be available for the five-year impact report.

The scheme promoter highlighted that in addition to the quantitative benefits the scheme had already contributed positively to the regeneration of Windsor Road, with significant new recent and planned developments.

BLTB noted the report of the scheme promoter and independent assessor.

Resolved – That the reports from the scheme promoter and the independent assessor be noted.

16. 2.12 Reading: South Reading Mass Rapid Transit (MRT) phases 1 & 2 - One Year Evaluation Report

A report was considered on the one-year impact report for scheme 2.12 Reading: South Reading Mass Rapid Transit (MRT) Phases 1 and 2.

The independent assessor had commented that Reading Borough Council's evaluation report had been comprehensive and detailed. The evaluation report focused on the impact the corridor improvements had had in supporting improved connectivity and economic development, particularly for key employment and housing locations in Reading. The Council's report highlighted that during 2017-18, the first year of the schemes implementation, that approximately 3,500 dwellings and 32,550 sqm of business/industrial floorspace had been developed.

The data considered in the one-year evaluation showed that Phases 1 and 2 of the MRT scheme had enabled a faster, more reliable and more frequent bus service along the A33 corridor with more buses recorded and fewer delays. The scheme promoter explained that this report covered only the first two phases of a much wider scheme, with the fourth phase almost nearing completion. The evaluation of the early phases could support funding bids for future phases particularly as there was evidence that congestion in the corridor was increasing again which would impact on the reliability of bus services.

A Member suggested that it would be useful to see bus patronage figures in future evaluation reports, although it was recognised that Covid-19 had had a significant impact on patronage. BLTB discussed the prospects for the recovery of public transport usage and it was noted that there were variable trends. Some services had already returned to pre-pandemic levels, however, others such as park and ride services for town centre locations remained below pre-Covid levels reflecting the changing economic patterns.

The reports were noted.

Resolved – That the reports from the scheme promoter and the independent assessor be noted.

17. 2.15 Bracknell: Martins Heron Roundabout - One Year Evaluation Report

A report was considered on the one-year impact report for scheme 2.15 Bracknell: Martins Heron Roundabout.

The independent assessor had concluded that Bracknell Forest Council's evaluation report had been well-constructed and balanced, despite the fact the fundamental change to usage patterns made the one-year impact report difficult. A comparison of the impacts between 2013 and 2021 demonstrated the success of the scheme. There was evidence of reduced delays associated with traffic congestion, for example, in 2013 it took on average 13 minutes to travel eastbound at morning peak and by 2021 this had reduced to 9 minutes. Lower levels of congestion had helped to reduce the level of harmful exhaust fumes and the improved junctions had helped to encourage and promote accessibility and sustainable modes of transport.

The scheme promoter commented that the investment had had a very positive impact now that it had been completed. BLTB noted the reports.

Resolved – That the reports from the scheme promoter and the independent assessor be noted.

18. 2.21 Slough: Langley Station Access - One Year Evaluation Report

A report was considered on the one-year impact report for scheme 2.21 Slough: Langley Station Access.

The independent assessor concluded that the Slough Borough Council evaluation report had been well constructed. The scheme had enhanced facilities for pedestrians and cyclists. The Council's evaluation stated that the infrastructure and supporting measures had created a safer, more attractive area of public realm, improving social inclusion and accessibility to Langley station. BLTB noted the reports.

Members discussed the overall conclusions from the four one-year impact assessments considered at the meeting. It was recognised that Covid had had significant impacts on the ability to evaluate the schemes against the criteria on which they were approved and it was suggested that officers work with the independent assessor to look at different metrics which would help assess both the short term impacts over a year and longer term five-year impacts.

Resolved – That the reports from the scheme promoter and the independent assessor be noted.

19. Transport for the South East - Subscription Report Update

A report was considered that sought agreement to continue the annual subscription to Transport for the South East (TfSE).

BLTB had agreed in November 2020 to renew the annual subscription to TfSE of £58,000 for 2020/21, with the amount to be split 6 ways between the constituent authorities. In its role as accountable body for the Berkshire Local Transport Body, Slough Borough Council collected contributions from BLTB members and passed the subscriptions to East Sussex County Council, the accountable body for TfSE.

TfSE was focused on the delivery of a Strategic Investment Plan (SIP), which would provide a blueprint for investment across the South East for the next 30 years. It was envisaged would be published for consultation in June 2022 with the final SIP to be put the TfSE board for agreement in March 2023. TfSE would be giving a presentation on its current work at the forthcoming Berkshire Strategic Transport (Members) Forum.

At the conclusion of the discussion, the recommendation to continue with an annual, pan-Berkshire subscription was agreed.

Resolved – That the renewal of annual BLTB subscription of £58,000 for Transport for the South East to the cover the period 2021/22 be agreed, with the amount to be split 6 ways between the constituent authorities.

20. BLTB Forward Plan

The BLTB Forward Plan which set out the matters to be considered at future meetings was considered and noted.

Resolved – That the BLTB Forward Plan be noted.

21. Date of Next Meeting - 10th March 2022

The date of the next meeting was confirmed as 10th March 2022.

Chair

(Note: The Meeting opened at 4.00 pm and closed at 4.57 pm)

Thames Valley Berkshire Local Enterprise Partnership (TVB LEP) and the Berkshire Local Transport Body (BLTB) – investing in strategic infrastructure

This briefing note is intended to set out the way TVB LEP works with BLTB to invest Local Growth Funds in transport schemes.

1. TVB LEP is a business-led organisation responsible for determining the key funding priorities to which Local Growth Funds (LGF) and other public resources are directed in order to implement a Strategic Economic Plan (SEP) and meet its commitments in the TVB Growth Deals. As a company limited by guarantee (registered at Companies House No. 07885051) it operates according to its Articles of Association, which comply with the Companies Act 2006. As a publicly-funded body it behaves in accordance with an Assurance Framework, which determines the practices and standards necessary to provide assurance to government and local partners that decisions over (all government) funding are proper, transparent and deliver value for money. [**LEP Assurance Framework (AF 4.0) March 2019**]

2. BLTB consists of six elected members (usually the lead member for transport or related portfolio), and six private sector representatives recruited and appointed by the LEP. [**AF 4.0 para 4.2.3**]. It is a Joint Committee of the six unitary authorities in Berkshire and its constitution is set out in its Founding Document.

3. TVB LEP recognises BLTB as "the BLTB has been designated as the competent body to prioritise, invest in and oversee transport capital schemes on behalf of the LEP. DfT retains responsibility for the approval process of schemes in excess of £20m LGF. The LEP will accept any BLTB recommendation or refer them back but will not substitute its own recommendations." [**AF 4.0, para 5.9**]

4. The process established by government for making Growth Deals is to invite LEPs to submit competitive proposals, and after due consideration to make awards based on all or part of a LEP bid. To date TVB LEP has agreed three Growth Deals. Each of these has included, among other things, the award of capital funds for individual transport schemes that were prioritised in the TVB LEP bid and named in the Growth Deal settlement.

5. TVB LEP works with its partners to identify and prioritise suitable schemes. It is a lobbying organisation, and, via Growth Deals, a joint-funder of selected schemes promoted by (usually, but not always) a local transport authority. [**BLTB Founding Document (FD) 11-13**]

6. BLTB requires promoters to develop each scheme in accordance with current WebTAG guidance published by DfT. In order to receive financial approval from BLTB, the Full Business Case must be subject to independent assessment and a positive recommendation about value for money. [**BLTB FD 14-16**]

7. The scheme promoter is responsible for all aspects of the design, risk management, insurance, procurement, construction and implementation of the scheme, including their responsibilities as highway and planning authorities, any other statutory duties, and any financial or other liabilities arising from the scheme. [**BLTB FD 18**]

8. The time taken between an initial government call for bids and the final announcement of a new Growth Deal can be in excess of a year. TVB LEP (together with BLTB for transport schemes) must go through a number of steps to respond to a government call for bids. Similarly, a transport scheme promoter also must go through several steps:

- LEP receives a call from government or Growth Deal proposals

- LEP asks BLTB to issue a call for transport capital schemes, which meet the Growth Deal criteria

- BLTB consults on and publishes prioritisation methodology for assessing schemes

- Local Transport authorities and other promoters propose schemes for inclusion
- BLTB applies the prioritisation methodology and recommends a priority order of schemes for inclusion in the overall LEP Growth Deal bid

- LEP submits Growth Deal bid including transport schemes

- Government announces Growth Deal approvals (if any) including named schemes and provisional financial allocation

- BLTB awards schemes named in the new Growth Deal "programme entry" status. This reserves the provisional financial allocation for each named scheme until the scheme promoter comes forward with a Full Business Case (FBC), which demonstrates at least "good value for money"

- The scheme promoter works up the detail of the scheme, including planning permission and any other regulatory approvals, design, costs, environmental and other impact assessments. The scheme FBC is then subject to independent scrutiny and a report is made to BLTB

MEETING OF THE BERKSHIRE LOCAL TRANSPORT BODY (BLTB) – THURSDAY 14 JULY 2022

CONTACT OFFICER: Alison Webster, Chief Executive, Berkshire Local Enterprise Partnership

Item 6: Thames Valley Berkshire Local Growth Deal 2015/16 to 2020/21

Purpose of Report

1. To report on the progress of the Thames Valley Berkshire Local Growth Deal[i], as amended by Growth Deal 2 (£10.2 million further support to Thames Valley Berkshire[ii]) and Growth Deal 3 (Factsheet GD3[iii]) with particular reference to the schemes included in the Transport Packages of the Strategic Economic Plan[iv]; and on the progress of schemes funded by the Business Rates Retention Pilots (BRRP) of 2018/19 and 2019/20. This report also reports on the transport element of the Getting Building Fund (GBF) released in September 2020.

2. The headline figure for transport scheme grants under the three Local Growth Deals is £135.96m. This includes £24m of "DfT retained" allocation relating to the Wokingham Distributor Roads. This report no longer includes detail for the TVB Smart City Cluster scheme, as this is reported separately to Berkshire's Digital Infrastructure Group. A further £25m has been released through BRRP1 2018/19 and £11m from BRRP2 2019/20, with £1.1m being allocated to two digital projects. Thames Valley Berkshire has received £7.5m through the GBF, of which £2,093,000 has been allocated to two transport projects.

3. £14.742m LGF was spent on transport schemes in 2015/16, £16.546m in 2016/17, £15.055m in 2017/18, £8.810m in 2018/19 and £12.441m 2019/20; £44.366m in 2020/21. In addition, £25.547m was spent from BRRP and £2.093 from the GBF.

4. To note a change to the current programme of LGF schemes:

Scheme 2.34 Slough MRT Phase 2 – note the change in focus for the park and ride facility.

Recommendations

5. That you note the progress made on the schemes previously given programme entry status, as set out in the accompanying summary report.

6. That you note the proposed changes to scheme 2.34.

Other Implications

Risk Management

7. The delegation of programme management responsibilities to the LEP/BLTB brings risks. The well-established scrutiny given by both BST(O)F and BLTB meetings is designed to mitigate that risk.

8. There will be an element of risk for scheme promoters who invest in developing their schemes to full business case stage in accordance with the approved Assurance Framework[v]. However, there is also risk involved in not developing the schemes; that risk is that any reluctance to bring the schemes forward will result in any final approval being delayed or refused.

9. The risks associated with each scheme are monitored locally. Table 4 has been adapted to show the current risk rating of each of the schemes. Completed schemes are shown in blue.

Financial

10. Thames Valley Berkshire LEP has been granted freedoms and flexibilities in managing the Local Growth Deal Capital Programme. This means that we will receive an annual allocation of capital within which it will be our responsibility to manage the award of LGF to individual schemes. This is a positive development for TVB LEP and recognises the confidence that government has in our governance arrangements.

Table 1: Available Finance for Transport Schemes (including digital) in TVB Local Growth Deal, BRRP and GBF

£m	2015/16 – 2022/23
Growth Deal 1 "DfT Major Schemes"	24.0
Local Growth Deal	112.0
BRRP 2018/19 and 2019/20	34.9
Getting Building Fund 2020/21 and 2021/22	2.1
Grand Total	**172.9**

*Digital infrastructure projects have been removed from the totals above as these are governed by the Digital Infrastructure Group.

11. The profile and status of the available money in each year is as follows:

Table 2: Local Growth Deal, BRRP and GBF Financial Allocations for Transport Schemes by Financial Year

£m	2015 /16	2016 /17	2017 /18	2018 /19	2019 /20	2020 /21	2021 /22	2022 /23	Total
Combined Growth Deal 1, 2, 3 & LTB Allocation	14.74	16.55	15.06	8.81	12.44	44.37	-	-	**111.96**
Growth Deal 1 (DfT Major Schemes)	-	-	-	0.87	22.13	1.0	-	-	**24.0**
Local Growth Deal Total	**14.74**	**16.55**	**15.06**	**9.68**	**34.37**	**45.37**	-	-	**135.96**
Business Rates Retention Pilot	-	-	-	**11.45**	**9.31**	**1.07**	**2.60**	**10.45**	**34.88**
Getting Building Fund	-	-	-	-	-	**0.60**	**1.50**	-	**2.10**
Grand Total	**14.74**	**16.55**	**15.06**	**21.13**	**43.88**	**47.04**	**4.10**	**10.45**	**172.95**

12. The breakdown of types of projects with allocated LGF, BRRP and GBF monies is shown below:

Table 3: Breakdown of schemes by type by funding allocated

£m	LGF	BRRP	GBF	Total
MRT / P&R projects	23.5	21.1	-	44.6
Railway projects	30.7	-	-	30.7
Highway improvements	24.6	-	2.1	26.7
Unlocking direct housing	21.6	12.3	-	33.9
Regeneration	4.5			4.5
Active travel	6.9			6.9
Revenue projects	0.004	1.5	-	1.5
DfT retained	24.0	-	-	24.0
Unallocated funds	n/a	n/a	n/a	n/a
Total funding	**135.8**	**34.9**	**2.1**	**172.9**

13. The LGF programme closed on 31 March 2021. Where a project did not complete by this date and there was still outstanding expenditure, the LEP was allowed to use freedoms and flexibilities to temporarily allocate the funding to an alternative capital project that took place within the local authority during 2020/21. Once the original projects completes, the LGF will be reallocated back to the original project. This process is known as a capital swap and is an accounting process to ensure that capital grants are defrayed within the correct financial period. Delivery partners confirmed that by the end of March 2021, expenditure was at roughly £79m, against the £112m paid over the LGF period. Roughly £33m was reallocated as a capital swap at March 2021, which was reduced to £22.1m at June 2022. The following table shows the amount of capital swap that was required by each local authority:

Table 4: LGF Capital Swap by Local Authority

Local Authority	Amount
West Berkshire Council	£9.6m
Slough Borough Council	£4.6m
Royal Borough of Windsor and Maidenhead	£3.8m
Wokingham Borough Council	£1.6m
Reading Borough Council	£2.4m
Bracknell Forest Council	-
Total	**£22.1m**

14. Table 5 has been amended to present all project data previously shown across several tables. It shows the final award of scheme finance for 2015/16, 2016/17, 2017/18, 2018/19, 2019/20 and 2020/21. The provisional allocation for 2021/22 is shown for the BRRP and GBF. It also shows Red Amber Green (RAG) risk rating and completed projects in blue, the data that LTB approval was granted or sought and any notes including when future evaluations are due

15. *Table 5 – Local Growth Deal, BRRP and GBF Scheme Funding Profiles*

LEP Capital Infrastructure Programme Summary **05/07/2022**

Ref.	Scheme Name	Growth Deal	RAG	Notes	LTB Funding Approval	Start on Site	Completion date	2015 /16	2016 /17	2017 /18	2018 /19	2019 /20	2020 /21	Total
	LOCAL GROWTH FUND													
2.01	Newbury: King's Road Link Road	GD1	AG	Worked stopped until planning issues are resolved.	Mar-15	Oct-16	Due Sep 22	0.000	1.335	1.000	0.000	0.000	0.000	2.335
2.02	Bracknell: Warfield Link Road	GD1	C	1-yr impact report published Mar 20	Jan-15	Feb-15	Apr 17; open Oct 18	3.500	0.000	0.000	0.000	0.000	0.000	3.500
2.03	Newbury: London Road Industrial Estate	GD1	C	1-yr impact report published Jul 18 Delays to linked housing	Mar-15	Feb-16	Mar-17	0.500	1.400	0.000	0.000	0.000	0.000	1.900
2.04	Wokingham Roads - Arborfield Cross Relief Rd	DfT major	C	1-yr impact report due March 2023	Jul & Aug 19 via DfT	Aug 19 enabling	Nov-20	0.000	0.000	0.000	0.874	22.126	1.000	24.000
2.05	Newbury: Sandleford Park	GD2	C	Final works underway	Jul-16	Aug-18	Dec-21	0.000	0.000	0.000	2.000	0.000	0.000	2.000
2.06	Reading Green Park Railway Station	GD1	AG	Final construction work before handing over to rail industry for safety testing. Opening expected late 2022	Nov 14 & Jul 19	Mar-18	Due Sep 22	0.000	0.000	4.575	0.000	4.575	0.550	9.700
2.07	Bracknell: Coral Reef Roundabout	GD1	C	1-yr impact report published Nov 17, 5 yr report due Nov 2023	Jan-15	Apr-15	Apr-16	2.100	0.000	0.000	0.000	0.000	0.000	2.100
2.08	Slough Rapid Transit Phase 1	GD1	C	1-yr impact report published Mar 20	Jul-14	Dec-15	Dec 17; buses Mar 19	3.100	2.500	0.000	0.000	0.000	0.000	5.600
2.09.01	Sustainable Transport: NCN 422	GD1	C	1-yr impact report due Nov 2022	Nov-15	Jan-17	Dec-20	0.000	2.100	1.500	0.200	0.400	0.000	4.200

2.09.02	Sustainable Transport: A4 Cycle (with Bucks)	GD1	C	1-yr impact report due Nov 2022	Nov-15	Feb-17	Sep-18	0.000	0.483	0.000	0.000	0.000	0.000	0.483
2.10	Slough A332 Improvements	GD1	C	1-yr impact report published Nov 2021	Nov-14	Dec-15	Sep-19	1.267	1.433	0.000	0.000	0.000	0.000	2.700
2.11	South Reading Mass Rapid Transit Phase 1	GD1	C	1-yr impact report published Nov 21	Nov-15	Aug-16	Jul-19	0.000	2.970	0.000	0.000	0.000	0.000	2.970
2.12	South Reading Mass Rapid Transit Phase 2						Jul-19	0.000	0.000	1.530	0.000	0.000	0.000	1.530
2.13	Wokingham Thames Valley Park and Ride	GD1	C	Bus service tender is on hold	Jul-17	Feb-18	Nov-20	0.000	0.000	0.000	2.000	0.900	0.000	2.900
2.14	*East Reading MRT Phase 1*	GD1	Project withdrawn											
2.25	*East Reading MRT Phase 2*	GD3												
2.15	Bracknell: Martins Heron	GD1	C	1-yr impact report due published Nov 2021	Apr-17	Apr-17	Apr-19	0.000	0.200	2.700	0.000	0.000	0.000	2.900
2.16	Maidenhead: Station Access	GD 1	C		Nov-17	Jan-19	Oct-21	0.000	0.000	0.000	0.690	1.666	1.394	3.750
2.17	Slough: A355 route	GD 1	C	1-yr impact report published Jul 18	Nov-14	Dec-15	Feb-17	2.275	2.125	0.000	0.000	0.000	0.000	4.400
2.18	Not used													
2.19	Bracknell: Town Centre Regeneration Infrastructure	GD 2	C	1-yr impact report published Mar 19	Nov-15	Apr-15	Sep-17	2.000	0.000	0.000	0.000	0.000	0.000	2.000
2.20	Not used													
2.21	Slough: Langley Station Access	GD 2	C	1-yr impact report due published Nov 2021	Nov-16	Mar-18	Feb-20	0.000	0.000	1.500	0.000	0.000	0.000	1.500
2.22	Slough: Burnham Station Access	GD 2	C	1-yr impact report published Jul 20	Mar-16	Jan-17	Apr-19	0.000	2.000	0.000	0.000	0.000	0.000	2.000
2.23	Reading: South Reading MRT Ph 3-4	GD 3	C	Final works underway. See BRRP below.	Nov-17	Mar-18	Due Mar 22	0.000	0.000	2.250	0.090	0.000	0.000	2.340

2.24	Newbury: Railway Station	GD 3	AG	Issues with station building resolved. Working to updated programme.	Conditional Jul 18, lifted Feb 19	Jan-19	Due Mar 23	0.000	0.000	0.000	3.630	0.000	3.061	6.691
2.25	East Reading MRT Phase 2 - See 2.14													
2.26	Wokingham: Winnersh Relief Road Phase 2 - See BRRP													
2.27	Maidenhead Town Centre: Missing Links	GD 3	AG	Final stage of bridge installation, due on site in July.	Conditional Nov 18, lifted Sep 19	Nov-20	Due Nov 22	0.000	0.000	0.000	0.000	0.000	2.242	2.242
2.28	Bracknell: A3095 Corridor	GD 3	C	1-yr impact report due - date TBC	Jul-18	Oct 18 enabling	Nov-21	0.000	0.000	0.000	0.200	1.800	3.519	5.519
2.29	Wokingham: Winnersh Triangle Park & Ride	GD 3 resrv.	A	Turning head close to completion. Car park water main issue resolved, work underway	Conditional Mar 19, lifted May 19	Apr-21	Due Feb 23	0.000	0.000	0.000	0.000	0.000	4.240	4.240
2.31	Slough: Stoke Road Area Regeneration	GD 3 resrv.	AG	TVU sites work outstanding, railway station work near completion. Canal Bridge element removed.	Jul-19	Aug 19 enabling	Due Sep 22	0.000	0.000	0.000	0.000	1.000	6.650	7.650
2.32	Maidenhead: Housing Sites Enabling Work Ph. 1	GD 3 resrv.	AR	Concerns over ability of final roundabout start. May lead to underspend / reallocation. See BRRP	Conditional Jan 19, lifted Jul 20	Nov-20	Due Mar 23	0.000	0.000	0.000	0.000	0.000	4.254	4.254
2.33	GWR: Maidenhead to Marlow Branch Line Upgrade	GD 3 resrv.		Project withdrawn										
2.34	Slough MRT Phase 2 – see BRRP below													
2.35	Reading: Reading West Station Upgrade	GD 3 resrv.	A	GWR contractor to begin work on station building in July.	Nov-19	Feb-21	Due Feb 23	0.000	0.000	0.000	0.000	0.000	3.100	3.100
2.36	Wokingham: Coppid Beech Park and Ride	GD 3 resrv.	C		Mar-20	Feb-21	Mar-22	0.000	0.000	0.000	0.000	0.000	2.400	2.400

2.37	Bracknell: A322 A329 Corridor Improvements	GD 3 resrv.	C		Nov-19, amendment Jun 20	Nov-20	Nov-21	0.000	0.000	0.000	0.000	0.000	0.400	0.400
2.38	Theale Station Upgrade	GD 3 resrv.	AR	Water main issue resolved, awaiting new works programme. Access for all footbridge funding released, installation at Christmas	Conditional June 20, lifted Dec 20	Mar-21	Due Oct 23	0.000	0.000	0.000	0.000	0.000	4.000	4.000
2.39	Wokingham: Coppid Beech northbound on-slip widening	GD 3 resrv.		Project withdrawn										
2.40	Windsor: Town Centre Package	GD 3 resrv.	AR	Main contractor re-tender ongoing due to increased costs, but design is complete.	Jul-20	Mar-21	Due Mar 23	0.000	0.000	0.000	0.000	0.000	1.563	1.563
2.41	Not used													
2.42	South Wokingham Distributor Rd – Eastern Gateway – see BRRP													
2.43	Wokingham: Barkham Bridge	GD 3 resrv.	C	1-yr impact report due July 2022	Nov-19	Nov-19	Feb-21	0.000	0.000	0.000	0.000	2.100	2.136	4.236
2.44	Reading Buses: Completing the Connection	GD 3 resrv.	C	1-yr impact report due July 2022	Conditional July 20 lifted Nov 20	Nov-20	Mar-21	0.000	0.000	0.000	0.000	0.000	1.541	1.541
2.45	Slough Langley High Street phase 1	GD 3 resrv.	G	Some resurfacing work remaining, completion delay to May.	Conditional June 20 lifted Oct 20	Feb-21	Due May 22	0.000	0.000	0.000	0.000	0.000	1.324	1.324
2.46	Slough Langley High Street phase 2	GD 3 resrv.	G	Some resurfacing work remaining, completion delay to May.	Conditional Jul 20 lifted Oct 20	Feb-21	Due May 22	0.000	0.000	0.000	0.000	0.000	1.033	1.033
2.47	Bracknell Town Centre The Deck	GD 3 resrv.	C	1-yr impact report due Nov 2022	Conditional Nov 20 lifted Dec 20	Feb-21	Aug-21	0.000	0.000	0.000	0.000	0.000	0.956	0.956

N/a	Independent assessment costs	GD 3 resrv.	N/a					0.000	0.000	0.000	0.000	0.000	0.004	0.004
					Total LGF Spend			**14.742**	**16.546**	**15.055**	**9.684**	**34.567**	**45.367**	**135.961**
					Unallocated LGF									**0.000**
	BUSINESS RATES RETENTION PILOT													
Ref.	**Scheme Name**	**Growth Deal**	**RAG**	**Notes**	**LTB Funding Approval**	**Start on Site**	**Completion date**			**2018 /19**	**2019 /20**	**2020 /21**	**2021 /22**	**Total**
	Capital Projects													
2.23	Reading: South Reading MRT Ph 3-4	BRRP	C		Nov-17	Mar-18	Due Mar 22			7.808	0.000	0.000	0.000	7.808
2.26	Wokingham: Winnersh Relief Road Phase 2	BRRP	C	Phase 1 privately funded Moved from LGF. 1-yr impact report due Nov 2022	Conditional Nov 18, lifted Feb 19	Jan-19	May-21			3.000	3.260	0.000	0.000	6.260
2.32	Maidenhead: Housing Sites Enabling Work Ph. 1	BRRP	AR	Concerns over ability of final roundabout start. May lead to underspend / reallocation. See BRRP	Conditional Jan 19, lifted Jul 20	Nov-20	Due Mar 23			0.000	0.000	0.000	1.027	1.027
2.34	Slough MRT Phase 2	BRRP	R	Delay to start of final section. P&R under review	Jan-19	Aug-19	Due Sep 22			0.000	1.000	3.000	9.300	13.300
2.42	South Wokingham Distributor Road – Eastern Gateway	BRRP	C		Nov-19	Oct-19	Mar-22			0.000	5.000	0.000	0.000	5.000
					Total BRRP spend – cap					**10.808**	**9.260**	**3.000**	**10.327**	**33.395**
	Revenue Projects													
N/a	BLIS development	BRRP	N/a	Work completed			#N/A			0.044	0.046	0.000	0.000	0.090
N/a	Business Case Preparation	BRRP	N/a	6 proposals approved						0.600	0.000	0.000	0.000	0.600
N/a	Forward Plans Team	BRRP	N/a	Proposals being developed	Mar-20	Oct-20	Mar-21			0.000	0.000	0.065	0.685	0.750

N/a	Independent assessment of 1 & 5 year evaluations	BRRP	N/a	Transferred from LGF by adjusting LGF / BRRP split for project 2.32	Due Jul 21	Due Nov 21	Due Mar 27			0.000	0.000	0.000	0.041	0.041
					Total BRRP Spend - Rev					**0.644**	**0.046**	**0.065**	**0.726**	**1.481**
					Total BRRP Spend					**11.452**	**9.306**	**3.065**	**11.053**	**34.876**
					Unallocated BRRP									**0.000**
	GETTING BUILDING FUND											**2020 /21**	**2021 /22**	**Total**
GBF1	Slough Langley High Street phase 3	GBF	AG	Re-designed layout expected to complete in Sep. Timings need to avoid Langley College enrolment period.	Cond. Nov 20; lifted May 21	Oct-21	Due Sep 22					0.593	1.050	**1.643**
GBF15	Bracknell A322 A329 Corridor Improvements	GBF	C		Jul-21	Nov-21	Mar-22					0.000	0.450	**0.450**
					Total GBF Spend							**0.593**	**1.500**	**2.093**

16. **Scheme 2.34 Slough MRT Phase 2 Update** – this project consisted of two elements: a new mass rapid transit (MRT) route and a park and ride facility. Whilst the MRT route is currently being delivered, Slough Borough Council has approached the LEP seeking to re-focus the park and ride element, due to anticipated changing demand for this facility. Since the full business case was submitted, planned land use within Slough town centre has changed from commercial and business to higher proportions of residential. In addition, with Heathrow Airport being unable to secure a third runway and reduced passenger usage since the pandemic, expected footfall for the airport will be significantly reduced for the foreseeable future. These factors will all reduce the demand for a traditional park and ride facility, potentially making it poor value for money.

17. Slough Borough Council has suggested investigating repurposing the site as a low carbon refuelling hub. This would align with the Government's Decarbonisation plan and provide a sub-regional facility to support the LEP's net zero policies. There will still be an element of park and ride spaces but a greater proportion of electric vehicle charge points. It may also be possible to develop one of the UK's first public hydrogen refuelling facilities capitalising on energy produced by a nearby energy from waste facility.

18. As this would constitute a change to the initial proposal it would be appropriate for a revised business case to be produced for consideration by BLTB. However, prior to commissioning this the LEP and Slough Borough Council have decided to undertaken a short piece of work to assess funding & delivery options for such an Energy Hub. This is considering any issues or gaps in the project proposal and the extent to which it could be progressed commercially as opposed to being grant or loan funded by the LEP. This will ensure that funding is allocated in a way that is clear, transparent and that achieves value for money and economic benefit across the Thames Valley area.

19. Due to resource challenges within the council, following the issuing of a Section 114 notice, the LEP has carried out a tender exercise on behalf of the council and appointed UK Power Network Services to carry out the options appraisal to assess the feasibility of these changes. It is expected that a full report will be provided to BLTB in November 2022, alongside a revised Business Case if this is considered appropriate.

20. *Human Rights Act and Other Legal Implications*

21. The Assurance Framework[vi] referred to above identifies the steps that scheme promoters should take in order to secure financial approval from the LTB. There are, in effect, two layers of scheme approval. The first, and primary layer rests with the scheme promoter (all the schemes referred to in this report are being promoted by Local Authorities). In order to implement the schemes in question, each promoter will need to satisfy themselves that all the legal implications have been considered and appropriately resolved. The secondary layer of approval, given by the LTB, is concerned with the release of funds against the detailed business case. The arrangements for publication of plans via the LEP and promoters' websites, the arrangements for independent assessment and the consideration of detailed scheme reports are appropriate steps to ensure that any significant Human Rights Act or other legal implications are properly identified and considered.

Supporting Information

22. The Thames Valley Berkshire LEP website has published summary information about all its Growth Deal-funded projects, including all transport projects. Please go to Thames Valley Berkshire Local Growth Fund [vii] and Business Rates Retention Pilot[viii] e-Books.

23. There is a detailed progress report on each of the schemes in the accompanying composite report.

Monitoring and Evaluation

24. The Monitoring and Evaluation Plan for the Thames Valley Berkshire Growth Deal has now been agreed with government. In addition to the need for transport scheme promoters to collect and publish monitoring and evaluation reports that comply with DfT guidance for capital schemes, there will be requirements to cooperate with the overall monitoring and evaluation plan for the Growth Deal.

25. The difference between the two processes is that one concentrates on the transport impacts and the other on the economic impacts. The basic information required from each scheme promoter is set out in the scheme proformas. This requirement is less onerous for schemes under £5m Growth Deal contribution and runs to much more detail for the larger schemes.

26. For most schemes there will be little or no additional Growth Deal monitoring burden beyond that already signalled. Extra effort may be required to comply with the standard set out in the Monitoring and Evaluation plan which is "accurate, timely, verified and quality assured monitoring data". For schemes mentioned by name in the Monitoring and Evaluation Plan (see list below) there will be a separate discussion about the duties on the scheme promoter:

    2.01 Newbury: King's Road Link Road

    2.04 Wokingham: Distributor Roads Programme

    2.06 Reading: Green Park Railway Station

    2.08 Slough: Rapid Transit Phase 1

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[i] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/327587/35_Thames_Valley_Berkshire_Growth_Deal.pdf
[ii] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/399438/Thames_Valley_Berkshire_Factsheet.pdf
[iii] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/589268/170202_Thames_Valley_Berkshire_LEP_GD_factsheet.pdf
[iv] http://www.thamesvalleyberkshire.co.uk/documents?page=1&folder=192&view=files
[v] http://www.thamesvalleyberkshire.co.uk/berkshire-strategic-transport-forum
[vi] http://www.thamesvalleyberkshire.co.uk/berkshire-strategic-transport-forum
[vii] https://spark.adobe.com/page/lUlLl858NStY0/
[viii] https://spark.adobe.com/page/6LOjEtuDgacVm/

MEETING OF THE BERKSHIRE LOCAL TRANSPORT BODY (BLTB) – THURSDAY 14 JULY 2022

CONTACT OFFICER: Alison Webster, Chief Executive, Berkshire Local Enterprise Partnership

Item 7: Evolving Role of Berkshire Local Transport Body

Purpose of Report

1. To outline the way in which the role and function of the Berkshire Local Transport Body (BLTB) could evolve. A review of BLTB role and purpose is necessary now that the Local Growth Fund (LGF) which had been allocated to LEPs is committed and with the move towards local authorities bidding for infrastructure funding through the new Levelling Up Fund and following the conclusion of the Government's review of LEPs.

Background and historic role of the Berkshire Local Transport Body

2. As part of the Levelling Up White Paper that was published in February 2022, the Government outlined their views on the evolving role of LEPs. Key was the recognition of the value of LEPs going forward. It was confirmed that LEPs would continue to play a key role in supporting the levelling up agenda across England. Government values many of the functions LEPs have carried out, especially around strategic planning and convening partners and this provides a solid platform to go forward. Government is encouraging the integration of LEPs and their business boards into Mayoral or the newly defined County Combined Authorities as part of their encouragement towards greater devolution in England through the agreement of County Deals. Government has committed that all areas requesting a county deal arrangement should have one in place by 2030. The Berkshire Leaders' Group committed in December 2021 to consider working towards a Level 2 devolution, with work on evidence and potential asks to include in the deal to be considered later in financial year 2022/23. Therefore, a deal is unlikely to be in place across the six Unitary Authorities in the Berkshire area in the short to medium term so here it will be a case of working within the existing structures.
3. The BLTB was established in 2013 as a voluntary partnership between the Thames Valley Berkshire Local Enterprise Partnership (now known as the Berkshire LEP) and the six local authorities within Berkshire. It was required by the Department for Transport to provide appropriate safeguards for the use of public funds and ensure the delivery of value for money when Government funding for major transport infrastructure schemes which had been devolved to LEPs, through the LGF.
4. The main purpose of BLTB was therefore to prioritise infrastructure schemes to receive the funding allocated by Government. This process is overseen by Slough Borough Council, as the Accountable Body of BLTB, ensuring decisions and activities of BLTB conformed to legal requirements and as well as ensuring appropriate use of funds through the Section 151 Officer, maintaining official records of BLTB proceedings and overall responsibility for BLTB decisions in the case of legal challenge. During its time, the BLTB has approved nearly £173m of capital funds across Berkshire, leveraging in an additional £123m of investment.
5. With the ending of the LGF and its successor the Getting Building Fund, capital funding for infrastructure schemes is no longer channelled through the LEP. Instead, new infrastructure funds, such as the nationally competitive Levelling Up and locally allocated Shared Prosperity Fund are being managed directly by local authorities and the BLTB no longer has a role in making these investment decisions.

An evolving role for the Berkshire Local Transport Body

6. It is clear that the LEP and BLTB will have less of a role is in the provision of capital funding, with the Levelling Up Fund and Shared Prosperity Fund, not being channelled through LEPs but rather local authorities. Once the 'tail' of the LEPs infrastructure funding is spent, BLTB will have no formal funding decisions to make. Nevertheless, the Berkshire LEP and BLTB still provide an invaluable forum for sharing best practice across Berkshire and offering a strong voice and a convening role in making the case for investing in transport infrastructure this is needed to support and grow the Berkshire economy. The Berkshire LEP can also continue to play an important role in bringing together stakeholders from businesses and local authorities to drive economic growth, through groups such as the BLTB and Berkshire Strategic Transport Forum.
7. With the removal of responsibilities for the allocation of funds the BLTB will not need the formal governance and assurance structures that it currently has. However, as well as the convening role outlined above it may be considered as a vehicle to offer governance for any future County Deal, recognising that this may still be some way off.
8. There are still a number of residual issues around schemes in the existing programme, as detailed in Item 6, that suggest value in BLTB meeting again in November. At that point we may also have a clearer picture of the future governance requirements for a Berkshire County Deal and the role the BLTB might be able to play and hence whether there is value in it being retained or whether its convening and advocacy functions can be carried out going forward through the Berkshire Strategic Transport Forum, with the formal body being disbanded.

Recommendation

9. You are recommended to agree that the BLTB reconvene in November. At this meeting a decision will be made as to whether the BLTB needs to continue, or whether it can be merged into the activities of the Berkshire Strategic Transport Forum

MEETING OF THE BERKSHIRE LOCAL TRANSPORT BODY (BLTB) – THURSDAY 14 JULY 2022

CONTACT OFFICER: Alison Webster, Chief Executive, Berkshire Local Enterprise Partnership

Item 8: One Year Evaluation Reports

Purpose of Report

1. At your meeting in March 2017, you approved guidance for the preparation of one- and five-year-on impact reports for BLTB funded local transport schemes. It has been decided to trial a less intensive approach towards the impact reports being considered at this meeting to reflect the reduction in reporting requirements from government whilst still demonstrating the value of investment in infrastructure.

2. This report introduces the one-year impact report for the following schemes

   - Scheme 2.04 – Arborfield Cross Relief Road
   - Scheme 2.26 – Wokingham: Winnersh Relief Road Ph2
   - Scheme 2.43 – Wokingham: Barkham Bridge
   - Scheme 2.44 – Reading Buses: Completing the Connection

Recommendation

3. You are recommended to note the revised evaluation process and the reports from the scheme promoter and the LEP conclusions.

Supporting Information

4. The LEP has a well-established and agreed process for the monitoring and evaluation of BLTB funded local transport schemes, which requires scheme promoters to produce one- and five-year-on post completion monitoring reports for each of their schemes. To date the process has also required these reports to be reviewed by the independent assessor and reported to the BLTB.

5. Since the LEP is unlikely to be overseeing significant capital funding going forward it was considered an appropriate time to review the monitoring and evaluation process to ensure that it remains proportionate and fit for purpose.

6. Historically, we have used these reports to feed into our regular reporting to central Government but with the conclusion of the LGF Programme the level of detail required has reduced. The LEP is still required to report back on outputs but traditionally the timing of the evaluations has not supported this process, which is monitored through regular reviews with transport officer. Nevertheless, these evaluations remain valuable to help us demonstrate the value of our investment and to inform future priorities.

7. For this round of 1-year evaluations we have therefore trialled a less prescriptive approach for the format and detail of the reports and enabled the scheme promoter to tailor the reports to their own needs and make them directly relevant to supporting investment decisions going forwards.

8. At the same time the contract with the consultants who have undertaken the independent review has reached an end. Rather than renew it at this stage, we have brought the process in-house with LEP officers summarising the key outputs of the review and taking forward the lessons learned. Roughly £41,000 has been allocated from the Business Rates Retention Pilot funding to pay for the

independent assessment of the 1 and 5 year evaluations. It is proposed that this funding be retained until the November BLTB meeting when the future role will be agreed.

9. The reports submitted by each of the scheme promoters continue to summarise the outcomes of the monitoring and evaluation undertaken following the completion of the schemes. The analysis gives an initial indication whether a scheme has been successful in achieving the related aims and objectives set and agreed at the start of the scheme development. It also seeks to demonstrate that the funding obtained has provided value for money and that any lessons learnt are captured as evidence to inform future decision making. In particular the assessments focus on:

    - Scheme build;
    - Delivered scheme;
    - Costs;
    - Scheme objectives; and
    - Impacts on the economy

Arborfield Cross Relief Road (ACRR)

10. Wokingham Borough Council received £24m in DfT grant towards the cost of this £28.3m scheme. The ACRR was a new road built to seek to mitigate the impact on the A327 from a range of developments in the area, by providing additional capacity on the road network. Due to the value of funding applied to this project its management was retained by DfT, with the LEP and BLTB carrying out an oversight role only.

11. The key strategic objectives were to unlock planned development of 2700 dwellings, minimise adverse impact and improve health outcomes. It sought to achieve this by reducing the growth in traffic flows and transport related emissions and noise at key locations and encouraging the use of active modes.

12. In assessing the delivery and effectiveness of the scheme, a number of metrics were identified through which the delivery and performance of the scheme could be assessed. The assessment has confirmed that in terms of scheme delivery all of the key features of the scheme have been delivered, other than certain public realm improvements that are due to be completed in 2022. The scheme was delivered to budget with a minor overspend of £63,473 (0.22% of the estimated total cost) and hence not considered a substantial change given the scale of the scheme.

13. At a high-level, most of the key milestones were met with the detailed design being completed ahead of schedule. The road opened in November 2020, which was approximately 6 months behind schedule, which was due primarily to drainage issues identified whilst on site.

14. In terms of the economic impact of the scheme this has been assessed by monitoring the delivery of employment and residential property in the local area. Furthermore, the green bridge element of this project won the innovation category of this year's Construction Industry Research and Information Association BIG Biodiversity Challenge Awards, which celebrates projects with at least one element that benefits wildlife and habitats

15. In terms of housing building rates, data was available for 2020/2021. This showed that the total number of houses constructed was 107 with a further 212 under construction. This fell 29 short of the total permitted house building rates (348), but still represented 92%. It was likely that housing building rates were not as prevalent during 2020 and 2021 due to the COVID-19 pandemic, additionally, Brexit created uncertainty in the economy and led to issues with the labour market.

16. The one-year on impact report of the Arborfield Cross Relief Road project is attached at Appendix 1.

Winnersh Relief Road Phase 2 (WRR)

17. Wokingham Borough Council received £6.3m LEP funding through the Business Rates Retention Pilot Fund towards the cost of this £8.04m scheme. The WRR was a new road built to improve traffic capacity and alleviate existing congestion through Winnersh by means of the provision of an alternate route for non-local traffic travelling through the area. Phase 2 of the Relief Road was opened for traffic in May 2021, whilst final scheme completion date was September 2021. Phase 1 was completed previously and funded by the developer.

18. The key strategic objectives of the scheme were to reduce existing and future peak hour congestion and journey times, facilitate the Hatch Farm Dairies housing development, cater for traffic generated by other new housing developments and encourage active transport through provision of cycle lanes and footpaths.

19. In assessing the delivery and effectiveness of the scheme, a number of metrics were identified through which the delivery and performance of the scheme could be assessed. The assessment has confirmed that in terms of scheme delivery all of the key features of the scheme have been delivered.

20. In terms of the cost of Phase 2 of the scheme, the outturn costs are not currently available because the Phase 2 construction works were combined with the West of Forest Road scheme. As a result, individual costs for each scheme will not be available until the cost of the two schemes have been disaggregated, so this information will be re-evaluated in the 5-year post scheme report.

21. At a high-level, whilst many key milestones were met the full opening of the scheme to traffic was a year behind the original programme. The key reasons and lessons learnt from this were that working within close proximity to and interface with National Highways required close management and regular communication to ensure both parties could deliver their contracted work on time. In addition, there were a number of issues related to drainage and utility diversion, that were not foreseen at the start of the scheme, that led to delays in delivery. Finally keeping the road open for public use, whilst desirable to minimise disruption, resulted in tight phasing of works and further delays.

22. The impact of scheme upon travel demand and journey time reliability in and around Winnersh has been analysed using several datasets, including traffic counts, pedestrian and cycle counts and journey time reliability surveys. Initial conclusions are that the Relief Road has reduced congestion on arterial routes around Winnersh such as the A329. With total traffic at one monitoring site reducing from 14% to 10% since the completion of the scheme. However, it should be noted that this scheme was constructed during the Covid-19 pandemic and as a result, the pre- and post-scheme traffic volumes recorded may not be directly comparable. This will be reassessed in the 5-year evaluation report.

23. With respect to cycling there were only a limited number of sites where comparable cycling data could be collected. Whilst there remains a high level of cycling, this limited data suggests there have been some reductions in cycle volumes, however this can be explained in part as off-road cyclists were excluded from the after survey and again cycle volumes may have been impacted by

the changes in travel patterns caused by the Covid-19 pandemic. This will also be revisited in the 5-year evaluation.

24. Journey time unreliability due to congestion was identified within the Business Case as a key contributing factor towards the development of the WRR. Some data has been collected and further data will be included in the 5-year report. However, at this stage due to IT issues, there is no direct comparison available, but this will be submitted to the LEP as soon as possible.

25. In terms of the economic impact of the scheme this has been assessed by monitoring the delivery of residential property in the local area. The scheme has helped to facilitate the Hatch Farm Dairies housing development. By the end of 2021/22, 409 of the 433 total permitted dwellings have been built. The final 24 dwellings are due to be completed during 2022/23. This data highlights the continued provision of housing in the local area and contributes towards the successful delivery of this scheme objective.

26. The one-year on impact report of the Winnersh Relief Road Phase 2 project is attached at Appendix 2.

***Barkham* Bridge**

27. Wokingham Borough Council received £4.2m LEP funding from the Local Growth Fund towards the cost of this £7.7m scheme. The B3349 Barkham Bridge scheme involved the construction of a new road bridge over the Barkham Brook, with the original single-lane bridge retained as a pedestrian and cyclist route. This removed the existing bottleneck by facilitating continuous two-way traffic over the Barkham Brook minimising further delays, providing safer facilities for cyclists and pedestrians as well as reducing the impact of increased traffic from major developments around the area.

28. The key strategic objectives of the scheme were to reduce peak hour journey times, support housing delivery, increase throughput of traffic across the bridge and increase the number of cyclist and pedestrians. In assessing the delivery and effectiveness of the scheme, a number of metrics were identified through which the delivery and performance of the scheme could be assessed.

29. Construction of the bridge began on programme in Autumn 2019 and was completed in March 2021, just a month behind programme, despite issues caused by Virgin Media. Overall contractor performance was considered to be good, with the build quality and management of a high standard.

30. In terms of the cost of the scheme, the predicted outturn figure is currently £8.2m, which is £443,000 above budget, representing a 5.7% increase. The forecast project cost increase was caused by several factors, the main one was a compensation event as a result of the Virgin Media delay causing contractor delay; it is hoped that this funding can be recovered.

31. Overall, initial indications are that the scheme has offered actual and potential benefits to network users, commuters, and residents, especially through the provision of significantly reduced journey times. The new bridge layout accommodates two-way traffic and initial survey results show significant journey time reductions on all routes that use Barkham Bridge. These range between 5% and 44% exceeded the target of achieving up to a 10% reduction in one or both peak hour journey times set out in the business case.

32. Initial analysis also shows the scheme has supported local housing delivery. In 2020/2021 period the total number of houses constructed (107) and under construction (241) matched the planned house build rate (348). Therefore, the scheme has achieved its target output of supporting a housing build rate within 10% of planned build rates within the first year of the scheme opening. As the scheme is aimed at supporting the 2026 local plan housing delivery the full benefits will only be realised at the end of this period. The house build out rate will continue to be monitored and reviewed again during the 5-year post scheme evaluation.

33. Looking at travel demand there has been a 15% increase in eastbound flows and 33% increase in westbound flows in the AM peak hour, but in contrast a 7% and 22% decrease during the evening peak. This means the scheme has exceeded its target to increase throughput up to 25 to 30% in the AM peak hour one year after scheme opening, but not met the target in the PM peak. This will be continued to be reviewed in the 5-year evaluation.

34. There was no pre-scheme data for cyclist and pedestrian flows, but post scheme data has been collected and this will be continually monitored from now on, to help demonstrate increased uptake of sustainable modes on the corridor.

35. The one-year on impact report of the Barkham Bridge project is attached at Appendix 3.

Reading Buses: Completing the Connection

36. Reading Buses received £1.5m LEP funding from the Local Growth Fund towards the cost of this scheme. This represented the total capital cost with Reading Buses' contribution being £1.045m towards running costs associated with the substantially enhanced RTI system and ticketing facility, covering five financial years. The project consisted of the following elements:

- A core, multi-operator Real Time Information (RTI) system.
- Three bus departure screens at rail stations – two at Reading and one at Newbury.
- Audio-visual customer information installations on 51 buses
- An online travel shop - enabling smart travel via app or smartcard.

37. The strategic objectives for the scheme were to support and drive further economic growth in the local area; enable and encourage use of local buses instead of private vehicles; enable and encourage easy interchange between public transport modes, and other sustainable modes; Make live information available to passengers and allow personalised purchase of mobile or smartcard-based tickets.

38. It was anticipated that this investment by the LEP would lead to higher passenger satisfaction with bus travel in the region; more useful management information on bus service performance to help refine timetables to reflect real life traffic conditions; more use of buses by passengers who currently struggle with audio or visual impairments; less use of cash transitions and more use of 'smart' ticketing to speed us bus boarding times and a modal shift from the private car to the bus.

39. The various RTI elements of the project were delivered on time and to budget between October 2020 and April 2021. The launch of the customer-facing system was delayed due to government Covid travel advice and when restrictions started to relax in September 2021, new features of the shop were used to issue a free day ticket voucher to all customers. The launch of the smartcard element of the shop was postponed until restrictions had eased so that a full communications campaign could be undertaken without causing disruption to travel patterns. In the meantime, the

opportunity was taken by Reading Buses to add further enhancements to the scope of the project (at their own cost) for a launch during 2022. This approach was sensible and ensured maximum impact and take up of the new products

40. In terms of achieving the objectives, it had been intended to use Transport Focus surveys to measure passenger satisfaction surveys. However, due to the pandemic and a significant drop in the numbers of people using public transport, the bus passenger survey was paused. Nevertheless, feedback from users of the new App has been very positive and there was strong take-up of the free travel promotion with 20,000 tickets claimed.

41. Data collected through the RTI system has proved invaluable in replanning the combined networks in response to the significant changes to travel patterns and traffic conditions during the pandemic. This has helped contribute to improved start point punctuality from 89.4% in 2018-19 to 93.4% in 2021-22, and mid-points from 78.2% to 85.2%.

42. It was expected to be able to measure modal shift as part of the project, but with Covid having a major impact on travel patterns and initial advice not to travel, it has not possible to identify a change in patronage that could be linked to the deployment of the improved systems funded by this project, although the aim to help improve confidence in using public transport across the Thames Valley region directly aligns with the post-pandemic need to rebuild.

43. One of the expected outcomes from allowing personalised purchase of mobile or smartcard-based tickets was to reduce the amount of on-bus cash transactions to speed up journey times and to reduce the risk of Covid19 transmission. Initial analysis shows that the percentage of cash transactions has reduced by 32% from an overall percentage of 22% to 15%.

44. Overall, the LEP would agree with the conclusion of the analysis that despite the challenges of Covid-19, this was a successful project, delivered on-budget and largely on-time. Such projects are highly deliverable and give real benefits to passengers, and over time (post-Covid) will encouraging a modal shift back to public transport.

45. The one-year on impact report of the Reading Buses: Completing the Connection project is attached at Appendix 4.

Wokingham Borough Council

ARBORFIELD CROSS RELIEF ROAD

Monitoring and Evaluation One Year After Opening “lite” Report

Wokingham Borough Council

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ARBORFIELD CROSS RELIEF ROAD

Monitoring and Evaluation One Year After Opening “lite” Report

WSP

2 London Square
Cross Lanes
Guildford, Surrey
GU1 1UN

Phone: +44 148 352 8400

WSP.com

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CONTENTS

TABLES

FIGURES

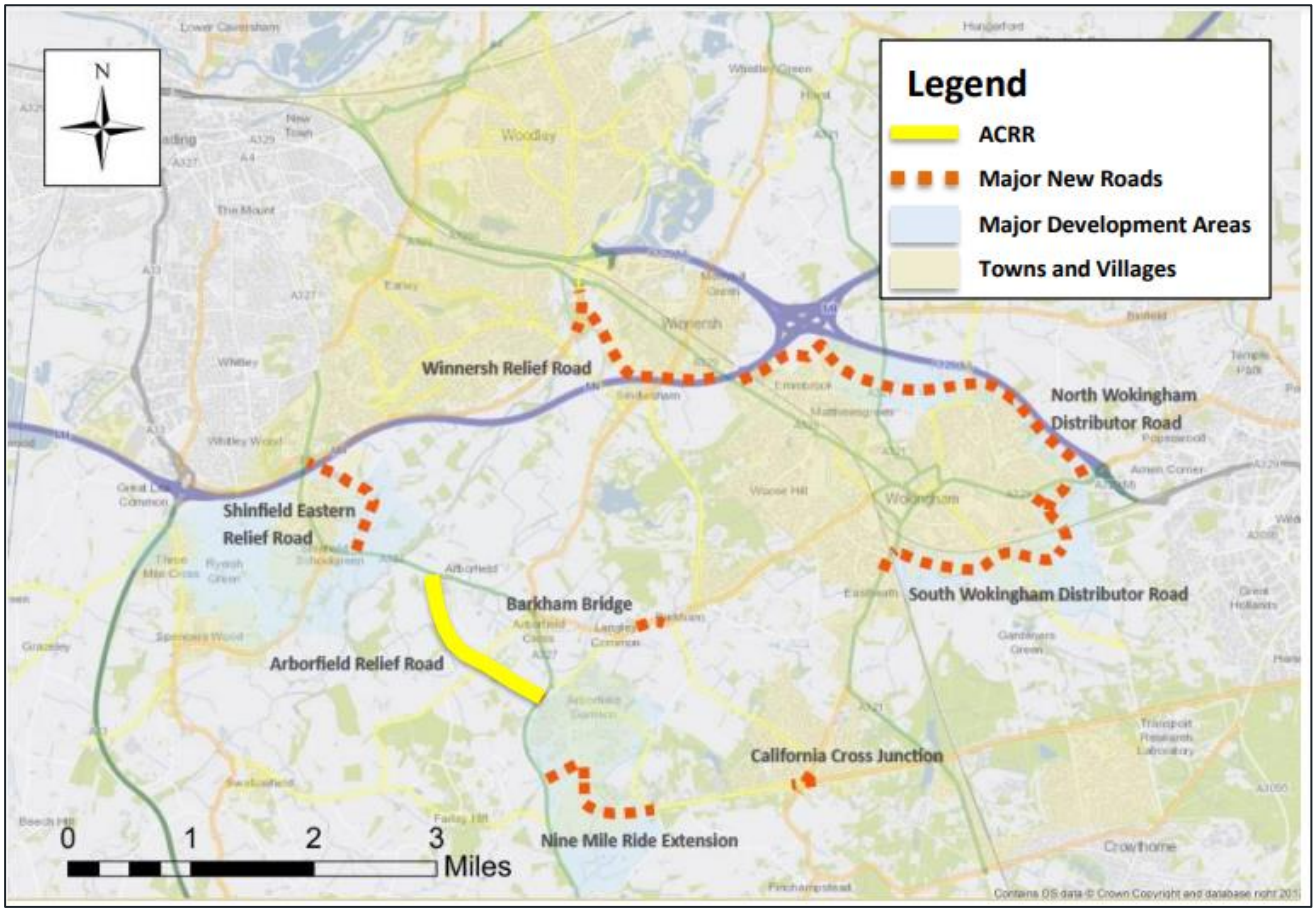
APPENDICES

1. INTRODUCTION

1.1.1. The Arborfield Cross Relief Road (ACRR) is a new road built to seek to mitigate the impact on the A327 from planned developments, particularly the Arborfield Strategic Development Location (SDL). The requirement for a relief road was identified in the Council's Core Strategy, Supplementary Planning Documents (SPD) and subsequent planning permissions.

1.1.2. The route runs to the west of Arborfield Cross, bisecting Swallowfield Road, and linking A327 Reading Road in the north and A327 Eversley Road in the southeast as shown in Figure 1-1. The road is a 2.3km long single carriageway, 7.3m wide road within open countryside with shared-use pathways. There are two new roundabout junctions that connect the new road to the existing network along the A327, a new staggered priority junction at Swallowfield Road and a new shared-use (non-motorised user) green bridge where Arborfield footpath 17 crosses the new road.

Figure 1-1 - Location of ACRR



1.1.3. As part of the ACRR Full Business Case (FBC), a Monitoring and Evaluation Plan (MEP) was produced in accordance with the Department of Transport (DfT) guidelines as set out in the Monitoring and Evaluation Framework for Local Authority Major Schemes (September 2012) and the Monitoring and Evaluation Strategy (March 2013).

1.1.4. The DfT guidance identifies three tiers of monitoring and evaluation, namely:

- Standard Monitoring, where schemes monitor and report on a standard set of measures;
- Enhanced Monitoring, for schemes costing more than £50m or which are anticipated to have a significant impact on particular indicators; and
- Fuller Evaluation, for a DfT-specified selection of schemes.

1.1.5. The ACRR is a project with an overall cost less than £50m and has therefore not been specified for fuller evaluation. As such it falls into the Standard Monitoring tier.

1.1.6. The MEP outlined a monitoring and evaluation framework to demonstrate that the funding obtained has provided value for money and that any lessons learnt are captured as evidence to inform future decision making.

1.1.7. The following measures were identified to be used to assess the scheme in accordance with the DfT Standard monitoring measures outlined below:

- Scheme build;
- Delivered scheme;
- Costs;
- Scheme objectives;
- Travel demand;
- Travel times and reliability of travel times;
- Impacts on the economy; and
- Carbon Impacts

1.1.8. Following the availability of the one-year post scheme data collection findings, which will correspond with the timings of (same months as) the collected baseline data, the full ACRR report will be submitted in January 2023. In the interim this report presents a ‘lite’ document, in which only the following are assessed.

- Scheme build;
- Delivered scheme;
- Costs;
- Scheme objectives; and
- Impacts on the economy.

1.2. SCOPE

1.2.1. The scope of this ‘lite’ report is to outline the metrics and measures used to assess the delivery of the scheme, and to determine whether the scheme has been successful in achieving the related aims and objectives set and agreed at the start of the scheme development.

1.2.2. This report builds on the baseline report which was issued in September 2020. The ACRR was opened in November 2020. This is an interim assessment with a focus on scheme delivery and

construction. In January 2023 a full one year after opening report will be provided including the assessment of the performance of the scheme. This delay is due to one year after opening surveys needing to take place at the same time of year after the baseline surveys, as requested by the DfT. The baseline link count surveys were undertaken in February/March, manual classified junction turning counts in October and non-motorised user counts in September.

1.2.3. On completion of the five year after opening data collection exercise, a further full assessment of the delivery and performance of the scheme will be made.

1.3. SCHEME OBJECTIVES

1.3.1. The primary objective of the ACRR scheme is to address the constraints in the Arborfield area by providing additional capacity on the road network.

1.3.2. In order to achieve the primary aim of the scheme, and in response to the problems and opportunities identified, clear objectives have been established for the scheme. A distinction has been drawn between the desired high level or strategic objectives and the scheme specific objectives.

1.3.3. The strategic objectives for the ACRR are set out below:

- Objective L1-01: Unlock the delivery of planned development in Wokingham as set out in the Wokingham Borough Council (WBC) Core Strategy;
- Objective L1-02: Minimise any adverse impact of future developments by managing growth in traffic congestion and transport related emissions and noise; and
- Objective L1-03: Improve health outcomes by encouraging and enabling physical activity.

1.3.4. The scheme specific objectives for the ACRR, which are in addition to the strategic objectives, are set out below:

- Objective L2-01: Reduce the growth in traffic flows at the Arborfield Cross roundabout;
- Objective L2-02: Reduce growth in transport related emissions and noise in the Arborfield area;
- Objective L2-03: Support access to 2,700 dwellings at the Arborfield Garrison, thereby helping to support delivery of WBC's Core Strategy planned development; and
- Objective L2-04: Encourage use of active modes for journeys within the Arborfield area.

1.3.5. The initial issue, scheme inputs and outputs are outlined in the scheme's logic map presented in Appendix A, as well as the short-, medium- and long-term outcomes which link back to the ACRR's objectives.

1.4. MEP DATA REQUIREMENTS

1.4.1. In assessing the delivery and effectiveness of the scheme, a number of metrics were identified through which the delivery and performance of the scheme could be assessed. Further information on the Monitoring and Evaluation process can be found in the Monitoring and Evaluation Plan.

1.4.2. Based on the data requirements, a data collection exercise was undertaken, in accordance with the methodology outlined in the MEP. A summary of the data collected (or to be collected) to monitor and evaluate the ACRR scheme is defined in the table included in Appendix B, along with the rationale for its inclusion; the proposed data collection methods; and the proposed frequency of data collection.

1.5. REPORT STRUCTURE

1.5.1. Following this introduction, the structure of this report includes the following:

- Chapter 2 - Scheme Delivery
- Chapter 3 - Economic Impact
- Chapter 4 - Conclusion

2. SCHEME DELIVERY

2.1. INTRODUCTION

2.1.1. This section outlines the assessment of the constructed scheme in terms of cost, programme and risk. It also compares whether the completed scheme differs from the scheme as originally designed.

2.1.2. The baseline assessment is based on the detail provided in the Full Business Case (FBC), with the one year after opening assessment compared against these forecasts.

2.2. DELIVERED SCHEME

2.2.1. As outlined in the FBC, the proposed scheme was to provide a new section of highway linking the A327 Reading Road in the north and the A327 Eversley Road in the south-east. The key features of the ACRR scheme included:

- A new single carriageway approximately 2.3km in length and approximately 7.3m wide with a 50mph speed limit;
- New junctions to connect the proposed alignment into the existing road network;
- A roundabout at the junction with Reading Road in the north;
- A staggered priority junction where the alignment crosses Swallowfield Road;
- A new three-arm roundabout at the junction with Eversley Road in the south;
- A shared use pathway (approximately 3m wide) alongside the eastern side of the proposed carriageway;
- A green bridge where the proposed alignment bisects an existing footpath approximately 350m to the south-east of the junction with Swallowfield Road;
- Urban realm improvements planned for Arborfield village.

2.2.2. Of the above, all have been delivered one year after opening apart from the urban realm improvements planned for Arborfield village. The parish councillors and residents have been consulted on the improvements in the village and the works are due to begin in June 2022.

2.2.3. Construction included fencing, vehicle restraint barriers, kerbing, elements of surface water drainage (including swales), lighting, drainage, two attenuation ponds, two ecological ponds, road signs, road markings, fencing and street furniture (being removed, relocated or replaced) along with resurfacing the existing road tying in with the scheme. The new road crosses two existing public right of ways, ARBO 17 and ARBO 22, with a new green bridge where existing Public Right of Way ARBO 17 crosses it.

2.2.4. A contextual drawing of the proposed scheme is included in Figure 2-1.

Figure 2-1 - ACRR scheme

2.2.5. The Design Register (tabulated in Appendix C) lists the design versions and hence iterations. The final drawings, as built, are in Appendix D. Below, in the construction programme section (2.4.3) there is description of some of the issues which led to design iterations. Satellite images from Google maps show the built scheme in Figure 2-2. Note that the ACRR is called Observer Way on street.

Figure 2-2 - ACRR built scheme, (Source: Google Maps).

2.3. SCHEME COST

2.3.1. In the FBC the capital cost of the scheme, at 2019 Quarter 1 prices, was established at £28.299m of which £24m was obtained from the DfT with the remainder being funded by WBC.

2.3.2. Table 2-1 gives the breakdown of the scheme cost estimate for delivery of ACRR and spend profile from the business case. The total forecast scheme cost includes all scheme development cost, all land costs, accurate Part 1 and other claim estimates, core contract team costs, survey costs, enabling works and construction costs including risks.

Table 2-1 - Summary of estimated business case scheme costs

Year	Land costs	Land compensation costs	Client project management costs	Stage 1 pre-construction costs	Utility diversion costs	Stage 2 construction costs	Total
Pre 2016/17			£627,649				£627,649
2016/17	£12,708		£509,666				£522,374
2017/18	£7,262		£769,066				£776,328
2018/19	£1,880,369		£538,921	£2,570,143			£4,989,433
2019/20	£27,600	£800,000	£220,000	£1,713,494	£121,773	£10,406,203	£13,289,070
2020/21	£13,800		£170,000		£386,572	£4,653,301	£5,223,673
2021/22		£257,143	£10,000			£200,000	£467,143
2022/23		£257,143	£10,000			£300,000	£567,143
2023/24		£257,143	£10,000			£500,000	£767,143
2024/25		£257,143	£10,000				£267,143
2025/26		£257,143	£10,000				£267,143
2026/27		£257,143	£10,000				£267,143
2027/28		£257,143	£10,000				£267,143
Total	**£1,941,739**	**£2,600,000**	**£2,905,302**	**£4,283,637**	**£508,345**	**£16,059,504**	**£28,298,527**

2.3.3. Table 2-2 shows the actual costs spent on this project. Note that these are the interim costs due to the ACRR project still being live and incurring costs one year after opening. This is due to the contract covering multiple schemes, active work delivering the village improvements, and post construction land processes still being completed. The original budget allowance for Land Compensation Costs has been forecast as these will require management for up to 7 years post construction. Additionally, a Stage 4 safety audit report has been commissioned and this could suggest additional works being necessary. However, this does not have budget provision in the current forecast.

Table 2-2 – Post scheme costs up to February 2022 and forecast to project completion (estimate forecast shown in blue)

Year	Land costs	Land compensation costs	Client project management costs	Stage 1 pre-construction costs	Utility diversion costs	Stage 2 construction costs	Total
Pre 2016/17			£627,649				£627,649
2016/17	£12,708		£509,666				£522,374
2017/18	£200,096		£769,066				£969,163
2018/19	£1,880,369		£287,833	£1,240,199	£209,788		£3,618,189
2019/20	£104,642		£283,291	£1,548,352	£52,066	£7,721,618	£9,709,970
2020/21	£137,963		£262,774	£790,516		£8,015,990	£9,207,243
2021/22	£100,000		£32,889	£11,780	-£162,256	£450,000	£423,412
2022/23	£100,000	£257,143	£610,000		£75,000	£640,000	£1,682,143
2023/24		£257,143	£10,000				£267,143
2024/25		£257,143	£10,000				£267,143
2025/26		£257,143	£10,000				£267,143
2026/27		£257,143	£10,000				£267,143
2027/28		£514,286	£10,000				£524,286
Total	**£2,535,780**	**£1,800,000**	**£3,433,167**	**£3,590,847**	**£174,597**	**£16,827,608**	**£28,362,000**

2.3.4. It was proposed that one year after scheme opening based on the cost estimates, profiling and final costs, an assessment on the financial performance in terms of scheme delivery could be completed. However, this will be confirmed in the five year after opening report since the one-year after opening costs still contain some estimates (in blue above).

2.3.5. There is a negative value (in red above) in Utility Diversion costs in 2021/22, because during construction a set of SSE ducts were installed for the entire length of the scheme. SSE have paid for this and the credit is merely the income received for that work. The cost to deliver it is included in the construction costs so it is offset, and not a saving in reality.

2.3.6. Based on these estimates, there will be an overspend of £63,473, although this is only 0.22% of the estimated total cost. Since it is not a substantial change in cost there will not be an updated Present Value of Cost. The overspend was due to issues with drainage and SGN (gas company) works delaying the project as outlined below in sections 2.4.3 and 2.4.4. One of the project targets was to build the scheme to budget and despite there being an overspend, 0.22% is considered to be very minor given the scale of costs.

2.4. CONSTRUCTION PROGRAMME

2.4.1. The FBC outlines the overall programme key milestones in delivering the ACRR scheme, these are then compared to the actual dates the programme occurred, these are shown in Table 2-3.

2.4.2. At high-level, most of the key milestones were met with the detailed design being completed ahead of schedule and the completion of the works falling behind schedule.

Table 2-3 - Programme key milestones

Key Milestones	Anticipated Programme Date	Actual Programme Date & Comment
Planning permission granted	10th January 2018	Work on the planning application for the ACRR began in late 2015. The Planning Application was submitted and validated under planning reference (172209). Full Planning Consent was granted for the Relief Road at Planning Committee on 10 January 2018.
Detailed design commences (PBA)	January 2018	January 2018
Detailed design completion	Winter 2019	Spring 2019
Full Business Case submission	31 May 2019	Submitted to DfT on 31st May 2019
Approval sought from DfT/LTB	June-July 2019	24th July 2019 – Robert Fox of DfT confirmed that the Business Case was “with minister”.
Works start	25 June 2019	In Winter 2018/Early 2019 site preparation and utilities re-routing were undertaken. Project mobilisation was undertaken in June 2019 for works to commence on site on the 25 June 2019.
Completion works	June 2020	The ACRR opened in November 2020. However, the urban realm improvements in Arborfield village only start construction in June 2022.

2.4.3. A key issue for the project was that drainage was not developed properly at the design stage. At a number of locations once on-site, issues with drainage were understood further and had to be

adapted from the initial plans. This included a re-design of the piping at the northern roundabout. There was a new outfall needed at the southern roundabout which became an improvement and can be tied into for the future works in the area. Additionally, the topography was not properly understood at points where the road ran in a cutting and a further drainage channel was not planned for. However, in adding this there were improvements for the Farley Hill fields drainage and alongside Greensward Lane. Likewise, there were some springs between the green bridge and Duck's nest farm which were unknown until the digging down for the green bridge was underway.

2.4.4. The SGN gas company works to lay a gas pipe delayed the project where they did not perform to their programme. Unfortunately, these had to be finished before the project could proceed in order for the road not to be dug up twice.

2.4.5. Additionally, more minor issues included altering a badger tunnel, additional lodge visibility planting to help screen residences; and vandalism to the green bridge.

2.4.6. A key win for the project was the geology upon which the ACRR was built. In fact, a prior (rejected) application was for a quarry at the site. A number of materials were excavated but then used for the base of the site. There were recycled type 1 materials which were used to build up areas which lay below the water board, and other areas where virgin stone (type 1) could be directly used. This meant that while some cost was associated with excavation, there was a net gain where materials did not need to be imported.

2.4.7. As a result of a new, slightly different way of laying the area of the roundabout between the kerb and the lining on the ACRR roundabouts, a new standard detail has been implemented in Wokingham based upon these.

2.4.8. Overall, there was good governance of the project, and it was managed properly. There were also running value engineering meetings which helped the project have the best value for money and would have saved approximately £0.25 million. There was good liaison with the neighbours and there have been no noise claims.

2.5. RISK

2.5.1. The final version of the Risk Register is found in Appendix E which shows the original project risks and all of the Early Warnings that were raised post-Contract. The Register shows both the original risk score and the mitigated score, as well as the original risk values and final costs associated with each risk.

3. ECONOMIC IMPACT

3.1. INTRODUCTION

3.1.1. A means of assessing the impact of the scheme on the above outcomes and objectives is by monitoring the delivery of employment and residential property in the local area. An increase in the number of dwellings and jobs in the study area will have the resultant impact of supporting the local economy.

3.1.2. The relief road is intended to minimise the impact of traffic growth on the villages of Arborfield and Arborfield Cross and the surrounding rural lanes. A sustainable new village with about 3,500 new homes is being built on the former Arborfield Garrison site. Shinfield Parish is also seeing significant development, with about 3,000 new homes being built in extensions to Shinfield Village, Three Mile Cross and Spencers Wood.

3.1.3. The Arborfield Garrison site has permission to build 800 of 3500 dwellings without the ACRR scheme in place, meaning the 2,700 dwellings are dependent on the ACRR scheme being built.

3.1.4. The Monitoring & Evaluation one year / five year after reports, will include the number of planning permissions and dwellings that have been built out (completions) within the Arborfield Garrison site following the completion of the scheme, to understand how the road scheme contributed to the delivery of the houses at the site.

3.1.5. WBC commits to carry out an evaluation of the housing numbers delivered directly as a result of the scheme. This evaluation includes:

- The number of houses delivered.
- The planned housing build-out trajectory.
- The reasons for why planning permission has/hasn't been applied for/granted.
- The reasons why house completions have / haven't occurred.
- Any related lessons learned.

3.1.6. The findings of the evaluation and questionnaire will be reported in the one year and five year after scheme opening reports

3.2. ONE YEAR AFTER OPENING

3.2.1. Firstly, the housing building rates will be discussed. The completion data is available for 2020/2021. Only housing data from large developments of 10+ housing sites was available, along with the Strategic Development sites. The house building rates for those in relation to the ACRR are presented in Figure 3-1.

3.2.2. The ACRR opened in November 2020, Figure 3-1 shows that in the 2020/2021 period, the total number of houses constructed (107) and under construction (212) fall 29 short of the total permitted house building rates (348). This is still 92% of the total, with only 8% not started.

3.2.3. It is likely that housing building rates were not as prevalent during 2020 and 2021 due to the COVID-19 pandemic, although these are still high compared to other years in the Figure 3-1.

3.2.4. Additionally, Brexit created uncertainty in the economy and led to issues with the labour market.

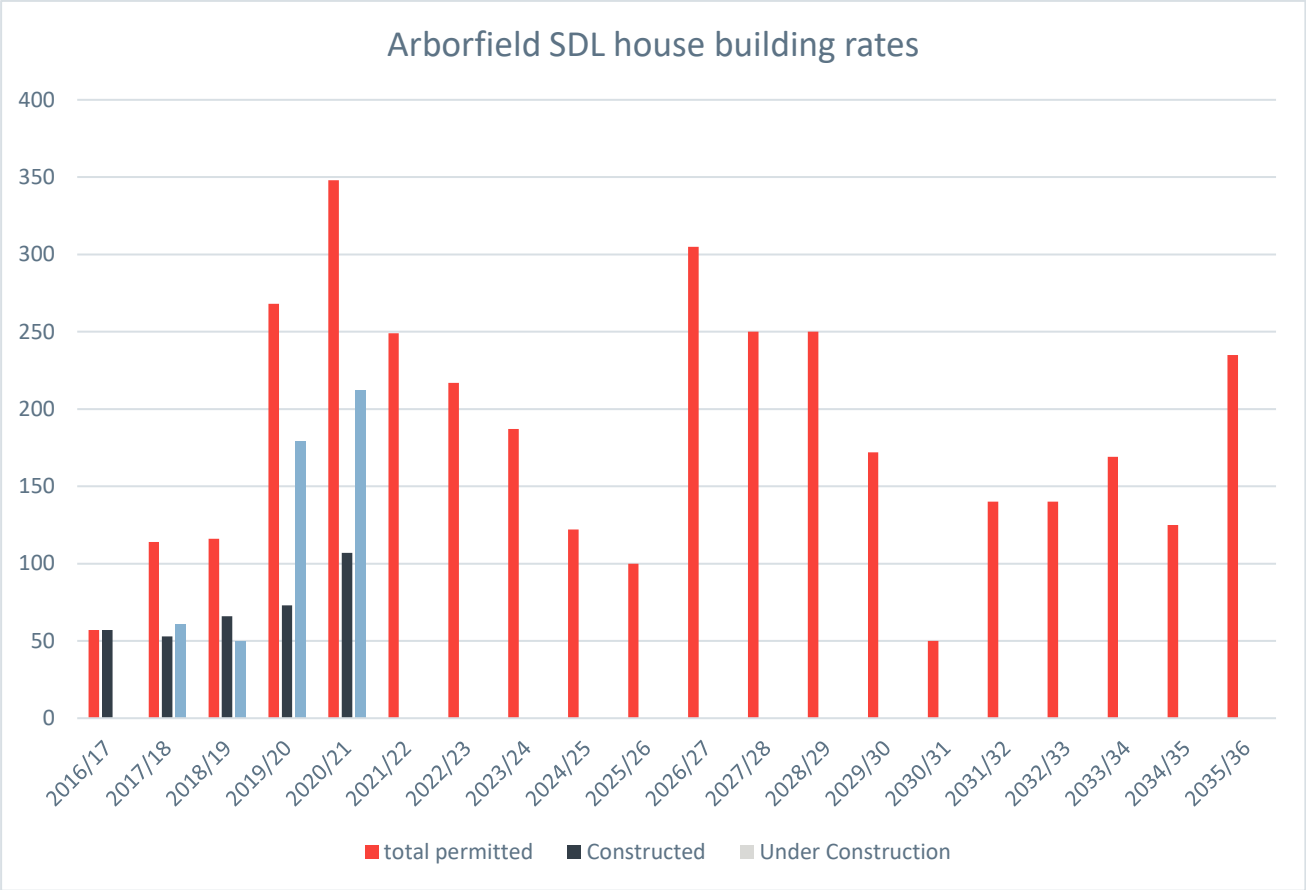


Figure 3-1 - Housing building rate in Arborfield SDL (Arborfield Garrison & Hogwood Farm)

3.2.5. When looking at the house building rates for the area cumulatively in Figure 3-2, only 356 dwellings were constructed by 2020/21 when the ACRR opened, this is well below the 800 dwellings which were given permission without the scheme in place (although this was guidance rather than a trigger – more on this below). Although another 502 dwellings were under construction at the time and 45 dwellings not started, giving a total of 903 houses permitted. By 2035/36, the final year of available data, there are a total of 3,614 dwellings permitted.

3.2.6. Whilst 800 new dwellings in Arborfield SDL was deemed the point where the ACRR was needed as mitigation to support growth, it was not a formal trigger. Feedback from the WBC planning team highlighted that not having a formal trigger in the SDL section 106 planning permissions (which would have prevented the developers going above a certain number until the ACRR was complete) has been helpful in giving all parties, developers and WBC, more flexibility.

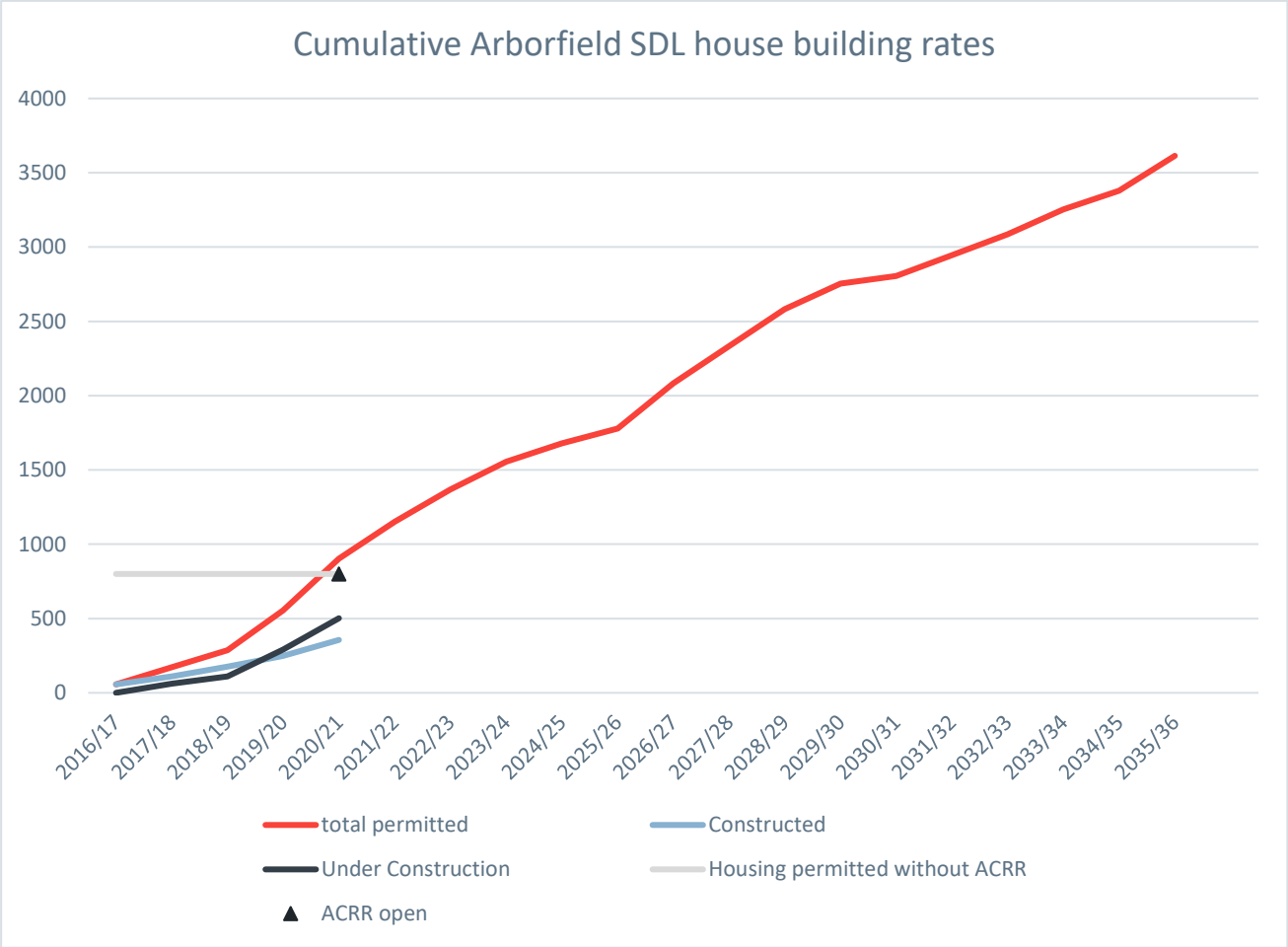


Figure 3-2 - Cumulative house building rate in Arborfield SDL (Arborfield Garrison & Hogwood Farm)

3.2.7. Speaking more generally, development has happened at a steady pace since outline planning permissions were granted for the SDL (Arborfield Garrison in 2015, Hogwood Farm in 2017). The SDL is very popular place and is attractive to prospective purchasers/occupiers. Part of that has to do with the good transport links to Reading and the M4 corridor, which are now improved as a result of the ACRR (and the Shinfield Eastern Relief Road).

3.2.8. Across the Arborfield SDL (Arborfield Garrison and Hogwood Farm) there are now 1,200 completions (as of April 2022) which is a healthy rate of development. Two new schools (one secondary, one primary) have also opened within the SDL. Reserved Matters approvals have been granted across iterative phases / parcels at a steady rate since 2015. A variety of developers have now taken on parcels – not only Crest Nicholson, but also Redrow Homes, Bloor Homes, Millgate Homes, Taylor Wimpey and Westbuild Homes. Sales have been steady, including through the pandemic, and the development commands a price premium. At Hogwood Farm CALA Homes and Barratt Homes operate, with potentially others in the future too. The rate of development at Hogwood Farm is likely to ramp up in the coming years due to the completion of the Nine Mile Ride Extension.

3.2.9. All of this demonstrates sustained commercial confidence in the SDL and the infrastructure that supports it (and that will come forward to further support it in future) – developers know that new homes in this area sell well.

3.2.10. In terms of employment related development at Arborfield Garrison there has been little employment development. There is a new Co-op convenience store at Bramshill Close which falls within the Arborfield SDL boundary and opened during 2021. It has a total floor space of 370sqm, with a sales area of 241sqm and is therefore able to open 7 days a week. Unfortunately, there is no information on the number of jobs generated.

3.2.11. There will hopefully be some employment related development in the future at an extension to the Hogwood industrial estate. The planning permissions for the main SDL development (Arborfield Garrison and Hogwood Farm) both include a significant amount of proposed employment floorspace, however none of this has come forward yet. Crest Nicholson will shortly be consulting the public on proposals for a district centre which will include a medium size supermarket, some retail units and a new pub. There will also be a community centre building that contains a library, a nursery and potentially also some office space units / desks for small businesses or individuals to rent. In terms of delivery, at the earliest it will be 2-3 years. It is hoped that the five year after opening report will have more information on this.

3.2.12. However, there have been two developments off the Shinfield Eastern Relief Road on the A327 northwest of the ACRR, approximately a mile from the ACRR. Firstly, 15,628sqm for a research and storage facility with 48 full time employees. Secondly, around 85,000sqm for film stages, workshops and office space to support filming activities. This has 1,500 full time posts generated by the studio and associated functions; 1,463 indirect positions; a further 1,399 direct and 1,355 indirect positions were generated during the construction phase.

3.2.13. In terms of construction jobs, at its peak the ACRR will have employed approximately 75 people at approximately month 3 to month 12, with approximately 20 employees otherwise.

3.3. FIVE YEARS AFTER OPENING

This section will be completed following the completion of the data collection exercise five years after opening.

4. CONCLUSION

4.1.1. This report presents the outcomes of the ‘lite’ monitoring and evaluation undertaken as part of the ACRR scheme. The process for monitoring and evaluation was outlined in the Monitoring and Evaluation Plan, in accordance with DfT guidelines.

4.1.2. As part of this process, data collection and analysis were undertaken preceding the construction of the scheme to form the baseline conditions from which any subsequent analysis could be completed.

4.1.3. Assessment following the completion of the scheme has been undertaken for the one year after opening for the scheme delivery and impact on the economy in this “lite” report.

4.1.4. The final one year after report will be produced and issued in January 2023 once traffic data has been collected in the same months of the year as the before data.

4.1.5. Five years after opening (Year 5) reporting is estimated to be in 2026.

Appendix A

LOGIC MAP

Appendix B

DATA REQUIREMENTS TABLE

Appendix C

DESIGN REGISTER

Appendix D

AS BUILT DRAWINGS

Appendix E

RISK REGISTER

2 London Square
Cross Lanes
Guildford, Surrey
GU1 1UN

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Wokingham Borough Council

WINNERSH RELIEF ROAD PHASE 2

Monitoring and Evaluation One Year After Opening Report

Wokingham Borough Council

WINNERSH RELIEF ROAD PHASE 2

Monitoring and Evaluation One Year After Opening Report

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WSP

1st Floor, Keble House
Southernhay Gardens, Southernhay East
Exeter, Devon
EX1 1NT

Phone: +44 1392 267 500

Fax: +44 1392 267 599

WSP.com

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Signature				
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CONTENTS

TABLES

FIGURES

1 INTRODUCTION

1.1.1. The Winnersh Relief Road is a new road built to improve traffic capacity on key routes in Wokingham Borough and alleviate existing congestion through Winnersh by means of the provision of an alternate route for non-local traffic travelling through the area.

1.1.2. If the scheme was not implemented, the performance of the A329 Reading Road was forecast to have deteriorated, resulting in increased congestion and delays, less reliable journey times and further increases in economic inefficiencies.

1.2 SCHEME LOCATION

1.2.1. Winnersh is a civil parish and a large village in the Borough of Wokingham in the county of Berkshire. Winnersh is bounded by the M4 Motorway to the south, with an existing residential area and development in the north, King Street Lane to the west and the A329 Reading Road to the east.

1.2.2. The Winnersh Relief Road connects the B3270 Lower Earley Way to the A329 Reading Road in Winnersh, Wokingham.

1.2.3. The Relief Road was delivered in two main phases:

- Phase 1: Western section, linking the B3270 Lower Earley Way with B3030 King Street Lane
- Phase 2: Eastern section, linking King Street Lane to the A329 Reading Road at the M4 overbridge.

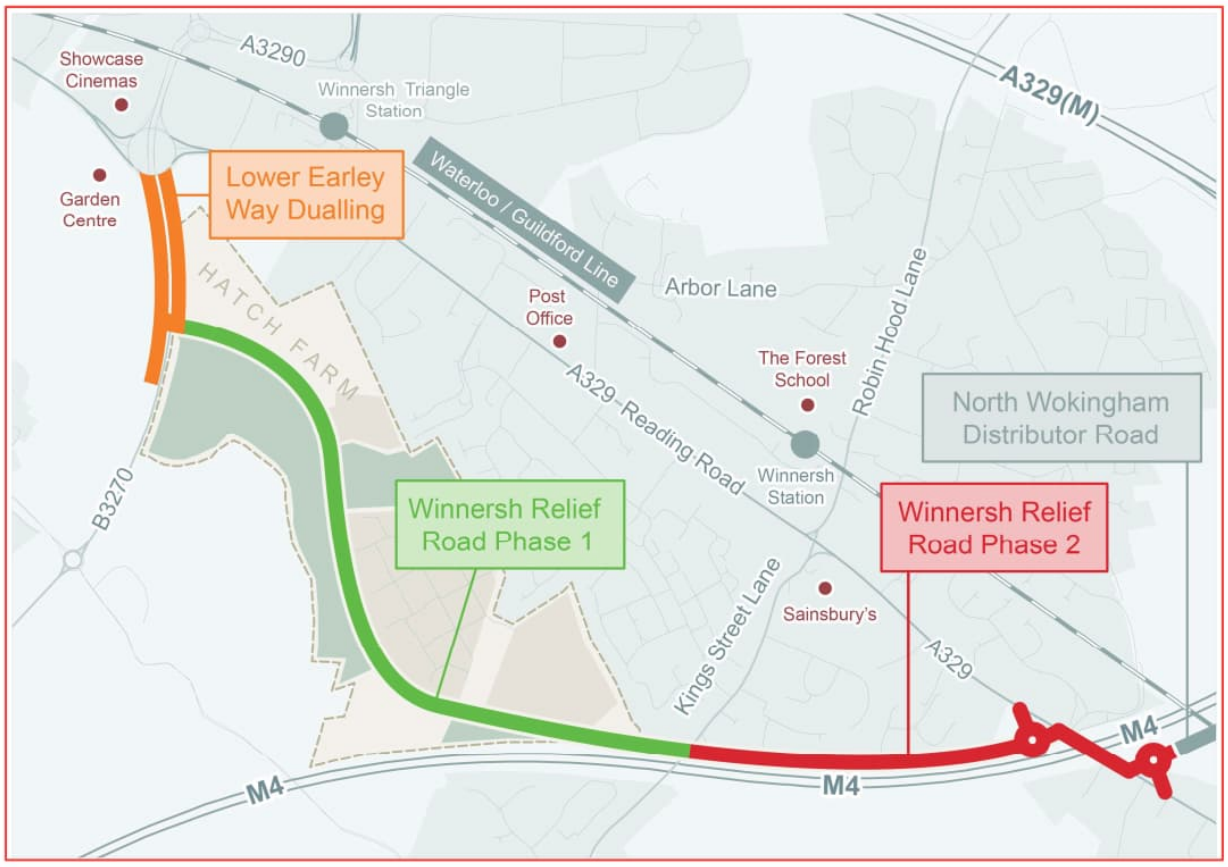
1.2.4. The scheme also includes Lower Earley Way dualling.

1.2.5. Winnersh Relief Road Phase 2 and Lower Earley Way dualling was funded by the Berkshire Thames Valley LEP (Business Rates Retention Pilot Fund) and Wokingham Borough Council's Capital Funding. The scheme completes the Winnersh Relief Road, linking Phase 1 of the scheme to the A329 Reading Road at two locations (each end of the scheme).

1.2.6. The route of the Winnersh Relief Road is illustrated in Figure 1-1. Phase 2 of the Relief Road was opened for traffic in May 2021, whilst final scheme completion date was September 2021.

1.2.7. Phase 1 of the Relief Road was delivered as a separate scheme and was funded by the developer of the nearby Hatch Farm Dairies housing development site (also illustrated in Figure 1-1).

Figure 1-1 - Winnersh Relief Road Scheme



1.2.8. As can be seen in Figure 1-1, Phase 2 of the Relief Road runs parallel north of the M4 Motorway (between Junction 10 to 11). The total length of the Relief Road is approximately 1.5 miles.

1.3 SCHEME DESCRIPTION

PHASE 2 WINNERSH RELIEF ROAD

1.3.1. The Winnersh Relief Road aims to reduce existing congestion through Winnersh village and on the wider road network. It has been designed to provide additional capacity, which will help the Borough meet its economic growth and job creation objectives.

1.3.2. Phase 2 of the Winnersh Relief Road consisted of a 750m long single carriageway with a speed limit of 40mph, linking the new junction on B3030 King Street Lane to a new junction on the A329 Reading Road. It was created by widening a 400m long section of the existing Longdon Road and extending it by 350m to join the A329. The existing priority junctions with Sandstone Close and Laburnum Road were retained, serving the residential area north of Longdon Road. A shared footway/cycle way was provided on the Relief Road, with uncontrolled crossings for pedestrians and cyclists at these junctions.

1.3.3. The scheme included:

- A new roundabout junction located on the A329 Reading Road, north of the M4 overbridge
- A further roundabout located south of the M4 overbridge providing a connection to the proposed West of Old Forest Road scheme
- A modified set of traffic signals at Kings Street Lane
- A new set of traffic signals on the Reading Road east bound approach at the southern roundabout
- One modified toucan crossing on Reading Road between the two roundabouts close to Woodward Close

LOWER EARLEY WAY DUALLING

1.3.4. Included within Phase 2 of the Winnersh Relief Road scheme was Lower Earley Way Dualling.

1.3.5. To accommodate traffic volumes associated with the relief road and Hatch Farm Dairies housing development, a 520m length of the B3270 Lower Earley Way was improved to a dual carriageway standard. The road was widened to provide two lanes in each direction, and a new footway/cycle way was also provided.

1.3.6. The location of this scheme in relation to Phase 2 of the Winnersh Relief Road is illustrated in Figure 1-1.

1.4 INTRODUCTION

1.4.1. As part of the Winnersh Relief Road Full Business Case (FBC), a Monitoring and Evaluation Plan (MEP) has been produced for Phase 2 of the scheme, in accordance with the Department of Transport (DfT) guidelines as set out in the Monitoring and Evaluation Framework for Local Authority Major Schemes (September 2012) and the Monitoring and Evaluation Strategy (March 2013).

1.4.2. The DfT guidance identifies three tiers of monitoring and evaluation, namely:

- Standard Monitoring, where schemes monitor and report on a standard set of measures.

- Enhanced Monitoring, for schemes costing more than £50m or which are anticipated to have a significant impact on particular indicators; and
- Fuller Evaluation, for a DfT-specified selection of schemes.

1.4.3. The Winnersh Relief Road Phase 2 is a project with an overall cost less than £50m and has therefore not been specified for fuller evaluation. As such it falls into the Standard Monitoring tier.

1.4.4. This report aims to demonstrate that the funding obtained for Phase 2 of the scheme has provided value for money and that any lessons learnt are captured as evidence to inform future decision making. The report aims to evaluate the success of the scheme so far, by comparing the expectations and assumptions made in the original Business Case against the scheme's current outcomes.

1.4.5. The following measures have been identified to assess the scheme in accordance with the DfT Standard monitoring measures:

- Scheme build
- Scheme delivery
- Scheme costs
- Scheme objectives
- Travel demand
- Travel times and reliability of travel times
- Impacts on the economy; and
- Carbon Impacts

1.5 SCHEME OBJECTIVES

1.5.1. The objectives of the Winnersh Relief Road were to:

- Reduce existing and future peak hour congestion in Winnersh by providing an alternative route for through traffic
- Reduce journey times on the A329 Reading Road through Winnersh
- Facilitate the Hatch Farm Dairies housing development (433 dwelling units)
- Cater for traffic generated by other new housing developments in the Borough of Wokingham as set out in the Core Strategy
- Encourage active transport through provision of cycle lanes and footpaths.

1.6 MEASURES OF SUCCESS

1.6.1. This report will analyse whether the above scheme objectives have been met using several different measures of success. The scheme objectives and criteria for assessment, as outlined in the Business Case, have been summarised in Table 1-1:

Table 1-1 – Measure of Success

Project Objective	Benefit	Measure	Timescale
Reduce existing and future peak hour congestion in Winnersh	Improved and reliable East-West connection would improve overall network performance	Journey time and reliability monitoring	Immediately after completion
Reduce journey times on the A329 Reading Road through Winnersh	Removal of some strategic traffic on the A329 Reading Road due to the bypass	Journey time and reliability monitoring	Immediately after completion
Facilitate the Hatch Farm Dairies housing development	Deliver the identified housing development. Full connectivity with the wider network	Delivery of housing target and jobs	Immediately after completion
Cater for traffic generated by other new housing developments in the Borough of Wokingham	Improved connectivity and network capacity for accommodating Council's growth aspiration	Network performance against increase in demand due to new developments	Long-term
Encourage active transport in the area through provision of better cycle lanes and footpaths	Support growth of sustainable transport (non-motorised users)	Monitoring NMU mode share against target	Medium-term

1.6.2. These project objectives and measurements of success will be scrutinised throughout this report to evaluate the overall success of Phase 2 of the Winnersh Relief Road scheme.

2 SCHEME BUILD, DELIVERY AND COSTS

2.1 INTRODUCTION

2.1.1. This section of the report focusses on whether the scheme build, delivery and costs of Phase 2 of the Winnersh Relief Road scheme were delivered as outlined in the original Business Case. It also assesses the constructed scheme in terms of cost, programme and risk.

2.2 SCHEME BUILD

2.2.1. To understand if the scheme was built and delivered on time in line with key project milestones (as outlined in the project plan), expected delivery timescales throughout the project lifecycle have been reviewed against the actual delivery dates, summarised in Table 2-1. If key milestones have not been met, an explanation of the reason/s for the delay has also been provided.

Table 2-1 – Review of Project Delivery Timescales

Task	Expected Delivery Timescale	Actual Delivery Timescale
Start enabling works	Summer 2018	Spring 2019
Site preparation	Summer 2019	Autumn 2019
Construction begins on King Street Lane	Late Autumn 2019	Late Autumn 2019
Start utility diversion work	Spring 2019	Early 2020
Road open to traffic	Autumn 2020	May 2021
South roundabout completion	-	Autumn 2021
Landscaping and remedial works	-	Summer 2022

2.2.2. A summary of key issues encountered and reasons for delays to the project timeline have also been provided to identify potential lessons learnt if the project was to be repeated:

- Working within close proximity to and interface with National Highways required close management and regular communication to ensure both parties could deliver their contracted work on time
- Deep excavation for drainage system was affected by significant periods of wet weather during Autumn and Winter 2020 – these created issues with surface water drainage
- A329 Reading Road utility diversion was required early in the programme
- The continued operation of the road for public use meant tight phasing of works

2.2.3. Further lessons learnt based on experiences during scheme construction have been summarised below:

- Ensure kerb islands are sized correctly to ensure minimal cutting
- Avoid the usage of Ovoid pipes if possible. NMRE Lorclon used a new pipe laying system with two excavators as opposed to a standard circular pipe. This worked very well and mitigated the air testing issue that was experienced with the Ovoid pipes, which meant that workers had to manually build a square concrete manhole around each junction. This took a significant amount of time.
- A new top to a footpath was required, however the standard of the previous work completed by another contractor was sub-standard. This increased workload and associated time pressures.
- The pedestrian crossing used a sprayed-on herring bone imprint. This is a lot faster than block paving to lay and easier and quicker to install and maintain.
- Account for the cost of vacuum excavation when working on a very old road. The cost of this was underestimated.

2.3 SCHEME DELIVERY

2.3.1. As outlined in the FBC, Phase 2 of the Winnersh Relief Road consisted of a 750m long single carriageway, linking the new junction on B3030 King Street Lane to a new junction on the A329 Reading Road. The final section of the Relief Road was opened for traffic in May 2021.

2.3.2. According to the FBC, the key features of scheme included:

1. A new roundabout junction located on the A329 Reading Road, north of the M4 overbridge
2. A further roundabout located south of the M4 overbridge providing a connection to the proposed West of Old Forest Road scheme
3. A modified set of traffic signals at Kings Street Lane
4. A new set of traffic signals on the Reading Road east bound approach at the southern roundabout
5. One modified toucan crossing on Reading Road between the two roundabouts close to Woodward Close

2.3.3. Of the above key features, all except one have been successfully delivered one year post scheme opening. The proposed traffic signals on the Reading Road east bound approach at the southern roundabout was not implemented (number 4). This change was made during the preliminary design before submission to Planning. It was recognised that the traffic signals should be provided later based on the Transport Assessment work done.

2.3.4. Scheme delivery for Phase 2 of the Winnersh Relief Road scheme is evidenced using satellite imagery from Google Maps (Figure 2-1). The construction and completion of some of the key features of the scheme (summarised above) are also highlighted in Figure **2-2** to Figure 2-5. The annotated numbers on the imagery in these figures directly correlate with the key feature listed above.

2.3.5. With reference to Lower Earley Way Dualling, the FBC stated that:

- A 520m length of the B3270 Lower Earley Way was to be improved to a dual carriageway standard. The road was widened to provide two lanes in each direction, and a new footway/cycle way was also provided.

2.3.6. The completion of the Lower Earley Way Dualling is evidenced in Figure 2-6 and Figure 2-7.

Figure 2-1 - Google Maps Satelitte Imagery of Built Scheme

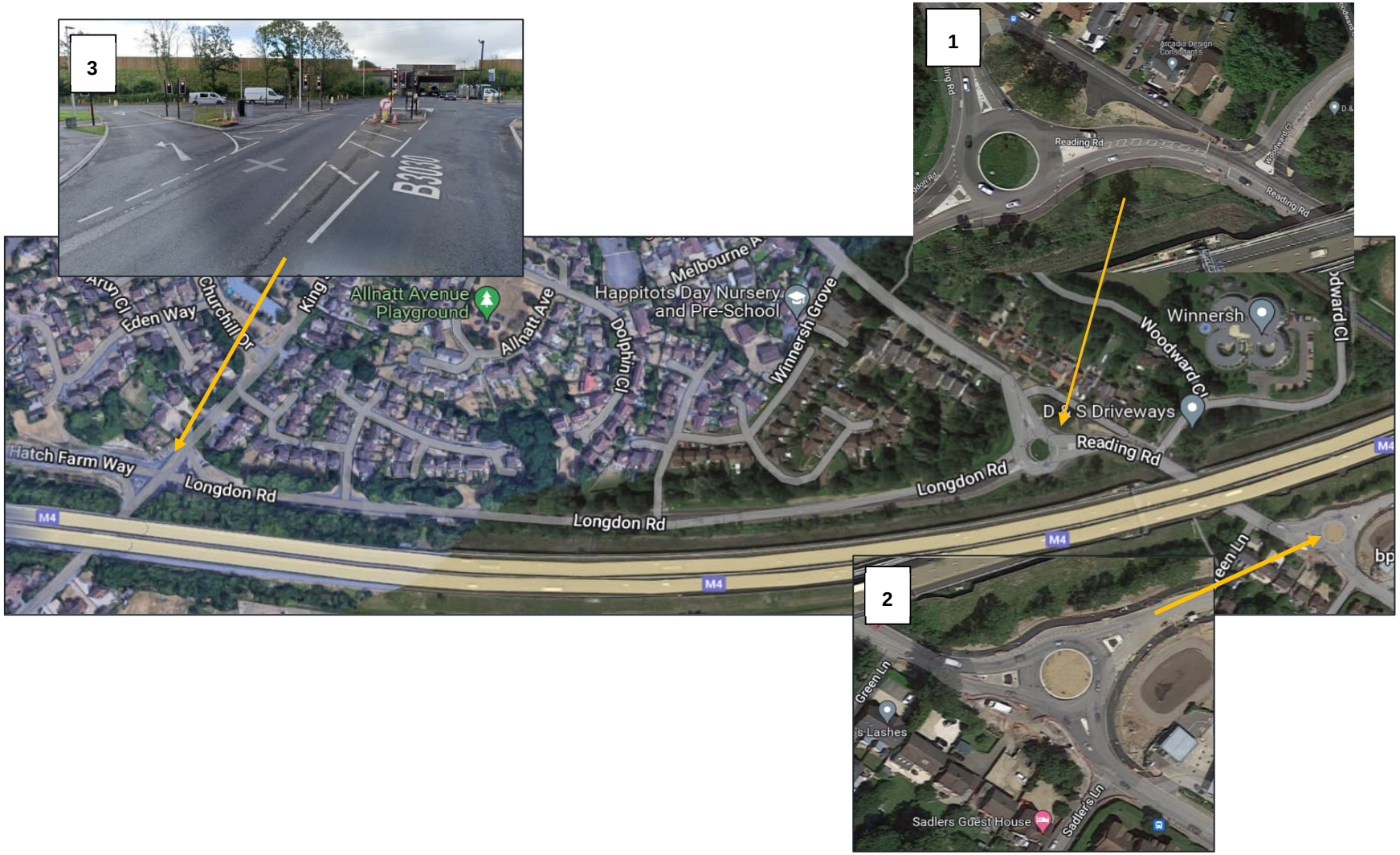


Figure 2-2 - Aerial view of construction of new northern roundabout

Figure 2-3 - Aerial view of construction of new southern roundabout

Figure 2-4 - Aerial view of new northern roundabout – now open to traffic

Figure 2-5 - Aerial view of new southern roundabout – now open to traffic

Figure 2-6 - Aerial view of Lower Earley Way Dualling (before)

Figure 2-7 - Aerial view of Lower Earley Way Dualling (after)

2.4 SCHEME COSTS

2.4.1. The purpose of this subchapter is to compare scheme costs that were initially forecast in the Business Case with actual scheme costs to establish whether the scheme was delivered within budget.

2.4.2. However, post scheme costs are not currently available for Phase 2 of the Winnersh Relief Road due to the combining of construction of this scheme with the West of Forest Road scheme. As a result, individual costs for each scheme will not be available until the cost of the two schemes have been disaggregated (approximately Autumn 2022). This information will have to be re-evaluated in the 5-year post scheme report.

2.4.3. Despite this, the estimated scheme costs discussed in the FBC are detailed below.

2.4.4. The overall cost estimate for Phase 2 of the Winnersh Relief Road scheme was **£8,037,121.82**. These costs were based on 2016 Quarter 3 prices and are broken by project task and year in Table 2-2:

Table 2-2 – Estimated Scheme Costs, as detailed in the FBC

Project Task	2017/18	2018/19	2019/20	2020/21	Total
Lands	£0	£45,000.00	£0	£0	**£45,000.00**
Pt1 Claims	£0	£0	£0	£500,000.00	**£500,000.00**
Core Team	£127,404.37	£509,617.49	£212,340.62	£0	**£849,362.49**
Surveys	£0	£0	£209,344.99	£0	**£209,344.99**
Enabling Works	£0	£0	£186,938.00	£0	**£186,938.00**
Construction	£0	£0	£5,033,987.88	£719,141.13	**£5,753,129.00**
Risk & BIM (Design)	£0	£0	£120,932.38	£0	**£120,932.38**
Risk & BIM (Construction)	£0	£0	£372,414.95	£0	**£372,414.95**
Total	**£127,404.37**	**£554,617.49**	**£6,135,958.82**	**£1,219,141.13**	**£8,037,121.82**

COST SAVINGS

2.4.5. Cost elements where savings have been identified cannot be accurately calculated until full scheme costs have been analysed.

COST OVERRUNS

2.4.6. Scheme compensation events (CE) have been summarised for Phase 2 Winnersh Relief Road and Lower Earley Way Dualling in Table 2-3 and Table 2-4 to identify where scheme cost elements incurred overruns:

Table 2-3 – Scheme Compensation Events (Phase 2 Relief Road)

CE Reference	Title
CE-85	South roundabout geometric re-design
CE-84	WRR2 - re-design of layout outside BP station access (refer to RSA 3 problem)
CE-72	Gritting of Longdon Road, Winnersh
CE-71	Damaged Lamp Column Following RTA on North Roundabout
CE-63	Planings Bound with Coal Tar
CE-60	Saddlers Lane Existing Pavement
CE-58	Substation Design - Additional Costs
CE-54	Footpath outside 328 Reading Road
CE-48	South Roundabout Thames Water Diversion Delay
CE-47	Unforeseen Ground Conditions - Pond 2
CE-45	Concrete Utilities Capping on Reading Road
CE-43	Obstructions Encountered During Vacuum Excavation Works
CE-42	Coal Tar Found on Reading Road
CE-41	SSE LV Pole Relocation (North Roundabout)
CE-40	M4 Boundary CCTV Cable
CE-39	Temporary
CE-38	SGN Subcontractor Stopped Due to Unsafe Working Practices
CE-37	Changes to Landscape Design
CE-36	Link Road opening
CE-30	ADS Signage - Physical works
CE-28	M4 V Ditch Groundwater Percolation

CE-27	Accommodating HE bridge works
CE-21	Vodaphone - North Roundabout Diversion
CE-19	Unforeseen Ground Conditions - Ovoid Pipe and Swale
CE-17	Unchartered Services - Water Pipe & LV Cable
CE-15	Thames Water Diversions Delay Contractor's Planned Works
CE-12	Gas spurs
CE-11	Additional filter drain - Preliminary design
CE-10	Change to proposed Woodward Close resurfacing extents
CE-5	Insufficient Cover to Communications Ducting
CE-4	Damaged Light Column - Longdon Road
CE-2	Vacuum Excavation

Table 2-4 - Scheme Compensation Events (Lower Earley Way Dualling)

CE Reference	Title
Phase 1	
CE-6	Topographical & Utilities Survey on LEWD
CE-13	Ecological Survey at ACRR & LEWD
CE-14	Surveys and Investigations (GI/Cores for LEWD, ACRR, BB, EG)
CE-23	Japanese Knotweed - LEWD
CE-58	Enabling Works
CE-75	WAC Testing
CE-107	Alteration to LEWD pond design following Ecological Walkabout
CE-347	Additional Preconstruction Staff Resource
Phase 2	
CE-1	Northbound lane 1 roundabout approach hatching
CE-2	Extension to Traffic Light ducts on the Northern Footpath
CE-3	Temp access and pond footpath material change

CE-4	Install two additional traffic signal ducts on the showcase roundabout
CE-5	New Showcase Cinema egress route
CE-6	ADS Foundation Installation
CE-7	RSA3 audit - site update construction instruction
CE-8	Wokingham white lining removed from left hand lane

2.5 RISK

2.5.1. The FBC states that project risk was to be managed as an on-going process as part of the scheme governance structure. The Winnersh Relief Road scheme has benefitted from Early Contractor Involvement and a detailed review of risk was undertaken by the whole (Client, Consultant and Contractor) team.

2.5.2. The following tasks were undertaken throughout the project lifestyle to mitigate the impacts of potential risks:

- Early warning notices process from both Contractor and Client
- Weekly risk reduction meeting and as required during construction of the scheme
- Weekly collaborative programme board meeting with Contractor and Client throughout the project lifestyle to manage risks based on RAG (red, amber, green) system and weekly review of actions.

2.6 SUMMARY

2.6.1. This chapter has summarised the scheme build, delivery and costs of Phase 2 of the Winnersh Relief Road scheme. Firstly, information on the scheme build such as project timescales and potential lessons learnt have been summarised. Within scheme delivery, Google Maps satellite imagery and before and after construction photos have been used to illustrate whether the key features of the scheme, originally outlined in the FBC, have been successfully delivered. Finally, estimated scheme costs and cost overruns have been provided, whilst risk mitigating measures have also been reviewed.

3 TRAVEL DEMAND AND JOURNEY TIME RELIABILITY

3.1 INTRODUCTION

3.1.1. The impact of Phase 2 of the Winnersh Relief Road scheme development upon travel demand and journey time reliability in and around Winnersh has been analysed using several datasets, including traffic counts, pedestrian and cycle counts and journey time reliability surveys.

3.1.2. The FBC identifies a requirement to reduce travel demand and improve journey time reliability along the A329 Reading Road. Before scheme development, this road, and the crossroads at the junction of Reading Road, King Street Lane and Robin Hood Lane suffered from considerable congestion and subsequent journey time unreliability and economic inefficiencies.

3.1.3. Traffic counts and journey time surveys have been proposed to understand what impact the development of Winnersh Relief Road has had upon travel demand and journey time reliability.

3.2 TRAFFIC COUNTS

3.2.1. Road traffic counts have been analysed on arterial routes at a variety of locations in Winnersh pre and post scheme development to ascertain the scheme's impact upon traffic volumes.

3.2.2. Wokingham Borough Council traffic count data for the pre-scheme traffic counts has been extracted from the C2 online platform. However, since the final scheme completion date was during September 2021, reliable post-scheme traffic counts remain unavailable on the C2 platform. There were also some technical issues that were reported for some of the traffic counters which meant they could no longer be used and required repair. As a result, post scheme traffic counts have been commissioned independently.

3.2.3. Since post-scheme traffic counts were commissioned and undertaken during week commencing 23rd May 2022, pre-scheme traffic count data has been extracted from the C2 online platform during the penultimate week in May to enable accurate comparisons of traffic volume.

3.2.4. Preparation for the delivery of Phase 2 of the Relief Road began in early 2019, therefore 2018 was deemed the latest year that the pre-scheme traffic counts could be extracted from the C2 online platform to enable accurate pre and post scheme comparisons. As a result, traffic volume data was extracted during the penultimate week in May 2018 for all site locations except for site number 14, where count data was extracted during May 2017 instead of May 2018 due to the unavailability of the required data during May 2018.

3.2.5. One additional traffic count has been undertaken at the Phase 2 Relief Road scheme location (Longdon Road). Counts had not previously been undertaken at this location by Wokingham Borough Council therefore a before and after scheme development traffic volume comparison was not possible at this site.

3.2.6. Figure 3-1 illustrates the locations of the pre and post scheme traffic volume counts, whilst Table 3-1 summarises the traffic volumes recorded at each site:

Figure 3-1 – C2 Count Locations

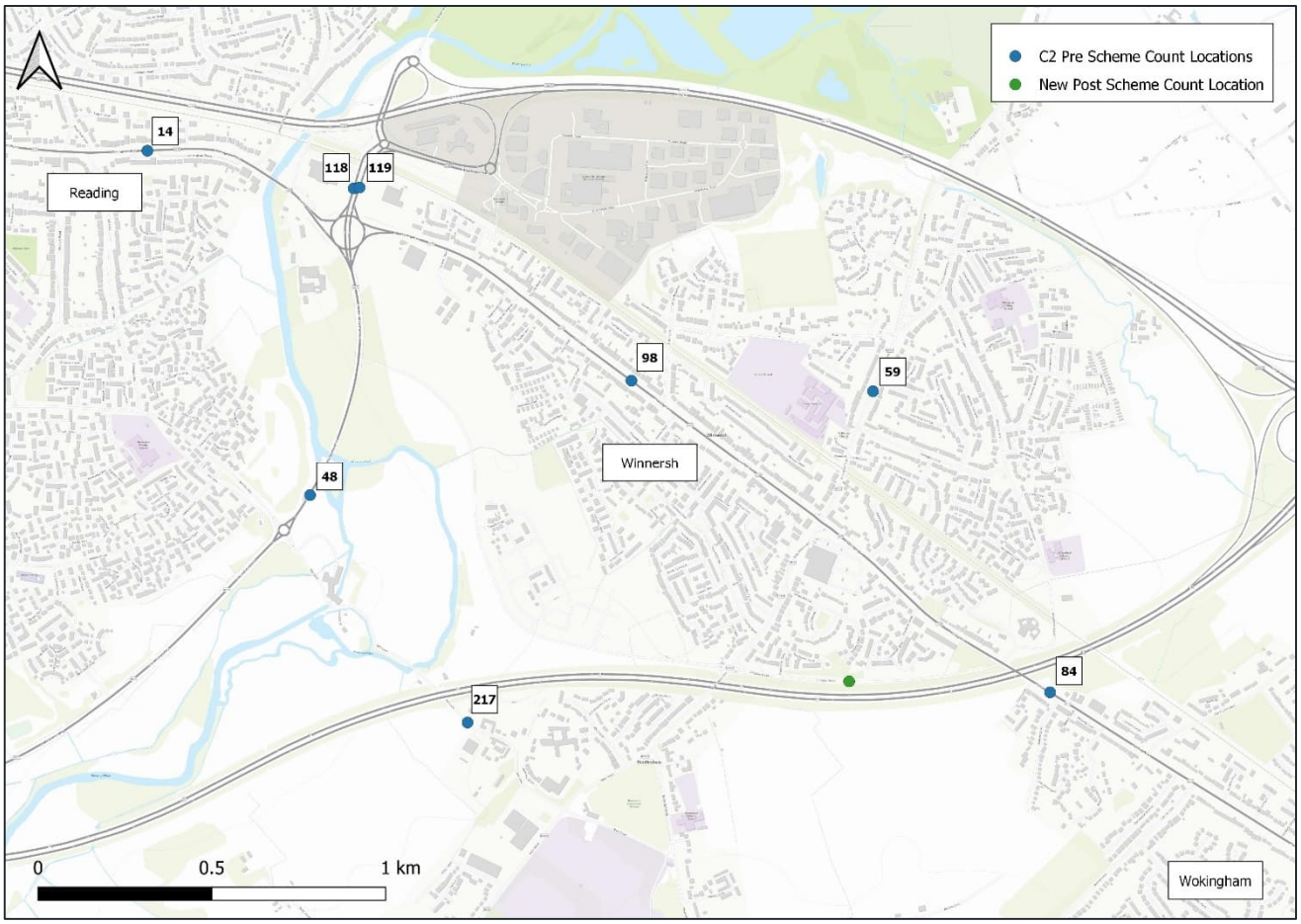


Table 3-1 – Pre- and post-scheme Traffic Volume Comparisons

C2 Site ID	Traffic Count Location	Pre-scheme average weekday traffic volume in May 2018				Post-scheme average weekday peak traffic volume in May 2022			
		12-hour (07:00-19:00)	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Peak travel as a % of total (average)	12-hour (07:00-19:00)	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)	Peak travel as a % of total (average)
14	A329 Wokingham Road	15,734	1,602	1,643	10%	14,223	1,459	1,514	10%
48	B3270 Lower Earley Way North	22,496	2,104	2,414	10%	21,780	2,420	2,397	11%
59	B3030 Robin Hood Lane	7,392	717	741	10%	6,595	724	667	11%
84	A329 Reading Road (under M4)	15,594	1,322	1,392	9%	20,127	2,253	1,907	10%
98	A329 Reading Road	13,156	1,804	1,797	14%	14,811	1,482	1,415	10%
118	Showcase Cinema (n-bound)	13,865	1,794	1,217	11%	11,899	1,509	1,177	11%
119	Showcase Cinema (s-bound)	13,044	1,063	1,628	10%	11,346	1,044	1,498	11%
217	Mill Lane, Sindlesham	10,620	1,040	1,160	10%	6,525	965	767	13%
N/A	Longdon Road	N/A				9,480	1,185	946	11%

3.2.7. Table 3-1 highlights that the average percentage of total traffic recorded travelling during peak periods before scheme construction is consistent. At every site except one, average peak travel ranges from 9-11% of total traffic recorded. The exception is site 98 (A329 Reading Road), where average peak travel sits at 14% of total traffic recorded. This contributes towards the idea that a significant volume of traffic at site 98 travelled during peak periods, resulting in notable congestion levels.

3.2.8. Since scheme completion, average peak travel of total traffic recorded ranges from 10-13% across the various surveyed sites. Average peak travel along Longdon Road sits at 11%, whilst the average weekday 12-hour traffic volume is 9,480 vehicles. Notably, average peak travel at site 98 (A329 Reading Road) has significantly decreased since the completion of the Winnersh Relief Road scheme, from, 14% to 10%.

3.2.9. The development of the Phase 2 of the Relief Road scheme has also had significant impacts upon traffic flows at sites 84 and 217. At site 84, 12-hour weekday traffic flows have increased 29% since the development of the scheme, whilst at site 217, traffic flows have decreased 39%. It can be seen therefore that the scheme has relieved traffic flows successfully on the parallel Mill Lane (site 217).

3.2.10. This data highlights the impact the Relief Road scheme has had upon easing the pressure upon nearby arterial routes around Winnersh such as the A329, resulting in decreased congestion.

3.2.11. It should, however, be noted that this scheme was constructed during the Covid-19 pandemic, whereby at times throughout scheme construction the general public were instructed to remain at home unless their journey was essential. The Covid-19 lockdown has had a long-term impact upon travel patterns and overall traffic volumes, with many employees and employers continuing to work flexibly. As a result, the pre and post-scheme traffic volumes recorded in Table 3-1 may not be directly comparable due to an increase in working from home.

3.3 PEDESTRIAN AND CYCLE COUNTS

3.3.1. Post scheme pedestrian and cycle counts have also been commissioned to understand current levels of active travel usage in Winnersh. Pedestrian counts and off-road cycle counts were undertaken at Longdon Road, whilst on-road cycle counts were undertaken at the same C2 count locations as identified in Figure 3-1 .

3.3.2. Post scheme construction pedestrian volumes on Longdon Road are summarised in Table 3-2:

Table 3-2 - Post scheme pedestrian volumes

C2 Site ID	Location	Total No. of Pedestrians Recorded						
		23rd May	24th May	25th May	26th May	27th May	Weekly Total	Weekly Average
N/A	Longdon Road	145	152	121	125	136	679	136

3.3.3. Table 3-2 highlights the consistent flow of pedestrians on Longdon Road from Monday 23rd – Friday 27th May.

3.3.4. With reference to pre and post scheme cycle volume comparison, preparation for the delivery of Phase 2 of the Relief Road began in early 2019, therefore 2018 was deemed the latest year that the pre-scheme cycle counts could be analysed to enable accurate pre and post scheme comparisons.

3.3.5. Post scheme cycle counts could only be compared against pre-scheme cycle volumes for sites 14 and 98 due to issues with the availability of the required data.

3.3.6. Post scheme construction cycle volumes are summarised in

3.3.7. Table 3-3:

Table 3-3 – Post scheme cycle volumes

C2 Site ID	Location	Pre scheme Pedal Cycle Volumes	Post scheme Pedal Cycle Volumes						
		Weekly Total	23rd May	24th May	25th May	26th May	27th May	Weekly Total	Weekly Average
14	A329 Wokingham Road	2314	212	175	207	251	216	1061	212
48	B3270 Lower Earley Way North	N/A	8	5	7	8	15	43	9
59	B3030 Robin Hood Lane	N/A	44	37	51	115	63	310	62
84	A329 Reading Road (under M4)	N/A	108	89	106	105	128	536	107
98	A329 Reading Road	2548	172	151	173	169	182	847	169
118	Showcase Cinema (n-bound)	N/A	0	0	2	1	4	7	1
119	Showcase Cinema (s-bound)	N/A	0	3	6	3	3	15	3
217	Mill Lane, Sindlesham	N/A	33	27	24	24	34	142	28
N/A	Longdon Road (on-road)	N/A	34	18	13	20	27	112	22
	Longdon Road (off-road segregated cycle facility)	N/A	85	62	70	71	73	361	72

3.3.8. Table 3-3 highlights the significant volume of pedal cycle flows that have been recorded at sites 14, 84 and 98. Volume of pedal cycle flows at site 14 exceeded 1,000 throughout the duration of the week, whilst volumes exceeded 500 pedal cycles at sites 84 and 98 throughout the duration of the week.

3.3.9. Table 3-3 also highlights the significant reductions in cycle volumes at sites 14 and 98 since the construction of the scheme. It is, however, important to caveat this information with several reasons why these totals may have decreased. Firstly, the pre scheme cycle volumes included both on-road and off-road cycle volumes, whereas the post scheme totals surveyed on-road cyclists only (except for Longdon Road, where both on-road and off-road cyclists were recorded separately). Secondly, as was the case with the traffic counts, overall cycle volumes may have been impacted by the changes in travel patterns caused by the Covid-19 pandemic. Finally, the opening of Phase 2 of the Relief Road is likely to have had some impact upon cycle route choices.

3.4 JOURNEY TIME RELIABILITY SURVEYS

3.4.1. Journey time unreliability due to congestion along the A329 Reading Road and the crossroads at the junction of Reading Road, King Street Lane and Robin Hood Lane was identified within the Business Case as a key contributing factor towards the development of the Winnersh Relief Road.

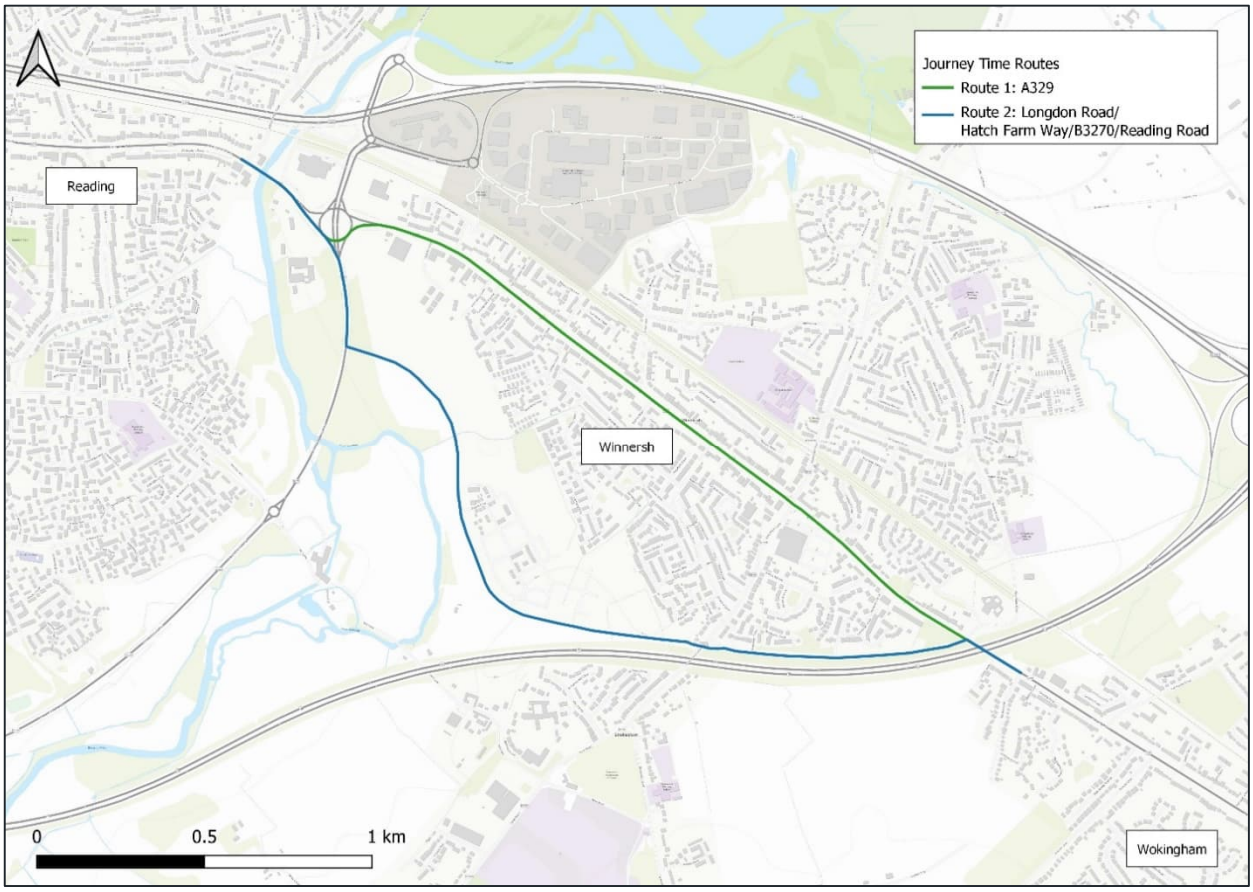
3.4.2. Journey time reliability surveys have been proposed along the following routes in Winnersh to understand the impact of AM and PM peak congestion upon journey times:

- Route 1: A329 Reading Road
- Route 2: Longdon Road/Hatch Farm Way/B3270/Reading Road

3.4.3. It is proposed that Department for Transport Trafficmaster/TeletracNavman data is used to access journey times.

3.4.4. The proposed routes for the journey time reliability surveys are illustrated in Figure 3-2.

Figure 3-2 - Journey Time Routes



3.4.5. Unfortunately, upon investigating these routes further, it was identified that the journey time data for route 2 was incomplete, with segments of the route missing data. This is most likely due to the fact that the Traffweb data layer used to access journey time routes was created before the Relief Road was built. To combat this, separate journey time surveys can be commissioned in the future to access journey time data for this route.

3.4.6. As a result of this issue, journey times for route 1 only will be analysed within this report, and journey times for route 2 will be re-evaluated in the 5-year post scheme report. However, at the time of writing the journey time data for route 1 was unavailable due to IT issues. The journey time data will be submitted separately to the LEP as soon as possible.

3.5 SUMMARY

3.5.1. This chapter summarises the impact of Phase 2 of the Winnersh Relief Road scheme development upon travel demand and journey time reliability using a combination of traffic counts, pedestrian and cycle counts and journey time reliability data.

3.5.2. The data summarised in Table 3-1 contributes towards the idea that peak hour congestion has been reduced since the development of Phase 2 of the Winnersh Relief Road scheme. At site 98 (A329 Reading Road), average peak travel as a percentage of total traffic recorded reduced from 14% to 10% since the completion of the scheme. It is probable that the development of the relief road has eased the pressure on nearby arterial routes around Winnersh such as the A329, thus reducing overall congestion.

3.5.3. The scheme has also relieved traffic flows successfully on the parallel Mill Road (site 217). It should, however, be noted that this scheme was constructed during the Covid-19 pandemic. As a result, the pre and post-scheme traffic volumes recorded in Table 3-1 may not be directly comparable due to an increase in working from home.

The data summarised in Table 3-2 highlights the consistent flow of pedestrians on Longdon Road, whilst

3.5.4. Table 3-3 highlights the high volumes of pedal cycles recorded at various site locations throughout Winnersh. Both figures highlight the usage of and requirement for continued non-motorised user provision throughout Winnersh.

4 ROAD SAFETY

4.1 INTRODUCTION

4.1.1. Wokingham Borough Council road traffic collision data for Winnersh has been analysed for a 5-year period between 2017-2021. Road traffic collision data has been analysed between these years to assess the effectiveness of the scheme in improving road safety and reducing the number of road collision casualties.

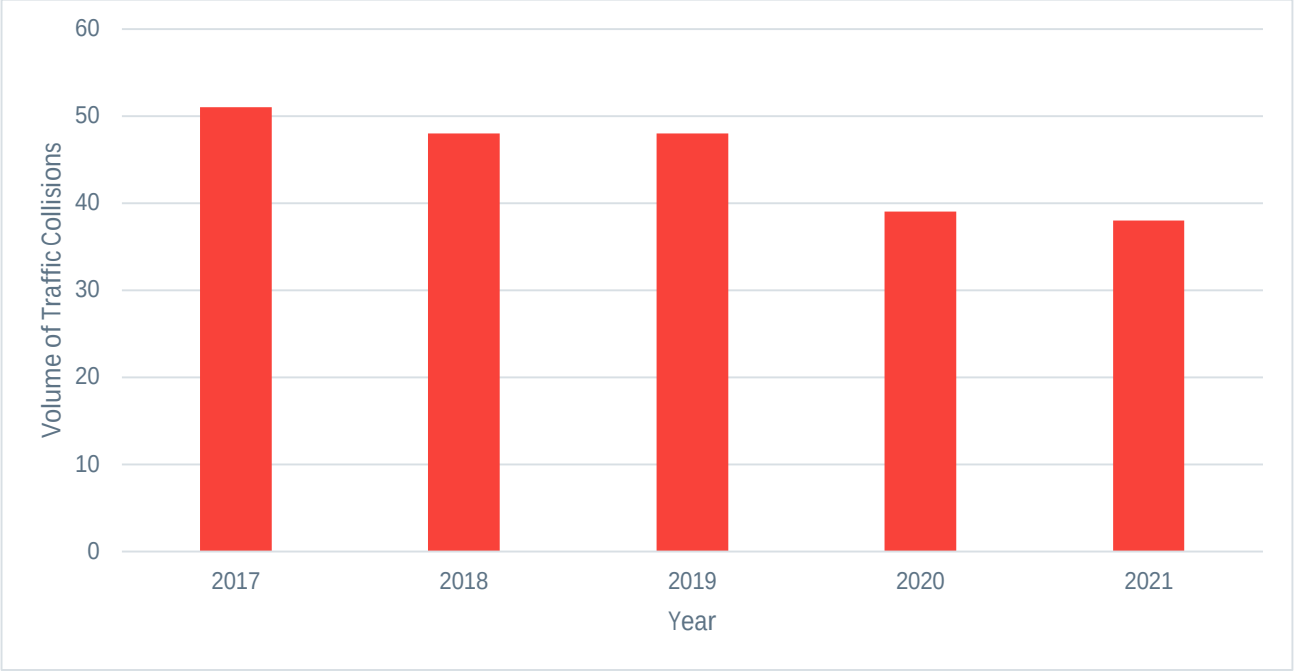
4.1.2. Despite the fact that road safety is not directly discussed within the scheme's objectives, it was deemed a relevant and important factor to review within this monitoring and evaluation report.

4.1.3. Locations of road traffic collisions were analysed and illustrated in the FBC as part of the scheme's economic appraisal in attempt to estimate accident costs that could be saved due to the construction of the Relief Road.

4.2 TRAFFIC COLLISION DATA

4.2.1. Figure 4-1 highlights the distribution of road traffic collisions in Wokingham Borough Council, by year. During 2020, traffic flows and traffic collision data may not be representative of previous years due to the impact of national and local lockdowns as a result of the Covid-19 pandemic.

Figure 4-1 - Volume of Road Traffic Collisions 2017-2021, by year



4.2.2. In total, 224 road traffic collisions have been recorded in the study area between 2017-2021. Noticeably, the annual volume of traffic collisions has decreased year-on-year between 2017-2021.

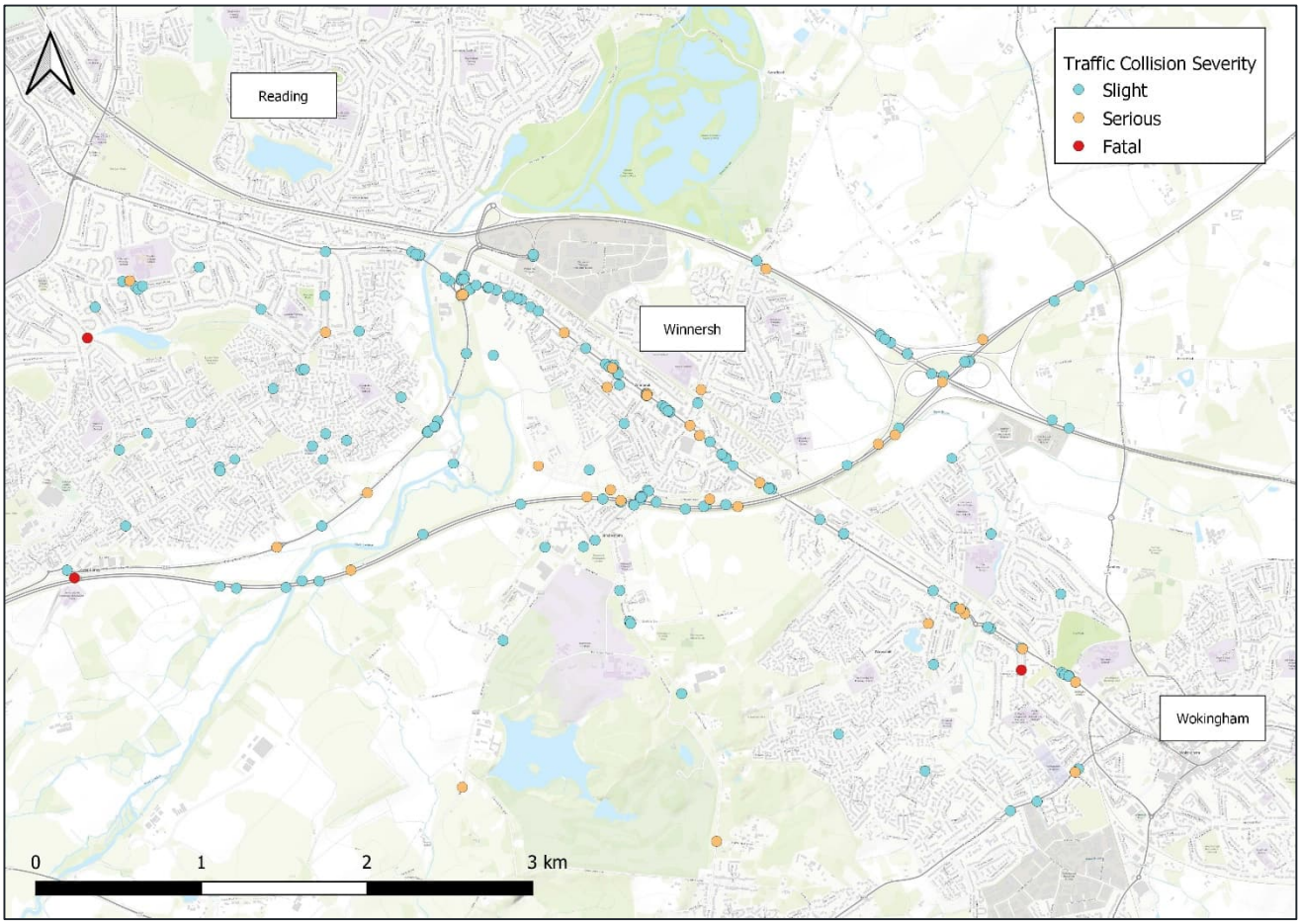
4.2.3. From the final completion of Phase 2 of the Winnersh Relief Road scheme in September 2021 to December 2021, 18 road traffic collisions were recorded.

4.3 TRAFFIC COLLISION SEVERITY

4.3.1. Traffic collision severity data in the study area has also been analysed over the 5-year period between 2017-2021. Road traffic collision data is divided into 3 collision severity categories: Slight, Serious and Fatal.

4.3.2. Incidents of road traffic collisions between 2017-2021, divided by collision severity, are illustrated in Figure 4-2:

Figure 4-2 - Road Traffic Collision Severity



4.3.3. Figure 4-2 highlights that most of the road traffic collisions within this section of the Wokingham Borough Council area between 2017-2021 occur on main arterial routes. Traffic collisions are heavily concentrated throughout the A329 Reading Road, particularly at the “Showcase” roundabout where Reading Road meets the A3290 and B3270 (north-west Winnersh).

4.3.4. A small minority of the recorded traffic collisions have taken place on Lower Earley Way.

4.3.5. Traffic Collision Severity data has also been summarised in Table 4-1:

Table 4-1 - Traffic Collision Severity 2017-2021 by year

Year	Slight		Serious		Fatal	
	Volume	% of annual total	Volume	% of annual total	Volume	% of annual total
2017	42	82%	9	18%	0	0%
2018	36	75%	11	23%	1	2%
2019	45	94%	3	6%	0	0%
2020	27	69%	11	28%	1	3%
2021	34	89%	3	8%	1	3%

4.3.6. Table 4-1 highlights the breakdown of traffic collisions occurring throughout the study area by year and severity. Most traffic collisions (69-94% of the annual totals) occurring throughout the study area have been defined as 'slight', whilst 3 fatalities have occurred since 2017.

4.3.7. All of the road traffic collisions that occurred from final scheme completion of Phase 2 of the Winnersh Relief Road in September 2021 to December 2021 were classified as slight.

4.4 SUMMARY

4.4.1. As can be seen in Figure 4-1, the annual volume of traffic collisions has decreased year-on-year between 2017-2021. It should be noted that the long-term impacts of scheme development upon road safety are difficult to quantify given how recently the scheme has been opened to motor traffic.

4.4.2. It is probable that the construction of the Relief Road has led to traffic transferring away from the arterial A329 Reading Road route onto the Relief Road, resulting in lower traffic volumes on the A329 Reading Road.

5 IMPACTS ON THE ECONOMY

5.1 INTRODUCTION

5.1.1. This section of the report reviews the scheme's economic impact, as outlined in the Economic Case of the FBC. This review is achieved by monitoring the delivery of employment and residential property in the local area. An increase in the number of dwellings and jobs in the study area will have the resultant impact of supporting the local economy.

5.2 HOUSING SUPPLY

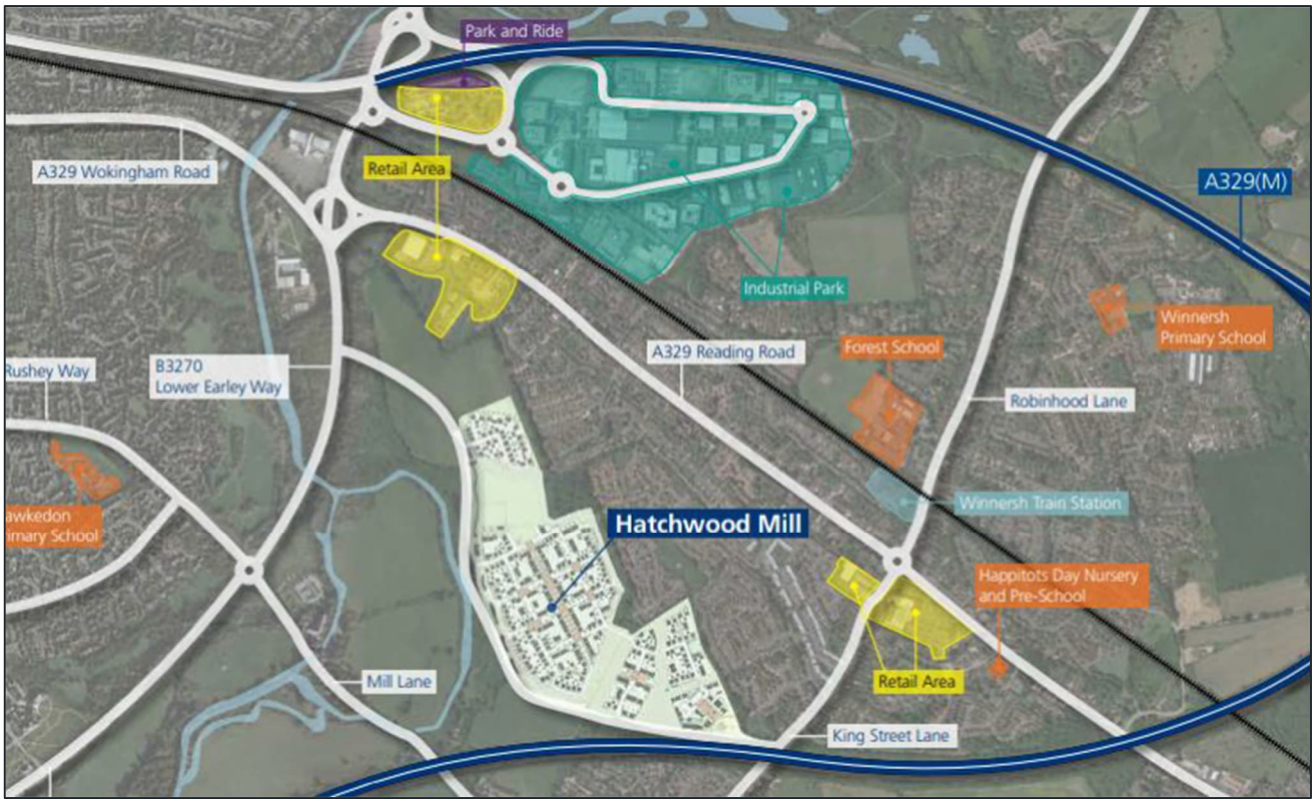
5.2.1. The Winnersh Relief Road Business Case identifies a requirement to improve transport capacity in and around Winnersh to support planned residential growth in the area.

5.2.2. Housing Supply Data for the Hatch Farm Dairies housing development site has been accessed from Wokingham Borough Council and provided within this chapter.

5.2.3. The Hatch Farm Dairies (now known as Hatchwood Mill) is a permitted housing development site with 433 dwellings. The site is located adjacent to the western boundary of the urban settlement of Winnersh and Winnersh Relief Road Phase 1.

5.2.4. The location of this development is illustrated in Figure 5-1.

Figure 5-1 - Location of Hatch Farm Dairies (Hatchwood Mill) site

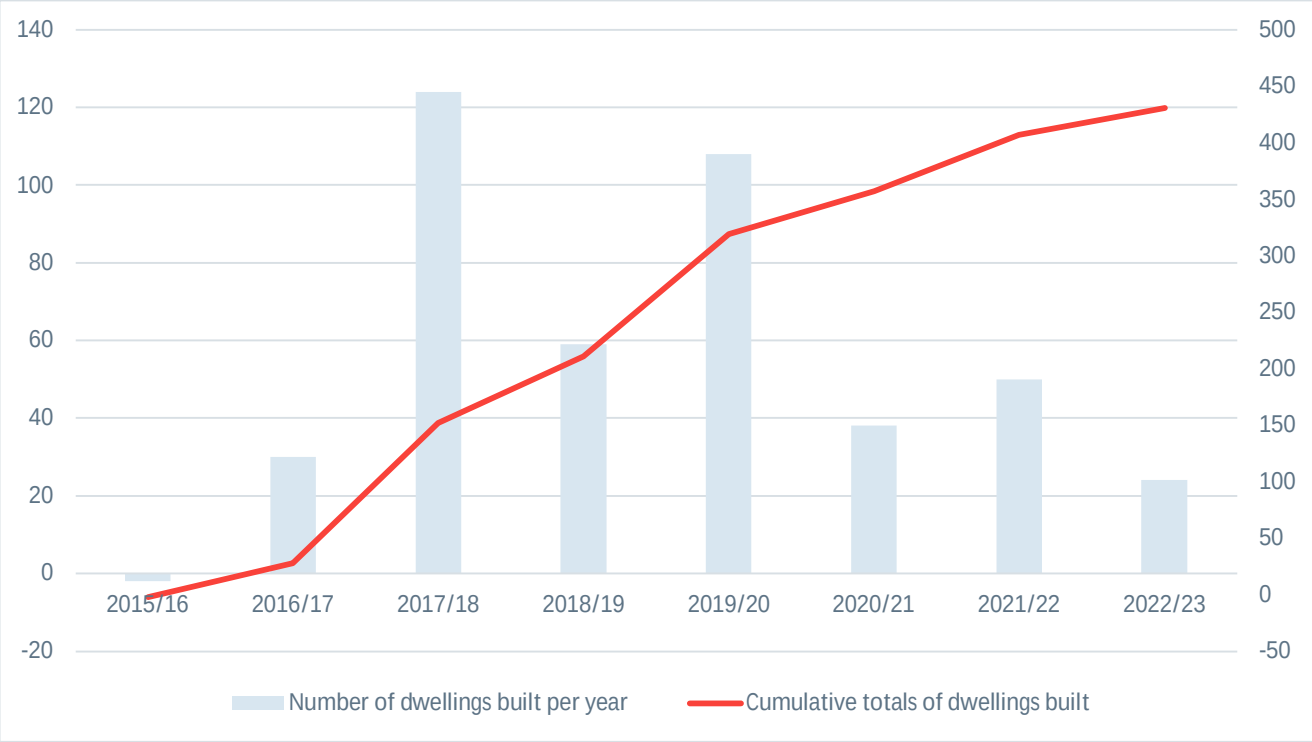


5.2.5. Table 5-1 summarises the number of dwellings that have been developed at the Hatch Farm Dairies (Hatchwood Mill) development site since 2015/16, whilst Figure **5-2** illustrates the cumulative totals of dwellings that have been built or a proposed to be built from 2015/16 to 2022/23:

Table 5-1 – Housing Development Figures at Hatch Farm Dairies (Hatchwood Mill)

Total Number of Dwellings Permitted	Total Number of Dwellings Built							
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
433	-2	30	124	59	108	38	50	24

Figure 5-2 - Cumulative totals of dwelling built at Harm Farm Dairies (Hatchwood Mill)



5.2.6. As can be seen in Table 5-1 and Figure **5-2**, since the demolition of two dwellings in 2015/16, there has been a consistent supply of houses built up to 2021/22.

5.2.7. By the end of 2021/22, 409 of the 433 total permitted dwellings have been built. The final 24 dwellings are due to be completed during 2022/23.

5.3 SUMMARY

5.3.1. This data highlights the continued provision of housing in the local area and contributes towards the successful delivery of the scheme objective to facilitate the Hatch Farm Dairies housing development.

6 CARBON IMPACTS

6.1.1. This chapter of the report discusses the impact of the scheme upon air quality and greenhouse gas emissions.

6.1.2. It was stated within the FBC that the development of the Winnersh Relief Road would result in a decrease in greenhouse gas emissions due to proposed road and junction improvements which would alleviate congestion issues in Winnersh. Similarly, with reference to air quality, concentrations of NOx, NO_2 and PM10 are predicted to meet statutory objectives. The qualitative assessment stated that impact of the scheme upon both greenhouse gases and air quality would be negligible.

6.1.3. DfT's most recent copy of Environmental Impact Appraisal guidance (released May 2022) states that the impacts of transport schemes on greenhouse gas emissions must be appraised consistently and transparently throughout the entire project lifecycle.

6.1.4. It is probable that the decrease in peak hour congestion levels, highlighted in Table 3-1, has contributed towards a reduction in greenhouse gases and improved air quality.

7 CONCLUSION

7.1.1. This report presents the outcomes of the monitoring and evaluation undertaken as part of Phase 2 of the Winnersh Relief Road scheme.

7.1.2. This report has aimed to demonstrate that the funding obtained for Phase 2 of the scheme has provided value for money and that any lessons learnt are captured as evidence to inform future decision making. The report has also evaluated the success of the scheme so far, by comparing the expectations and assumptions made in the original Business Case against the scheme's current outcomes.

7.1.3. A variety of datasets, such as traffic count and housing supply data has been used to illustrate whether the scheme objectives have been successfully achieved. This information is summarised in Table 7-1:

Table 7-1 – Outcome of Scheme Objectives

Scheme Objective	Evidenced by	Outcome of objective
Reduce existing and future peak hour congestion in Winnersh by providing an alternative route for through traffic	A reduction in traffic volumes during AM and PM peak on A329 Reading Road.	Achieved
Reduce journey times on the A329 Reading Road through Winnersh	Journey Times TBC	Journey Times TBC
Facilitate the Hatch Farm Dairies housing development (433 dwelling units)	A consistent supply of houses has been built from 2015/16 to 2021/22 at the Hatch Farm Dairies (Hatchwood Mill) development site.	Achieved
Cater for traffic generated by other new housing developments in the Borough of Wokingham as set out in the Core Strategy	A reduction in traffic volumes during AM and PM peak on A329 Reading Road.	Achieved
Encourage active transport through provision of cycle lanes and footpaths.	A consistent flow of pedestrians and pedal cycles throughout the study area.	Achieved

1st Floor, Keble House
Southernhay Gardens, Southernhay East
Exeter, Devon
EX1 1NT

wsp.com

Wokingham Borough Council

BARKHAM BRIDGE EVALUATION AND MONITORING REPORT

Baseline and One-Year After Opening

Wokingham Borough Council

BARKHAM BRIDGE EVALUATION AND MONITORING REPORT

Baseline and One-Year After Opening

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BARKHAM BRIDGE EVALUATION AND MONITORING REPORT

Baseline and One-Year After Opening

WSP

2 London Square
Cross Lanes
Guildford, Surrey
GU1 1UN

Phone: +44 148 352 8400

WSP.com

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CONTENTS

TABLES

FIGURES

APPENDICES

1 INTRODUCTION

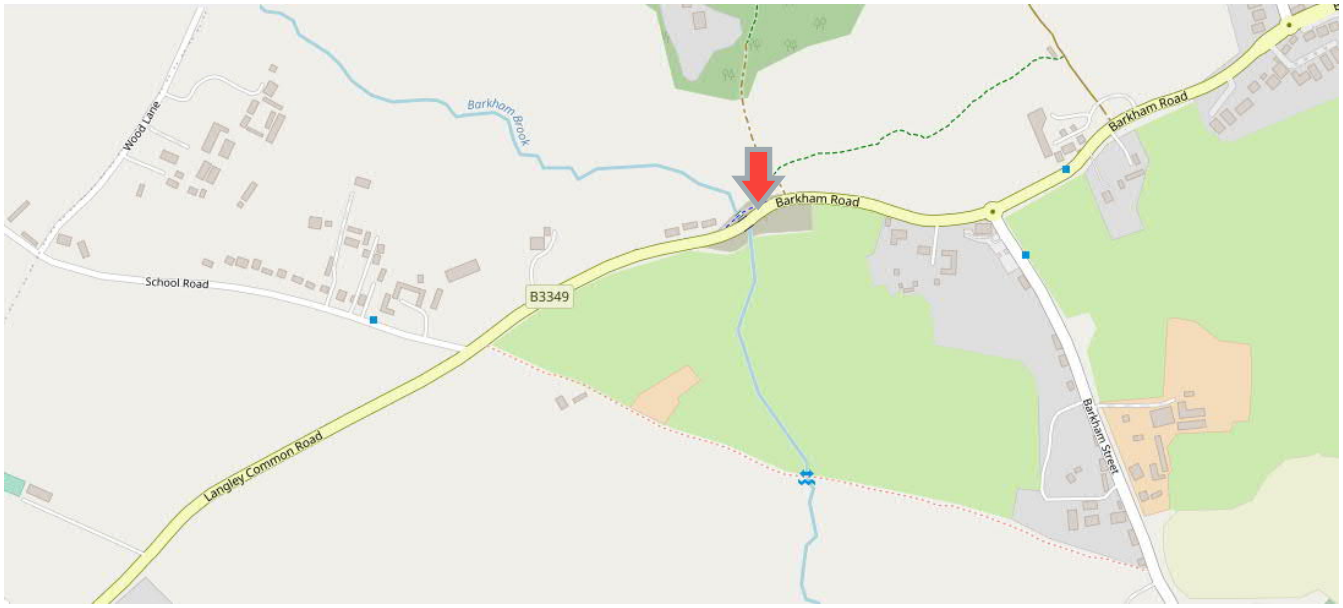
1.1.1. Barkham Bridge is located on Barkham Road (B3349) between Barkham Street and Langley Common Road, within Wokingham borough. Barkham Road continues to School Road B3349 which leads to Arborfield Cross and also to Langley Common Road which links to the former Arborfield Garrison, which is a Strategic Development Location (SDL). Barkham Bridge is at a mid-point of Barkham Road and carries through-traffic over a small river-tributary of River Loddon, Barkham Brook and the location of the Bridge is shown in **Figure 1-1**.

1.1.2. The B3349 Barkham Bridge scheme involved the construction of a new road bridge over the Barkham Brook, with the original single-lane bridge retained as a pedestrian and cyclist route. The B3349 Barkham Bridge scheme was funded by the Berkshire Thames Valley LEP Local Growth Fund and Wokingham Borough Council's Capital Funding programme.

1.1.3. Prior to the scheme's introduction Barkham Bridge was only wide enough to accommodate a single lane of traffic and the westbound traffic had priority over the eastbound and was regulated by a 'Give Way' priority sign on the eastbound direction on the Barkham Road. This created a bottleneck and caused severe delays and increased journey times along this route. The delays and journey times were expected to worsen as the Arborfield SDL is built out.

1.1.4. The scheme was expected to remove the existing bottleneck by facilitating continuous two-way traffic over the Barkham Brook and help to minimise further delays that otherwise might arise as the Arborfield SDL is built out.

Figure 1-1 - Location of Barkham Bridge (source: Openstreetmap.org)



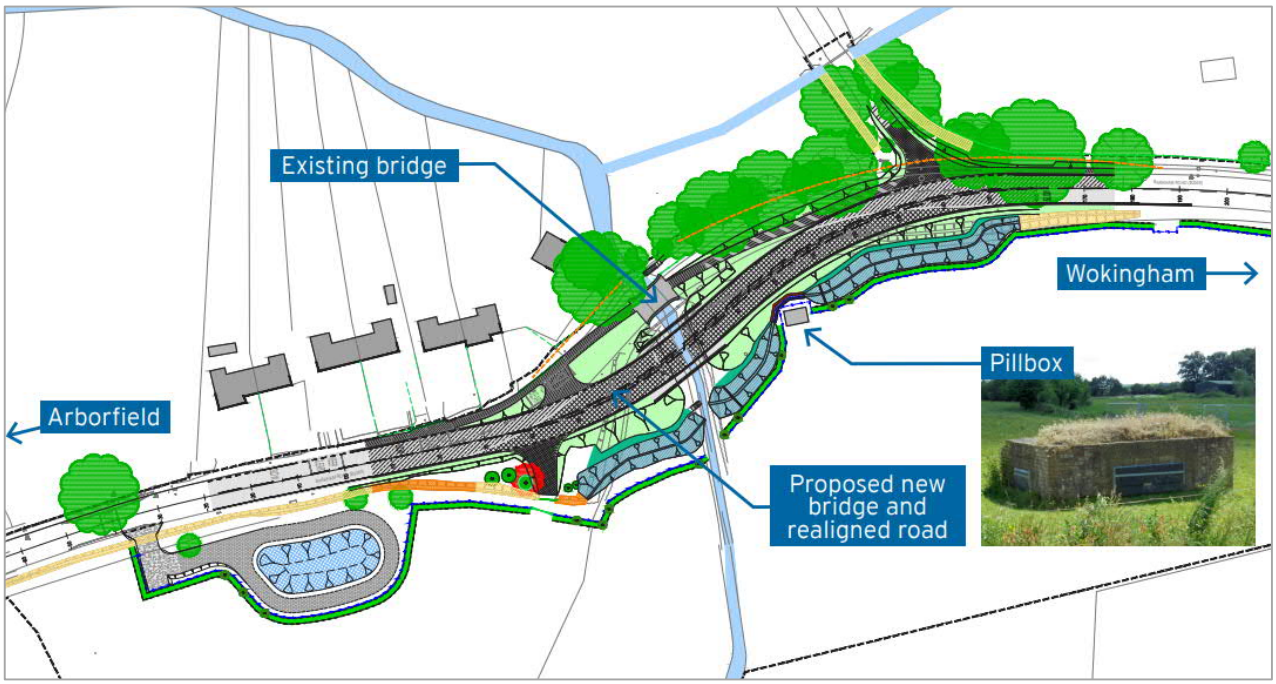
2 SCHEME DETAILS

2.1 OVERVIEW

2.1.1. The scheme consisted of a new bridge structure, which has been constructed just to the south of the former Barkham Bridge, as well as approximately 300 metres of associated carriageway realignment. The existing bridge structure has been retained and converted to a pedestrian footway, connecting the existing sections of footway to the east and west.

2.1.2. Highway drainage improvements to the Barkham Road up to School Lane were included in the project scope to reduce flood risk and improve water quality discharging into the brook. **Figure 2-1** depicts the scheme details.

Figure 2-1 - Proposed New Bridge



2.2 SUPPORTING MEASURES

TRAFFIC MANAGEMENT

2.2.1. During various phases of construction temporary traffic signals were in operation either side of the bridge construction works on Barkham Road, covering a road length of 300m.

COMMUNICATIONS

2.2.2. The project was supported by a communications programme to keep residents and motorists advised of the works and associated disruption. The communications took the form of press releases, newsletters and information on the Wokingham Borough Council (WBC) website. Overall, there was widespread patience and acceptance of the disruption in expectation of the wider benefits that would arise from the new road layout.

3 FUNDING DETAILS

3.1.1. Barkham Bridge was funded through the Thames Valley Berkshire Local Enterprise Partnership (TVBLEP) Local Growth Fund and WBC's Capital Funding programme. **Table 3-1** below shows a summary of the estimated costs, the costs to date and the expected final cost. These are interim reported costs at this stage awaiting completion of the full contract and a cost conciliation being completed.

Table 3-1 – Barkham Bridge Estimated, Interim and Final Cost Forecast

Cost items	Estimate	Costs to date (up to 31/03/22)	Final cost forecast
Land	£290,000	£393,451	£420,000
Part 1 Claims	£250,000	£250,000	£250,000
Core Team, Construction, Inflation & Risk	£6,122,508	£5,908,339	£6,500,000
Surveys	£132,683	£132,683	£132,683
Enabling Works	£131,609	£131,609	£131,609
Utilities	£749,822	£512,973	£685,000
Total	£7,676,622	£7,329,056	£8,119,292
Difference	-	-£347,566	+£442,670

3.1.2. The forecast project cost increase was caused by several factors, the main one was a Compensation Event (CE) as a result of the Virgin Media delay causing contractor delay. This CE was originally £380,000 but the final agreed value was £348,000. WBC are following up with Virgin Media to try to secure recovery of this extra spend.

3.1.3. The two other main CEs were £86,000 for a Thames Water main redesign and delay and £20,000 for COVID-19 related extra costs which included enhanced cleaning regimes. There were six further CEs each at a cost of less than £10,000 each with the total extra cost of CEs adding up to £486,000.

3.1.4. In summary the project is forecast to cost £8,119,292, which is £442,670 (5.7%) more than planned at the business case stage, though the final costs will be confirmed once the full contract and cost conciliation exercise has been completed.

4 SCHEME PROGRAMME

KEY DATES

4.1.1. Construction on the bridge began in Autumn 2019 with a proposed completion date of 9th February 2021, however the final completion date slipped by a month to 12th March 2021. While snagging and planting activities did extend beyond this date, this was the date when the completion certificate was issued for the scheme.

PROGRESS AND MONITORING

4.1.2. WBC held weekly risk reduction meetings covering all schemes being delivered by Balfour Beatty within Wokingham under their SCAPE Civil Engineering Framework.

4.1.3. Specific Barkham Bridge monthly meetings were also held with the project manager, Balfour Beatty and their traffic management subcontractors. Regular contract monitoring and scheme progress reports were provided by Balfour Beatty and discussed with the Council.

4.1.4. WBC engineers regularly attended the works site along with fellow project team members in order to monitor progress and to check adherence to technical plans and specifications.

CONSTRUCTION AND PROGRAMMING PROBLEMS

4.1.5. There was a two-week site shutdown due to the initial COVID-19 lockdown in April 2020 and the design of the thrust blocks also caused a three-week delay to the water main diversion. However, neither of these elements had an impact on overall project programme delivery.

4.1.6. The bridge was opened to two-way traffic before Christmas 2020, so some activities took place after this up to the completion date.

4.1.7. There was a significant delay to programme caused by Virgin Media cancelling/postponing their required diversion at very short notice (one day before they were due on site). The delay in this activity was 2-3 months, however some time was recovered, for example, by building bridge abutments at the same time as the delay, and the programmed completion date slipped by approximately one month.

ROAD SAFETY AUDITS

4.1.8. Road Safety Audits were carried out at each stage of the project and a Departure from Standard request relating to the horizontal alignment was submitted by the Design Organisation. The request was approved as the proposed changes to the horizontal alignment did not introduce any significant safety concerns.

4.1.9. Following RSA stage 3, the site was considered to be compliant with road safety guidelines.

5 DELIVERED SCHEME

5.1.1. **Figure 5-1** shows an image of Barkham Bridge before the improvements whilst, for comparison, **Figure 5-2** shows the completed scheme.

Figure 5-1 - Barkham Bridge - Pre-construction Westbound approach (Source: Google Images)

Figure 5-2 - Barkham Bridge - Post construction Westbound approach (Source: Google Images)

5.1.2. Whilst there were several elements that had to be altered during construction due to the proximity of existing utilities the overall design layout remained unchanged. The altered elements were:

- The north east and south east wing walls were re-designed due to the location of a Thames Water sewer.
- A water mains diversion was required to link two existing mains. which were also discovered to be of different pipe material. This required thrust blocks to be designed in order to keep the diverted mains in place.

5.1.3. Additionally, to offer added value in terms of biodiversity an existing pillbox structure was repurposed for use by bats and otter fencing and measures were installed. The stream bed was profiled to have stepped banks so that the stream bed would be narrower, and water would be deeper in periods of low-level flow in drier/summer months thus assisting aquatic life in those periods.

6 REVIEW AND EVALUATION OF THE OUTCOMES

6.1.1. As part of the proposed framework for the monitoring and evaluation of the new Barkham bridge project the business case identified several objectives along with the expected targeted outputs to be measured after one-year of scheme opening. These are summarised within **Table 6-1** and explained in detail in the sections below. In addition, collision analysis is included at the end of the chapter.

Table 6-1 – Objectives and target outputs

Measure	Data to be Used	Target Output
Travel times	Overall route journey time including time on links and at junctions. Travel time surveys between specified timing points along the route.	Up to 10% reduction in peak hour journey time
Support the 2026 Local Plan housing delivery in the Borough	Housing completion figures	Build rate within 10% of planned build
Travel demand	Traffic flows in the corridor, forecast flows versus actual. Pedestrian and cycle flows; pre-construction and post construction.	Increase in throughput in the peak hour, up to 25 to 30% one year after scheme opening. 10 to 15% increase in pedestrians and cyclists one year after scheme opening.

TRAVEL TIMES

6.1.2. The new bridge layout accommodates two-way traffic. The objective of this was to reduce journey travel times over the original single lane give-way arrangement, which led to bottlenecks and significant delays. The target for the scheme was up to a 10% reduction in journey times during the peak hour.

6.1.3. To compare the journey times before and after the scheme opening, TomTom Global Positioning System (GPS) journey time data was obtained from vehicles travelling between Arborfield Green and Wokingham. The data focused on two journey time routes along Langley Common Road and Barkham Road. Maps of the two journey time routes are attached within **Appendix A**.

6.1.4. The first journey time route is approximately 4.9km and runs from the Langley Common Road/Eversley Road Roundabout (Arborfield Green) to the Barkham Road/Molly Millars Lane junction (Wokingham), whilst the second journey time route runs from the B3349 School Road to Barkham Street and is approximately 0.7km.

6.1.5. The journey times were extracted from the following weekday time periods listed below:

- Pre-scheme opening 4th – 15th February 2019 and 25th February – 1st March 2019

6.1.6. Post-scheme opening: 31st January – 13th February 2022 and 28th February - 7th March 2022**Table 6-2** and **Table 6-3** show the average eastbound and westbound weekday journey times, respectively between the Langley Common Road/Eversley Road Roundabout and the Barkham Road/Molly Millars Lane junction.

Table 6-2 – Journey time between Wokingham and Arborfield Green (eastbound)

Time Period	Pre-scheme opening 2019 (hr:mins:secs)	Post-scheme opening 2022 (hr:mins:secs)	Journey time difference (hr:mins:secs)	Journey time difference (Percentage)
0700-0800	00:07:47	00:06:14	00:01:33	-20%
0800-0900	00:11:27	00:07:15	00:04:12	-37%
0900-1000	00:06:48	00:06:01	00:00:47	-12%
1000-1100	00:06:15	00:06:00	00:00:15	-4%
1100-1200	00:06:22	00:06:13	00:00:09	-2%
1200-1300	00:06:25	00:06:10	00:00:15	-4%
1300-1400	00:06:21	00:06:08	00:00:13	-4%
1400-1500	00:06:26	00:06:10	00:00:15	-4%
1500-1600	00:06:39	00:06:23	00:00:16	-4%
1600-1700	00:06:50	00:06:16	00:00:34	-8%
1700-1800	00:07:11	00:06:16	00:00:55	-13%
1800-1900	00:06:35	00:06:06	00:00:29	-7%

Table 6-3 - Journey time between Wokingham and Arborfield Green (westbound)

Time Period	Pre-scheme opening 2019 (hr:mins:secs)	Post-scheme opening 2022 (hr:mins:secs)	Journey time difference (hr:mins:secs)	Journey time difference (Percentage)
0700-0800	00:06:34	00:06:03	00:00:30	-8%
0800-0900	00:07:18	00:06:30	00:00:48	-11%
0900-1000	00:06:27	00:06:07	00:00:19	-5%
1000-1100	00:06:15	00:06:15	00:00:00	0%
1100-1200	00:06:33	00:06:11	00:00:22	-6%
1200-1300	00:06:22	00:06:12	00:00:10	-3%
1300-1400	00:06:13	00:06:09	00:00:05	-1%
1400-1500	00:06:14	00:06:28	00:00:14	4%
1500-1600	00:06:40	00:06:33	00:00:07	-2%
1600-1700	00:06:45	00:06:18	00:00:27	-7%
1700-1800	00:06:58	00:06:26	00:00:32	-8%
1800-1900	00:06:36	00:06:07	00:00:29	-7%

6.1.7. **Table 6-2** and **Table 6-3** show that there were significant journey time reductions between Wokingham and Arborfield Green during both peak hours. For eastbound vehicles there has been a 37% decrease in journey times in the AM peak hour (0800-0900) and a 13% decrease in the PM peak hour (1700-1800). Similarly, for westbound vehicles there has been a reduction of 11% in the AM peak hour and 8% in the PM peak hour.

6.1.8. **Table 6-4** and **Table 6-5** show the average eastbound and westbound weekday journey times, respectively, between the B3349 School Road and Barkham Street.

Table 6-4 – Journey Time from the B3349 to Barkham Street (eastbound)

Time Period	Pre-scheme opening 2019 (hr:mins:secs)	Post-scheme opening 2022 (hr:mins:secs)	Journey time difference (hr:mins:secs)	Journey time difference (Percentage)
0700-0800	00:02:03	00:00:58	00:01:05	-53%
0800-0900	00:04:09	00:01:32	00:02:37	-63%
0900-1000	00:01:17	00:00:54	00:00:23	-30%
1000-1100	00:01:00	00:00:53	00:00:07	-11%
1100-1200	00:01:02	00:00:55	00:00:07	-12%
1200-1300	00:01:03	00:00:53	00:00:10	-15%
1300-1400	00:01:02	00:00:56	00:00:06	-10%
1400-1500	00:01:03	00:00:57	00:00:06	-9%
1500-1600	00:01:12	00:01:00	00:00:12	-17%
1600-1700	00:01:22	00:00:56	00:00:25	-31%
1700-1800	00:01:41	00:00:57	00:00:44	-44%
1800-1900	00:01:15	00:00:55	00:00:20	-27%

Table 6-5 – Journey Time from Barkham Street to the B3349 (westbound)

Time Period	Pre-scheme opening 2019 (hr:mins:secs)	Post-scheme opening 2022 (hr:mins:secs)	Journey time difference (hr:mins:secs)	Journey time difference (Percentage)
0700-0800	00:00:55	00:00:51	00:00:04	-8%
0800-0900	00:00:59	00:00:53	00:00:06	-10%
0900-1000	00:00:54	00:00:51	00:00:03	-5%
1000-1100	00:00:53	00:00:52	00:00:01	-3%
1100-1200	00:00:53	00:00:51	00:00:02	-4%
1200-1300	00:00:52	00:00:50	00:00:02	-4%
1300-1400	00:00:53	00:00:50	00:00:03	-4%
1400-1500	00:00:53	00:00:52	00:00:01	-2%
1500-1600	00:00:55	00:00:52	00:00:03	-5%
1600-1700	00:00:54	00:00:51	00:00:03	-5%
1700-1800	00:00:56	00:00:53	00:00:03	-5%
1800-1900	00:00:56	00:00:52	00:00:04	-8%

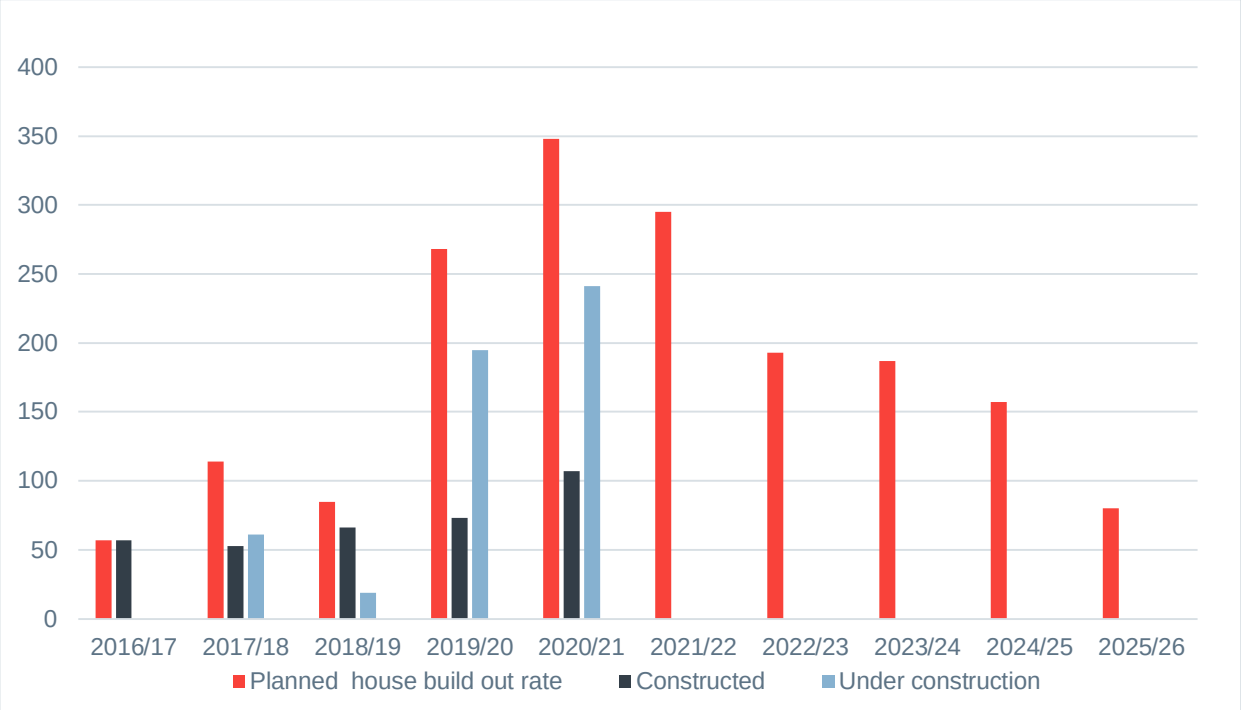
6.1.9. **Table 6-4** and **Table 6-5** show that there were significant journey time reductions between the B3349 and Barkham Street. For eastbound vehicles there has been a 63% decrease in journey times in the AM peak hour (0800-0900) and a 44% decrease in the PM peak hour (1700-1800). Similarly, for westbound vehicles there has been a reduction of 10% in the AM peak hour and 5% in the PM peak hour.

6.1.10. For both journey time routes the scheme has exceeded its target of achieving up to a 10% reduction in one or both peak hour journey times set out in the business case.

HOUSING BUILD OUT RATES

6.1.11. To help understand if the scheme supported the delivery of planned development in Wokingham, housing completion figures from sites in the scheme area (Arborfield SDL and Barkham) were obtained from the WBC planning team. **Figure 6-1** below shows the yearly planned house build rate up to 2025/26 and the number of constructed and completed houses up to 2020/2021, which is the latest available house build out data set.

Figure 6-1 - House Build Out Rates in Barkham Bridge area



6.1.12. **Figure 6-1** shows that in 2020/2021 period the total number of houses constructed (107) and under construction (241) matched the planned house build rate (348). Therefore, the scheme has achieved its target output of supporting a housing build rate within 10% of planned build rates within the first year of the scheme opening.

6.1.13. As the scheme is aimed at supporting the 2026 local plan housing delivery the full benefits will only be realised at the end of this period. The house build out rate will continue to be monitored and reviewed again during the 5-year post scheme evaluation.

TRAVEL DEMAND

6.1.14. To compare before and after scheme opening travel demand, data for the week of 28th March - 3rd April 2022 was extracted from the WBC Vivacity traffic monitoring system. An average of the peak hour traffic flows and daily 12-hour Non-Motorised User (NMU) flows were obtained from Vivacity cameras located at the Barkham Road/B3349 School Road junction and the Barkham Road/Barkham Street junction.

6.1.15. Additionally, the Wokingham strategic transport model (WSTM4) was used to estimate the before scheme opening (baseline) travel demand scenario, as no pre-construction traffic surveys were able to be conducted due to the rapid installation of temporary traffic management very soon after funding was provided.

Vehicle demand

6.1.16. **Table 6-6** and **Table 6-7** present a traffic flow comparison of the 2021 (scheme opening year) WSTM4 Do Minimum (DM) forecast model and the 2022 Vivacity traffic monitoring system for the section of Barkham Road between B3349 School Road and Barkham Street.

Table 6-6 – Traffic flow comparison (PCUs) - eastbound

	2021 DM model scheme opening year forecast (PCU)	2022 Vivacity traffic count (PCU)	Flow Difference (PCU)	Flow Difference (percentage)
AM peak hour	580	668	88	15%
PM peak hour	530	494	-36	-7%

Table 6-7 - Traffic flow comparison (PCUs) - westbound

	2021 DM model scheme opening year forecast (PCU)	2022 Vivacity traffic count (PCU)	Flow Difference (PCU)	Flow Difference (percentage)
AM peak hour	410	544	134	33%
PM peak hour	680	528	-152	-22%

6.1.17. **Table 6-6** and **Table 6-7** show that there was 15% increase in eastbound flows and 33% increase in westbound flows in the 2022 AM peak hour when compared to the 2021 DM forecast model. In contrast that there was a 7% decrease in eastbound flows and a 22% decrease in westbound flows during the PM peak hour. The scheme has met/exceeded its target to increase throughput up to 25 to 30% in the AM peak hour one year after scheme opening, but not met the target in the PM peak.

6.1.18. Whilst the full reasons for the changes in traffic flows are not understood at this time, the increased flow in the AM peak could potentially be attributed to the Barkham Bridge scheme. The decrease in the PM peak hour traffic levels could potentially be attributed to change in traffic flows and travel behaviour due to the COVID-19 pandemic, as there has been a significant increase in companies implementing hybrid and flexible working arrangements, resulting in a spreading of the PM peak traffic from 3.00 PM– 7:00 PM.

6.1.19. Additionally, the WSTM4 was modelled based on pre-COVID 19 forecasts therefore it could be expected that the forecast model flows could also be higher than actual flows. The comparison of actual and modelled data should be considered as a proxy in the absence of collected data

NMU demand

6.1.20. **Table 6-8** shows the average 12 hr weekday pedestrian and cyclist flow along Barkham Road.

Table 6-8 – Average 12hr weekday NMU flows along Barkham Road

Time period	Pedestrian flows	Cyclist flows
0700-1900	16	21

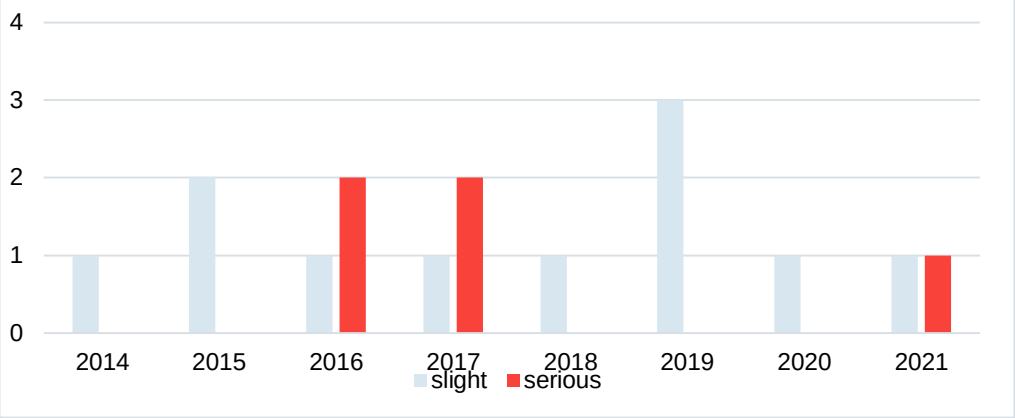
6.1.21. As noted above, no NMU surveys were carried out pre-construction

6.1.22. It should also be noted that Vivacity has identified issues with the camera sensors not picking up NMUs within the far extreme of their field of view and during hours of darkness at the Barkham site. Vivacity is currently working on a software update to address this and this is expected to be deployed in Autumn 2022.

COLLISION ANALYSIS

6.1.23. Collision data was obtained from WBC for all reported incidents between 1st January 2014 until 31st December 2021. **Figure 6-2** shows a summary of the collisions that have occurred along Barkham Road, within 1km of the Barkham Bridge, whilst the locations and collision severity are also provided within **Appendix B.**

Figure 6-2 - Reported collision data near Barkham Bridge 2014-2021



6.1.24. Figure 6-2 shows that between 2014 and 2021 there was a total of 5 serious and 11 slight collisions and no fatal collisions. Further analysis of the data also showed that collisions involving cyclists accounted for 44% of all collisions. the one slight collision located on the bridge related to a Heavy Goods Vehicle colliding with a Light Goods Vehicle due to carelessness in 2019.

6.1.25. Collisions will continue to be monitored and reviewed again during the 5-year post scheme evaluation.

7 LESSONS LEARNED AND SUMMARY CONCLUSION

LESSONS LEARNED

7.1.1. The following lessons learned were obtained from WBC:

- The contractor performance was generally good.
- The build quality, quality management and workmanship were all considered to be good by WBC. However, towards the end of the project, the contractor did progress some activities without instruction as they were keen to complete the works. They subsequently raised retrospective CEs which caused some disagreement.
- The contractor's team were inexperienced in terms of handover documentation and what was required in terms of DMRB requirements for bridgeworks. They needed guidance from WBC.
- The "Works Information" produced as required under the NEC contract was generic/lacking in some detail at that stage. More detail was required when it came to deciding on whether items were covered by the original contract/design or were compensation events. The lesson learned is that the "Works Information" needs to be produced once more detailed understanding of the scheme is known.

SUMMARY

7.1.2. The Barkham Bridge project was commissioned by WBC to address the bottleneck and delays on the Barkham Road (B3349) between Barkham Street and Langley Common Road caused by the previous single lane/give way bridge layout. Barkham Road also continues to School Road B3349 which leads to the Arborfield Green. The improvements were also needed to help support major new developments in Wokingham borough, in particular the Arborfield SDL development. The scheme sought to remove the existing bottleneck by facilitating continuous two-way traffic over the Barkham Brook and help to minimise further delays that otherwise might arise as the Arborfield SDL is built out.

7.1.3. The scheme involved the construction of a new two-lane bridge located south of the existing bridge, with the current bridge converted into a pedestrian footway with supporting highway drainage improvements to reduce flood risk and improve water quality discharge into the brook.

7.1.4. Construction began in Autumn 2019 and whilst there were some minor delays, it was completed in March 2021 approximately a month later than the projected date. Scheme costs were however higher than planned, with a 5.7% overspend due primarily to utility related delays/costs, some of which the Council is actively trying to recover.

7.1.5. The scheme offers actual and potential benefits to network users, commuters, and residents through the provision of significantly reduced journey times. While the traffic levels for the last two years have been affected by the COVID-19 pandemic it is expected that the full raft of benefits will be realised over the next five years. This time period is considered realistic, not least, to allow the re-establishment of what might be considered 'normal' conditions, in terms of both traffic and development patterns.

7.1.6. WBC would like to express its appreciation to the TVBLEP for the Growth Fund financial contribution and various other forms of LEP/Berkshire Local Transport Body support enabling the delivery of this project. The Council is also grateful for the patience and understanding of motorists and residents during the work.

Appendix A

JOURNEY TIME ROUTES

Appendix B

COLLISION DATA

2 London Square
Cross Lanes
Guildford, Surrey
GU1 1UN

wsp.com

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Reading Buses' Real Time Information

''Completing the Connection' 1 Year Monitoring Report

Document No. 02 | rev 1.0

23 June 2022

Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
0.1	xx May 2022	1 Year Monitoring Report – first working draft	GD	n/a	n/a	n/a
1.0	23 June 2022	1 Year Monitoring Report – issued	GD	GD	SA	GD

Distribution of copies

Revision	Issue approved	Date issued	Issued to	Comments
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1.0	G Dean	23 June 2022	Robert Williams Simon Gold Jake Osman Dan Barrett (all RB)	Issued for Reading Buses' and TVB LEP use

Reading Buses' Real Time Information

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Jacobs U.K. Limited

The West Wing, One Glass Wharf
Temple Quay, Bristol, BS2 0EL

www.jacobs.com

Contents

1. Executive summary

Following the successful submission of 'Completing the Connection' of a Full Business Case (FBC) to the Thames Valley Berkshire Local Enterprise Partnership (TVB LEP), funding was awarded for three key elements to upgrade and enhance the Reading Buses' Real Time Information (RTI) system and a fourth element of an upgraded online ticket shop. This aimed to deliver, and has successfully delivered, the following outputs:

1. More reliable and better quality RTI data for buses from multiple operators in the region.
2. Easier and better-informed interchange between rail passengers and bus services at Reading and Newbury stations.
3. Equipping 51 buses with useful audible and visual RTI.
4. Easier and more convenient ticket purchase via smart or mobile media.

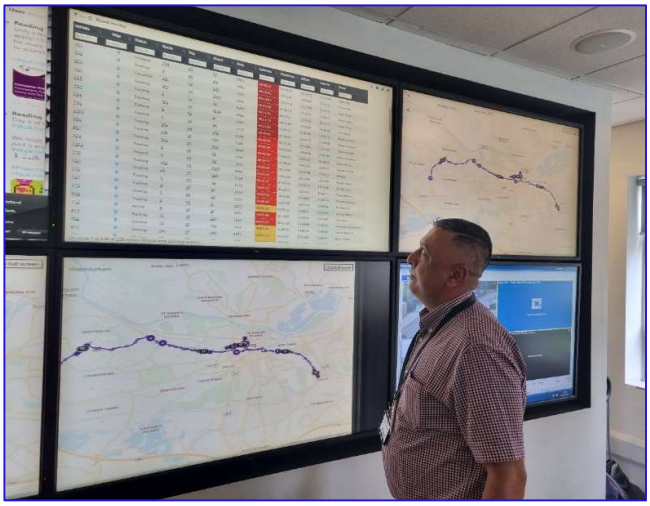
The project took place in various stages between October 2020 and March 2021 and was successfully delivered to budget and largely on time with each of the three suppliers and project partners such as Network Rail and Great Western Railway working well together and with Reading Buses.

It should be recognised, like many other projects, that the Covid-19 pandemic has had, and continues to have, a huge effect on the passenger transport industry, and especially on passenger numbers. At the time of writing (June 2022), bus passenger levels have partially recovered from the extreme lows during the various periods of 'lockdown' but are still approximately 23% under pre-Covid levels. Therefore, this should be borne in mind in terms of assessing the objective against criteria such as passenger numbers and modal shift.

Despite the challenges of Covid-19, this was a successful project, delivered on-budget and largely on-time. Such projects are highly deliverable and give real benefits to passengers and over time (post Covid) will encourage modal shift back to public transport.

Reading Buses are very keen to continue to work with TVB LEP to seek funding opportunities for the additional project of 'Enhancing the Connection' and other related projects to update and enhance the on-street RTI displays and other RTI functionality. Such projects, and the use of this type of technology, are essential in enhanced partnerships - building on the existing investment by local transport authorities and bus operators.

One of Reading Buses' Route Controllers using the RTI management information for proactive monitoring of service reliability and passenger information



2. Introduction

2.1 Background

Following the successful submission of 'Completing the Connection' of a Full Business Case (FBC) to the Thames Valley Berkshire Local Enterprise Partnership (TVB LEP), funding was awarded for three key elements to upgrade and enhance the Reading Buses' Real Time Information (RTI) system and a fourth element of an upgraded online ticket shop.

Jacobs was commissioned by Reading Buses to manage the project, and the RTI elements were supplied by the existing RTI supplier 'r2p' (https://www.r2p.com/). The ticketing elements were supplied by Passenger Technology Group (https://www.discoverpassenger.com/).

The project was delivered in the financial year 2020/21.

2.2 Purpose of this document

The purpose of this document is to evaluate the 12-month performance of the project in line with the requirements of the TVB LEP.

2.3 The effect of Covid-19

It should be recognised from the outset, like many other projects, that the Covid-19 pandemic has had, and continues to have, a huge effect on the passenger transport industry, and especially on passenger numbers. At the time of writing (June 2022), bus passenger levels have partially recovered from the extreme lows during the various periods of 'lockdown' but are still approximately 23% under pre-Covid levels. Therefore, this should be borne in mind in terms of assessing the objective against criteria such as passenger numbers.

The next chapter describes the logic model of the project.

3. Logic Model

3.1 Context and Rationale

The Full Business Case set out the context and rationale of this project, which was to:

"significantly enhance customer information for multiple operators' routes and ticketing enhancements with smart and mobile ticketing. It will help enable and encourage employees of local businesses, residents and visitors to switch to public transport for some or all of their journeys and help economic growth in the region".

3.2 Objectives:

The Full Business Case set out 5 objectives of this project to upgrade the RTI system and smart ticketing. These were:

1. Supporting and driving further economic growth in the local area.
2. Enable and encourage use of local buses instead of private vehicles.
3. Enable and encourage easy interchange between public transport modes, and other sustainable modes.
4. Make live information available to passengers.
5. Allow personalised purchase of mobile or smartcard-based tickets.

3.3 Resources and input

The resources and input to achieve this were defined as:

1. One core, multi-operator RTI system.
2. Three bus RTI departure screens at two rail stations.
3. Audio-visual customer information installations on 51 buses.
4. An online shop enabling smart travel via app or smartcard.

3.4 Outputs

Once accomplished, these activities will produce the following deliverables:

5. More reliable and better quality RTI data for buses from multiple operators in the region.
6. Easier and better-informed interchange between rail passengers and bus services at Reading and Newbury stations.
7. Equipping 51 buses with useful audible and visual RTI.
8. Easier and more convenient ticket purchase via smart or mobile media.

3.5 Expected outcomes

1. Higher passenger satisfaction with bus travel in the region.

2. More useful management information on bus service performance to help refine timetables to reflect real life traffic conditions.

3. More use of buses by passengers who currently struggle with audio or visual impairments.

4. Less use of cash transitions and more use of 'smart' ticketing to speed us bus boarding times.

5. Modal shift from the private car to the bus.

The success or otherwise of these outcomes will be evaluated later in this report.

The next chapter describes the scheme elements in more detail.

4. Scheme Details

4.1 Introduction

There are four different scheme elements which form the 'Completing the Connection' project. These are:

- A core, multi-operator Real Time Information (RTI) system.
- Three bus departure screens at rail stations – two at Reading and one at Newbury.
- Audio-visual customer information installations on buses which serve bus routes in the TVB area.
- An online travel shop - enabling smart travel via app or smartcard.

Each of these elements are described in detail below.

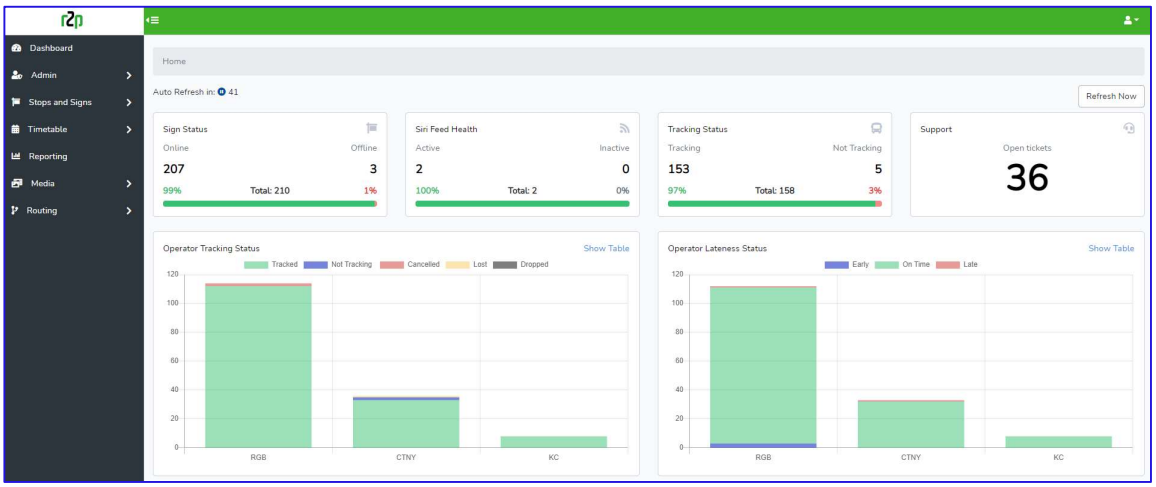
4.2 Central RTI System Upgrade (iConnex2)

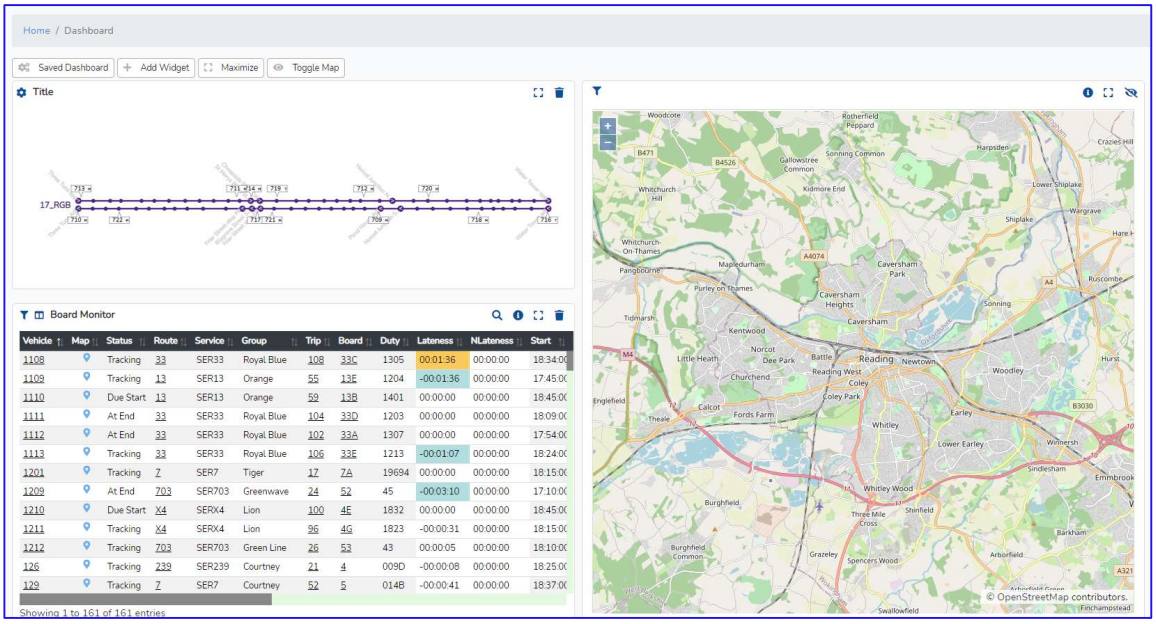
This element of the project upgraded the existing central RTI system software provided by r2p and used by Reading Buses. It brings together and enhances the functionality of three separate instances of the original iConnex1 software package holding data for Reading Borough Council, Reading Buses and Courtney Buses in a joined-up way. This will significantly enhance the provision and content of live journey planning information. The system is designed to support the addition and dissemination of live information for multiple operators' services that subscribe to the appropriate modules.

The single core RTI system has been developed in accordance with Open Data and Real Time Information Group (RTIG) standards, incorporating:

- One combined RTI system for Reading Buses operating companies - Reading Buses, Thames Valley Buses (previously Courtney Buses) and Newbury & District fleets - and existing managed on-street RTI displays.
- Enhanced algorithms through an updated RTI prediction engine.
- Enhanced content management system through a newly developed "Media" product with:
  - far more flexible content editor;
  - a more intuitive user interface;
  - flexible configuration to enable the display of different content on targeted routes or buses; and
  - an improved media player.
- Facilities for secure importing and management of schedule data by each respective operator to ensure commercial confidentiality.
- Enhanced user software interfaces for the tracking system and timetable database management portal.
- To future proof the system with the potential of other operators to join the scheme, providing the opportunity to access and use modules subscribed to, and to store RTI data in dedicated sections of the system for commercially confidential data.
- Facilities to export the data to local authority systems.

Example screen shots of the various vehicle management modules from the iConnex2 software:

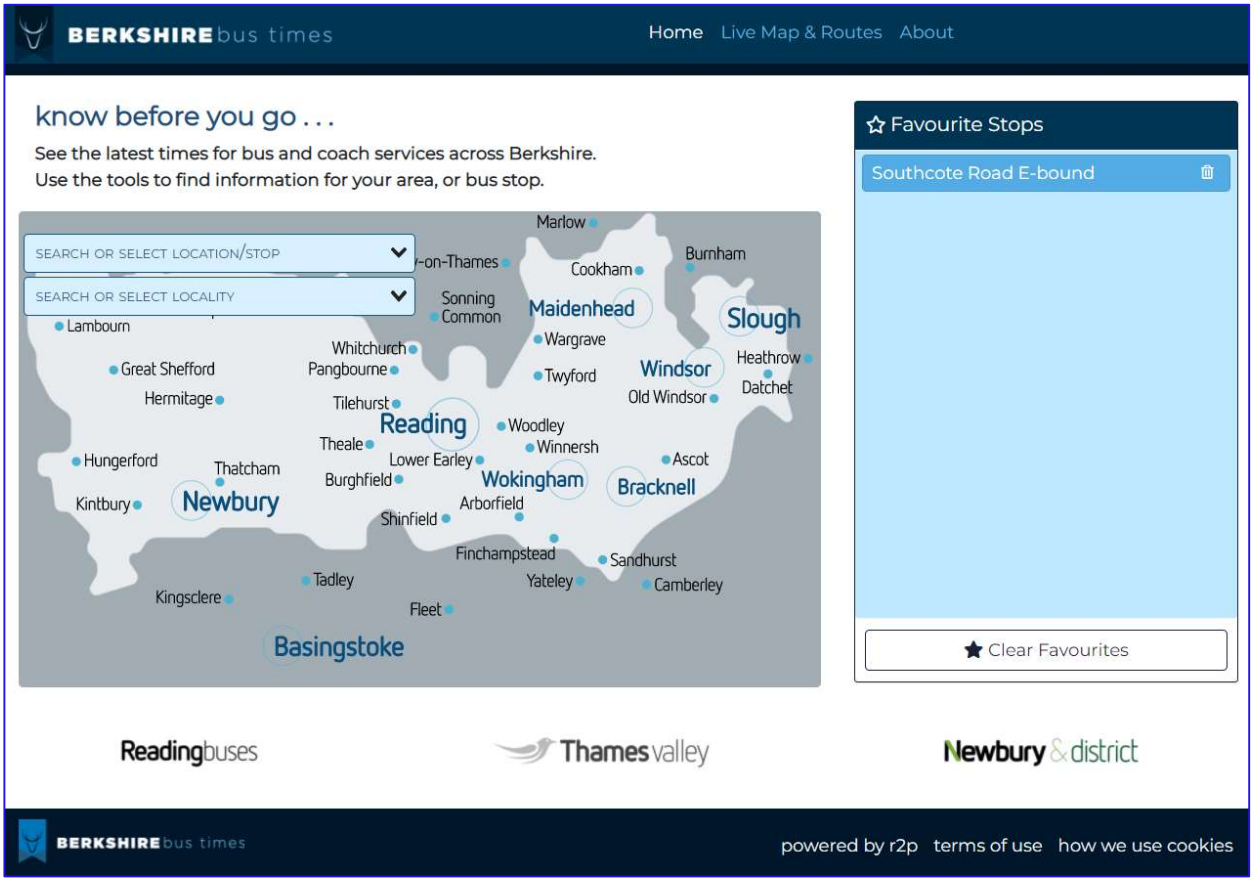


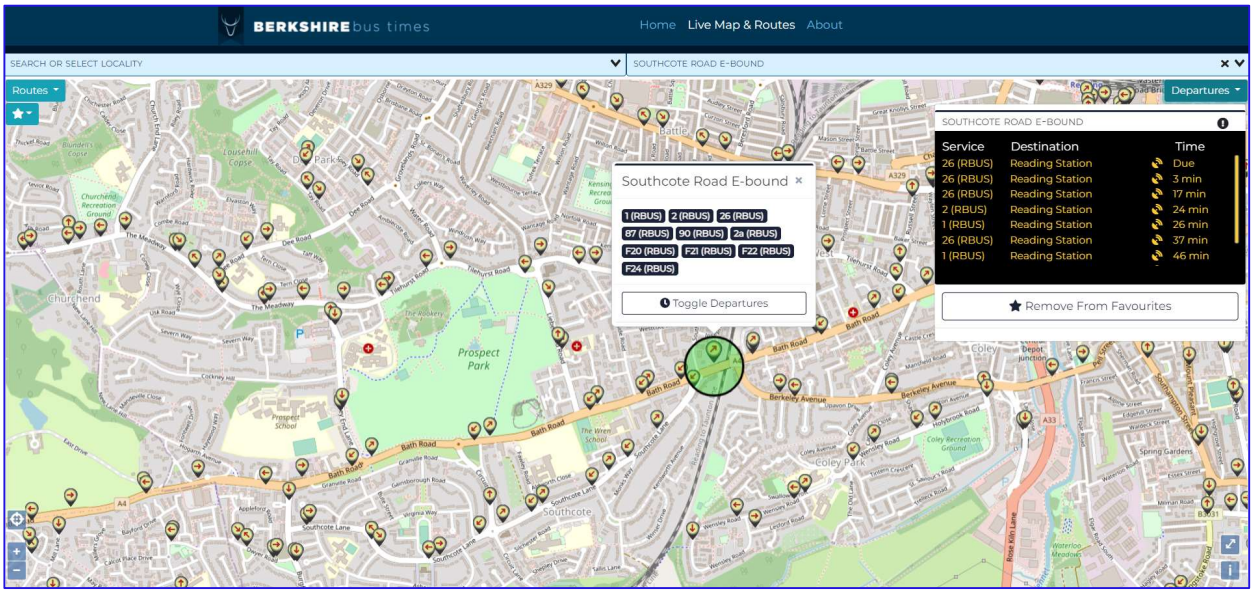


Part of this deliverable was a public website interface (PWI) capable of showing live bus departure times for all Reading Buses' operating companies, and other bus operators as and when their data is made available through compatible data feeds. This has been branded 'Berkshire Bus Times' and can be seen at www.berkshirebustimes.com.

In addition to the original specification, the flexibility of the new iConnex2 system has allowed it to be linked to the Oxfordshire RTI system for the exchange of bus arrival time predictions for services that cross the local authority boundaries between both systems. This brings data from Oxford Bus Company, Thames Travel and Arriva The Shires services into the system.

The Berkshire Bus Times website





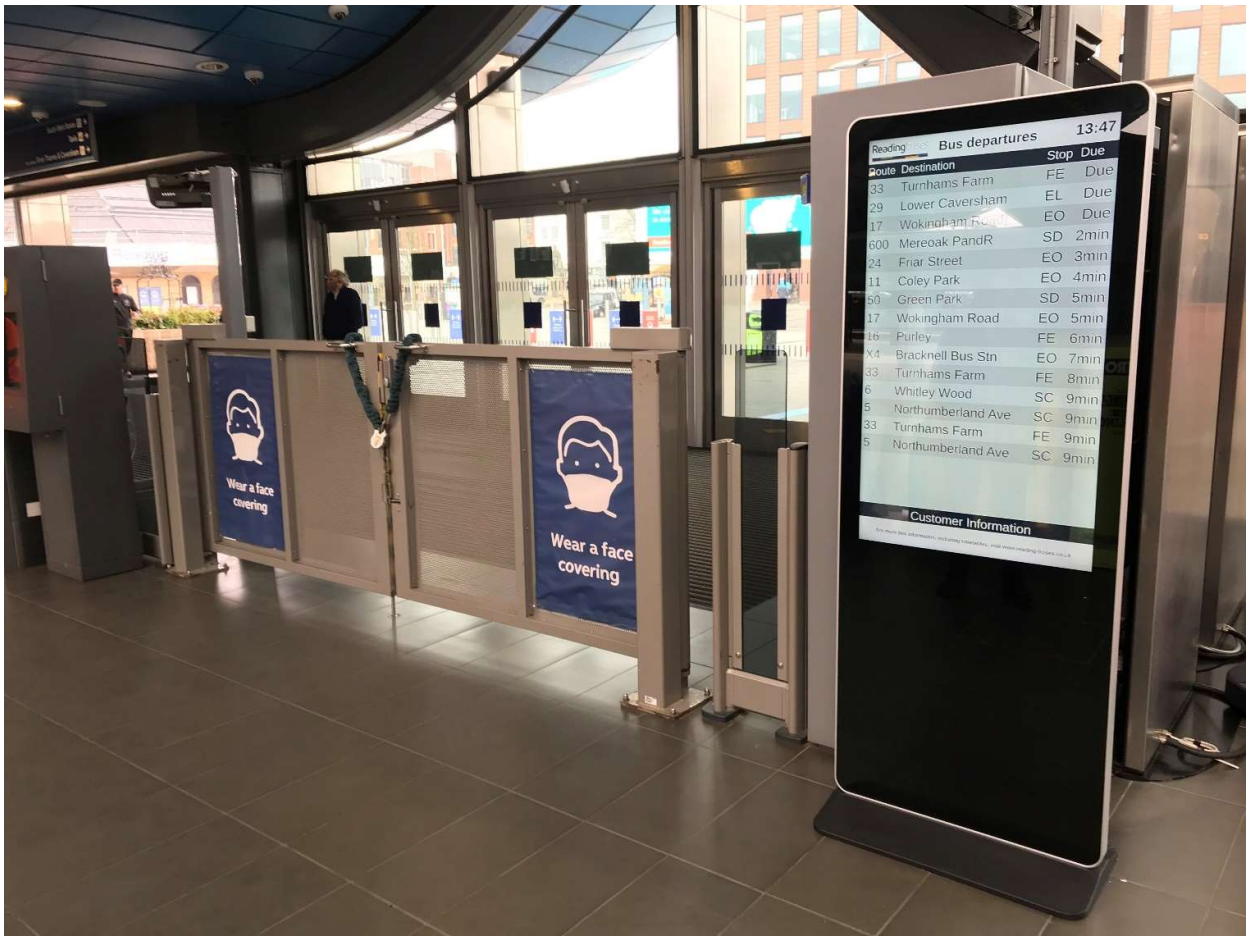
4.3 Rail Station Interchange displays

This element delivers three real time bus departure screens: two for Reading Railway Station and one for Newbury Railway Station. These are of a 'totem' style to show the maximum number of routes, stops and departures.

At Reading Station one display is installed outside the gate-line in the north entrance, and the second is inside the gate-line in the western entrance on the south side. This latter display is located near the bottom of the stairs and escalators and is shown in the image below.

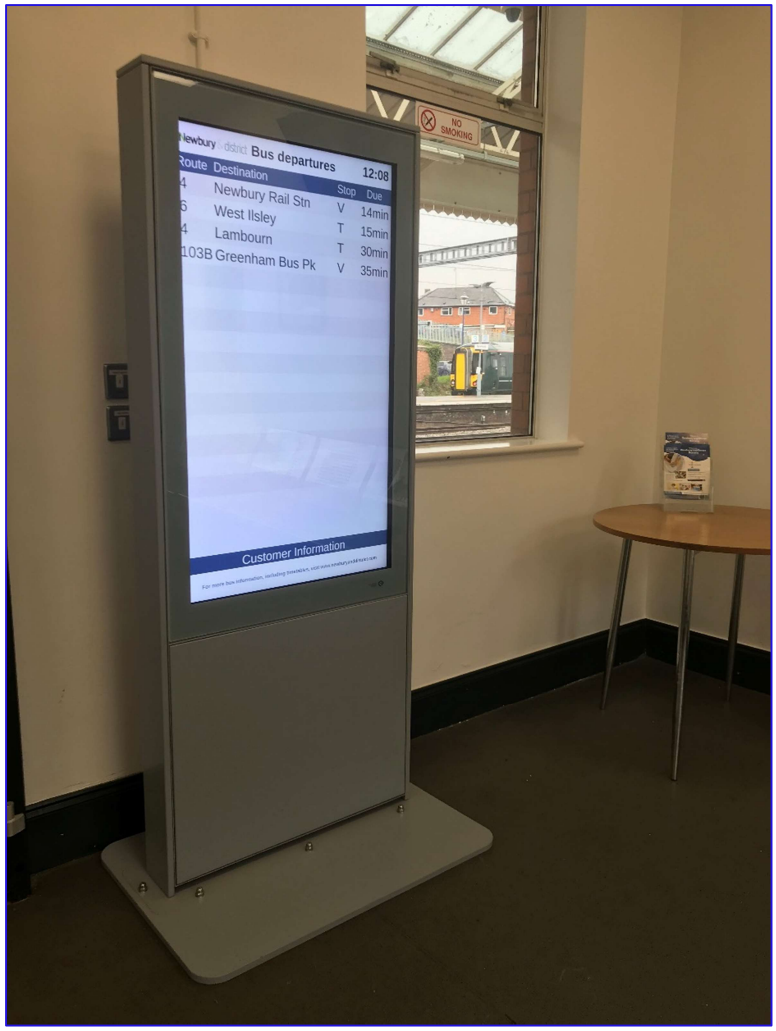
Both Reading Station displays are 'semi-ruggedised', which means they can withstand some temperature fluctuations and moisture as the station only partially enclosed, but they are not fully weatherproofed for full outdoor use.

One of Reading Station's RTI displays



At Newbury Station, it was agreed with Great Western Railway that, as the station is undergoing significant improvement works, as an interim measure, the display here would be located in the Platform 1 passenger waiting room. Once the station improvements are complete, the display will be moved to the Platform 1 gate-line. The gate-line here is more susceptible to weather fluctuations, so the display is 'ruggedised', which means it is suitable for outdoor use.

The Newbury Station RTI display

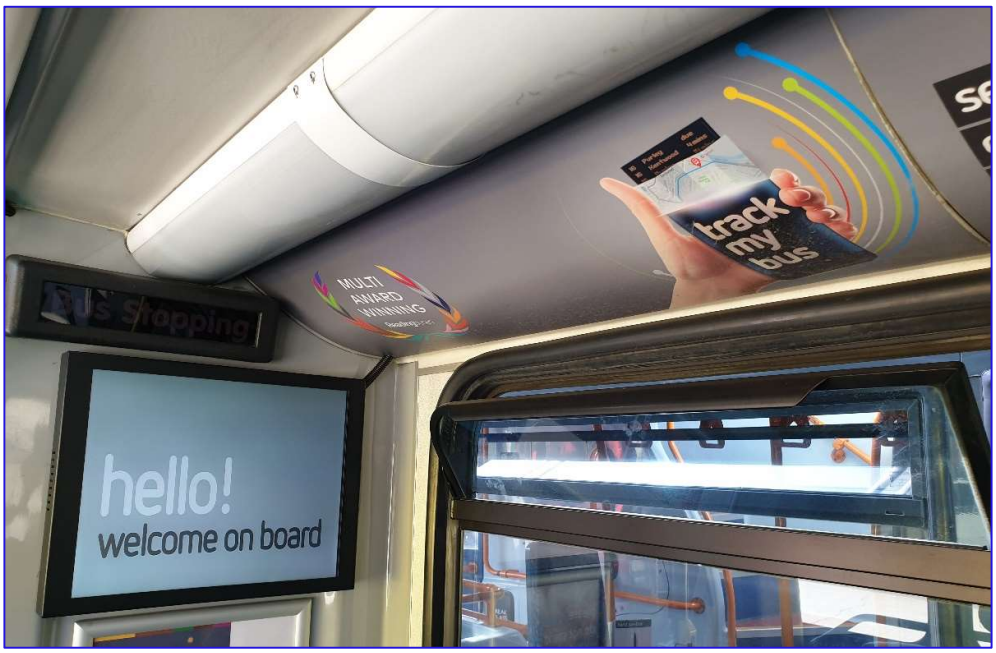


4.4 On-Bus next-stop audio and visual information

This element delivered on-bus next stop audio and visual information using full-colour screens and speakers. One screen is installed on single deck buses and two screens on double deck buses. An example of one of the on-bus screens and next stop information is shown below.

The screens can also show 'welcome aboard' messages and other public information and marketing messages, set up via the media editor in iConnex2.

Examples of the on-bus RTI displays



A total of 51 buses were equipped with audio visual equipment, comprising 33 Thames Valley Buses, 13 Newbury and District Buses and 5 Reading Buses. A further 12 Reading Buses vehicles were upgraded with additional screens to provide information on both decks of double deck buses.

These buses primarily operate on 34 different bus routes/groups of bus routes, covering the six local authority areas in the TVB LEP area.

Service reductions necessitated by the impact of Covid-19 subsequently led to the equipment that was fitted to four vehicles being removed and stored for future use as the vehicles are no longer in the fleet. Similarly, a further three vehicles have been replaced by brand new vehicles that require a different shaped screen, so the removed screens were stored for future use.

4.5 Online ticket shop

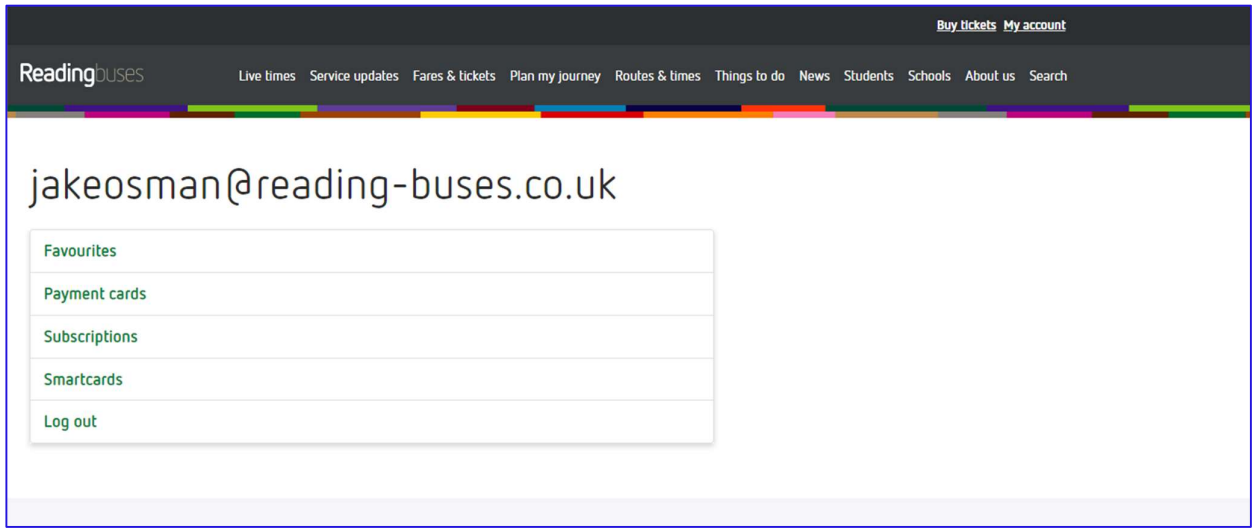
This element delivers a new online travel shop to:

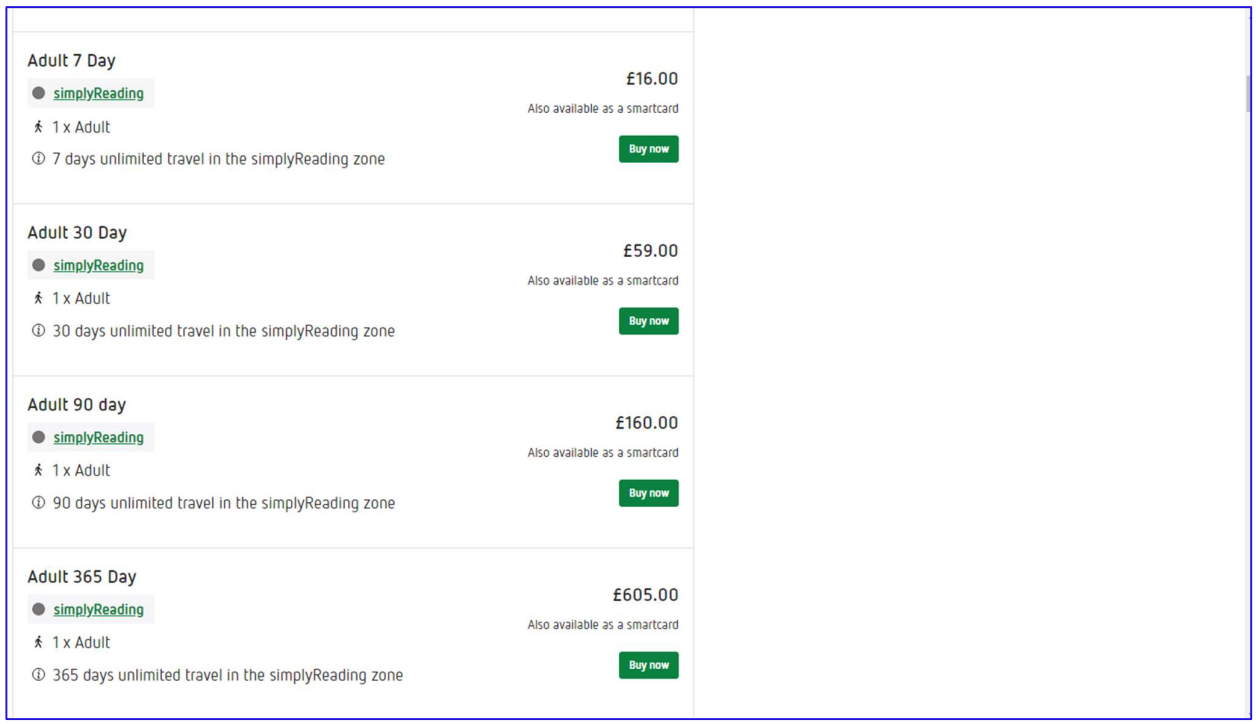
- Allow the online shop to be managed by bus operator staff (prices, tickets, descriptions, etc.).
- Provide mobile ticket and smartcard sales, the latter being achieved through integration with a back-office processing system provided by Unicard.

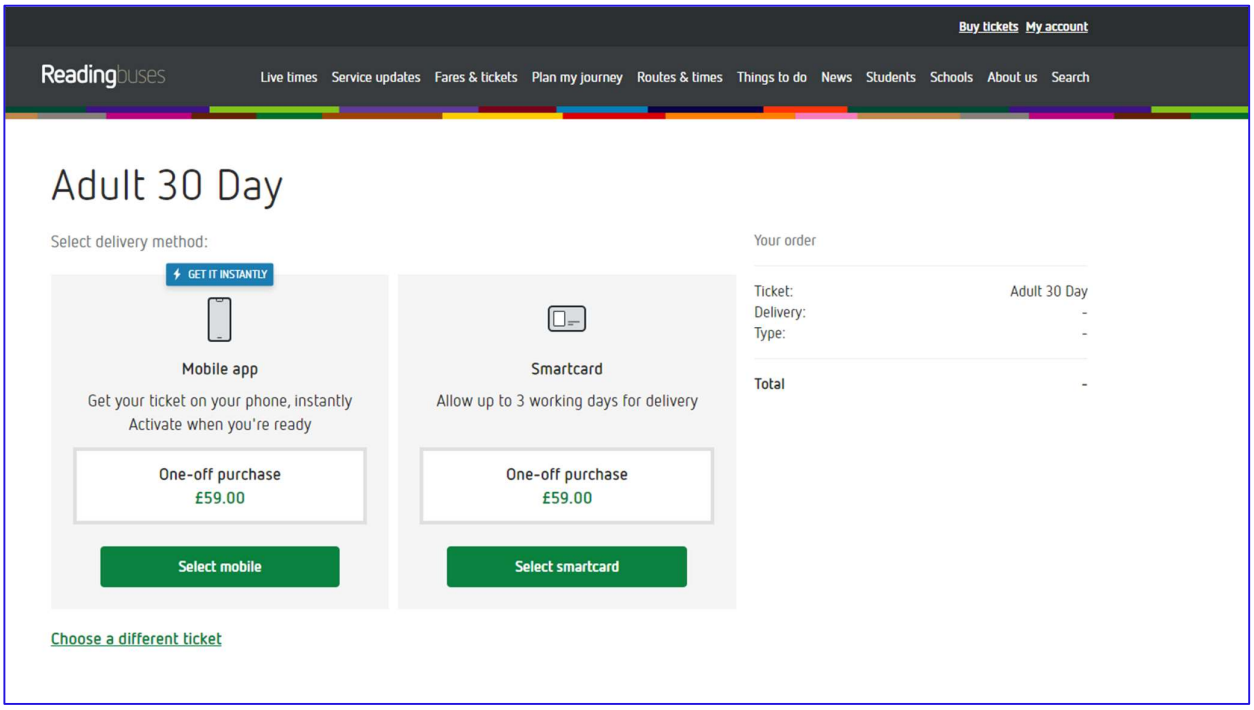
- Deliver a single login for both the website and app.
- Enable customers to choose how their ticket is received (mobile ticket or smartcard).
- Give customers the option to set up a recurring payment for specific ticket(s).
- Provide reports for both mobile ticket and smartcard sales.

This enables Reading Buses to allow customers to choose how they would like to purchase their bus travel (web or mobile) and choose how they would like to have their travel fulfilled (mobile ticket or smartcard) whilst still using the Unicard Card Management System to communicate smartcard transactions with the Host Operator or Processing System (HOPS).

Example screenshots from the online ticket shop



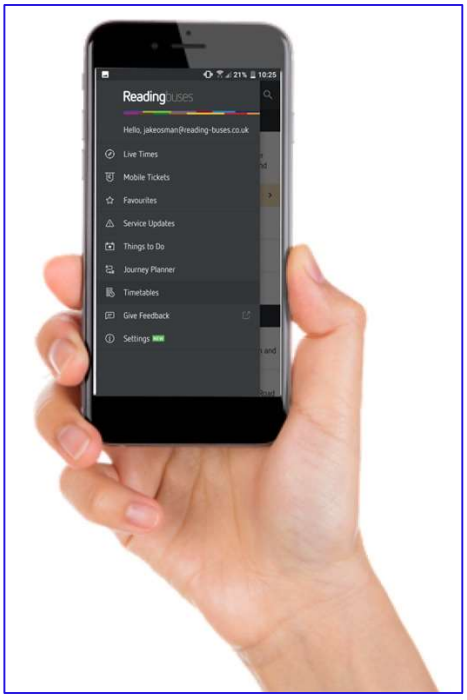


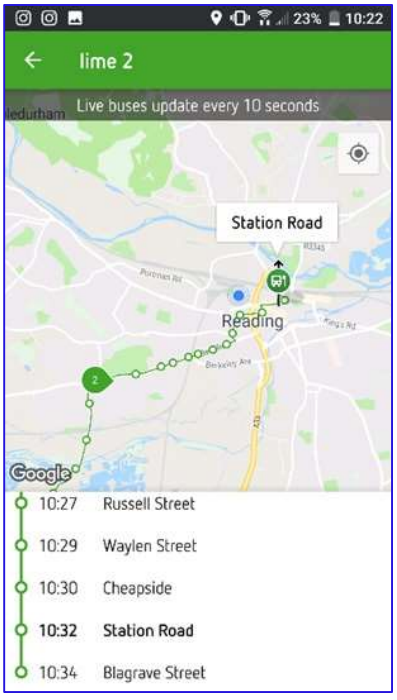


The shop was supplied by Passenger Technology Group, again an existing supplier to Reading Buses, to ensure compatibility with existing systems. The decision was taken not to carry out a full public launch of the online ticket shop at the height of Covid given that the overriding public message was to 'stay at home'.

The app also proved very useful for displaying messages directly to passengers' mobile phones and smart devices, especially concerning changing advice and service changes during the Covid period.

Example screenshots from the app





The next chapter describes the implementation of the project.

5. Implementation

5.1 Project Programme

The central RTI system upgrade took place between October 2020 and March 2021. It was split into phases for different elements of the functionality, enabling bus operator supervisors and service planners to be trained and test the different modules, giving feedback to the supplier (r2p) before it was formally rolled out. This enabled the different bus operators' information to be shown on one system. The website was also developed, and a 'soft launch' carried out for selected parties, to enable it to be tested and to obtain feedback before being rolled out to the public.

The two displays for Reading Station were successfully installed in March 2021 to a clearly agreed plan with the Network Rail managers at Reading. The Newbury rail station display was installed in April 2021 in the passenger waiting room on Platform 1 as the 'temporary' location due to the ongoing enhancements to the station. This installation was delayed by a few weeks because Great Western Railway, as tenant, needed to obtain landlord consent from Network Rail. This took longer than expected but was concluded successfully.

The on-bus displays and audio were installed between January 2021 and February 2021, and all proceeded to plan. Buses were generally fitted overnight between daily service in the two main depots, to an agreed process of installation and sign-off, before being returned to service the next day. No major issues were encountered. For example, buses were generally available when planned (subject to last-minute service changes) and 'reserve' bus fits were planned to cater for any last-minute changes.

The online ticket shop core functionality was delivered in March 2021, consisting of an Application Interface (API) to take data between the Passenger front end and Unicard back-office system, and testing of that system.

The launch of the customer-facing system was delayed due to government Covid travel advice in force at the time. During this time, Reading Buses suspended the time remaining on customer's season tickets so that they could reactivate them when restrictions were relaxed. When restrictions started to relax in September 2021, new features of the shop were used to issue a free day ticket voucher to all customers who either had an app account or had created an account before a given deadline.

It also became clear that customer accounts from the old and new smartcard systems couldn't be merged, and that it would ultimately require all existing smartcard users to create a new account and re-register their card to use it again. Given the high level of usage of smart cards for school travel, and the emergence of the Omicron variant, the introduction of this element of the shop was postponed until a date when a full communications campaign could be undertaken without causing disruption to travel patterns. In the meantime, the opportunity was taken by Reading Buses to add further enhancements to the scope of the project (at their own cost) for a launch during 2022.

5.2 Project Management

Weekly project progress meetings were held with r2p, Reading Buses and Jacobs throughout the project to ensure delivery within the tight programme, and to ensure that all costs were kept within agreed budgets. Given the importance of the project, these weekly progress meetings included Reading Buses CEO, Finance Director and Chief Engineer (during the period of the on-bus installations).

Despite all meetings being held remotely via Teams rather than face-to-face, there were nonetheless excellent project communications and a positive working relationship, with all parties working to deliver the project successfully.

Monthly progress updates were given also given to TVB LEP.

5.3 Lessons Learnt

As described above, all parts of the RTI project went to plan. However, one key lesson learnt for RTI displays in railway stations is not to under-estimate the time required to obtain landlord consent from Network Rail where the train operating company (TOC) is the tenant. Even though the TOC was engaged at an early stage, and the project had TOC support, the approvals processes were lengthy and required many stages of internal TOC and Network Rail sign-off, despite the strong support of the local TOC team. It is interesting to compare Newbury Station to Reading Station, of which the latter is a much bigger station and with a much higher footfall, but where the approvals and consents were much easier as it was a Network Rail directly managed station.

In operation, it was found that the display screens at both stations were initially regularly unplugged, either by cleaners for their equipment or by customers wishing to charge their personal devices, and then were left powered off. The status of the displays is monitored continuously and remotely, and engineers were called out to respond on each such occasion. To avoid sending engineers to simply plug them back in, the issue was resolved through fitting a locked plug to the screen in Newbury waiting room and engaging with Network Rail employees in Reading.

With the e-shop, the difference between a software upgrade and having replacement software made it significantly more difficult to roll out the benefits to customers.

The next chapter describes the scheme costs of the project.

6. Scheme Costs

As described in the 'Completing the Connection' FBC document, the total capital funding of £1,541,243 ex-VAT came from the TVB LEP, with Reading Buses paying for the ongoing revenue costs.

The capital funding was paid monthly in arrears to Reading Buses by the Royal Borough of Windsor and Maidenhead Council on behalf of the TVB LEP following the acceptance of a monthly claim. Supporting invoices were provided.

The full agreed capital sum of £1,541,243 was spent and was claimed in financial year 2020/21.

Minor changes to the scope of the RTI elements with r2p, such as variations to a few on-bus screen-sizes, were documented and agreed through a summary change log and associated change control forms and used part of the small contingency budget. There was a small cost saving by r2p in relation to the contingency for on-bus equipment (such as extra brackets) and it was agreed with the TVB LEP that this could be used by Reading Buses on marketing and publicity of the RTI enhancements and online ticket shop.

The spend with all three suppliers (r2p, Passenger Technology Group and Jacobs) and Reading Buses were within the agreed ceiling budgets, as shown in Table 6.1 below.

Table 6.1 Spend by Supplier

Totals by supplier	Total Forecast Cost	Actual Spend	Difference
r2p invoices	£1,393,093	£1,384,877	-£8,216
PTG invoices	£98,150	£98,150	£0
Jacobs invoices	£44,390	£44,390	£0
Reading Buses	£0	£8,216	£8,216
Totals	**£1,535,633**	**£1,535,633**	**£0**

This activity included publicity to inform existing and potential passengers about the improved information and ticketing on the app. This was key in driving the move from cash to cashless payments, especially important due to concerns about Covid, and included wrapping five bus rears from services across the TVB LEP area with appropriate messages, and a media launch (pictured above). A video "Making buses even easier" was also

produced for social media, with a full version being available for viewing at: https://www.youtube.com/watch?v=vUK9qnOTDjI.

As agreed in the business case, Reading Buses has made provision in its forward planning for a revenue contribution of £1.045 million from its own budget towards running costs associated with the substantially enhanced RTI system and ticketing facility, covering five financial years. This is £209,000 per annum and covers ongoing software licenses, hosting and maintenance of servers, hardware failure, and technical support.

The next chapter describes the evaluation of the project.

7. Evaluation

7.1 Direct and indirect outcomes

The direct and indirect outcomes of this project, as set out in the logic model, were described earlier in this report but are also reproduced below. These are:

1. Higher passenger satisfaction with bus travel in the region.
2. More useful management information on bus service performance to help refine timetables to reflect real life traffic conditions.
3. More use of buses by passengers who currently struggle with audio or visual impairments.
4. Less use of cash transitions and more use of 'smart' ticketing to speed up bus boarding times.
5. Modal shift from the car to the bus.

Each of these are evaluated below.

7.2 Higher passenger satisfaction

Prior to Covid, the passenger watchdog, Transport Focus, conducted regular passenger satisfaction surveys, including in the TVB LEP area. It was expected to use this data to measure passenger satisfaction with bus travel in the region. However due to the pandemic and a significant drop in the numbers of people using public transport, the bus passenger survey was paused (Link to Transport Focus Statement).

The app gives users the opportunity to give feedback, and a selection of customer comments include:

it's very helpful and it's so much easier having the timetable in front of me and being able to purchase a ticket on my phone.
Easy to use. Finding the bus u need is really easy with clear stops and times. The tracker is a great tool for seeing just where the bus is and buying tickets is really simple and explanatory
It's great to be able to see the departures in real time. Saves much waiting time at bus stops. Well done!
Excellent really good
Easy to use
Rly usefully and efficient
Very good
App works very well 👍
I think it is brilliant the fact that actually shows you where the bus is
Easy to use
I am loving the readingbuses app!
Easy to use and affordable
It's a class app
mobile app is very good for tracking and buying tickets
This is the easiest bus app in the uk that I have used thank you

With the free travel promotion in September 2021, the Wokingham Today newspaper carried the headline "How you can travel on Reading Buses for free - Reading Buses is giving away free day tickets - but you have to be quick" https://wokingham.today/how-you-can-travel-on-reading-buses-for-free/. During the three-week promotion 2,934 new registrations were generated on a base of 98,673 app accounts, of which only 45,651 were active for ticket purchases in the last 12 months. All accounts were sent a free ticket, with 19,388 claimed (19.1%). Real time information is available through the app whether the app is used for a ticket purchase or not.

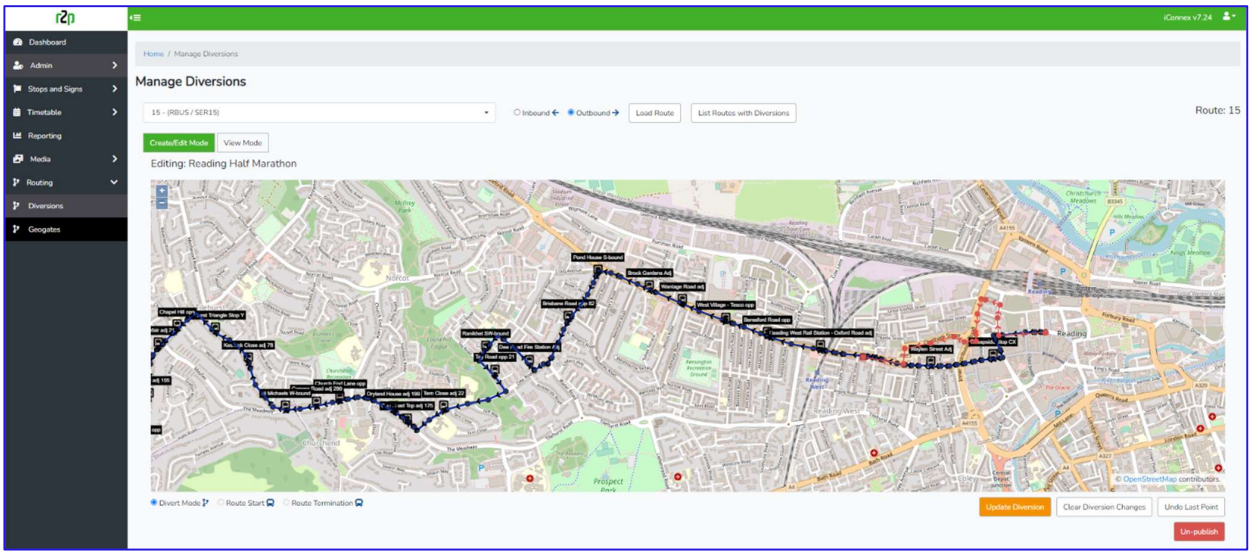
7.3 Management information on bus service performance

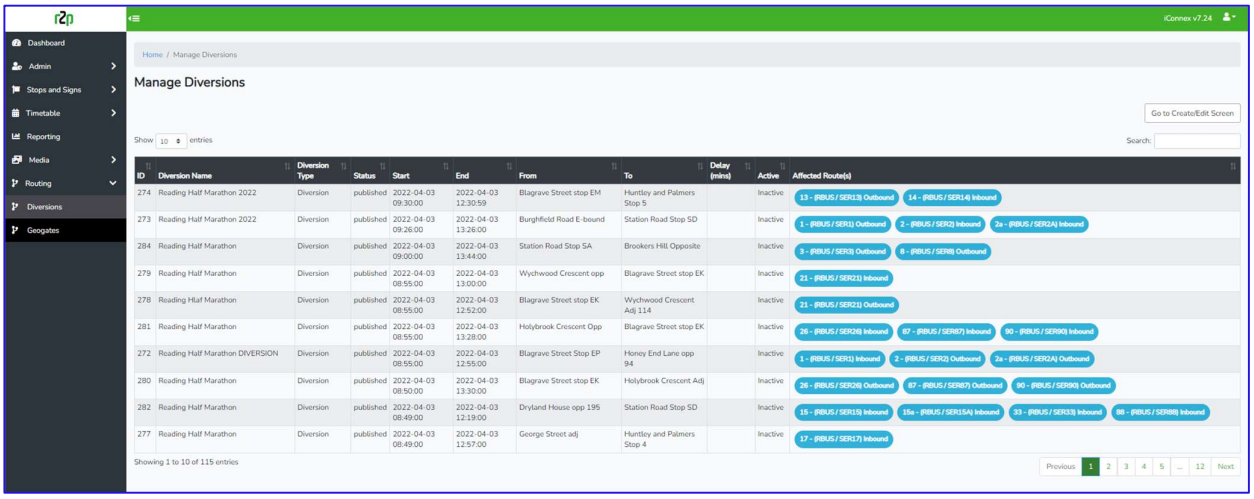
Data collected through the RTI system has proved invaluable in replanning the combined networks in response to the significant changes to travel patterns and traffic conditions during the pandemic. Data from the system, particularly from the October/November 2021 period prior to the emergence of the Omicron variant, has been analysed in depth to help plan post-pandemic service levels and journey times. New timetables were introduced on some routes based on this data in April 2022, with further changes currently being planned for October.

Because of these refinements to the timetables with the additional management information, Reading Buses start point punctuality has improved from 89.4% in 2018-19 to 93.4% in 2021-22, and mid-points from 78.2% to 85.2%.

The new diversion module has been helpful to ensure that bus stops not being served are not announced during planned road closures. Reading Buses and r2p continue to develop the functionality of this module through the ongoing support contract to make it even better in the future.

The new 'route diversions' module in iConnex2 to ensure realistic RTI predictions during diversions





7.4 Passengers with audio/visual Impairments

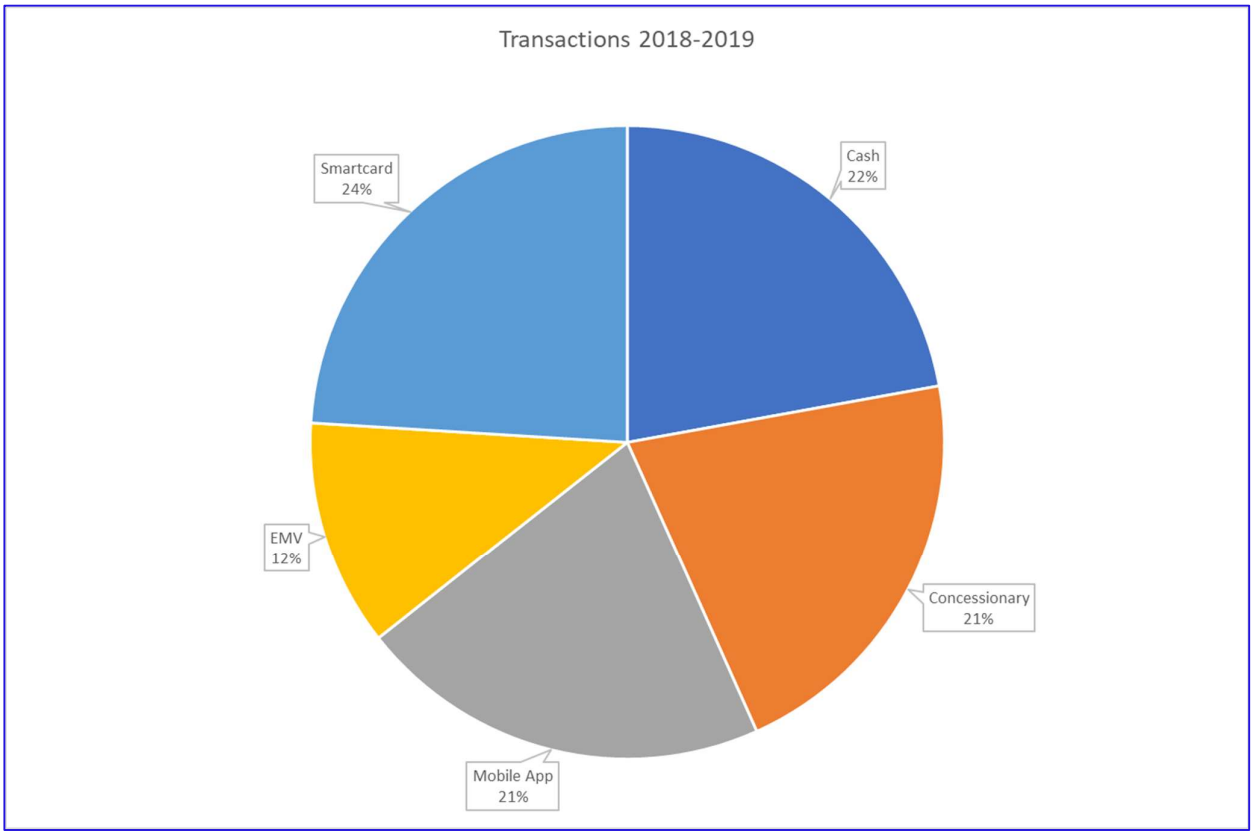
It was expected to be able to measure this through use of concessionary passes on buses, but again Covid has reduced use of bus services by concessionary pass users (see section 7.5 below). The COVID-19 pandemic has had a major impact on travel patterns, and the initial 'avoid public transport' messaging has significantly affected customer confidence, which will take some considerable time to restore. The level of customer recovery since the pandemic has been the lowest amongst the elderly and disabled concessionary pass users at around 65%, and the strongest recovery has been amongst children and young people, where the need to travel to school, college and University every day has maintained the demand for travel. Overall recovery is currently around 77%.

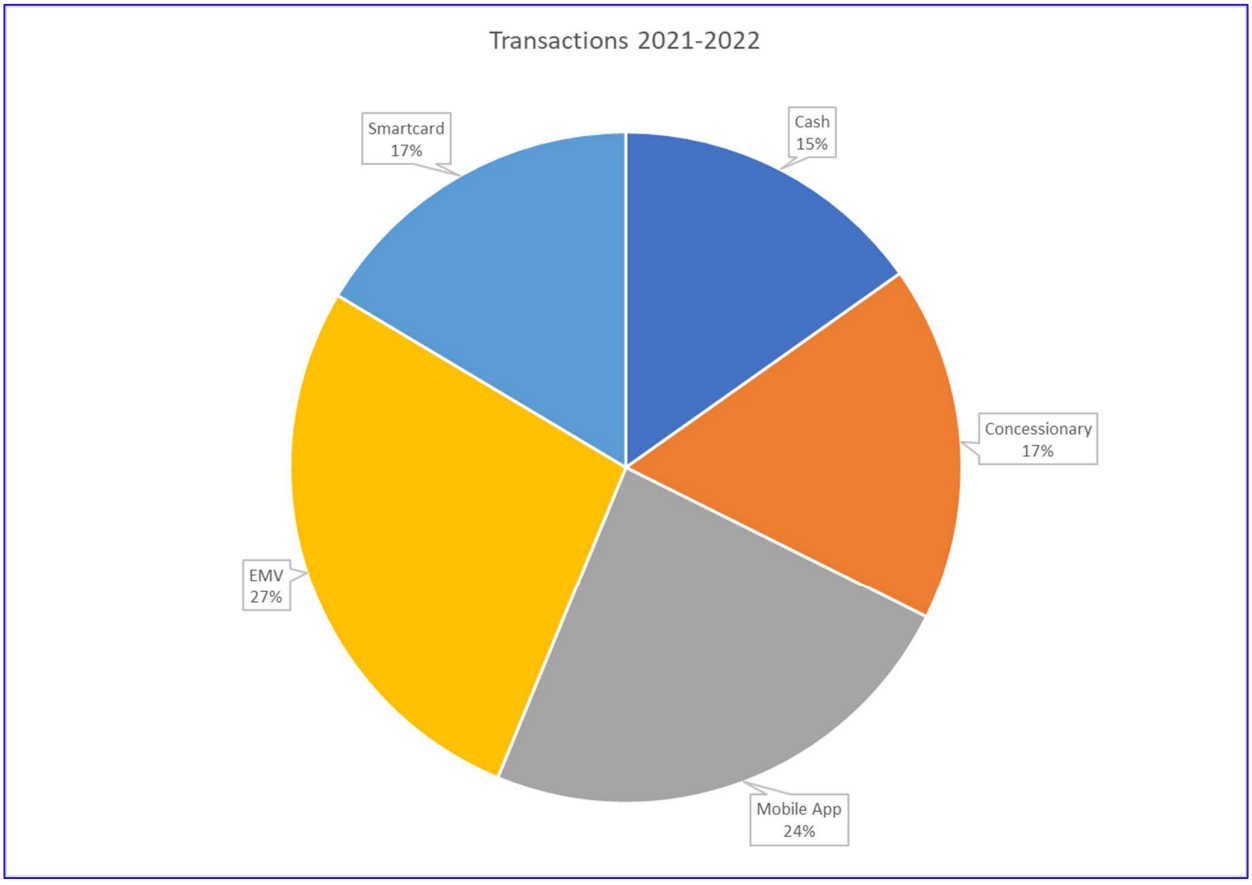
Unfortunately, due to the scale of the pandemic, it is not possible to identify a change in patronage that could be linked to the deployment of the improved systems funded by this project, although the aim to help improve confidence in using public transport across the Thames Valley region directly aligns with the same post-pandemic need to rebuild.

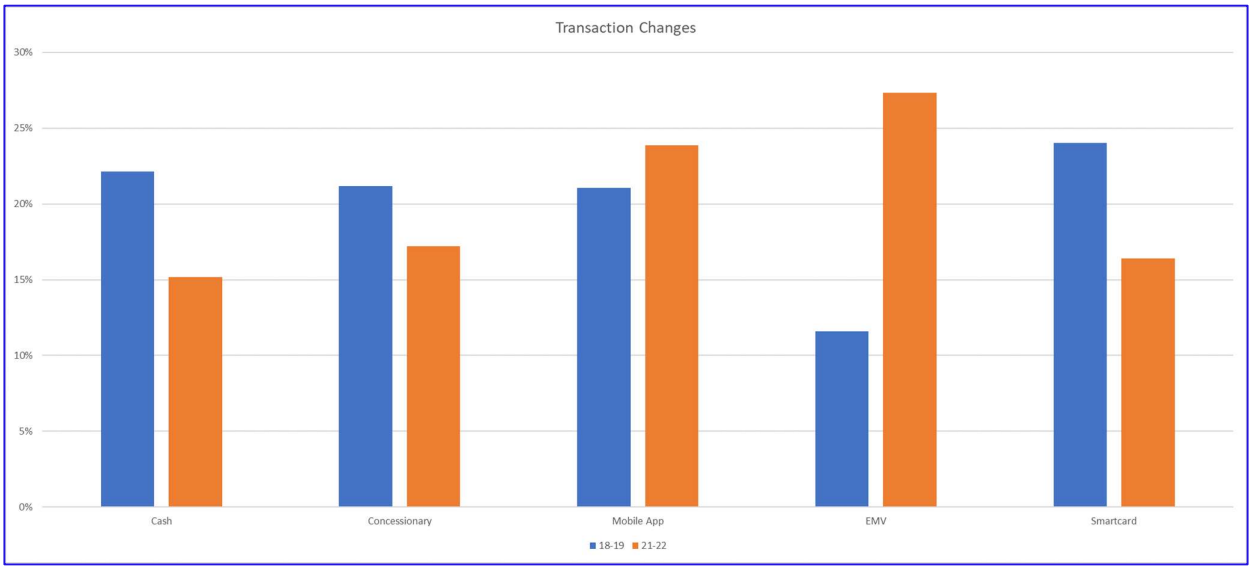
7.5 Less cash transitions

One of the expected outcomes from allowing personalised purchase of mobile or smartcard-based tickets was to reduce the amount of on-bus cash transactions to speed up journey times and to reduce the risk of Covid19 transmission. The below graphs show how the split of transactions has changed between 2018/19 and 2021/22. This shows that the percentage of cash transactions has reduced by 32% from an overall percentage of 22% to 15%.

Interestingly, in 2018-2019 the split of cash and EMV (contactless payment) transactions were 65% cash and 35% EMV. In 2021-2022 this had swapped to 35% cash and 65% EMV.


Transactions 2018-2019
Cash 22%
Concessionary 21%
Mobile App 21%
EMV 12%
Smartcard 24%


Transactions 2021-2022
Cash 15%
Concessionary 17%
Mobile App 24%
EMV 27%
Smartcard 17%



7.6 Modal shift from car to bus

As noted in section 7.4 above. the COVID-19 pandemic has had a significant impact on travel patterns, and the initial 'avoid public transport' messaging has significantly affected customer. Again, unfortunately, due to the scale of the pandemic, it is not possible to identify a change in patronage that could be linked to the deployment of the improved systems funded by this project, although the aim to help improve confidence in using public transport across the Thames Valley directly aligns with the same post-pandemic need to rebuild.

An example of a journey history report used to refine the timetable to reflect real life traffic conditions.

Journey History

Date Range	**2022-05-04 - 2022-05-10**
Time From	**00:00:00**
Time Until	**23:59:59**
Operator	**RBUS**
Service	**16**
Trip Number	**12**
Location Type	**ALL**
Operator Code	**RBUS**
Route	**16**
Trip No.	**12**
Duty No	**1106**
Driver Id	**692121**
Fullname	
Scheduled Start	**2022-05-04 07:55:00**
VehicleCode	**707**
Running No	**16B**
Depot Code	**RBUS**
Direction	**Inbound**

Location	Location Name	Seq.	Arrival	Departure	A	D	Dwell Time	Scheduled	Timing Point	Scheduled Dwell Time	Lateness
030051270001	Chestnut Grove adj 2	1	07:51:12	07:56:01	✔	✔	00:04:49	07:55:00	Y		00:01:01
030056860001	Wintringham Way adj 21	2	07:56:27	07:57:06	✔	✔	00:00:39	07:55:00			00:02:06
030051460002	Colyton Way SW-bound	3	07:57:38	07:58:46	✔	✔	00:01:08	07:57:00			00:01:46
030054140001	New Hill adj	4	07:59:25	07:59:34	✔	✔	00:00:09	07:58:00			00:01:34
030052430001	Footpath to Highfield Road opp	5	07:59:44	08:00:01	✔	✔	00:00:17	07:58:00			00:02:01
030052610001	Goodliffe Gardens adj	6	08:00:31	08:00:41	✔	✔	00:00:10	07:59:00			00:01:41
030056520001	Warley Rise opp	7	08:01:02	08:01:50	✔	✔	00:00:48	08:00:00			00:01:50
030055850001	Talbot Way Adj	8	08:02:02	08:02:25	✔	✔	00:00:23	08:01:00			00:01:25
030050040001	Addiscombe Chase opp	9	08:02:44	08:03:21	✔	✔	00:00:37	08:01:00			00:02:21
030051780002	Denefield School opp	10	08:03:59	08:04:36	✔	✔	00:00:37	08:03:00	Y		00:01:36
030051740001	Dark Lane Top on	11	08:05:53	08:06:36	✔	✔	00:00:43	08:05:00			00:01:36
030052270001	Fairford Road adj	12	08:06:49	08:07:11	✔	✔	00:00:22	08:05:00			00:02:11
030054500002	Dark Lane Foot adj 292	13	08:07:50	08:08:17	✔	✔	00:00:27	08:07:00	Y		00:01:17
030051770002	Dell Road adj 240	14	08:08:44	08:09:08	✔	✔	00:00:24	08:08:00			00:01:08
030056370002	Tring Road Shops adj	15	08:09:21	08:09:58	✔	✔	00:00:37	08:08:00			00:01:58
039025340001	Brooksby Road adj 160	16	08:10:38	08:11:02	✔	✔	00:00:24	08:10:00			00:01:02
039026830001	Oak Tree Copse opp 103	17	08:11:44	08:11:52	✔	✔	00:00:08	08:11:00			00:00:52
039026870001	Overlanders End adj	18	08:12:03	08:12:10	✔	✔	00:00:07	08:12:00			00:00:10
039026440002	Kentwood Circle S-bound	19	08:12:37	08:13:25	✔	✔	00:00:48	08:13:00			00:00:25

The next chapter makes some conclusions on the monitoring and evaluation of the project one year on.

8. Conclusions

8.1 Objectives

The 'Completing the Connection' FBC to the TVB LEP set out 5 objectives of this project to upgrade the RTI system and smart ticketing. These are listed below along with an assessment of whether they have been delivered / met:

1. Supporting and driving further economic growth in the local area - **delivered**
2. Enable and encourage use of local buses instead of private vehicles - **delivered**
3. Enable and encourage easy interchange between public transport modes, and other sustainable modes - **delivered**
4. Make live passenger information available - **delivered**
5. Allow personalised purchase of mobile or smartcard-based tickets - **delivered**

8.2 Resources and input

The resources and input to achieve this were defined as:

1. One core, multi-operator RTI system - **delivered**
2. Three bus RTI departure screens at two rail stations - **delivered**
3. Audio-visual customer information installations on 51 buses **– delivered (51 buses equipped plus 12 addition buses upgraded with extra / better displays 66)**
4. An online shop enabling smart travel via app or smartcard - **delivered**

8.3 Outputs

Once accomplished, these activities will produce the following deliverables:

1. More reliable and better quality RTI data for buses from multiple operators in the region - **delivered**
2. Easier and better-informed interchange between rail passengers and bus services at Reading and Newbury stations - **delivered**
3. Useful audible and visual RTI on 51 buses not currently equipped - **delivered**
4. Easier and more convenient ticket purchase via smart or mobile media - **delivered**

8.4 Direct and indirect outcomes

1. Higher passenger satisfaction with bus travel in the region **– anecdotal positive evidence this has been achieved from passenger feedback, but no formal Passenger Focus passenger survey due to Covid**
2. More useful management information on bus service performance to help refine timetables to reflect real life traffic conditions **– yes, clear evidence from service planners and route controllers**
3. More use of buses by passengers who currently struggle with audio or visual impairments **– unable to determine as use by concessionary pass holders is currently lower than pre-Covid times.**

4. Less use of cash transitions and more use of 'smart' ticketing to speed us bus boarding times **– yes, clear evidence from transaction data.**

5. Modal shift from the private car to the bus **– unable to determine as bus use is currently lower than pre-Covid times.**

8.5 Commentary

Despite the challenges of Covid-19, this was a successful project, delivered on-budget and largely on-time.

Such projects are highly deliverable and give real benefits to passengers, and over time (post-Covid) will encouraging a modal shift back to public transport.

Reading Buses are very keen to continue to work with TVB LEP to seek funding opportunities for the additional project of 'Enhancing the Connection' and other related projects to update and enhance the on-street RTI displays and other RTI functionality. Such projects and the use of this type of technology are essential in enhanced partnerships, building on the existing investment by local transport authorities and bus operators.

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BLTB Forward Plan 2022

Meeting	Deadline for final reports:	Agenda published	Agenda items
10 November 2022	21 October	2 November	• Review of role of BLTB • Progress reports • One-year-and Five year Impact reports • Transport for the South East – Annual Subscription Report Update • Forward Plan

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