Enhanced Network

1. Oxfordshire has developed a comprehensive commercial bus network, which operates from early morning to late evening on radial 'Premium' routes from Oxford City Centre to residential suburbs and to County towns. There is also a secondary network, at lower frequency, within some of the County towns, also with some links between these hubs. There are also some Community Transport services, where individuals and groups have created new services and filled gaps where previous services had ceased to operate.

2. There has been considerable population growth in recent years, and the County has been proactive in requiring that new developments are designed around the bus with section 106 funding requested to fund the initial years of new service provision. There are several new developments, which will generate new bus services in the next few years.

3. The COVID pandemic has reduced the level of bus use in Oxfordshire, which will take some time to return to previous levels. Some rationalisation of routes and frequencies may take place to reflect the new 'normal', but it is considered the main commercial network should remain intact or be improved where possible. However, there is less certainty about some of the secondary commercial routes and some short-term financial support may be necessary to retain such services, especially where they link to other Council priorities, A provisional allowance has been made in the bid Finance table in the main report.

4. Away from the main routes, there are significant parts of the County without any form of bus service. Getting the provision of rural services right – in terms of providing a balance between being able to provide connectivity and serve populations and getting value for money from services which, in most cases, are not going to be commercially viable – is one of the biggest issues for Oxfordshire. Connections to commercial services, rail stations, new forms of flexible service and the provision of mobility hubs are just some of the ways this can be approached. There are wider strategic decisions needed, for example in terms of threshold for service provision, whether based on population size or other factors.

5. At this stage, a limited number of new services are proposed to provide accessibility to people living in these areas. These would probably operate in a flexible manner, focusing on journeys to work and education as well as for retail/medical/social purposes, linking in with main 'Premium' bus routes at hubs or interchanges. An estimated capital cost of £800,000 for around 8 new vehicles would reduce the ongoing revenue support costs required to sustain six new services, which is assumed to be £100,000 per additional route per annum.

6. Several new or improved conventional services linking rural communities were commenced in September 2020, following receipt of a one-year DfT Supported Bus Services Fund. Arrangements have been made to continue operation of these routes until March 2022. Provision has been made in the BSIP document and bid to continue operation of these routes until March 2025.

7. Rural mobility across Oxfordshire would also be enhanced by the provision of some 'mobility' hubs along the inter-urban network. These hubs would be located where modest investment could provide an interchange facility for journeys made by different modes from adjacent rural areas. It is currently assumed that six new mobility hubs could be progressed, at a provisionally estimated capital cost of £250,000 per hub. Some of these mobility hubs would be at existing suitable sites, which are already located adjacent to inter-urban bus services and already possess most of the desired facilities.

8. Park and Ride services have operated to and from Oxford City Centre for some decades, as the very first of such a scheme in the UK. Building on one of few wholly commercial networks in the UK, the strategy has evolved in recent years to include rail-based Park and Ride and the provision of sites further from Oxford, and to serve different travel markets such as the Hospitals.

9. There are considerable current challenges with Park & Ride in Oxfordshire, including significantly depressed demand. An urgent review is needed to review the role and purpose of sites, car parking charges and ticketing arrangements. There may well need to be some transitional financial support for this type of service.

More attractive Fares and Ticketing

10. The provision of a simple, attractive fare and ticketing structure is of fundamental importance in achieving Oxfordshire's vision of an attractive and efficient public transport system carrying more public transport users.

11. Oxfordshire has already made a huge achievement in adopting a 'Smartzone' in the Oxford area in 2011, which required the close collaboration of previously competing operators to provide an inter-available ticket range, covering different time periods. There are also other zonal fares in existence, for example, in the Didcot and Banbury areas.

12. There is a joint commitment for a gradual move towards a more integrated Countywide ticketing system. To achieve this will require negotiations with a wide range of operators, and some investment will be required in devices to issue and process tickets, as well as the development of back-office systems to reallocate revenue to operators. This may include more integration with rail ticket products, although this is likely to take some time to bring into operation.

13. Ahead of this, specific, targeted measures could be introduced to boost the market. This BSIP contains proposals for
     - cheaper tickets for under 19s
     - discounted tickets for low-wage NHS employees at Hospital sites

14. For now, it is assumed that £1 million per annum revenue support would be required to support new bus fare initiatives on an ongoing basis after 2025, but discussions are continuing with operators regarding this level of cost.

15. It is also assumed that the provision of some new ticket machines for smaller operators (so they can issue and accept multi-operator tickets), the provision of tap-off readers for some buses (to facilitate revenue reassignment on ticket types that would be faster to issue) and the cost of developing software to enable this reallocation of revenue would cost a total of around £600,000.

Better Vehicles

16. Buses used on Oxfordshire's Premium Routes are modern, with comfortable double-deck seating and with many customer-focused attributes, such as wi-fi and charging facilities for mobile phones. These buses also mainly have Euro 6 low-emission engines, as required in Oxford's Low Emission Zone. Some discussion will be required about the design of the future fleet, considering the availability of seating for elderly people and the need to reduce dwell time at stops as part of an overall approach to reduce journey times.

17. The next step in the evolution of Oxfordshire's buses could be the introduction of a fleet of an estimated 166 battery electric double-deckers on routes wholly within the Oxford Smartzone area. This new fleet could be part-funded through the Government's ZEBRA initiative, which would make a significant change to air quality within the Oxford City area.

18. As technology evolves, there will be proposals for investment in vehicles suitable for Oxfordshire's extensive inter-urban network. These are all day, high-mileage, higher speed routes with little opportunity for charging at termini so are not currently suitable for all-electric operation. Considerable thought will be given to the appropriate future technology for the 100 or more vehicles currently employed on high-speed high-mileage buses currently operating on the County's interurban network, for example hydrogen fuelled or improved 'range-extender' vehicles.

Improved Information

19. The provision of clear, unbiased, and attractive information about public transport is extremely important in attracting new users. Currently information is available on different bus operator websites, and related applications, but there is also significant unmet demand for more traditional approaches such as maps, paper timetables and roadside publicity.

20. 'Next bus' information is also currently available on the County's 'Oxontime' website, through electronic displays at 261 bus stops and through a text messaging facility. This system has been in operation for around 15 years and is now increasingly outdated and unreliable. A targeted programme of new 'totem' signs for comprehensive displays at key public transport hubs and interchanges is proposed. There would also expedite a programme of replacing older signs and providing new sign infrastructure where required. This programme would help to restore Oxfordshire's previous reputation as a nationally recognised leading public transport authority.

21. Unlike in many Local Transport Authority areas, there is currently no central portal for bus service information in Oxfordshire. No maps or diagrams are produced to show the bus service network of all operators, or connection points with the rail network. This BSIP proposes to change this situation by making a significant step-change in provision. Further development of a centrally provided information hub could be an Oxfordshire app, which could then lead to a portal for multi-operator ticket sales.

22. The provision of good quality public transport information requires investment in staff resources, both by the Council and by operators. Whilst certain types of information can be imported automatically, it is necessary to maintain the central electronic timetable database from which information can be exported in various formats to on-street signs, to websites and apps, to the national Traveline service and to operators for production of information at bus stops.

23. It is proposed to create a comprehensive County website for public transport information and to produce a suite of maps and diagrams showing the overall Public Transport network across the County and in the different towns. These maps would be used in Interchanges, in Bus Shelters and in other places and formats. An estimated additional staffing cost of £150,000 per annum (including on-costs) is included in the Financial Implications. An ongoing Revenue Support budget of £300,000 is required to pay for support costs (fees to the RTI system support contractor, the cost of producing maps, and designing a new website.)

A more reliable main road network

24. The free-flow traffic conditions experienced during the lockdown periods in 2020 provided an unheralded indication of what unrestricted conditions for bus services could be like.

25. In normal circumstances, Oxfordshire is currently an extremely challenging environment for bus operation, with a very constrained road network around Central Oxford, much competition for road space with other modes, an extremely high incidence of roadworks caused mainly by utilities and a very significant pressure from new developments.

26. According to recent bus operator analysis, between 2015 and 2018 bus operating speeds declined by 30% along Abingdon Road and by 19% along the Cowley Road. Bus schedules are already very slow – only 8 mph during the weekday peaks from the JR Hospital to the City Centre via Cowley Centre on route 10.

27. There will be strong focus on driving up operating performance on Oxfordshire's bus network, particularly operating speeds. There is a requirement for concerted action to improve punctuality and bus speeds both inside and around the central zone. There is likely be a requirement for the installation of new bus lanes and other bus priority measures, particularly on stretches of the main road network approaching the very busy Oxford Ring Road. There is also a requirement for investment in smart traffic signals, which detect the approach of buses to key junctions and change the signalling sequence to provide buses with priority.

28. Achieving the necessary change will require much investment in operational personnel, supporting technology and targeted investment in infrastructure improvements. Both the Council and the bus operators will commit to a process of delivering improved quality through deepened partnership working, delivering more consistent bus punctuality and operating speeds.

29. The Council's Connecting Oxford project is key to achieving this success. This scheme will facilitate significant reductions in car traffic levels in the Oxford city area by creating a series of 'traffic filters', coupled with the introduction of a workplace parking levy, amongst other measures. The consequent reduction in general traffic will reduce delays to buses and will increase journey speeds. Some of these measures, focusing on the measures, particularly traffic filters, which have the potential to be delivered earliest, will now need to be accelerated to contribute to the bus journey-time reductions proposed in this BSIP. This in turn will give operators confidence to provide the local funding required to complete the bid for ZEBRA funding for the fleet of new battery-electric vehicles.

30. The Council is changing its approach to on-street parking enforcement, following the agreement to de-criminalise parking offences in three of the District areas (Cherwell, South and Vale). There will be mobile patrols starting in early 2022, which can initiate civil action against offenders. There will be a process for bus operators to provide details of problem locations.

31. There will also be an ongoing corridor-by-corridor approach to measuring bus performance, of analysing points of delay and working up schemes which increase average bus speeds. Operating statistics will be produced on a regular basis, and teams of operational Council and bus company staff will be empowered to work up schemes for investment.

32. For this approach to work, it is proposed that additional staffing resource will be required in the following council functional areas: roadworks, traffic signals, capital scheme design. Investment will also be required in new technology for installation in traffic signals.

33. A proposed base capital budget of at least £10 million per annum for additional capital works related to bus movement is included in the indicative BSIP bid profile. This will be additional to the current annual £1 million budget for these works. The cost of additional staffing in the Network management area required to facilitate closer working with the bus operators is estimated to cost £200,000 per annum (including on-costs).

34. Work is still ongoing to define and refine a list of potential bus priority schemes for the BSIP bid, including quantifying the benefits. These projects have been identified by operators as causing significant delays to buses and their users, causing additional vehicles to be deployed on services to maintain frequencies, at additional cost.

35. Inclusion of a scheme on this indicative list does not imply that these proposals will necessarily proceed as illustrated, individual projects would be subject to the usual process of approval by Cabinet Member or the full Cabinet. This list is intended to

illustrate the level of commitment required to enable the outcomes we are looking for through BSIP and inform the discussion about the quantum of ambition to be included in the bid to Government.

Improving Bus Stop Infrastructure

36. The quality of each bus stop across Oxfordshire is of fundamental importance to the attractiveness of the public transport network to residents and visitors travel mode. Due to restricted budgets and staffing levels, maintenance standards have declined in recent years with a drift away from the high standards achieved during the Premium Bus Routes programme.

37. It is considered essential that common high-quality standards for the County's bus stops are re-established as soon as possible. This requires greater emphasis on bus stop infrastructure delivery as part of an integrated public transport function in the County Council. This increased resource would also focus on delivery of common standards for bus shelters across the network, for example through tendering an Oxfordshire advertising contract. In addition, an enhanced maintenance budget would be required for the upkeep of bus stop infrastructure across the County and replacement of damaged assets.

38. An annual capital budget of £500,000 for each of the next three years is proposed for a programme to catch up with arrears of maintenance, to upgrade infrastructure as required. This amount will also cover the procurement of new shelters, where these cannot be included in the proposed new advertising shelter contract. An annual revenue budget of £150,000 (including on-costs) is also required to provide adequate staffing for this function.

Targets

39. The Council and bus operators must agree to a set of performance targets, to be achieved through joint working and agreed programmes. The overall County annual bus patronage level was 40.8 million in 2019/20, however overall patronage had declined from a higher level of 43.2 million reached in 2013/14 and patronage levels for 2020 and 2021 will be much lower than this. The immediate challenge is to regain lost ground as quickly as possible and restore a comparable patronage level, which will support a comprehensive commercial bus network with services from early to late, seven days per week. Otherwise, there will be reductions in bus service levels, in some cases lower frequency of bus services, in other cases removal of evening/weekend buses, or possibly the loss of entire routes. Whilst bus services in the last two years have been sustained through a Government COVID support scheme, this will cease by April 2022 and current patronage levels are at a level insufficient to sustain the current network.

40. The Council and bus operators entered a Punctuality Improvement Partnership in 2020. The current target for services measured at origin points is 90% of all journeys operating within a window of no more than one minute early or five minutes late. Current performance is 87%; however, this metric is less important than average bus speed in the Oxfordshire context because bus schedules are currently artificially inflated to meet the requirements of the Traffic Commissioner.

41. The average operating speeds of buses in urban areas is an essential statistic for inclusion in the BSIP, so progress can be measured year on year. In Oxford, measurement will be made at the corridor level as well as providing an average bus speed for the wider city network. Some work remains to be done before presentation of this important metric.

Oxfordshire – scheduled bus journey times

Oxford City radials				
	Routes	**Am peak**	**Interpeak**	**Evening**
Elms Parade-Westgate	4	14 mins	11 mins	10 mins
Wolvercote – Sr Aldates	35	32 mins	32 mins	34 mins
Garden City – Magdalen St	2	28 mins	22 mins	15 mins
Jack Straws Lane -St Aldates	X3	16 mins	22 mins	18 mins
Barton Edgecombe– Westgate	8	36 mins	44 mins	19 mins
Wood farm – Police station	15	29 mins	24 mins	23 mins
Templars Sq-Westgate	1,5	25 mins	22 mins	19 mins
Rose Hill - Westgate	3	29 mins	23 mins	20 mins
Orbital				
Cowley to JR hospital	10	28 mins	28 mins	22 mins
Summertown to JR hospital	700	40 mins	30 mins	25 mins
Inter-urban				
Wantage – Frideswide Sq	S9	55 mins	45 mins	
Witney Mkt – George Street	S1	64 mins	45 mins	36 mins
Carterton X –George St	S2	65 mins	57 mins	
Woodstock – George St	S3	43 miins	33 mins	24 mins
Deddington – Magdalen Street	S4	68 mins	52 mins	46 mins
Thame - Oxford	280	44 mins	37 mins	32 mins
Chalgrove-Speedwell St	11	56 mins	49 mins	
Wallingford-Westgare	X39/40	51 mins	36 mins	34 mins
Radley - Westgate	35	23 mins	20 mins	18 mins
Abingdon-Police stn	X2	36 mins	22 mins	18 mins
Didcot Parkway-High Street	X32	48 mins	33 mins	32 mins

42. Passenger satisfaction is the final indicator to be included in the BSIP document, Passenger Focus has carried out comprehensive surveys in recent years, with Oxfordshire scoring a respectable percentage of bus users satisfied with their journey. In 2019, 93% of 1,057 Oxfordshire bus users were either satisfied or very satisfied with their journey. Efforts will be made to capture the views of non-bus users, which are not included in the Passenger Focus methodology.

BSIP submission to DfT

43. A blank DfT Finance Form to be attached to Oxfordshire's BSIP is attached as Annex 2. This strongly suggests that the quality of Oxfordshire's bid will be enhanced by inclusion of complementary funding for bus-related schemes, in particular this Council's capital and revenue programmes. This will be completed prior to submission.

44. **BSIP capital schemes**.

The following section gives further details of the Capital Schemes which are proposed for inclusion in the BSIP document and bid. Most of these already have Feasibility studies and/or some other funding available (Developer Funding, Growth Deal). A successful bid to BSIP could help to fill funding gaps and ensure that some important 'bus priority' capital projects could be delivered in the next 3 years.

45. **Proposed Bus Priority schemes**

This Bus Service Improvement Plan proposes several capital schemes which will have a significant effect on promoting faster journey times and more reliable journeys for buses. These measures will make buses more attractive for users and will reverse the recent trends in bus patronage in Oxfordshire

This list of projects with indicative costs are described in more detail in the following sections

	Scheme	Description	Indicative cost
C1	Connecting Oxford	Traffic filters	£3 million
C2	Countywide Traffic Signal upgrade	Enable bus priority at all junctions and crossings	£3.1 million
C3	Barton (Waynflete Road to A40)	Bus link	£3 million
C4	Hinksey Hill A34 Northbound Exit	Bus Lane	£10 million
C5	Banbury Cherwell St	Bus lane	£2.5 million
C6	Pear Tree Park & Ride	Bus Lane extension	£1 million
C7	Benson Lane, Crowmarsh	New bus-only right turn off A4074	£2 million
C8	Kidlington roundabout	Signalised roundabout and bus priority approach	£5 million
C9	Horspath Driftway	Queue relocation	£1.5 million
Total			**£31.1 million**

C1   Connecting Oxford

The 'Connecting Oxford' proposals constitute a very radical proposal to make a significant reduction in general traffic levels in the Oxford City area, within the Outer Ring Road. A series of 'Traffic Filters' are proposed at strategic points within this area, which would restrict movement by general traffic, except by buses and other permitted vehicles. These 'Traffic Filters' would be similar to the current successful Oxford City Centre bus gates, which constrain general traffic through the use of camera technology, backed by the appropriate enforcement legislation, signage and penalties for infringement. The reduction in general traffic levels on most roads within the Outer Ring Road will have a beneficial effect on bus journey speeds in this area.

The implementation of these Traffic Filters is currently scheduled for the summer of 2023, subject to the outcomes of consultation and scheme approvals.

The cost of delivering the Traffic Filters, associated signage, back-office set-up and associated studies for the traffic filters and Workplace Parking Levy proposals is estimated to cost £4.4 million between 2021/2022 and 2023/4, of which £1m of Growth Deal funding can be offered as Match Funding,

	2021/2	2022/3	2023/4
Growth Deal	0.6m	0.4m	
BSIP capital		1.6m	1.4m
Total	0.6m	2.0m	1.4m

The Connecting Oxford proposals also include a 'Workplace Parking Levy' (WPL) component, which has a separate approval process. The WPL scheme would charge work-spaces used for commuting in much of Oxford £400-600 per annum, commencing in 2024, subject to the outcomes of consultation and scheme approvals. This proposal would not only result in lower levels of car use to and from workplaces, but also raise income to fund additional measures in this area, to deliver improved bus services, especially to workplaces around the 'Eastern Arc' of the City.

The WPL scheme could raise up to £4 million per annum for investment in supporting measures, especially in improved bus services. These funds would likely start to become available from 2024 onwards and would provide much needed longer-term investment.

There is a strong aspiration for better bus services, especially to the Eastern Arc, which are covered in the 'revenue' section of this bid.

(see plan)

C2   Upgrading traffic signals with bus priority modules

Providing traditional bus priority measures (such as significant sections of bus lane) is not feasible at many of the congestion points in the historic urban environment of Oxford city and the County's towns and villages.

It is therefore considered that a comprehensive upgrade to the County's stock of traffic signals would be a highly appropriate way of reducing bus journey times around the County. Modules can be inserted into each signal installation (junctions and the various typed of pedestrian/cycle crossing, and these can then be configured to detect approaching buses through an interface with the AVL component of Oxfordshire's Real Time Information system. The traffic light sequence at each signal installation can then be progressed more quickly to offer the oncoming bus a green light, or a green signal can be extended to allow an approaching bus to pass.

Oxfordshire currently has 438 named signal locations, of which 158 are road junctions, 278 are pedestrian crossings of various types and there are two signalled bridges.

It is estimated that the cost of fitting the bus priority modules to site signal controllers would cost £9,000 per junction and £6,500 per crossing, inclusive of supply, installation and testing. which adds up to a proposed investment of £3,103,900 for the entire County.

A full-time additional position for 3 years would be required to oversee this project and to undertake any feasibility configuration and linking work, at an annual cost of £70,000 including on-costs. This position would probably be a consultant, engaged solely to deliver this programme

Of the 438 sites, 147 are located in the Oxford City area, where there is a higher density of bus journeys and proportionately more delays to buses. On a typical urban corridor with 12 signal installations (thus 24 signals on the round trip) an average 10 second benefit to buses per signal could make a 4-minute journey time reduction on a round trip, thus making a very substantial contribution to better reliability, shorter and more attractive journeys and consequently more bus passengers.

It's proposed that the traffic signal programme would start in the Oxford City and would be rolled out on a corridor-by-corridor basis, starting with those routes which currently suffer from the greatest delays. This programme would then stretch outwards to the inter-urban corridors and the main Oxfordshire towns, before tackling more isolated signal installations. Banbury has 47 signal installations, Bicester 30, Witney 23 and Didcot 16 signalised junctions and pedestrian crossings. There are currently significant delays to buses in these towns.

C3   Barton Waynflete Road link

This proposal for a new section of one-way bus only road would link the Barton residential estate with London Road, thus avoiding the Barton exit onto Green Road roundabout which causes very significant delays to buses on route 8. The different between daytime and evening journey times from Barton to Oxford City centre is as much as 25 minutes – from 44 minutes daytime to 19 minutes evenings. This represents a resource cost of at least £360,000 per annum to operators, to maintain the 8 buses per hour level of service.

Green Road roundabout was last revised around 12 years ago, when a 'hamburger' lane was provided from the A40 (London) approach to A40 (Cheltenham) direction.

This five-arm roundabout operates at capacity on the four main approaches, but the fifth (Barton) arm is not signalised, and it is very difficult for buses to emerge onto the roundabout circulatory. Signalising the egress from Barton is not considered an option because this would cause unacceptable delays on the other four main arms, two of which have significant bus flows, from Oxford City Centre) (x buses per hour) and from Thornhill/London (y buses per hour).

The Waynflete-London Road link would result in buses being able to avoid the very long delays on the exit from Barton estate, instead actuating a traffic signal which would allow buses to join the flow from London/Thornhill, at the same time providing a pedestrian crossing for local people.

The cost of this link is estimated to cost £3.2 million.

(see plans)

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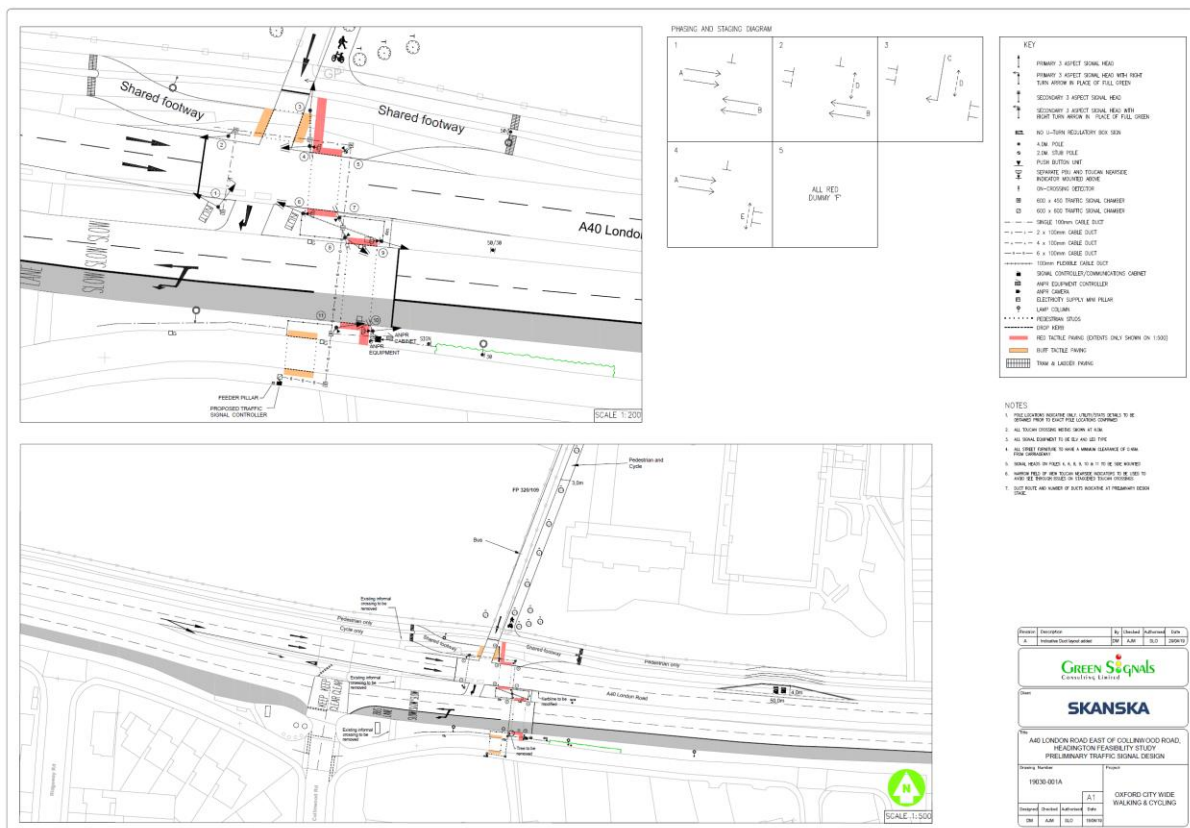
C4   Hinksey Hill A34 northbound exit

Buses from Abingdon and Didcot currently suffer significant delays in the morning peak approaching the Hinksey Hill interchange, where they take the southern bypass route towards Kennington Roundabout and then the Abingdon Road towards Oxford City Centre. The peak hour scheduled time for an x2 service from Abingdon Town

Centre to the City Centre in 36 minutes (Police Station) compared to 22 minutes during the inter-peak period. Around 10 minutes of this excess peak hour schedule can be attributed to the queue approaching the Hinksey Hill interchange.

A bus lane costing around £10 million could be provided by widening the exit slip road – this would extend back for some distance adjacent to the A34 trunk road,
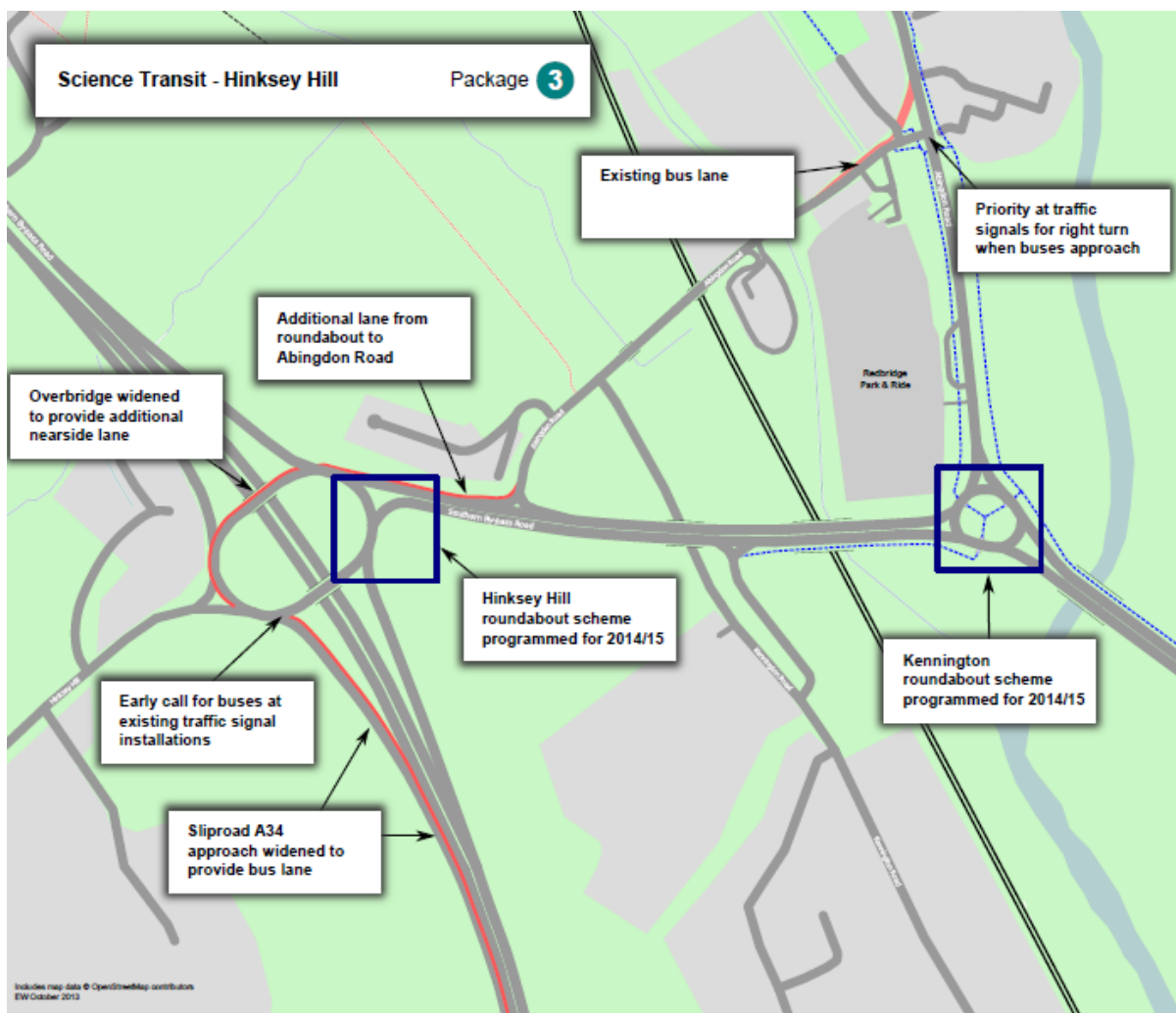
A section of bus priority lane is being provided on an adjacent scheme linking Hinksey Hill with Kennington Roundabout. This project being delivered from £15 million of Growth Deal monies, which will be used as match funding for the Hinksey Hill project.

(to be revised, to reduce length of bus lane and avoid cost of removing pedestrian overbridge)

[PDF] S-000988-FEA-000-0 25 Option 4 Concept l   [PDF] S-000988-FEA-000-0 26 Option 4 Concept l   [PDF] CA_APR1514R12 Annex 4 - City Deal.p

(see plans)

Science Transit - Hinksey Hill   Package 3

Existing bus lane

Priority at traffic signals for right turn when buses approach

Additional lane from roundabout to Abingdon Road

Overbridge widened to provide additional nearside lane

Hinksey Hill roundabout scheme programmed for 2014/15

Early call for buses at existing traffic signal installations

Sliproad A34 approach widened to provide bus lane

Kennington roundabout scheme programmed for 2014/15

Redbridge Park & Ride

Includes map data © OpenStreetMap contributors
EW October 2013

C5   Banbury Cherwell Street

The signalised Bridge Street intersection with Cherwell Street is of particular importance for Banbury's local and inter-urban bus network, as it is the gateway to the terminal area within the Town Centre. This junction operates over-capacity resulting in significant delays to buses, both into and out of the town centre. The provision of a section of bus lane and reconfigured traffic islands between the George Street and Bridge Street junctions, would save around 2 minutes (one sequence of the signals) for buses approaching the Town Centre on the following routes: B5, B9, S4, 488 (10 buses per hour) as well as services operated by Johnsons and Community operators. A reconfiguration of the signals would also save around 2 minutes per bus for the same routes, plus the B3 to Bodicote, the B9 to the Gateway Centre and the 500 to Brackley (so a total of 16 buses per hour) plus Johnsons and Community operators.

The estimated cost for widening Cherwell Street for the new bus lane and making changes to the traffic islands and signal sequencing is estimated to be £2.5 million. The scheme would also link with the Tramway project costing £3 million and funded through the Growth Deal. This project will re-route bus service B3 through the Rail Station forecourt area providing direct linkage between residents in several parts of Banbury and the rail station.

(see map)

C6   A44 Pear Tree park and ride junction

The A44 north of Oxford is soon to be transformed as a consequence of major new commercial and residential developments due to Cherwell's new Housing Allocation policy, with bus priority measures being included in a major physical enhancement of this corridor, to accommodate the additional movement which will be generated. The scheme designs aim to cap car travel at current levels, whilst increasing the use of more sustainable modes.

The section of route from Yarnton (Cassington Road) to the Pear Tree Interchange (A44 junction with the A34) will have near-continuous bus lanes and will be funded with £15 million of Growth Deal monies.

The section of route from the A44/A40 Wolvercote roundabout to a junction with a new link road between the A44 and A40 will be constructed as a Planning Obligation by the developers of the Oxford North site. This section will also include bus lanes and new bus stops.

These plans leave a short section of the A44 between the two schemes, which include the junction to the access road to the Pear Tree Park and Ride site. Delays to southbound buses along the A44 during peak hours currently cause significant delays to s3 services, as their route into the existing southbound bus lane is blocked by protruding traffic islands at this junction. These buses either must make a time-wasting detour into and out of the Park and Ride site, or they must wait until they can join the outer lane. Peak hour buses from Woodstock to the City Centre are currently scheduled to take 48 minutes rather than the inter-peak 38 minutes.

The estimated cost of the proposed works at the Park and Ride junction are £1 million, and these can be set against the £15 Growth Deal funded A44 project for the Pear Tree Interchange to Yarnton section.

(See plans)

C7   Benson Lane, Crowmarsh

This proposes a signalised right-turn for buses off the A4095, into Benson Lane which is the 'historic' direct route from Oxford towards Crowmarsh Gifford and Wallingford.

Currently Benson Lane is one-way only between the A4095 junction and Howbery Park, which is an employment site with many bus users travelling from Oxford. Currently they need to cross the fast A4095 road and walk some distance to their workplace.

The three inter-urban buses per hour on routes x38/x39/x40 are required to travel much further than is necessary, to the junction with the Henley Road, before turning west towards Wallingford

It is thought that creating this right-turn bus-only facility would also much better serve new housing situated along Benson Lane.

The indicative cost of this signalised junction and associated realignment of Benson Lane would be £2 million.

(see plans)

C8   Kidlington roundabout

This signalisation project at Kidlington roundabout would reduce peak-hour delays to buses passing southbound through Kidlington. Currently there are 13 buses per hour on routes 2, 7, s4, 500 and 700. There would also be significant reductions in journey times from Bicester to Oxford (currently 4 buses per hour on service s5).

The peak-hour journey time from Kidlington (Garden City) to Oxford (City Centre) is 28 minutes, while the inter-peak journey time is 22 minutes, a differential of 6 minutes. The peak-hour scheduled journey time from Bicester (Park and Ride) to Oxford City Centre is 42 minutes, whilst the inter-peak schedule is 31 minutes, a differential of 11 minutes.

The cost of the Kidlington roundabout scheme is £6 million, of which £1 million would be provided by Growth Deal funding, leaving £5 million to be funded by BSIP.

PDF

P1B Kidlington
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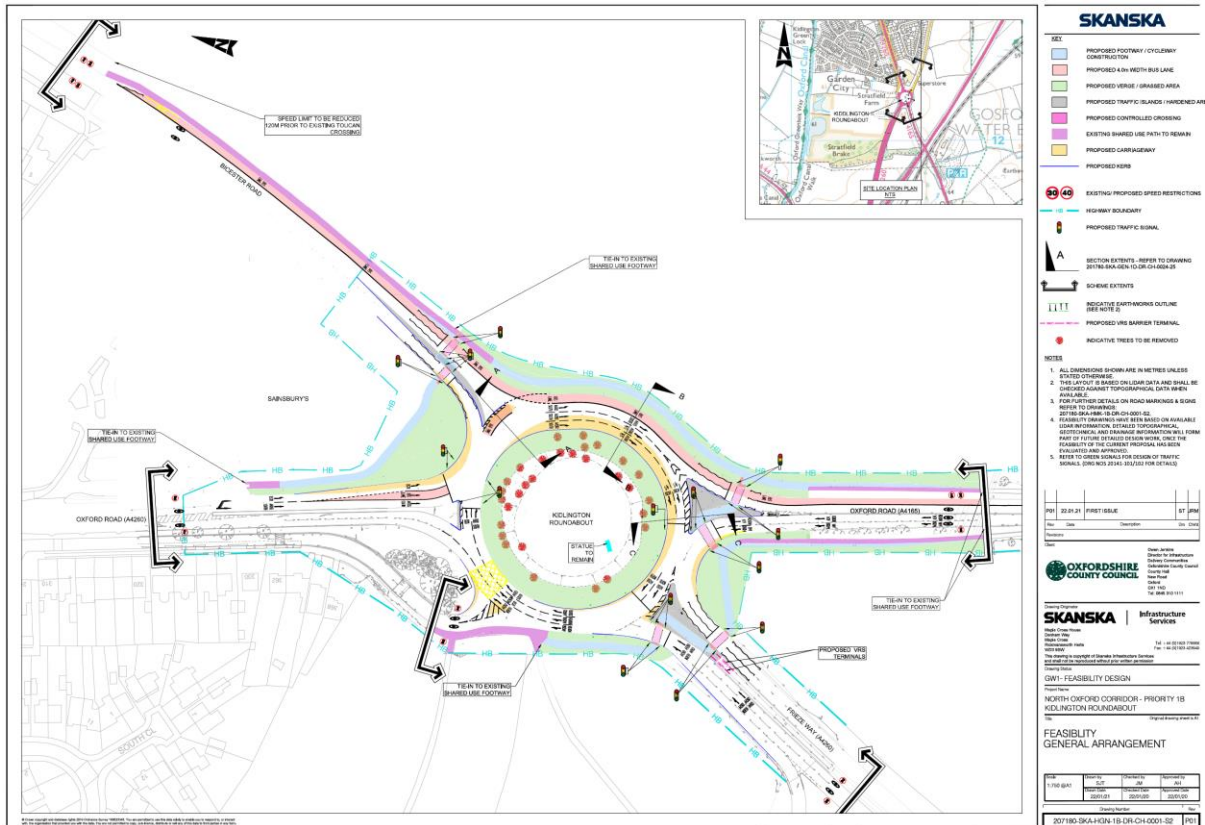
C9   Horspath Driftway

This project aims to relocate queues of cars which build up in peak hours from traffic turning from the Southern Bypass into Horspath Driftway, before turning into The Slade. The configuration of the mini-roundabout at the junction of the Slade, Hollow Way and the Slade results in northbound bus movement becoming blocked. The queue of cars would be relocated into the inner lane of the Eastern Bypass,

Buses on routes 10 and U5 (up to 10 buses per hour) would benefit, along the proposed new bus route from Abingdon/Redbridge to Eastern Arc workplaces and the JR hospital, reducing journey times and increasing the reliability of these services. Route 10 is currently scheduled to take 6 additional minutes during peak periods between Cowley and the JR hospital.
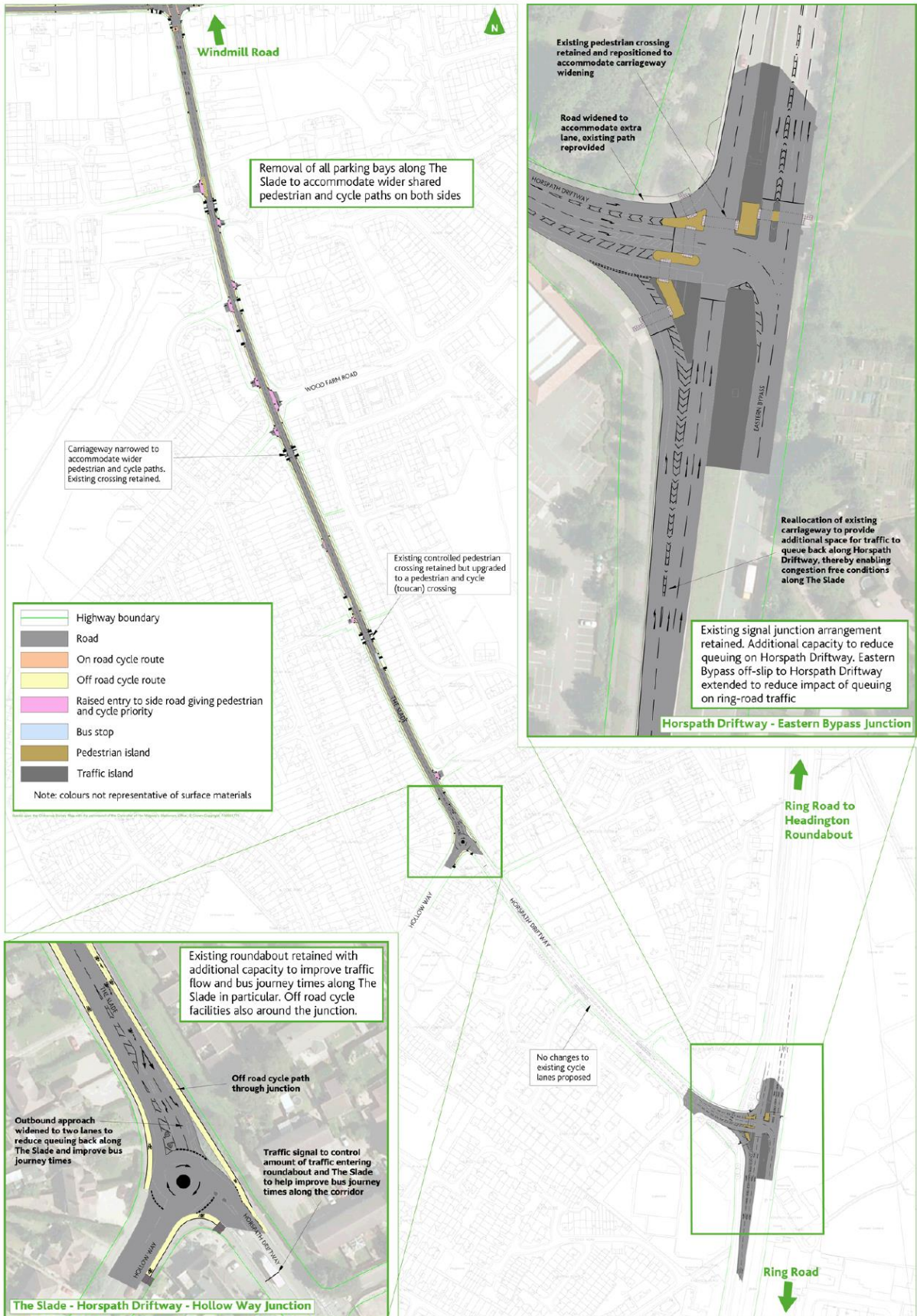
The cost of the Horspath Driftway queue relocation scheme is estimated to be £1.5 million.

(this may be included with the Connecting Oxford proposal)

A2H TRO
consultation_The Slad

7 The Slade - Horspath Driftway

Windmill Road

N

Removal of all parking bays along The Slade to accommodate wider shared pedestrian and cycle paths on both sides

Existing pedestrian crossing retained and repositioned to accommodate carriageway widening

Road widened to accommodate extra lane, existing path reprovided

WOOD FARM ROAD

Carriageway narrowed to accommodate wider pedestrian and cycle paths. Existing crossing retained.

Existing controlled pedestrian crossing retained but upgraded to a pedestrian and cycle (toucan) crossing

Reallocation of existing carriageway to provide additional space for traffic to queue back along Horspath Driftway, thereby enabling congestion free conditions along The Slade

Existing signal junction arrangement retained. Additional capacity to reduce queuing on Horspath Driftway. Eastern Bypass off-slip to Horspath Driftway extended to reduce impact of queuing on ring-road traffic

Horspath Driftway - Eastern Bypass Junction

	Highway boundary
	Road
	On road cycle route
	Off road cycle route
	Raised entry to side road giving pedestrian and cycle priority
	Bus stop
	Pedestrian island
	Traffic island

Note: colours not representative of surface materials

Ring Road to Headington Roundabout

Existing roundabout retained with additional capacity to improve traffic flow and bus journey times along The Slade in particular. Off road cycle facilities also around the junction.

Off road cycle path through junction

Outbound approach widened to two lanes to reduce queuing back along The Slade and improve bus journey times

Traffic signal to control amount of traffic entering roundabout and The Slade to help improve bus journey times along the corridor

No changes to existing cycle lanes proposed

HOLLOW WAY

HORSPATH DRIFTWAY

The Slade - Horspath Driftway - Hollow Way Junction

Ring Road

Other BSIP capital projects

46. There are four other capital projects for further consideration. (scheme reference C10 to C13),

C10   Mobility Hubs

There has been much discussion recently about the Mobility Hub concept, in an aim to provide much better interchange between several modes of transport, and potentially making the bus more accessible to a wider range of users.

The concept is modular, but sites including more modules (showers, toilets, workspace etc) would take some time to design and deliver, would need planning permission and business cases for staffing etc, which would probably rule out the more ambitious models for delivery within the three-year BSIP timeframe.

However, it appears more likely that this type of Mobility Hub could be provided through the Development Planning process, in a similar manner to the Bicester Park and Ride site, which was delivered through the Bicester South West (Kingsmere) Planning Application. This type of facility would need to appear in Planning Policy documents before these Development sites come forward, thus generating negotiations, This type of site could take up to 10 years to deliver.

Another route for delivery of Mobility Hubs might be through partnership working with large sympathetic organisations, – Science Parks, Universities, Hospitals etc. Whilst the Council has ongoing relationship with these bodies, working up an agreed design and consequent delivery plan would also be protracted, probably over 3 years unless a start has already been made.

The Harwell Science Centre is currently planning to construct a 'Travel Hub' on its land, so it is proposed that this site becomes the first Oxfordshire Mobility Hub in this category, This would benefit a scattered rural population to the south of Harwell campus, as well as providing more options for movement to the further reaches of the very extensive Harwell Campus site.

It is probable that some of the Oxfordshire Park and Ride sites could be modified, as these sites already belong to local Councils. Whilst these of these sites have staff, toilets and a heated waiting area, there would probably not be enough space for showers/workspace etc without some form of building extension. The amount of covered cycle parking could be increased, however.

Redbridge Park and Ride site could become a Mobility Hub, as it could act as an interchange point for South/East Oxford residents cycling to interchange with inter-urban bus services heading towards Crowmarsh, Abingdon, Milton Park and Harwell. A new Park and Ride site is scheduled to be constructed soon at Eynsham on the A40 corridor west of Oxford. The site would appear to have the potential for some modifications to the current design to provide elements of the Mobility Hub concept.

There is possibly more opportunity for rural 'opportunity sites' in Oxfordshire. These would be relatively low-cost upgrades at certain locations, where there is some

existing 'spare' tarmac which could be formalised as a parking area. There would need to be much better shelters and there would need to be some secure/covered parking for cycles, and some provision of surfaced footway.

There are currently eight indicative rural mobility hubs along the A420 (Oxford-Faringdon-Swindon) and the A4074 Oxford-Wallingford-Reading corridors.

A420 corridor (Served by the s6 inter-urban bus from Swindon to Oxford, 3 or 4 buses per hour)
1. West of Southmoor, junction with Charney Lane
2. East of Kingston Bagpuize
3. Faringdon, Coxwell Road
4. Watchfield, Majors Road

A4074 corridor (Served by the x38, x39, x40 inter-urban bus from Wallingford to Oxford, 3 buses per hour)
1. Benson Marina
2. Berinsfield, A415 junction
3. Golden Balls
4. Nuneham Courtenay, opposite Arboretum

Currently there's a line in the BSIP bid suggesting that 3 Mobility Hubs might be progressed, at a cost of £500,000 each. But this would seem excessive where spare tarmac for parking already exists, such as west of Southmoor, or at Benson Marina. Perhaps we could progress six at an average cost of £250,000 per site – so we could have Harwell, one of the Park and Ride sites and two of each of the A420 and A4074 corridors.

C11   On bus ticketing equipment

1 Development and modernisation of Oxford Smartzone

Oxfordshire has a market-leading multi-operator Smartzone scheme, which has been in place since 2011. This covers all services operated by Go-Ahead and Stagecoach operating in the greater Oxford area.

Smartzone tickets can be purchased via the following means:
- On-bus, as a day ticket or by topping up a Smartcard. Only tickets of less than 4 weeks duration can be topped up on board buses.
- In a travel shop, by topping up a Smartcard
- Online, by topping up a Smartcard

Prior to the COVID-19 pandemic, Smartzone was highly successful with around 10m journeys being fulfilled each year using these products. A survey from the TAS partnership in 2018 found that 81% of respondents saw the scheme as offering good value for money.

The scheme is operated as a joint venture by the bus operators, with no involvement from the LTA. An independent information referee is employed to apportion revenue between operators, and to check and periodically audit data returns made by operators. This model has generally worked well, however as with any mature scheme some areas for development have been identified and we will seek to address these in this plan.

Firstly, the scheme does not include smaller operators operating within Oxford City, such as Arriva, Red Rose / Redline and Pulhams. Both Arriva and Red Rose / Redline are currently in the process of setting up their ticket machines to accept Smartzone products and we expect this to be in place by the start of the 2022/23 financial year.

Secondly, the requirement to first hold a Smartcard to be able to access scheme products acts as a barrier to entry to the scheme and can make it difficult for shorter term visitors to the city to access. To address this, it is planned to introduce Oxford Smartzone QR coded mobile app tickets, with these being targeted for launch around the start of year 1. Operators have already invested in QR coded enabled ticket machines and have drawn up a project plan to implement this technology, however a contribution of £150,000 is sought from the National Bus Strategy funds to allow set up, testing and the onboarding of smaller operators to this. The advantages of doing this will be to remove barriers to travel, reduce scheme fulfilment costs and act as a "proof of concept" for schemes involving differing ETM suppliers. Thus far, successful QR code based multi-operator schemes have only been implemented where all operators utilise the same ticket machines. This work is essential to ensure that moving forward, operators maintain the ability to keep an open choice for the purchasing of a ticket machine equipment and avoids the possibility of a monopoly developing in the supply chain.

Thirdly, the day ticket element of the scheme is currently operated as an "MIT" product, with revenue laying where it falls, unlike the longer-term Smartcard-only tickets which are operated as "MTC" products, with revenue re-apportionment between operators. This limits the ability for joint promotion of the day ticket, as each operator must be free to price these tickets as they see fit under competition law. It is planned to address this issue by converting the day ticket to a QR coded "MTC" product once the app channel has been implemented. This will enable improved promotion of the day ticket, as well as for multi-operator day tickets to be sold through off-bus channels such as mobile apps for the first time. Similarly, once a paper MTC range is established, this may enable the introduction of an on-bus weekly multi-operator ticket within Oxford, or a county-wide multi-operator day ticket similar to the Hertfordshire "Intalink Explorer", each which has been noted as a current gap in the range. This will also allow the foundation to be put in place for future deployment of multi-operator capping schemes as described in 2 below.

Finally, awareness of the scheme is limited – TAS found that 61% of bus users surveyed in Oxford city in 2018 had heard of Smartzone. Operators also market their own products and the choice of tickets of both Smartzone and "operator own" tickets are quite broad. Therefore, choosing a ticket can appear confusing, particularly to new or occasional bus users. To address this, we plan to re-launch Smartzone with consistent on-bus and roadside signage denoting where the scheme is valid. We are

requesting funding of £50k to support this re-launch and to ensure all vehicles within the Smartzone area carry easily identifiable Smartzone branding on the exterior of the vehicle, to clearly show customers that the ticket is accepted.

2   Simplification of product range

Research and feedback from stakeholders have consistently indicated that fares in Oxfordshire, and within Oxford city can be confusing and make it difficult for new users, or those new to the area to work out the best value ticketing products for them, particularly in season tickets and carnets.

This is partially due to the operating environment, with Oxford city home to several multi-operator corridors with services shared between operators under Qualifying Agreements. For competition compliance reasons, operators have continued to offer their own single operator products as well as the multi-operator SmartZone ticket, and it has been challenging to communicate simple messages around the inter-acceptance of returns and day tickets within the Smartzone due to competition law factors, as well as the pressures of commercial competition between operators. Similarly, commercial issues have historically limited the extent to which operators have wished to promote the multi-operator ticket range, with the range generating very low yields for operators due in part to the fact that a significant proportion of the tickets are sold as heavily discounted annual products, often through workplace "salary sacrifice" or "pay monthly" interest free loan schemes.

Under the Enhanced Partnership we hope to address this issue through a review of the season ticket range for both adults and young persons. Within the city it is proposed to withdraw single operator tickets and replace these with the Smartzone range. The Smartzone range will have a weekly on-bus paper variant added, and will be expanded to operate on mobile, as well as on Smartcard. All operators running services within the Smartzone will be required to accept Smartzone tickets for travel and encouraged to join the scheme to benefit from revenue apportionment from the scheme products.

The withdrawal of own operator tickets within Smartzone will make marketing of season tickets for travel on services into Oxford from outside the zone more simple. Operators will work to offer a simple "add Smartzone for £x" message to their own operator period tickets for these journey types, with this being consistently applied across all services.

Some of the longer term Smartzone passes will be rationalised with a view to offering a consistent range across all channels, simplifying the ticket range and removing excessively low yield products to allow operators to maintain an attractive and low-priced range of on-bus fares.

No funding is required from the BSIP for this part of the strategy, but it will form a fundamental building block of making buses more accessible and easier to understand in the county.

3   Further roll out of Tap on, Tap Off ("TOTO") in Oxford city

Oxford is a city with a higher-than-average level of on-bus transactions, and this is partially caused by the challenges with Oxford Smartzone noted above. These impacts boarding times, with TAS finding in their research in 2018 that tickets purchased on-bus took on average 10-11 seconds to issue, compared with 5-7 seconds for QR code or Smartcard ticket transactions to be completed. TAS found that some 80 operating hours per day were spent issuing on-bus single, return or day tickets, and that it may be possible to reduce this by as much as a third, leading to journey time savings with appropriate migration of these purchases to off-bus channels, or to TOTO for those who resist "planning ahead."

Go-Ahead has offered TOTO functionality with single operator capping on all its services in Oxfordshire through its "Freeflow" product, since June 2020. Currently this makes up only a limited percentage (<5%) of on-bus revenue, due to the lack of consistency between operators of the channels on offer and lack of a multi-operator cap within the Oxford Smartzone area. Go-Ahead has felt that introducing a cap within this zone might lead to competitive tension with Stagecoach, as well as the possibility for confusion for customers, who might expect the cap to work across operators as is the case with many other tickets in this zone and has therefore not proceeded to do so.

To introduce multi-operator capping, it is first necessary for each operator to introduce TOTO functionality with capping for its own services and products. We therefore propose to seek funding to widen the roll out of TOTO to Stagecoach, Arriva, Red Rose, Redline and Pulhams services. This will allow a more consistent customer experience between operators which should in turn lead to increased take up of TOTO, with a corresponding reduction in single fares being purchased. This will lead to an improvement in boarding times within Oxford Smartzone and will allow the foundations to be put in place for multi-operator capping to be delivered, once the industry project CORAL to deliver the industry back-office solution has concluded. As well as funding physical readers, it is likely that funding will also be required for development of the technology to underpin the scheme, either in development of existing single operator back offices to be compatible with a multi-operator scheme, or to allow those operators without their own back offices to be able to participate.

Summary	2022/3	2023/4	2024/5
System integration	150,000		
Card readers	100,000	100,000	
Machines for small operators	50,000	150,000	50,000
Totals	300,000	250,000	50,000

C12   Real Time Information

'Next bus' information is also currently available on the County's 'Oxontime' website, through electronic displays at 261 bus stops and through a text messaging facility. This system has been in operation for around 15 years and is now increasingly outdated, with increasing failures of equipment

A targeted programme of new 'totem' signs for comprehensive displays at key public transport hubs and interchanges (including rail stations) is proposed. There would also expedite a programme of replacing older signs and providing new sign infrastructure where required. This programme would help to restore Oxfordshire's previous reputation as a nationally recognised leading public transport authority.

Replace 175 old signs   @£7,000 each - £1,225,000
25 new totem signs   @£24.000 each   £600,000
50 new standard signs   @£8,000 each   £400,000

These costs are derived from existing contracts and include an allowance for civil engineering works for the new 'standard' and 'totem' signs.

Examples of possible new Totem sign locations   (will be multiple signs in some locations)

Cowley	Witney	Redbridge
Headington	Carterton	Water Eaton
Summertown	Chipping Norton	Gloucester Green
Abingdon	Banbury	Wantage
Didcot centre	Bicester	Thame

It's possible that one or more totem signs could be located in rail stations. However, as the installed cost of a sign in a station would be roughly double the cost of an installed totem sign on-street, then each sign installed on railway land would reduce the number of on-street signs by two

Total capital cost   £2,225,000

	2022/3	**2023/4**	**2024/5**	**Totals**
Replace old RTI signs (175)	475,000	375.000	375.000	1,225,000
New totem RTI signs (25)	200,000	200,000	200,000	500,000
New standard RTI signs (50)	100,000	150,000	150,000	400,000
Totals	**775,000**	**725,000**	**725,000**	**2,225,000**

C13   Improvements to bus stops

Oxfordshire has around 3,000 bus stops, of which around 2,000 are located on routes with at least an hourly daytime bus. There are up to 1000 shelters at these stops, and there are 261 Real-time information signs at these stops.

The quality of these bus stops varies enormously .The Council aims to establish standards for its estate of bus stops, which will be divided into three categories, as follows:

Premium
Stops on routes with a turn-up-and-go bus service of at least four buses per hour (currently or expected to be, as a consequence of housing/commercial development in the near future) plus evening/Sunday bus service

Second-tier
Stops on routes with at least an hourly bus service on weekday daytimes

Minor
Stops on routes with less-than-hourly service on weekday daytimes.

It is proposed to establish minimum standards for these types of bus stops. The Premium Route stops will attract the largest numbers of passengers to these access points to the bus network, so these will have higher standards of accessibility (kerb heights, ramp access etc), higher standards of information (wayside displays and in many cases electronic information) and higher standards of comfort (shelter, seat etc),

The Council will also strive to improve Second-tier and minor bus stops to minimum standards of provision, including hard-standing areas and a distinctive pole/flag/information case unit, which will advertise the stop location for bus users and also provide basic timetable information.,

There was substantial investment in stops along the County's Premium Bus Routes between 10 and 20 years ago, but since then there has been some deterioration. Since then, stops have been provided on an ad-hoc basis for new development sites, but bus stops elsewhere on the same routes can be dilapidated.

An annual capital budget of £500,000 for each of the next three years is proposed for a programme to catch up with arrears of maintenance, and to upgrade infrastructure to the proposed standards as required. This amount will also cover the procurement of some new shelters, where these cannot be included in the proposed new advertising shelter contract.

BSIP revenue support

47   There are nine projects or schemes which would require revenue support from BSIP, referenced R1 to R9. some of these requiring ongoing support from the Council's revenue budget,

R1. New rural bus route project

Six semi-flexible new bus routes would be created in the more rural parts of Oxfordshire. The current thinking is that seven new buses would be purchased by the Council, and initially these vehicles would be maintained and operated by the Council's in-house fleet service.

The areas to be served would include villages where all bus services were withdrawn in the last decade, so the new routes would link residents to various services (retail,

medical, education and social) in addition to the wider public transport network linking to larger centres.

The new bus users would access a range of travel tickets, including single fares and day tickets from the integrated Oxfordshire range

Currently, it is anticipated that these buses would operate on an hourly or two-hourly basis during weekday daytimes, in a similar manner to the Lincolnshire Call-Connect model or the Call-Connect service that was operated until recently in South Northamptonshire. These buses would be semi-scheduled, so more localities can be served than a fixed route, Buses would leave termini at fixed times, but the actual route would depend on phoned-requests or requests to the driver at terminal points.

It is currently considered that a tech-led operating model using 'apps' would be inappropriate to the probable demographic and potential users in these areas. This facility could be offered at a later stage of the rural bus project, but then there could be significant additional costs. Initially there would be a contractual arrangement with a call-centre.

Currently it is proposed that the Council purchases eight vehicles, similar to the Mellor Strata minibuses currently operated on routes in East Lancashire (County Council contract with Transdev). Purchase cost is to be verified, but currently £100,000 per vehicle is assumed. These lightweight vehicles benefit from low fuel consumption, compared to a standard bus.

Following a two-year evaluation, the County Council may offer the operation of these services to commercial companies. Ownership of the vehicles would remain with the County Council.

The eight vehicles would include two maintenance spares, so that six different routes could be operated daily.

There would be considerable emphasis on encouraging the use of these routes by local people, to create a sustainable operating model beyond the period of BSIP funding. It is important that regular income is secured, for example by conveying secondary school-pupils and college students at the appropriate times. Income from operating these services will be estimated and will be included in calculation of the net operating cost.

The following list suggests several potential routes/areas of consideration, and further analysis is required to select the six preferred new routes.

Possible rural flexible routes

A. Otmoor – linking to Wheatley and Bicester

Could potentially serve Forest Hill, Stanton St John, Beckley, Horton-cum-Studley, Noke, Oddington, Charlton on Otmoor, Fencott, Murcott, Upper Arncott, Piddington, Blackthorn.

Would link to Premium Route bus services to Oxford and Thame in Wheatley, also route to Cowley centre.

Would link to bus services to Oxford and Buckingham in Bicester, also services to Brackley and Aylesbury. Would also link to Bicester Village rail station.

B. White Horse - linking to Wantage and Faringdon

Could potentially serve Letcombe Regis, Letcombe Bassett, Childrey, Sparsholt, Kingston Lisle, Uffington, Woolstone, Ashbury, Baulking, Shellingford, Baulking, Fernham, Longcot, Little Coxwell,

Would link to Premium Route services to Abingdon, Oxford, Harwell, and Didcot in Wantage Town Centre

Would link to bus services to Oxford and Swindon in Faringdon.

C. North Downs – linking to Didcot and Harwell Campus

Could potentially serve North Moreton, South Moreton, Aston Tirrold, East Hagbourne, West Hagbourne, Blewbury, Upton and Chilton

Would link to bus services to Milton Park, Abingdon, and Oxford, also bus services to Wallingford and Wantage at Didcot. Would also connect with trains at Didcot Parkway station

Would link to bus services to Wantage, Didcot, Oxford, and Newbury at Harwell.

D. Cherwell Valley - linking to Bicester

Could potentially serve Bucknell, Ardley, Fritwell, Somerton, Souldern, Clifton, Stratton Audley, Fringford, Hethe, Hardwick

Would link to bus services to Oxford and Buckingham, other bus services to Aylesbury and Brackley in Bicester
Could extend to Bicester Village station

E. North Oxfordshire – linking to Banbury

Could potentially serve Little Bourton, Great Bourton, Cropredy, Mollington, Claydon, also Hornton, Horley, Shutford, North Newington

Would link to strategic bus services towards Oxford and Chipping Norton in Banbury, Would extend to Banbury station with the new Tramway scheme.

F   West Oxfordshire – Linking with Burford

There is less certainty here, due to the recent launch of Community Transport operations. Whilst care will be taken to not de-stabilise these operations, there are

communities which are unserved by bus, or which have only a very infrequent service – Idbury, Fifield, Taynton, Fulbrook, Swinbroke, Asthall Leigh, Fordwells

Bus connections at Burford for Witney, Oxford, Hanborough station.

G   West Oxfordshire – Lechlade link

Could potentially serve the scattered communities between Witney/Carterton and the Gloucestershire border at Lechlade – but the alternative inter-urban proposal for a direct link to Swindon would be a more commercial proposition.

Bus connections in Carterton for Oxford, in Lechlade to Highworth and Cirencester

H   South Oxfordshire Chilterns – Linking Henley with Woodcote

Could potentially serve Rotherfield Peppard, Rotherfield Greys, Kidmore End, Checkendon, Stoke Row

Bus connections in Henley for Reading, High Wycombe, Wallingford and Oxford. Would extend to Henley rail station
Bus connections in Woodcote for Reading, Wallingford and Oxford,

I   South Oxfordshire Chilterns – Linking Wallingford with Thame

Could potentially serve Shillingford Hill, Ewelme, Britwell Salome, Watlington, Pyrton, Lewknor, South Weston, Great and Little Milton, Great and Little Haseley. Tetsworth may be served but is located on High Wycombe-Oxford route,

Bus connection in Wallingford for Oxford, Reading, Henley
Coach connection in Lewknor
Bus connection in Thame for Oxford, Aylesbury and High Wycombe

J   Bicester – Kidlington

Could potentially serve Chesterton, Weston on the Green, Kirtlington, Bletchingdon, Hampton Poyle, Lower Heyford.

Bus connections in Bicester for Oxford, Milton Keynes, Brackley. Could extend to Bicester village station.

Bus connections in Kidlington for Oxford, Woodstock and Banbury.

BSIP rural bus bid components

	2022/3	2023/4	2024/5	2025/6	continuing
Capital BSIP	800,000				
Revenue BSIP	650,000	650,000	600,000		
Revenue OCC				500.000	500,000

Capital: £800,000 for seven new Mellor Strata vehicles (or similar)   (Year 1))

Revenue: £650,000 net operational cost in years 1 and 2, inclusive of drivers' wages and back-office costs - £600,000 net operational cost in year 3, inclusive of income from users

£500,000 per annum net operational cost in year 4 onwards to be borne by the Council's revenue budget,

R2.   Restoration of Cross-boundary bus services

This project would restore the following bus service links which cross into neighbouring local authority areas, which have been withdrawn in the last two decades. It is assumed that these new/restored services would become fully commercially viable after a period, here assumed to be eight years.

A   Newbury-Harwell-Oxford (or Didcot)

This service would link West Berkshire and Oxfordshire. Historically there was an hourly Newbury to Oxford bus service along then A34, but in more recent times, this service was split into several sections and finally the Harwell Campus to Newbury section of route was lost. Restoration of this link is a priority of the Newbury MP, and there have been meetings to progress this project.

This scheme would provide access to employment in both directions, as well as providing an hourly all-purpose daytime bus service between the peaks.

Costs of the service between Newbury and Harwell Campus would be shared with West Berkshire Council, and some s106 would be allocated from the Harwell Campus site. Costs of this service enhancement would also be contained by linking the Newbury-Harwell Campus section (with one of the existing bus services operating from Harwell to Oxford (or to Didcot).

B   Oxford-Bicester-Brackley-Northampton

Historically there was an 'express' direct bus service between Oxford and Northampton, with many connections available to destinations. However, this journey has become more difficult in recent years as routes have been chopped into shorter sections with fewer journeys.

In particular, the Bicester-Brackley section of route was lost around 5 years ago during a round of tendered service reductions. However new bus service 505 started around 2 years ago, funded by section 106 contributions in Brackley. Unfortunately, the pandemic conspired to undermine this initiative, so few passengers benefited and sadly this funding will cease in the near future. The BSIP process offers an opportunity to re-boot this essential bus link and to tie it in with plans for a refreshed hourly bus service from Brackley to Northampton and with the existing s5 Bicester to Oxford bus service.

C.   Oxford-Carterton-Lechlade-Swindon

Service 64 linked Carterton to Lechlade and Swindon every 2 hours until around 5 years ago, and the loss of this service means that journeys between West Oxfordshire, Lechlade and Swindon are currently not possible by bus, with work, education and social journeys lost. In particular, access is no longer possible to College Education in Swindon for West Oxfordshire residents,

A planned revision to the Oxford-West Oxfordshire bus service pattern now offers an opportunity to create a refreshed link to benefit West Oxfordshire residents, not only from Carterton but also from Witney, at a cost of one additional vehicle allocated to this route.

Summary funding table (£ thousands)

Newbury	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
BSIP	80	70	60					
OCC						20	20	10
S106				50	40	10		
Northampton								
BSIP	160	140	120					
OCC				100	80	60	40	20
Swindon								
BSIP	160	140	120					
OCC				100	80	60	40	20
Funding Totals								
BSIP	400	350	300					
OCC				200	160	140	100	50
S106				50	40	10		

R3.   SBSF services commenced in September 2020.

Thirteen Oxfordshire bus services were created, or amended, in September 2020, using £588,000 from the DfT's Supported Bus Services Fund. These services have now operated for the full year of the DfT scheme, and more funds have been found internally to extend their operation until March 2022.

It is proposed that BSIP should fund the continued operation of these services for the next three years, from April up to March 2025. During 2024 it is suggested that a review would determine their future operation

- Service 11: Watlington – Chalgrove —— Garsington – Cowley – Oxford
  Sunday service consisting of 4 journeys each way,

- Service 20: Rose Hill – Cowley
  Three off-peak journeys in each direction, on Mondays to Fridays.
- Service 40: Thame – Chinnor – Stokenchurch – High Wycombe
  Sunday service introduced, operating at an hourly frequency.
- Service 45: Abingdon – Berinsfield – Sandford – Littlemore – Cowley
  New Monday to Friday journeys between Cowley, Berinsfield and Abingdon.
- Service 47: Lambourn – Ashbury – Bishopstone – Swindon
  Contribution to West Berkshire Council to maintain this service
- Service 63: Southmoor – Longworth – Appleton – Cumnor - Oxford
  New Monday to Friday service consisting of five journeys in each direction.
- Service 136: RAF Benson – Benson – Crowmarsh – Wallingford
  Retention of existing Monday to Friday peak hour journeys
- Service 233: Woodstock – Bladon – Long Hanborough – North Leigh – Witney
  Sunday service introduced, operating at an hourly frequency.
- Service 488: Chipping Norton – Hook Norton – Bloxham – Banbury
  Sunday service introduced, operating at a broadly two-hourly frequency.
- Service S4: Banbury – Deddington –– Tackley – Kidlington – Oxford
  Additional evening journeys provided on Mondays to Saturdays.
- Service X8: Chipping Norton – Kingham Station
  New service on Mondays to Fridays connecting with peak-hour rail services.
- Service X9: Chipping Norton – Chadlington – Charlbury – Finstock – Witney
  Saturday service enhanced to same level as Monday to Friday service.
- Service X38: Henley – Nettlebed – Crowmarsh – Wallingford
  Sunday service introduced, operating at an hourly frequency.

It is proposed that a bid for £500.000 per annum is made to BSIP to continue operation of these services.

	2022/3	2023/4	2024/5
SBSF services	500,000	500.000	500.000 (review)

R4   Improved fares offer for Oxfordshire residents

Expansion of youth fares offering

In Oxfordshire, both major operators give discounts to young people, however the level of discount in offer is inconsistent between operators and across ticketing channels. Oxford Bus Company and Stagecoach both give 50% discount to under 16's on their on-bus fares, although outside of the city the two companies offer only 33% discount.

Through off-bus channels such as app or smartcard-based season tickets, young person discounts are available up to and including the age of 18, but at a more modest 25% discount.

Oxford Bus Company and Thames Travel also have a "Get Around" card which gives a flat fare of £1 to those aged 18 and under within Oxford city. However the card costs £5 to obtain, and the discounts are not valid outside of the city or on other operators' services.

This adds up to a confusing picture which it is felt can discourage bus use among younger people and therefore it is proposed to standardise the youth fares offer to cover up to and including 18 years of age at 50% discount for on bus-fares and 25% discount for season tickets, with the reduced discount for seasons reflective of the fact that these are already discounted and are important tools in ensuring the viability of many homes to school services.

We are requesting funding of £1,000,000 per annum through this BSIP to deliver these discounts, which we hope will encourage positive habit forming in our young people and support their continued engagement in education, training or apprenticeships between the ages of 16 and 18.

Discounts to improve bus usage among low earning workers in Oxford City

Oxford City is one of the 5 locations in the UK with the highest index of house prices to average earnings. The city sees a large net inflow of workers each day, many of whom are forced to live away from the city in cheaper dormitory locations such as Bicester, Didcot, Witney and Abingdon due to the unaffordability of housing within the city.

One of the worst affected employers is the Oxford University Hospitals NHS Trust. The Trust operates several large hospital sites in the Headington area and employs large numbers of staff in relatively low paid nursing, cleaning and porter roles, the salary level for which is set by central government with no ability for the Trust to adjust salaries to reflect local market conditions. The hospital sites are major traffic generators, with the John Radcliffe site being a major contributor to traffic congestion and bus journey time volatility within the east of the city.

It has been identified by the bus operators, through discussion with the Trust that there is currently an issue with the relative price of bus tickets in comparison with staff parking permit prices at the hospital sites. For example, currently the Trust charges £28.75 per month for a staff parking permit, whereas a 4-week Smartzone bus ticket is £61. For those travelling from further afield – which naturally includes many those in the lower grades, due to the issue with housing availability within the city – an equivalent 4 weekly bus pass will cost as much as £90. This price differential acts as a disincentive to bus travel amongst the lowest paid staff, and while the Trust wishes to increase prices and reduce the number of staff parking permits issued, it must also be mindful of the impact on staff recruitment and retention of such a move, if suitable alternatives are not in place.

At present, Trust staff are not open to switching from car to bus travel, and these habits have been hardened during the pandemic period, when public transport use was discouraged and when additional, temporary staff parking concessions at NHS sites were introduced. A staff travel survey run in June 2021 collected 2,873 responses from the Trust's 13,000 employees. Of these, over 1,700 used private cars to get to work. When asked, 1,473 of these stated that they would not consider using public transport to get to work, with many of these stating that cost and lack of subsidies was a reason for this view.

We are therefore proposing to trial an enhanced staff discount scheme for those in the lowest paid grades 2-5 at the Trust. These staff will be offered 75% off their bus tickets (grades 2-3) and 50% off (grades 4-5). This covers a total of 5,869 staff based at the Headington sites in Oxford, of whom 2,427 are in grades 2-3 and 3,442 are in grades 4-5. Initially this will be applied for a six-month period to understand take up levels and to allow data to be gathered by the Trust to inform the development of a business case to make the scheme permanent, with match funding from the Trust generated from an increase in parking permit prices for visitors and staff in higher grades. We estimate that this trial will need funding of £750k from the BSIP to support the initial discounts being offered.

The NHS Trust would administer the ticket scheme, using existing structures. They would also be prepared to commit funding to the scheme if they a positive business case can be demonstrated. The ongoing funding proposition would therefore be;

Year 1: £750k funding for first 6 months, £400k funding for second six months with remainder covered by Trust giving £1.15m in total.
Year 2: £800k funding in total
Year 3: £600k funding in total (would hope to either increase share from Trust over time, or see benefit in revenue to justify this)

From year 4 onwards, to be funded from the Workplace Parking Levy.

Summary	2022/23	2023/24	2024/25	onwards
BSIP	1,150,000	800,000	600,000	
NHS trust	200,000	400,000	400,000	400,000
WPL				600,000
Total	1,350,000	1,200,000	1,000,000	1,000,000

R5   Improved Passenger Information – operational budget

Unlike many other Local Transport Authority areas, there is currently no central portal for bus service information in Oxfordshire. No maps or diagrams are produced to show the bus service network of all operators, or connection points with the rail network. This BSIP proposes to change this situation by making a significant step-change in provision. Further development of a centrally provided information hub could be an Oxfordshire public transport website, which could then lead to a portal for multi-operator ticket sales.

The provision of good quality public transport information requires investment in staff resources, both by the Council and by operators. Whilst certain types of information can be imported automatically, it is necessary to maintain a central electronic timetable database from which information can be exported in various formats to on-street signs, to websites and apps, to the national Traveline service and to operators for production of information at 'wayside' bus stops.

It is proposed to create a comprehensive County website for public transport information and to produce a suite of maps and diagrams showing the overall Public Transport network across the County and in the different towns. These maps would

be used in Interchanges, in Bus Shelters and in other places and formats. An ongoing Revenue Support budget of £300,000 is required to pay for support costs (including fees to the RTI system support contractor, the cost of producing maps, and designing a new website.)

R6   Additional staffing

Additional staffing resource is required in most parts of the public transport function of the County Council, to underpin delivery of a more reliable public transport network, to improve the stock of bus stops and interchanges and to provide much improved information to the travelling public.

It is considered that the roadworks coordination, traffic signal operation and scheme design functions each require an additional member of staff focused on public transport operations, so a revenue budget of £200,000 is proposed (including on-costs).

An annual revenue budget of £300,000 (including on-costs) is also required to provide adequate staffing for the bus stop maintenance/improvement and the improved travel information functions.

R7   Investment in the future network

There is considerable uncertainty regarding the level of national government support for bus companies to compensate for the loss of patronage due to the COVID pandemic, associated negative messaging about travelling by bus and the consequent changes to working arrangements. Currently patronage levels by bus in Oxfordshire are only around 65% of pre-COVID levels, with some types of route recovering better and others worse, it is now apparent that there will be no more government funding to compensate bus operators for lost revenue, so now it will be for bus operators/local authorities to reduce operating costs and to use the BSIP as a means of continuing to provide some level of financial support, rather than lose complete bus routes. The draft BSIP revenue table contains some very speculative amounts, on a declining basis, such that there would be no call on the Council's revenue budget post March 2025. These figures will be updated to reflect the position in late October.

R8   Future Eastern Arc rapid transit network

The Connecting Oxford proposals include an ambition to introduce a new 'Rapid Transit' bus network, linking Eastern Oxford with the nearby major settlements of Witney, Kidlington and Abingdon, thus attracting a significant proportion of the large numbers of people who travel regularly to employment in this area.

It is essential to launch this new 'rapid transit' network in 2023, in line with the launch date for the 'Connecting Oxford' initiative, which will result in a significant reduction in traffic volumes and congestion within the Oxford outer ring road. This 'rapid transit' network will also provide good access to employment around the 'Eastern Arc', thus providing a practical alternative to driving a car to work and thus influencing the number of parking spaces that are provided.

It is anticipated that this new bus service will take eight years to become established as a fully commercial proposition. This new service will mainly be funded by proceeds from the Workplace Parking Levy, which will commence from 2024/5 onwards, however there will be a requirement for £2.28 million in 2023/4 to fund the first year's deployment of 13 vehicles on this new route. This expected amount will be offset by £1.44 million of s106 in this first year of operation, leaving £840,000 to be funded from the BSIP bid.

Year	23/4	24/5	25/6	26/7	27/8	28/9	29/30	30/31
BSIP	840,000							
S106	1,440.000							
WPL		1,996,000	1,710,000	1,425,000	1,140,000	855,000	570,000	285,000
Total	2,280,000	1,996,000	1,710,000	1,425,000	1,140,000	855,000	570,000	285,000

R9   Journey planning

It is proposed to procure the services of a Journey Planning company to conduct research at Oxfordshire's leading employers. as a means of understanding the home-to-work travel patterns at these companies, so bespoke interventions can be designed by local bus companies, with the aim of increasing the proportion of people travelling by bus.

Proposed cost £100,000

BSIP Net Revenue Table summary

		2022/3	2023/4	2024/5	onward
R1	Rural flexible bus	650,000	650,000	600,000	OCC
R2	New cross-boundary	400,000	350,000	300,000	OCC
R3	SBSF services	500,000	500,000	500,000	review
R4	Youth fares	1,000,000	1,000,000	1.000,000	OCC
R4	Low paid NHS	1,350,000	1,200,000	1,000,000	WPL
R5	Improved information	300,000	300,000	300,000	OCC
R6	Staffing	500,000	500,000	500,000	OCC
R7	Future network reshaping	2,100,000	1,400,000	700,000	ends
R8	Eastern Arc Rapid Transit		840,000		WPL
R9	Journey planning	100,000			ends
	Totals	6,720,000	6,740,000	4,900,000	