

Connecting Oxfordshire: Local Transport Plan 2015-2031

A420 Route Strategy

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Purpose of this strategy

1. This chapter aims to set out a non-exhaustive list of short to medium term improvements along the A420. This document will be updated as the needs of the A420 and surrounding areas are further understood. It should be noted that Oxfordshire County Council does not have any capital funding to spend on these improvements; schemes will only be possible through development in the surrounding areas and successful Central Government funding bids.

The Local Context

Role/function of A420 as a principal route

2. The A420 is the principal and only direct route between Swindon and Oxford. It is an important strategic link in the Oxfordshire hierarchy, and a primary route which the Council expects to be of a standard to allow for free passage of current (20,000 vehicles per day) and expected future traffic for the majority of the traffic day. It should therefore operate with minimal congestion in order to avoid rat running on minor roads.

A420 route within Oxfordshire

3. In addition to providing a direct route to Oxford city centre from Swindon, the A420 serves the many settlements along the corridor including, for example Shrivenham, Watchfield, Faringdon, Kingston Bagpuize and Cumnor. At peak times, certain points operate over capacity resulting in congestion, particularly at the northern end near Botley. Although lorries are advised to use the M4 and A34, locals report 'significant and growing' HGV usage of the route for through as well as local journeys. Up-to-date traffic surveys have been commissioned to quantify this.
4. The A420 is also a Premium bus route corridor, and is served by a highly successful commercial bus route with a frequency of up to three buses per hour Monday to Saturday, plus evening and half hourly Sunday services. Usage of the service has doubled over the last 5 years: this significant growth has resulted in increased service frequency and plans for further upgrades. At times of congestion, buses are subject to the same delays as all other vehicles.

Growth Context - Oxfordshire growth, Vale of White Horse Local Plan, Swindon Local Plan and Eastern Villages

5. This Strategy will take account of and evaluate the likely individual and cumulative effect on the capacity of and operational effect on the A420 of planned growth in Swindon Borough and the Vale of White Horse District. The cumulative effect will be quantified using the county council's strategic traffic model, the results of which are published as part of the Vale of White Horse Local Plan evidence base titled "Evaluation of Transport Impacts".
6. Any planning application for development in Swindon Borough or the Vale of White Horse District that will generate significant amounts of movement shall be supported by a Transport Statement or Transport Assessment that takes into account the planned growth in both authorities and the proper accommodation of its traffic consequences on the network.
7. The Vale of White Horse Local Plan 2031 aims to make provisions for growth of 23,000 new jobs and at least 20,560 new homes by 2031. It lists 21 strategic site allocations: six of these are along the A420, as shown on the plan at the end of this chapter. These housing figures include the allocation for the Vale arising from the Oxfordshire Strategic Housing Market Assessment, although as yet they do not take into account any unmet need arising from neighbouring authorities. This will be assessed in the future but as there are a number of methods for addressing this, no timescale can be put on it at present.

8. Swindon Borough Council's Local Plan (2026) identifies an area called 'Eastern Villages' with an allocation of around 8,000 new homes plus employment land on the eastern edge of the town, adjacent to the Oxfordshire boundary and the A420. A joint A420 Working Group including Swindon Borough Council has been set up, to understand and plan for the transport impacts on Oxfordshire and infrastructure requirements arising from this development.
9. The Council will continue to work with partners and stakeholders on this Group to develop and deliver a strategy for the A420 corridor, including Vale of White Horse District Council, Swindon Borough Council, Western Vale Villages consortium, Town and Parish Councils, the police and businesses, such as the Watchfield Defence Academy.

Transport Aims

10. To have a strategic highway and public transport corridor capable of moving a significant number of people along it whilst maintaining suitable access to and from the A420 from communities along the route, both for vehicular access to the A420 and pedestrian or cycle access to bus stops for the Premium bus route. This will be achieved by:
 - Improved junctions on the A420 to improve access to main settlements including Faringdon and Shrivenham, focusing on where new Local Plan development is proposed and existing 'priority' junctions require upgrading. Critical junctions within Oxfordshire on the A420 for evaluation in the Route Strategy will include the following:
 - o A significant junction improvement will be required at the A420 junction with Coxwell Road to accommodate known housing growth in the area. The Highway Authority has been negotiating with the developers through the planning process and developer funded full signalisation of the junction has been agreed.
 - o The A420/B4508 roundabout at Watchfield, to be funded and delivered by the development sites.
 - o A new roundabout on the A420 in Shrivenham, near Highworth Road. The Highway Authority is negotiating with developers in this area to secure the delivery of this infrastructure.
 - o A420 / A417 Park Road, Faringdon – in particular increased capacity on the approach from Faringdon
 - o Additional junctions may be identified through transport modelling work.
 - Enhancement of the A420 Premium bus route, focusing on enhancing service frequency to four buses per hour in each direction, improved bus stops (including changing on-carriageway stops to bus stop laybys where feasible), better walk/cycle connections and crossing provision, cycle parking and high quality

waiting/shelter provision (including real time passenger information) and, where appropriate, parking provision at selected bus stops. The accompanying Active & Healthy Travel strategy provides guidance on Door to Door travel (e.g. walking or cycling in combination with bus/rail) and emphasises the importance of good quality cycle parking at popular bus stops as well as safe, direct routes to the stops.

- Improved access and increased capacity of the A420 and associated junctions on the approach to Swindon, including White Hart Junction, Gablecross Roundabout, Police Station access, Old Vicarage Lane, new Eastern access to Rowborough and new/existing access to the Eastern Villages development area south of the A420, as identified in the Swindon and Wiltshire Growth Deal package of schemes.
- Improved access into Oxford, including approaches to the A420/A34 interchange at Botley, to be developed as part of the Oxford Transport Strategy, including a new A420 corridor Park & Ride site at Cumnor and improvements to Botley Interchange by Highways England.
- Reviewing and managing the impact on the surrounding road network, including parallel roads to quantify the likelihood of rat running being caused by proposed and allocated development traffic and identifying effective measures to combat this. Potential mitigation measures required to reduce the impact of through traffic on these include local traffic calming and traffic/speed management measures, to be agreed with the relevant local communities. Oxfordshire County Council will request that planning applicants consult local communities and bring forward measures with their application for development, subject to funding. Routes to be evaluated include:
 - B4508 east of Shrivenham
 - B4000 south of Shrivenham
 - B4507 Swindon – Wantage

Baseline Information

11. Traffic accident data for 2009 to 2014 shows there were 157 accidents along the A420 between Botley and the county boundary. Of these, 5% were fatal, 22% serious and 73% slight. They led to 251 casualties: 4% fatal, 17% serious and 80% slight. 146 (93%) of the accidents were motor vehicle only. The forecast increase in traffic flows could increase the number of accidents along the route. Automatic traffic counter data along the route for the period 2009 to 2014 shows a 4.4% increase in vehicle numbers travelling towards Oxford, and a 2.5% increase in vehicle numbers travelling towards Swindon.
12. Traffic modelling data for forecast year 2030 (base year 2007) shows that:
 - The eastbound route will be over capacity in the AM peak period at Botley Interchange, Fyfield, Buckland, Faringdon.
 - The eastbound route will be over capacity in the PM peak period at Botley Interchange

- The westbound route will be over capacity in the PM peak period at Fyfield and Buckland
- Many other sections of the route will be near capacity in both the AM and PM peak periods

Strategy

13. A major upgrade of the A420 corridor is not proposed for the current LTP period. Any significant scheme (such as further dualling of all or part of the route) would attract more traffic and be likely to encourage further sites on this corridor to be identified for development. However there is a need to balance this approach with allowing for the significant transport impact arising from planned development, particularly in terms of providing appropriate route/junction improvements, enabling access onto and off the A420 from local communities and preventing rat-running.
14. The Strategy is based upon 3 main proposals:

<u>A420 Proposal 1</u> Ensure the A420 continues to perform a strategic function operating as a principal road moving people quickly and efficiently between Swindon and Oxford by:	A420 1.1 Promoting improvements to Botley Interchange as part of Highways England's A34 Route Strategy
	A420 1.2 Ensuring junction designs continue to support the main east-west general traffic and bus flow, with a consistent approach to junction type
	A420 1.3 Reviewing speed limits to ensure that changes in limit are at the most appropriate locations
	A420 1.4 Identifying opportunities for bus priority as required
	A420 1.5 Working with partners and agencies to ensure the A420 is resilient to issues such as flooding, ensuring that the network can continue to operate
	A420 1.6 Work with Swindon Borough Council on cross-border issues
<u>A420 Proposal 2</u> Maintain suitable access from settlements along the A420 ensuring:	A420 2.1 Safe and timely movement onto and off the A420 by ensuring new and enhanced junctions enable local access and egress along the route (as described in the tables and map at end of this chapter)
	A420 2.2 Safe access to and from bus stops along the A420
	A420 2.3 High quality bus stop facilities, including cycle parking at key locations
<u>A420 Proposal 3</u> Safeguard and maintain the	A420 3.1 Safeguard land for a new access onto A420 at/near Highworth Road in the vicinity of the Shrivenham strategic site.

ability to deliver strategic pieces of infrastructure if required in the future due to significant additional development. For the A420 corridor these include:	Continue to safeguard land at the Townsend Road junction with the A420 (Local Plan reference E17) A420 3.2 Safeguard the Coxwell Road junction (E18).
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Safeguarding

15. To achieve proposal 3, we will support the Vale of the White Horse District Council in safeguarding land for transport schemes in areas where it is possible that significant development may occur in the future, including that which is more likely to take place beyond the period of this Plan.

Funding

16. Funding to deliver the strategy will primarily need to be secured via Developer Contributions, which will either be sought through Section 106 agreements or the Community Infrastructure Levy (CIL) when it is introduced by the District Council. It may also be appropriate for development to directly deliver proposed strategy schemes. We will secure strategic transport infrastructure contributions from all new development based on the contribution rate per dwelling or per m² for non-residential developments, based on the total cost (tbc) of the transport package. Due to the large scale of growth we will also seek central Government funding where possible.
17. Contributions would also be sought from major residential and other development sites towards the strategic bus service identified in the A420 strategy, including funding service enhancements until they become commercially viable and bus stop infrastructure. Other residential sites would make a contribution based on the estimated cost of an improved commercially viable service across the western Vale area, divided proportionally by the amount of planned growth to give a cost per development site.
18. Developments are also required to provide modern bus stop infrastructure including shelters and Real Time Information, and high quality access to the bus network, usually secured through section 106 or section 278 agreements.
19. The Strategic Transport Contribution does not include direct mitigation measures, which will be sought separately. These schemes are delivered by developers when specific mitigation measures are solely linked to enabling that development. This is as opposed to the county council pooling funds for schemes to mitigate the impact of more than one development proposal.

Timescales and prioritisation study

20. The schemes and projects described in this chapter will be implemented at different stages of the Plan period, as outlined in the table below. The most likely source of funding will be to secure these improvements through the planning application process for housing and other development sites. Some schemes have already been secured or are the subject of discussion as part of current applications. Others can only come forward in line with development yet to enter into this process. Some schemes will be the responsibility of delivery partners, such as Highways England. Timescales are influenced by a number of different factors, including when development applications come forward and when other funding opportunities are available. The timeframes for delivery will be monitored and updated if necessary in conjunction with the future Local Transport Plan updates.
21. A study undertaken by consultants aimed to prioritise all the schemes and projects. The consultants developed a scoring system in order to assess each scheme across multiple factors:

Approach to scoring of schemes

Each highway improvement scheme was assessed against the following criteria:

- ▶ Will the following goals of the LTP4 be met?
 - ▶ Goal 1: Supporting growth and economic vitality;
 - ▶ Goal 2: Reducing emissions; and
 - ▶ Goal 3: Improving quality of life.
- ▶ Will there be benefits for bus users, pedestrian and cyclists?
- ▶ Will road capacity, traffic flows and safety be improved?
- ▶ Can schemes be delivered within the extent of publicly maintainable highway?
- ▶ Will the schemes be acceptable in terms of environmental, social and locational constraints?

A simple scoring mechanism was used to score the relative merits of each highway improvement scheme against this criteria, whereby:

- ▶ 1 = meets criteria; and
- ▶ 0 = does not meet criteria.

A weighting factor of 10 was given to those highway improvement schemes that were likely to come forward early as a result of funding from development. This criteria overrides all others and has been made in order to take account of the fact that these funded schemes are integral to the 'live' planning applications to which they pertain and have been assessed accordingly to accommodate said development.

22. A potential funding source was considered to be the most important factor for each scheme, as Oxfordshire County Council does not have any capital funding to spend on these improvements. The study highlighted the difficulty in predicting scheme timescales, as sources/timescales of funding are often unknown and difficult to predict. Vale of White Horse District Council's Local Plan 2031 Part 1 was adopted on 14th December 2016. This gives the Highway Authority more certainty where strategic sized development sites may come forward, and therefore where directly related and necessary schemes may have a mechanism of funding.

The consultant grouped the schemes into four categories, based upon their judgement:

Category	Explanation
Primary priority	Schemes considered by the consultant to be most likely to be deliverable
Secondary priority	Schemes considered by the consultant to potentially be deliverable, but meet fewer of the scoring criteria
Lower priority requiring further investigation	Schemes considered by the consultant to potentially be deliverable, but meet fewer of the scoring criteria, may have funding issues, and require further work
Currently undeliverable	Schemes considered by the consultant to currently have land ownership, environmental, or funding issues

The tables below have been updated to show the consultant prioritisation rating. A 'primary priority' rating does not guarantee that Oxfordshire County Council will be able to deliver the scheme, and a 'currently undeliverable' rating does not guarantee that the scheme will never happen. The ratings are the opinion of the consultant at the time of their study.

Proposed junction schemes

23. The following schemes are for upgrades to existing junctions or completely new junctions and will be requested through the planning application process, to mitigate the impact of development along the A420:

Project/Scheme	Timescale period	Prioritisation Rating
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Investigate upgrading of the A420 / A417 Park Road junction, Faringdon.	To be determined	Primary Priority
Secure a signalised junction improvement at the A420 junction with Coxwell Road to accommodate known housing growth in the area.	Exact timing dependent upon application and planning permission: 2015-2020.	Primary Priority
Secure a new junction (roundabout) near Highworth Road, Shrivenham in proximity to the Strategic Site allocation for 500 dwellings.	Exact timing dependent upon application and planning permission: 2015-2020.	Primary Priority
Investigate improvements to signage at the Pine Woods Road/Charney Road junction, Southmoor, on the A420.	To be determined	Secondary Priority
Investigate upgrading of the T-junction at the Little Coxwell/Fernham Road on the A420 junction to a roundabout or other upgrade to improve access, safety and the vision through this junction.	To be determined	Lower Priority - requires further investigation
Review the Buckland Road/A420 junction, to include assessment of the junction splay and right-turn lane on the A420.	To be determined	Lower Priority - requires further investigation

Proposed new/upgraded crossings

24. The following proposed schemes are to ensure communities are accessible by sustainable travel, and movement across the A420 between towns and villages located on it or nearby can be undertaken safely. As above, they will be requested through the planning application process to mitigate the impact of development along the A420:

Project/Scheme	Timescale period	Prioritisation Rating
Secure a crossing on the A420 to link Kingston Bagpuize with Fyfield.	Exact timing dependent upon application and planning permission: 2015-2020	Secondary Priority
Investigate a new crossing on the A420 at the Little	To be determined	Secondary Priority

Coxwell/Fernham Road junction.		
Improve connections to the subway under the A420 near Fyfield, for use by pedestrians and cyclists to link Kingston Bagpuize to Cumnor via Fyfield and Appleton.	To be determined	Currently Undeliverable

Proposed Speed Limit changes and safety improvements

Project/Scheme	Timescale period	Prioritisation Rating
On the A420, investigate speed limit changes on the Faringdon 'bypass' between Little Coxwell and Littleworth - reduce from 60mph.	To be determined	Lower Priority - requires further investigation
Investigate speed limit changes on B4507 through Ashbury Village – reduce to 20mph.	To be determined	Lower Priority - requires further investigation
Investigate speed limit changes on B4507 Ashbury to Wantage – reduce from 60mph.	To be determined	Lower Priority - requires further investigation
Investigate speed limit changes on B4508 Watchfield to Pusey Common Wood – reduce from 50mph.	To be determined	Lower Priority - requires further investigation
Investigate speed limit reduction on B4000.	To be determined	Lower Priority - requires further investigation

Public Transport

Project/Scheme	Timescale period	Prioritisation Rating
Improved frequency of Premium Bus Route service (number 66) between Swindon and Oxford and consider cycle parking at popular stops to enable Door to Door sustainable travel (see Active & Healthy Travel Strategy)	On-going	Not assessed – OCC already treat this as a Primary Priority, requesting bus service contributions from new developments on a per dwelling basis

Provide secure cycle parking at well used bus stops and also consider shelters to encourage more journeys by sustainable modes.	To be determined	Secondary Priority
Review footway access, pedestrian signage and hard-standing facilities at bus stops on the A420.	To be determined	Secondary Priority
Take account of new Oxford outer Park & Ride site proposal on the A420 corridor, in the vicinity of Cumnor which is being progressed through the Oxford Transport Strategy Park & Ride study	To be determined	Lower Priority - requires further investigation
Investigate providing car park(s) for bus users in Shrivenham to enable an alternative to public on-street parking.	Exact timing dependent upon application and planning permission: 2015-2020	Currently Undeliverable

Measures to improve safety and deter rat-running through local communities

Project/Scheme	Timescale period	Prioritisation Rating
Investigate deterring rat running through Great Coxwell by replacing "Village Only" sign with a "No Right Turn" sign and accompanying Traffic Regulation Order at B4019 junction with The Hollow	Exact timing dependent upon option feasibility: 2015-2020.	Secondary priority
At Bourton, investigate traffic calming measures on the Bishopstone entrance to the village and on the Avenue Road entrance.	To be determined	Lower Priority - requires further investigation

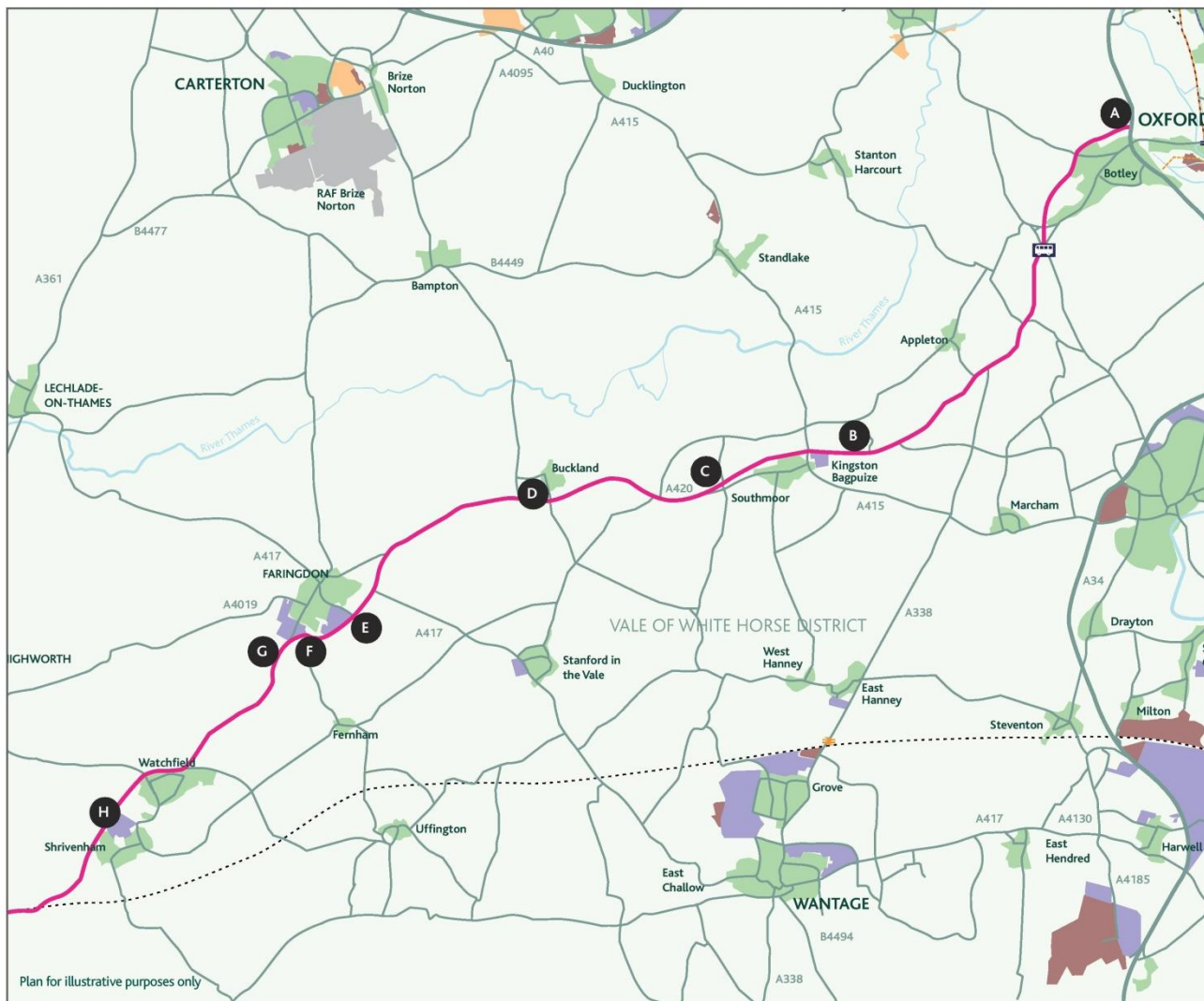
At Bourton, investigate the feasibility of installing traffic lights on the railway bridge at Lower Bourton. This is a narrow bridge and would improve safety.	To be determined	Lower Priority - requires further investigation
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Delivery Partner Schemes

Project/Scheme	Timescale period
Highways England improvements at Botley Interchange.	Exact timing dependent upon option feasibility: 2015-2020.

References

Oxfordshire Local Enterprise Partnership [http://www.oxfordshirelep.org.uk/cms/Vale of White Horse draft new Local Plan 2031](http://www.oxfordshirelep.org.uk/cms/Vale%20of%20White%20Horse%20draft%20new%20Local%20Plan%202031) (published November 2014)
<http://www.whitehorsedc.gov.uk/services-and-advice/planning-and-building/planning-policy/new-local-plan-2031>
 South Oxfordshire Core Strategy 2027 (adopted December 2012)
<http://www.southoxon.gov.uk/services-and-advice/planning-and-building/planning-policy>
 Oxfordshire Growth Board - <http://www.oxfordshire.gov.uk/cms/content/oxfordshire-local-transport-board-0>
 Swindon Local Plan <http://ww1.swindon.gov.uk/ep/ep-planning/planningpolicy/ep-planning-localdev/Pages/ep-planning-localdev-localplan.aspx>



A420 Figure 1:

Indicative plan of transport infrastructure and proposed growth along the A420 corridor

Schemes to be investigated
(map is not exhaustive)

- A Botley Interchange and approaches
- B Kingston Bagpuize to Fyfield crossings and subway
- C Pine Woods Road/Charney Road
- D Buckland Road
- E Park Road
- F Fernham Road
- G Coxwell Road junction
- H Shrewsbury junction

Key

- Local Plan residential areas
- Local Plan mixed use areas comprising residential and employment
- Existing commercial/employment areas
- Existing settlement
- RAF Brize Norton
- Proposed Park and Ride
- A420
- Railway
- Rail Station
- Proposed Rail Station

