South Oxfordshire Local Plan 2034 Publication Version

Transport Topic Paper

Updated January 2019

South Oxfordshire District Council

Listening Learning Leading

Contents

1.0 Introduction

1.1 This topic paper sets out the process and evidence the Council has undertaken to produce and inform the Transport Policies to be included in the South Oxfordshire Local Plan 2034.

1.2 The Local Plan 2034 sets out how development will be planned and delivered across South Oxfordshire. The policies in the Plan will be used to help make decisions on planning applications in the District.

2.0 National Policy Context

National Planning Policy Framework 2018

2.1 The National Planning Policy Framework (NPPF), updated in 2018, sets out the government's planning policies for England and how they are expected to be applied. At its heart is the need to ensure planning contributes towards the delivery of sustainable development, which should include economic, social and environmental considerations.

2.2 Paragraph 104 of the new NPPF states that 'planning policies should:

a) Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;
b) Be prepared with the active involvement of local highway authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;
c) Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;
d) Provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans); and
e) Provide for any large scale transport facilities that need to be located in the area.' [1]

2.3 Paragraphs 105 and 106 further make reference to parking, including reference to the requirement for any parking standards to take account of 'the need to ensure an adequate provision of spaces for charging plug-in and

[1] NPPF, 2018, paragraph 104, at: https://www.gov.uk/government/collections/revised-national-planning-policy-framework

other ultra-low emission vehicles,' and that in town centres, 'local authorities should seek to improve the quality of parking so that it is 'convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists.'[2]

National Planning Practice Guidance

2.4 The National Planning Practice Guidance (NPPG)[3] sets out planning guidance to support practitioners and complements the NPPF. The NPPG is in the process of being updated to reflect the updated NPPF. The sections on plan-making have been updated, but the sections specifically on transport are yet to be updated. The section on plan-making highlights the importance of working with infrastructure providers in development of the Local Plan, with paragraph 55 specifically noting that, 'A collaborative approach is expected to be taken to identifying infrastructure deficits and requirements, and opportunities for addressing them.'[4]

Planning for the future: A guide to working with Highways England on planning matters 2015

2.5 This document includes guidance from Highways England for those involved with development that may result in traffic or other impacts on the strategic road network. It includes guidance to inform the preparation of local plans. It states that:

> "Development should be promoted at locations that are or can be made sustainable, that facilitate the uptake of sustainable transport modes, and support wider social and health objectives, and which support existing business sectors as well as enabling new growth".[5]

> "The preparation of local plans provides an opportunity to support a pattern of development that minimises the need for travel, minimises journey lengths, encourages sustainable travel, and promotes accessibility for all. This can contribute to the achievement of environmental objectives and reduce the cost to the economy arising from the environmental, business and social impacts associated with traffic generation and congestion".[6]

[2] NPPF, 2018, paragraphs 105 and 106
[3] https://www.gov.uk/guidance
[4] https://www.gov.uk/guidance/plan-making
[5] Highways England (2015), The strategic road network - Planning for the future: A guide to working with Highways England on planning matters, Paragraph 69
[6] Highways England (2015), The strategic road network - Planning for the future: A guide to working with Highways England on planning matters, Paragraph 64

3.0 Local Context

Local Transport Plan (LTP4): Connecting Oxfordshire 2015[7]

3.1 In September 2015 Oxfordshire County Council agreed its Local Transport Plan (LTP4): Connecting Oxfordshire, which sets out the strategy and policy for transport in the county up to 2031. Connecting Oxfordshire was subsequently updated in 2016 in order to strengthen the emphasis on improving air quality and making better provision for walking and cycling.

3.2 LTP4 has three key themes which are reflected in Local Plan 2034. They are as follows:

- Theme 1: Supporting growth and economic vitality
- Theme 2: Reducing emissions
- Theme 3: Improving quality of life

3.3 LTP4 and further study work associated with the LTP4, Local Plan development and transport evidence base work has identified that, at this stage, land should be safeguarded in the South Oxfordshire Local Plan 2034 to ensure that proposed development does not prejudice future delivery of the following transport schemes:

- Clifton Hampden bypass
- A new Thames road crossing between Culham and Didcot Garden Town *
- Didcot Northern Perimeter Road
- Science Bridge, Didcot*
- (A4130/ B4493) Didcot Central transport corridor improvements
- Southern Didcot Spine Road*
- A4130 road safety improvements
- A4074/ B4015 (Golden Balls) Junction Improvements
- A bypass for Watlington
- A bypass for Benson
- A bypass for Southern Abingdon*
- A new Park and Ride site at Sandford to the south-east of Oxford

*These schemes route across the border into the Vale of White Horse and have safeguarded land identified in the Vale Local Plan 2031 Part 1, adopted in December 2016.

3.4 It should be recognised that securing funding for more detailed development and delivery of these schemes is complex, and that the delivery of these schemes have wider strategic benefits. Evidence base work has also shown that certain key schemes, such as the proposed new Thames road crossing, have wider strategic impacts that need careful consideration. The District will

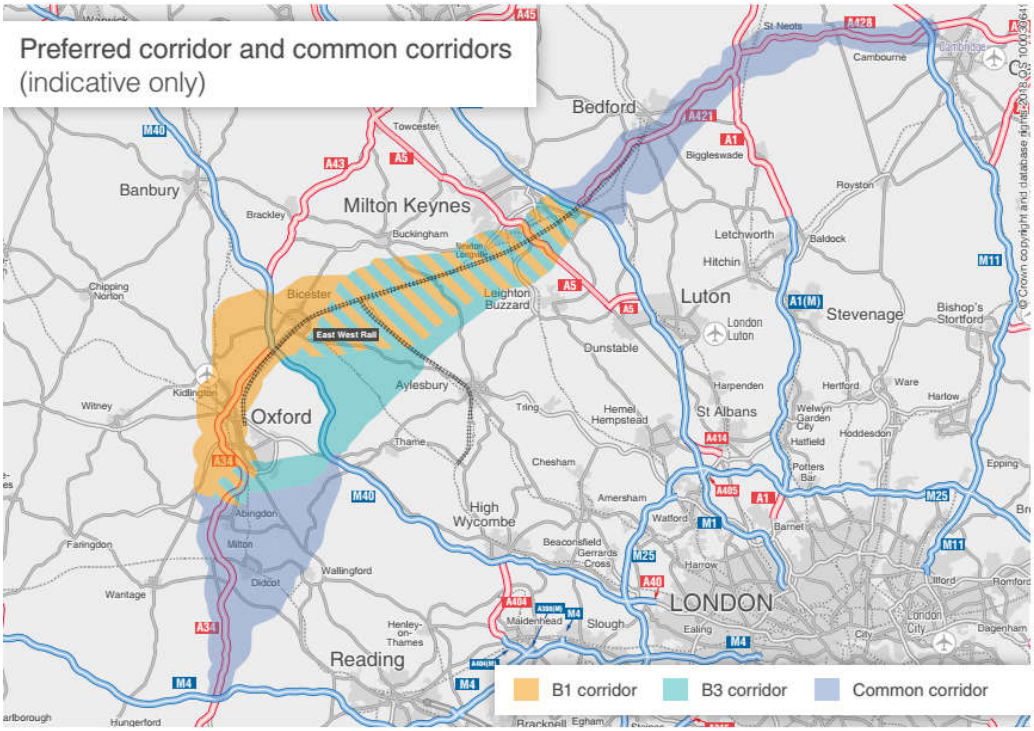
[7] Oxfordshire County Council (2015), Connecting Oxfordshire: Local Transport Plan 2015-2031 (updated 2016)

therefore continue to work positively with the County Council and others to understand the benefits and impacts of these schemes and how and when they can be brought forward.

4.0 Wider transport infrastructure considerations

Oxford to Cambridge Expressway

4.1 In September 2018, the government announced its preferred corridor for the Oxford to Cambridge Expressway road proposal.[8] The map below shows this corridor, indicating that there are 2 potential corridor options for routing of the Expressway around Oxford, broadly either north/west of Oxford, or south/east of Oxford. A 'common corridor' is also identified to the south of Oxford. The location of the Expressway in this area will depend on which routing option around Oxford is agreed.



4.2 Identification and selection of a specific route will now commence, with public consultation on potential routes planned for Autumn 2019. It is not expected that the preferred route will be announced until Autumn 2020, with the

[8] https://highwaysengland.co.uk/projects/oxford-to-cambridge-expressway/

statutory development consent order process following. Delivery of the expressway will not be until at least 2025 - 2030.

4.3 Highways England will take account of planned development when establishing potential Expressway routes. Therefore, they will be able to take into account development locations as set out in the Local Plan (timetabled for submission in Spring 2019) when considering potential routes. South Oxfordshire District Council will continue to liaise with the relevant stakeholders, particularly Highways England, the National Infrastructure Commission and Oxfordshire County Council to understand the implications associated with the Expressway proposals, and how they may impact on delivery of the proposed local plan. For example, once route options are more certain, this can help inform more detailed development of the highway mitigation identified as required to support the Local Plan.

Proposed new Thames road bridge to the east of Reading

4.4 In addition to the Expressway proposals in the north of the district, to the south of the district the neighbouring authorities of Wokingham and Reading have for several years been promoting plans for a new road bridge over the River Thames to the east of Reading. Development work for this scheme is ongoing, with a Strategic Outline Business Case produced and published in early 2018.[9] This indicated the scheme could have a generally positive business case, but that traffic impacts on the South Oxfordshire area vary. Some areas are forecast to have increased traffic and some areas decreased traffic as a result of the scheme. The district will continue to work in partnership with these authorities and the County Council to understand any impacts and benefits of this proposed scheme, informed by more detailed work.

Technology and innovation

4.5 It will also be important for the Council to understand the implications of technology and innovation in relation to how access and movement will change over the next few years. In particular, the Council will look to identify opportunities to deliver infrastructure for the expected growing market in low and zero emission transport, such as autonomous vehicles (driverless cars) and electric vehicles, in accordance with the latest best practice. These opportunities are currently being reviewed for the Didcot Garden Town area, and can be developed in other areas should there be a case to do so.

[9] http://news.wokingham.gov.uk/news/new-thames-crossing-strategic-outline-business-case/

5.0 Funding situation

4.6 The Council recognise that significant transport infrastructure will be needed to support the proposed development set out in the Local Plan. Much of the funding for this will be secured from developers, with priorities outlined in the Infrastructure Delivery Plan update that supports this version of the plan. However, it is recognised that there is likely to be a need for additional funding for certain strategic transport schemes due to viability and other considerations. The Council will therefore continue to work with relevant partners, particularly the County Council, to identify and prioritise funds for transport improvements to support delivery of the overall housing, employment and supporting facilities identified in the plan.

4.7 In the short term, funds have been secured as part of the Oxfordshire Growth Deal for infrastructure improvements, with South Oxfordshire benefiting from part of the £150 million funds secured. In November 2018, the Growth Board agreed that contributions from this fund would be given towards delivery of the Watlington and Benson Relief Roads, Thame to Haddenham Cycle Route, and Didcot Garden Town schemes.[10]

4.8 In addition to the Growth Deal funds, the District is also working with Oxfordshire County Council on development of a Housing Infrastructure Bid which would help fund major transport infrastructure schemes in Didcot Garden Town. This includes key schemes for which land is safeguarded or proposed to be safeguarded in either the Vale of White Horse or South Oxfordshire Local Plans, namely a new road crossing of the Thames between Culham and Didcot, capacity enhancements to the A4130, and a new 'Science Bridge' improving access to growing areas of Didcot.[11] The full bid is due for submission to central government by end of March 2019. If funding is secured for delivery of these schemes, this will help unlock new housing and employment areas in the Didcot area.

6.0 Evidence

Evaluation of Transport Impacts

6.1 South Oxfordshire District Council has been working with the County Council and consultants Atkins, who undertake the strategic modelling, to test the impacts of a number of updated Local Plan development scenarios that could meet the required number of new homes needed for the District. This work

[10] https://www.oxfordshiregrowthboard.org/infrastructure-programme-to-unlock-over-500-million-of-investment-across-oxfordshire/

[11] https://www.oxfordshiregrowthboard.org/growth-board-welcomes-further-government-announcement-on-investment-for-oxfordshire/

has used the updated transport model for Oxfordshire, with a base year of 2013, and a forecast year of 2031 and has been done in stages. Stage 1 was undertaken to support Local Plan consultation at Regulation 18 in Spring 2017, Stage 2 work done to support Regulation 19 consultation in Autumn 2017, and the latest stage of work done to support the Regulation 19 Version 2 consultation in January 2019.

ETI Stage 1 – March 2017

6.2 The Local Plan development scenarios tested in the Stage 1 transport modelling work included committed development (as of Autumn 2016), additional growth at towns and large villages of 10%, South Oxfordshire Core Strategy allocations, Wheatley/ Holton (300 homes) and 1,800 homes assumed to come forward at Berinsfield to deliver regeneration. The variation in scenarios tested was as follows:

- Scenario 1: 3,500 homes at the Chalgrove strategic site
- Scenario 2: 3,500 homes at Culham
- Scenario 3: 3,500 homes at Grenoble Road
- Scenario 4: 3,500 homes at Harrington (Junction 7 of the M40 motorway)
- Scenario 5: 3,500 homes at Chalgrove and 3,500 homes at Culham

6.3 The Local Plan development scenarios (1 to 5) were assessed against a 'do minimum' scenario for South Oxfordshire which only included the growth that was committed (i.e. having planning permission as of Autumn 2016), and the 2012 Core Strategy sites. For all scenarios tested, the baseline infrastructure included was that already identified as required to support growth in the Science Vale area, as well as public transport infrastructure expected to come forward by 2031. In the Science Vale area this included the Northern Perimeter Road in Didcot, the Clifton Hampden Bypass, and the Culham to Didcot Thames River Crossing (eastern alignment). The need for these schemes has already been established to support development in Didcot as allocated in the South Oxfordshire Core Strategy and Vale of White Horse Local Plan 2031 Part 1.

6.4 The full results of this assessment are contained in the South Oxfordshire Local Plan Evaluation of Transport Impacts Report, March 2017[12].

ETI Stage 2- October 2017

6.5 The ETI Stage 2 tested the proposed development quantum in line with the Local Plan spatial strategy following the Regulation 18 (preferred options)

[12] Atkins (March 2017), South Oxfordshire District Council Local Plan 2034 - Evaluation of Transport Impacts: Stage 1 - Development Scenarios

consultation in March 2017. In summary, this included all of the following housing:

- 3,000 homes at the Chalgrove Strategic Site
- 3,500 homes at the Culham Strategic Site
- 2,100 homes at the Berinsfield Regeneration Site (this has since been reduced to 1,700 homes for subsequent regulation 19 consultations)
- 300 homes at the Wheatley/ Holton strategic site
- A number of homes coming forward at Market Towns and Larger Villages, with sites for development to be identified within new or reviewed Neighbourhood Plans.

6.6 The Local Plan development scenario was assessed against an updated 'do-minimum' scenario which included committed growth. A number of baseline transport infrastructure schemes consistent with those included in the ETI Stage 1 as set out above were included in both the 'do-minimum' and local plan development scenarios.

6.7 The ETI modelling work was then further developed to test a number of proposed transport mitigation proposals along with Local Plan growth to assess how these impacted on the strategic transport network. The proposals were tested as packages of transport mitigation measures as follows:

a) Removal of currently unfunded Science Vale transport schemes - Thames road crossing between Culham and Didcot Garden Town, Clifton Hampden Bypass, Didcot Science Bridge and A4130 dualling - to show how this impacted on transport network performance.

b1) Inclusion of all unfunded schemes identified for test a), with the addition of bypasses at Stadhampton and Watlington and roundabout improvements at Golden Balls.

b2) Inclusion of all schemes in test b1), with the further addition of Bypasses at Benson and Nuneham Courtney.

6.8 The full results and analysis of this transport modelling work is set out in the 'Evaluation of Transport Impacts: Stage 2: Development Scenarios.'[13] Tables 1 and 2 summarise the results of each scenario for a number of transport network metrics forecast to take place once all development included in each scenario is built out.

[13] Atkins (October 2017), South Oxfordshire District Council Local Plan 2034 - Evaluation of Transport Impacts: Stage 2 - Development Scenarios (including mitigation testing)

Table 1: South Oxfordshire network performance - AM Peak Hour, 2031[14]

Performance Parameters	Morning Peak				
	Do Minimum	Local Plan (Oct 17)	Mitigation Scenario (a)	Mitigation Scenario (b1)	Mitigation Scenario (b2)
Delay (pcu hr)	518	961	906	936	906
Total Time (pcu hr)	6039	6815	6683	6796	6788
Total Distance (pcu km)	375965	393554	387763	391964	391088
Average Speed (km/h)	62.3	57.8	58	57.7	57.6

Table 2: South Oxfordshire network performance - PM Peak Hour, 2031

Performance Parameters	Evening Peak				
	Do Minimum	Local Plan (Oct 17)	Mitigation Scenario (a)	Mitigation Scenario (b1)	Mitigation Scenario (b2)
Delay (pcu hr)	618	951	1044	844	810
Total Time (pcu hr)	6689	7398	7344	7368	7353
Total Distance (pcu km)	406097	426439	420490	427628	426603
Average Speed (km/h)	60.7	57.6	57.3	58	58

6.9 The network statistics shown in tables 1 and 2 indicate that additional growth associated with the Local Plan at this stage would increase delay and reduce average speeds slightly compared with the 'do-minimum' scenario. The mitigation tested in scenarios b1 and b2 is forecast to reduce delay compared to this local plan scenario without proposed mitigation, with this being more noticeable in the PM peak period.

[14] The metrics used to measure the performance of the highway network are delay (pcu-hours), total time (pcu-hours), total distance (pcu-km) and average speed (km/hr), as defined:

- Delay (pcu-hours) – Delay in the modelled hour experienced by the vehicles on the highway network.
- Total Travel Time (pcu-hours) – Total time spent travelling in the modelled hour by vehicles on the highway network.
- Travel Distance (pcu-km) – Total distance travelled in the modelled hour by vehicles on the highway network.
- Overall Average Speed (km/h) – Average speed of vehicles on the highway network in the modelled hour.

A Passenger Car Unit (PCU) is a means of converting the various types of vehicles including cars, LGV (Light Goods Vehicle) and HGV (Heavy Goods Vehicle) into a single class (equivalent to car) in the model. Cars and LGVs have been modelled as 1 PCU, while HGVs have been modelled as 2.3 PCUs, which is consistent with previous stages of the modelling work.

6.10 In scenario a) where unfunded transport schemes in Science Vale are removed, delay in South Oxfordshire is forecast to increase in the PM peak period compared to the Local Plan scenario where these schemes are included, although there are less clear trends shown in the AM peak period. The full modelling results show that removal of these schemes has wider cumulative impacts that need consideration. In particular in this scenario there is re-assignment of north-south traffic movements from the proposed Thames road crossing between Culham and Didcot Garden Town back to the A34 Trunk Road, causing greater forecast congestion on this alternative north-south route in the 2031 forecast year.

ETI Stage 3 – January 2019

6.11 The ETI Stage 3 tested the forecast transport impacts of a number of different development scenarios following the decision to review all potential SODC Local Plan sites following the last Regulation 19 consultation. The quantum of housing at the individual sites used in the scenario testing is based on information available on potential site capacities in mid-2018, and it is acknowledged that the final housing numbers proposed for sites in the publication version of the plan are lower for two of the sites adjacent to Oxford (Land north of Bayswater Brook which was previously referred to as Wick Farm/ Lower Elsfield, and Northfield).

6.12 As with previous transport modelling work (ET1 Stage 1 and 2), the scenarios were compared against a 'do-minimum' scenario, which included committed growth, both within South Oxfordshire, and in surrounding districts. The transport mitigation for the 'do-minimum' scenario was consistent with that included in the previous work (ETI Stages 1 and 2). The transport mitigation included for each scenario relates to the proposed development included in each scenario. A number of scenarios were tested, with the last scenario including those strategic sites within the regulation 19 publication version 2 of the plan. A summary of development and mitigation included in each scenario is shown in table 3 below:

Table 3: Summary of scenarios tested within the ETI Stage 3

Scenario	Proposed development Site Allocations (above those in the Do Minimum)	**Mitigation Included** (above that in the Do Minimum)
1	Culham (3500), Chalgrove (3000), Wheatley (300), Berinsfield (1700), Neighbourhood Plan commitments and targets	Stadhampton Bypass, Chiselhampton Bypass, Watlington Bypass, Benson Bypass, Golden Balls Junction with additional eastbound filter lane
2	Thornhill (875), Northfield (2000), Grenoble Road (3000), Berinsfield (1700), Wick Farm/Lower Elsfield (2036),	Watlington Bypass, Benson Bypass, Golden Balls Junction with additional eastbound filter lane

Scenario	Proposed development Site Allocations (above those in the Do Minimum)	**Mitigation Included** (above that in the Do Minimum)
	Neighbourhood Plan commitments and targets	
3A	Grenoble Road (3000), Culham (3500), Wheatley (300), Berinsfield (1700), Neighbourhood Plan commitments and targets	Watlington Bypass, Benson Bypass, Golden Balls Junction with additional eastbound filter lane
3B	Thornhill (875), Northfield (2000), Culham (3500), Wheatley (300), Berinsfield (1700), Neighbourhood Plan commitments and targets	Watlington Bypass, Benson Bypass, Golden Balls Junction with additional eastbound filter lane
3C	Thornhill (875), Wick Farm/Lower Elsfield (2036), Culham (3500), Wheatley (300), Berinsfield (1700), Neighbourhood Plan commitments and targets	Watlington Bypass, Benson Bypass, Golden Balls Junction with additional eastbound filter lane
4A	Harrington (6500), Chalgrove (3000), Berinsfield (1700), Neighbourhood Plan commitments and targets	Stadhampton Bypass, Chiselhampton Bypass, Watlington Bypass, Benson Bypass, Golden Balls Junction with additional eastbound filter lane, Harrington Site Access Links
4B	Harrington (3500), Chalgrove (3000), Berinsfield (1700), Neighbourhood Plan commitments and targets	Stadhampton Bypass, Chiselhampton Bypass, Watlington Bypass, Benson Bypass, Golden Balls Junction with additional eastbound filter lane, Harrington Site Access Links
5A	Northfield (2000), Grenoble Road (3000), Chalgrove (3000), Culham (3500), Wick Farm/Lower Elsfield (2036), Berinsfield (1700), Wheatley (300), Neighbourhood Plan commitments and targets	Stadhampton Bypass, Chiselhampton Bypass, Watlington Bypass, Benson Bypass, Golden Balls Junction with additional eastbound filter lane from the B4015 to the A4074.
5B	Northfield (2000), Grenoble Road (3000), Chalgrove (3000), Culham (3500), Wick Farm/Lower Elsfield (2036), Berinsfield (1700), Wheatley (300), Neighbourhood Plan commitments and targets	Benson Bypass, Chiselhampton Bypass, Stadhampton Bypass, Watlington Bypass, Culham Didcot Thames River Crossing, western alignment, Culham Site Access Links, Culham Didcot Thames River Crossing alternative (Western alignment), A40 Link Road (40mph single carriageway), Berinsfield northern access, Speed reductions to Dorchester/Stadhampton Road to 20mph, Golden Balls roundabout enlargement, capacity increase for north- and southbound movements and additional filter lane from Clifton Hampden bypass to A4074 northbound, Accesses to Culham site improved

6.13 Full result of the ETI Stage 3 work are included in the 'Evaluation of Transport Impacts: Stage 3 – Development Scenarios and Mitigation Testing.' report.[15] This includes more detail on the results of each scenario shown in Table 3, compared with in the 'do-minimum' scenario, including plots showing forecast capacity on routes in the highway network, and forecast changes in traffic flow. The report also includes a summary section setting out differences in results of the scenarios tested. Table 4 below gives a summary of delay to help understand the impact that potential strategic site allocations within each scenario could have on the highway network within South Oxfordshire. The table gives total delay in the 'do- minimum' scenario in pcu hours, along with the percentage increase in delay forecast in each scenario with respect to the 'do-minimum' value. Table 5 further gives summary statistics for the 'do-minimum' and Scenario 5B.

Table 4: Summary of forecast changes in delay in South Oxfordshire by scenario compared with the 'do-minimum' scenario (pcu hrs)

Model	Morning Peak	Evening Peak
2031 DM	522	611
Scenario 1	72%	36%
Scenario 2	18%	36%
Scenario 3A	76%	48%
Scenario 3B	86%	41%
Scenario 3C	74%	38%
Scenario 4A	59%	30%
Scenario 4B	19%	12%
Scenario 5A	85%	40%
Scenario 5B	34%	13%

Table 5: South Oxfordshire network performance – AM and PM Peak Hours, 2031

Performance Parameters	Evening Peak		Evening Peak	
	Do Minimum	Scenario 5B	Do Minimum	Scenario 5B
Delay (pcu hr)	522	698	611	693
Total Time (pcu hr)	6060	6776	6719	7547
Total Distance (pcu km)	378302	400806	408410	441993
Average Speed (km/h)	62.4	59.1	60.8	58.6

[15] Atkins (January 2019), South Oxfordshire District Council Local Plan 2034 - Evaluation of Transport Impacts: Stage 3 - Development Scenarios and Mitigation Testing

7.0 Sustainable Transport

7.1 It will be important that sustainable transport improvements are realised within South Oxfordshire District as new development comes forward. The transport policies of the plan recognise this, highlighting the importance of promoting walking, cycling and public transport improvements to ensure that existing and new residents have opportunities to travel by means other than car.

7.2 However, it is recognised that the District is largely rural, and therefore these opportunities will be greater in locations close to or within built-up areas such as Didcot and Oxford where links can more easily be made to existing sustainable transport networks. In other areas, it is recognised that the car will remain an important way for residents to access facilities and services. New development can help minimise the impacts of this car travel by, for example, providing infrastructure to enable charging of plug-in and other low-emission vehicles from the outset.

7.3 In preparation of the plan, SODC has undertaken engagement with the County Council and others such as bus companies to help identify the required sustainable transport improvements associated with the proposed strategic site allocations. This is reflected in the updated Infrastructure Delivery Plan published alongside the Local Plan Regulation 19 consultation Version 2, which identifies requirements associated with specific proposed sites.

8.0 Consultation undertaken to date

8.1 The Council has undertaken informal consultation with Oxfordshire County Council in relation to the transport policies for the Local Plan 2034. The Council has also worked in partnership with the County Council on the transport evidence base work undertaken to date as set out above. There is also continued engagement with other key stakeholders including Highways England, Network Rail and public transport operators to ensure that they are aware of plans for the increase in housing and jobs in South Oxfordshire, and that their strategic plans reflect and take account of the location and quantum of growth.

8.2 Engagement with Oxfordshire County Council and other key stakeholders will continue as the South Oxfordshire Local Plan 2034 goes through the next stages. This will include engagement on further, more detailed transport evidence base work associated with review of the detailed impacts of development proposed in the Local Plan, as well as development of transport schemes required to mitigate the impact of Local Plan growth.

9.0 Key Issues (Challenges and Opportunities)

9.1 The key issues taken in to consideration in producing the policies for Local Plan 2034 are:

- The requirement to accommodate significant growth to meet economic needs, including in relation to Oxford's unmet housing need.
- The need to safeguard land for the future delivery of strategic transport schemes necessary to accommodate growth.
- The outputs from the ETI work, which indicate an increase in delay and overall journey times in South Oxfordshire associated with growth, therefore requiring appropriate and timely infrastructure.
- The need for policies to ensure that development takes full account of its impact on the transport network and opportunities are taken to promote the use of sustainable modes.
- The impact of growth in other districts and how that affects the transport network in South Oxfordshire.
- The need to work with Oxfordshire County Council and other partners to identify and secure opportunities for match funding, particularly given the need to ensure that development is viable and therefore unlikely to fund significant transport infrastructure in its entirety.
- The need to ensure that strategic transport improvements take account of impacts on communities and the environment and that these impacts are appropriately mitigated.

10.0 Transport Policies

10.1 In relation to transport, the consultation version of Local Plan 2034 contains seven Transport Policies. These are listed below and explained further in Table 6:

- Policy TRANS1a: Supporting Transport Investment across the Oxford to Cambridge Arc
- Policy TRANS1b: Supporting Strategic Transport Investment
- Policy TRANS2: Promoting Sustainable Transport and Accessibility
- Policy TRANS3: Safeguarding of Land for Strategic Transport Schemes
- Policy TRANS4: Transport Assessments, Transport Statements and Travel Plans
- Policy TRANS5: Consideration of Development Proposals
- Policy TRANS6: Rail
- Policy TRANS7: Development Generating New Lorry Movements

Table 6: Transport Policies set out within the Local Plan 2034

Policy	Comments
Policy TRANS1a: Supporting Transport investment across the Oxford to Cambridge Arc The Council will work with Network Rail, Highways England, the National Infrastructure Commission, the County Council and others to: i) Plan for, and understand the impacts of changes to rail infrastructure and service improvements linked to East-West rail; ii) Plan for, and understand impacts and required mitigation associated with the Oxford to Cambridge Expressway. **Policy TRANS1b: Supporting Strategic Transport Investment** The council will work with Oxfordshire County Council and others to: (i) Deliver the transport infrastructure which improves movement in and around Didcot, including measures that help support delivery of the Didcot Garden Town; (ii) Support measures identified in the Local Transport Plan for the district including within the relevant area strategies; (iii) Support sustainable transport measures that improve access to/from proposed major development around Oxford;	The significant growth in demand for road and rail connections within and through South Oxfordshire is expected to continue as new homes and jobs come forward in the area. The Council will continue to work with partners, including Oxfordshire County Council, Highways England and neighbouring authorities, to support the delivery of, and understand the impacts of, strategic transport infrastructure. This includes the proposed Oxford to Cambridge Expressway, and East-West rail. The Council will also work in partnership with others to develop feasibility and business case work for schemes that will be required to support growth in South Oxfordshire and that link to surrounding areas. This includes highway improvements planned for Didcot and in the vicinity of Chalgrove, sustainable transport links into Oxford, and the proposed new Thames road crossing between Culham and Didcot Garden Town.

(iv) Support delivery of the safeguarded transport improvements as required to help deliver the development required in this plan period and beyond; (v) Ensure that the impacts of new development on the strategic and local road network, including the A34 and M40, are adequately mitigated; (vi) Plan for improvements in the Reading area, including a proposal for a new River Thames crossing, subject to ensuring that any traffic and environmental impacts of those measures do not result in adverse impacts on South Oxfordshire; (vii) Understand any wider cross-border transport impacts from development and plan for associated mitigation; (viii) Understand any cross-border transport impacts from development and plan for associated mitigation; (ix) Support the development and delivery of a new Thames road crossing between Culham and Didcot Garden Town; (x) Support, in association with major development, the delivery of new or improved roads, such as bypass or edge road, including sustainable transport improvements, linked where appropriate with relevant Neighbourhood Plans and any wider County Council highway infrastructure strategy.	
Policy TRANS2: Promoting Sustainable Transport and Accessibility The Council will work with Oxfordshire County Council and others to:	Policy TRANS2 outlines how new development can have a positive role in both improving and funding sustainable transport network connections. The Council will continue to work with Oxfordshire County Council and other

(i) Ensure that where new development is located close to, or along, existing strategic public transport corridors, bus and/or rail services can be strengthened in response to increases in demand for travel; (ii) Plan positively for rail improvements within the area that support improved connectivity to areas of new development; (iii) Ensure new development is designed to encourage walking and cycling, not only within the development, but also to nearby facilities, employment and public transport hubs; (iv) Support provision of measures which improve public transport (including Park & Ride), cycling and walking networks within and between towns and villages in the district; (v) Support, where relevant, sustainable transport improvements in the wider Didcot Garden Town area and in and around Oxford, particularly where they improve access to strategic development locations; (vi) Promote and support improvements to the transport network which increase safety, improve air quality, encourage use of sustainable modes of transport and/or make our towns and villages more attractive; (vii) Adopt a comprehensive approach to the provision and management of car parking aimed at improving the attraction of our town and village centres; (vi) Ensure the needs of all users, including those with impaired mobility are planned for in development of transport improvements.	partners to promote sustainable transport and accessibility in line with proposals outlined in the Local Transport Plan 4. Where development will lead to an increase in demand for public transport, the Council will ensure that this is evidenced and that this is fed in to wider plans and studies. As part of the plans for more homes and jobs at Culham, for example, there is the opportunity to work with the rail industry to develop the rail station as an improved public transport hub with more rail services and improved interchange facilities. It will also be important for those sites adjacent to Oxford that they can appropriately tie in with the current Oxford bus network to allow sustainable transport access to nearby employment, services and facilities. In line with the NPPF, the District will support the availability of suitable and sufficient car parking within town and village centres.

Policy TRANS3: Safeguarding of Land for Strategic Transport Schemes Land is safeguarded to support the delivery of the following identified transport schemes: • Clifton Hampden bypass • A new Thames road crossing between Culham and Didcot Garden Town • Didcot Northern Perimeter Road • Science Bridge, Didcot • (A4130/ B4493) Didcot Central transport corridor improvements • Southern Didcot Spine Road • A4130 road safety improvements • A4074/ B4015 (Golden Balls) Junction Improvements • A bypass for Watlington • A bypass for Benson • A bypass for Southern Abingdon • A new Park and Ride site at Sandford to the south-east of Oxford New development in these areas should be carefully designed having regard to matters such as building layout, noise insulation, landscaping, the historic environment and means of access.	There is a need to safeguard land to enable the delivery of key transport infrastructure that will support development within the Local Plan 2034 and beyond. This will be important to ensure that any proposals for development do not prejudice the future delivery of these schemes. The schemes included for safeguarding of land to protect their future delivery are based on evidence work undertaken to date, including where relevant consistency with the Local Transport Plan 4 adopted in 2015. The Council will continue to work with others, particularly the County Council and, where relevant, other statutory consultees, on development of these schemes.

Any proposals for development that may reasonably be considered to impact upon the delivery of the identified schemes should demonstrate the proposal would not harm their delivery. Planning permission will not be granted for development that would prejudice the construction or effective operation of the transport schemes listed above. As the options for the schemes progress, the impact of these schemes will be subject to thorough assessment. This will include full environmental and archaeological assessments working in association with the relevant statutory bodies. Where schemes are located in areas of Flood Zones 2 and 3, a flood risk sequential test and the exception test should be undertaken as part of the appraisal process.	
Policy TRANS4: Transport Assessments, Transport Statements and Travel Plans Proposals for new developments which have transport implications that either arise from the development proposed or cumulatively with other proposals will need to submit a transport assessment or transport statement, and where relevant a travel plan. These documents will need to take into account Oxfordshire County Council and Planning Practice Guidance and where appropriate, the scope should be agreed with Highways England.[16]	Policy TRANS4 outlines the requirements for transport assessments, transport statements and travel plans in accordance with the latest National Planning Practice Guidance and County Council Guidance, and, where relevant Highways England guidance. It also outlines the need for developers to take account of the requirements for transport infrastructure in the area.

[16] https://www.oxfordshire.gov.uk/cms/content/travel-plans-statements-and-advice and https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements

Appropriate provision for works and/or contributions will be required towards providing an adequate level of accessibility by all modes of transport and mitigating the impacts on the transport network. Careful consideration should be given to the cumulative impact of relevant development both in South Oxfordshire and adjacent authorities, and how this links to planned infrastructure improvements. This should take into account the latest evidence base work, which, where relevant, will inform the scoping of the Transport Assessment and Travel Plan. The transport assessment or transport statement should, where relevant; (i) illustrate accessibility to the site by all modes of transport; (ii) show the likely modal split of journeys to and from the site; (iii) detail the proposed measures to improve access by public transport, cycling and walking to reduce the need for car travel and reduce transport impacts; (iv) illustrate the impact on the highway network and the impact of proposed mitigation measures where necessary; (v) include a travel plan (which considers all relevant forms of transport including accessible transport for disabled people) where appropriate; and (vi) outline the approach to parking provision. Where relevant, evidence obtained from this detailed work will inform the number and phasing of homes to be permitted on proposed development sites and will be established (and potentially	Transport assessments and transport statements are used to help determine whether the impact of a development is acceptable. Travel plans should set out how a development will be managed, post-occupation, to meet targets for car journeys to and from the site and promote sustainable travel, in addition to outlining how, particularly in rural areas, innovative measures may be required.

conditioned) through the planning process, in consultation with the Highway Authority. In accordance with the guidance, travel plans will be required, implemented and monitored for all developments that will generate significant amounts of movement.	
Policy TRANS5: Consideration of development proposals Proposals for all types of development will, where appropriate: i) provide for a safe and convenient access for all users to the highway network; ii) provide safe and convenient routes for cyclists and pedestrians, both within the development, and including links to rights of way and other off-site walk and cycle routes where relevant; iii) provide for covered, secure and safe cycle parking; iv) be designed to facilitate access to high quality public transport routes, including safe walking routes to nearby bus stops or new bus stops; v) provide for appropriate public transport infrastructure; vi) be served by an adequate road network which can accommodate traffic without creating traffic hazards or damage to the environment; vii) where new roads, pedestrian routes, cycleways and street lighting are to be constructed as part of the development, they should be constructed to adoptable standards and be	In line with the NPPF, Policy TRANS5 sets out the key considerations in relation to transport access and movement that need to be accommodated at both the design stage and the delivery stage of new development. This includes in particular the provision of facilities for walk, cycle and public transport access to new development, as well as providing facilities for low-emission vehicles given their current growth in numbers.

completed as soon as they are required to serve the development; viii) make adequate provision for those whose mobility is impaired. ix) be designed to enable charging of plug-in and other low-emission vehicles in safe, accessible and convenient locations; x) provide for loading, unloading, circulation and turning space; xi) be designed to enable the servicing of properties by refuge vehicles; xii) provide for parking for disabled people; xiii) provide for the parking of vehicles in accordance with the County Council parking standards, unless specific evidence is provided to justify otherwise; and xiv) provide facilities to support the take up of electric and/ or low-emission vehicles.	
Policy TRANS6: Rail Where required, and not covered within the scope of permitted development, planning permission will be granted for proposals which: (i) improve rail services in South Oxfordshire; (ii) improve access to rail services including for disabled people; and/or (iii) improve facilities at railway stations such as car and cycle parking and upgrades to interchanges provided that there are	Demand for the use of rail services is growing strongly, and there are plans to significantly improve rail services operating to and through South Oxfordshire. Significant improvements such as proposed new rail lines would likely require approval processes at a national level, such as through a Transport Works Act Order.[17] However, where in the scope of local planning policy, Policy TRANS6 supports provision for rail improvements to take place.

[17] https://www.gov.uk/government/groups/transport-and-works-act-team

no significant adverse effects on the environment or amenities of residents.	
Policy TRANS7: Development Generating New Lorry Movements Proposals for development leading to significant increases in lorry movements such as freight distribution depots should only be permitted in locations where: (i) any increase in lorry movements can be appropriately accommodated on the surrounding road network; (ii) the opportunities for sustainable transport access have been maximised; and (iii) the development does not result in serious and adverse environmental effects on the surrounding area.	It is important that the impact of any new development which will lead to significant new lorry movements is fully understood and that locations for such development have appropriate access to strategic transport networks.