

Cherwell Local Plan 2011-2031:

**Matters 3 – 9 Transport**

Representations on behalf of  
Cherwell Development Watch Alliance (“CDWA”)

## **TRANSPORT – MATTERS 3 – 9**

Cherwell Development Watch Alliance has liaised with its Members (the Begbroke & Yarnton Green Belt Campaign; GreenWayOxon; Harbord Road Area Residents' Association; Kidlington Development Watch; and the Woodstock Action Group) which were each asked to limit their submissions to 2,000 words per Matter, and is speaking on their behalf in respect of Matters 3 - 9.

Accordingly, its submission which is 2,469 words long stands for all.

Cherwell Local Plan 2011-2031:  
**Matter 3 – Spatial Strategy**  
Representations on behalf of  
Cherwell Development Watch Alliance:  
Transport

**Railton TPC Ltd**



Railton TPC Ltd ref:	Cherwell Local Plan
Planning Inspectorate	Ref: N/A
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Author:	Bruce Bamber BSc MA MSc CMILT MCIHT

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## 1. INTRODUCTION

### General

- 1.1. This submission has been prepared on behalf of Cherwell Development Watch Alliance in relation to Matter 3 (Spatial Strategy) to be discussed on Day 1 of the scheduled Main Hearing to consider the Cherwell Local Plan 2011-2031 Partial Review: Oxford's Unmet Housing Need.
- 1.2. Railton TPC Ltd prepared a report objecting to the proposed Policies PR8 and PR9 in October 2017 on behalf of Begbroke and Yarnton Greenbelt Association (BYG) as part of BYG's overall consultation response to the proposed Policies PR8 and PR9.
- 1.3. This submission provides evidence that the Spatial Strategy is unsound in that:
  - The transport modelling work that has been undertaken fails to account for the closure of Sandy Lane;
  - No reliable transport modelling work has been undertaken to properly assess the impact of the proposed allocations on the A44;
  - The area of search assessment process was flawed and biased;
  - Mitigation measures to avoid severe transport impacts may not be deliverable or effective.

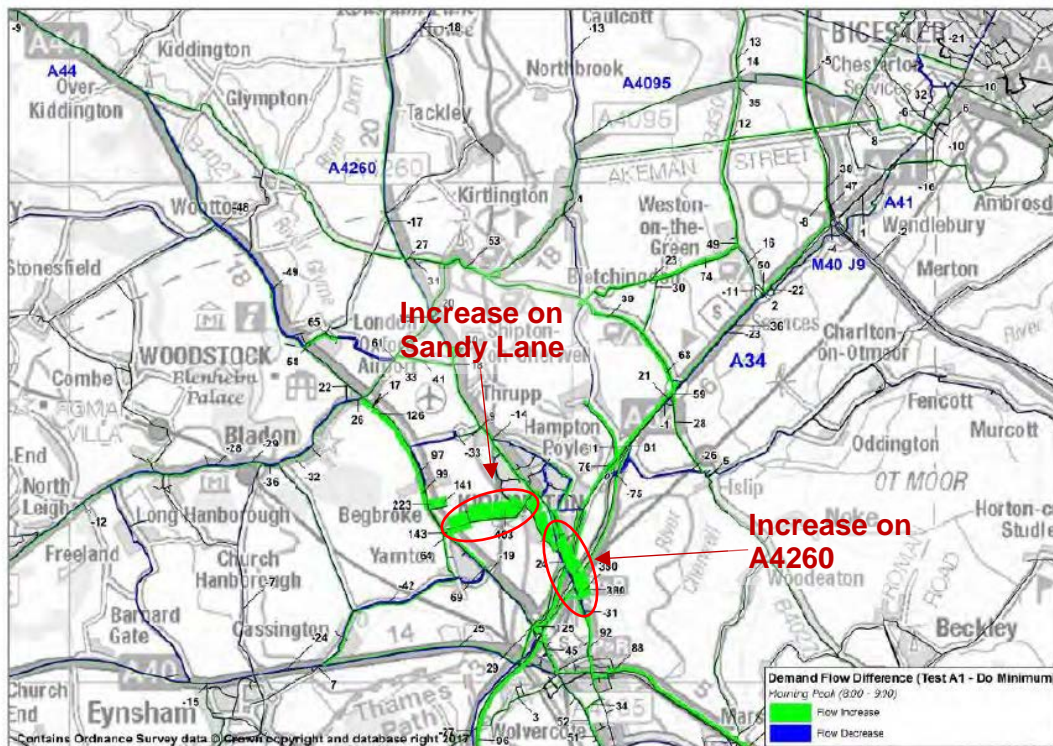
### The Author

- 1.4. The author, Bruce Bamber is a member of the Chartered Institution of Highways and Transportation and a member of the Chartered Institute of Logistics and Transport and holds a master's degree from Imperial College, London. He is the Director of Railton TPC Ltd and has worked in transport planning for over 25 years, developing transport and access strategies for a range of land uses including major development sites. He has participated in a number of Local Plan Examinations and given evidence at Public Inquiries and a DCO Inquiry.

## 2. FAILURE TO MODEL CLOSURE OF SANDY LANE

- 2.1. The closure of Sandy Lane forms an integral part of the access strategy for development east of the A44. The closure is cited explicitly in Policy PR8 and its priority is described as 'critical' in Table 8-2 of the 'Transport Assessment: Evidence for Cherwell Local Plan (Part 1) Partial Review: Oxford's Unmet Housing Need' (ITP, July 2017) (the Transport Assessment, **document PR52**). Sandy Lane must be closed to avoid an unacceptable impact on the A4260 that would undermine its central role in accommodating a Rapid Transit service (see Section 3.2 of A44/A4260 Study, **document PR36**). The Rapid Transit service is a key objective of the Oxfordshire Local Transport Plan (LTP, **document PR18, pp.9, 10-19**). Sandy Lane is also required to be closed to avoid an increase in traffic using the level crossing, an outcome that would be strenuously opposed by Network Rail on safety grounds.
- 2.2. The Transport Assessment (the TA) prepared by ITP to inform the Local Plan Partial Review (ITP, July 2017) indicates, in its initial modelling of the impacts of three possible combinations of site allocations (Scenarios A1-A3), that the most notable impact is a very significant increase in traffic on Sandy Lane and on the A4260 through Kidlington as shown on Figure 7-4 of the TA reproduced below. Green lines indicate traffic increase and the width of the lines is proportional to the magnitude of the increase. Clarification on the number of vehicle trips represented by the green line has been sought from Oxfordshire County Council (OCC):

Figure 1: Change in Traffic Flow AM Peak (Scenario A1 – Do Minimum)



Source: Figure 7-4 of Transport Assessment, July 2017

- 2.3. The finding is entirely contrary to the overall strategy that seeks to direct general traffic towards the A44 and close Sandy Lane to vehicular traffic.
- 2.4. The 'Refined Development Scenario' (A4) was subsequently modelled with a package of mitigation measures. Paragraph 7.36 of the TA states:

*The option to sever Sandy Lane as a vehicular link was tested in an initial model run, but generated results that were incompatible with expectations. Consequently, it was agreed that Sandy Lane would remain open to traffic in the model (to allow for network optimisation), but recognised this would likely remain a desirable highway intervention to support the delivery of housing in the vicinity of Kidlington and prevent excessive rat-running across what is currently a very quiet route. (TA, para. 7.36)*

- 2.5. The term 'incompatible with expectations' is not standard modelling terminology and is not explained in the accompanying text. What is evident, however, is that there has been no reliable modelling of the impact of the proposed allocations if Sandy Lane is closed.
- 2.6. A further important issue that has not been considered in the modelling work is the extent to which the closure of Sandy Lane will displace existing traffic movements onto the A44 and A4260. A traffic survey undertaken in January 2019 shows that the route is currently used by over 2,000 vehicles a day with over 200 vehicles in the AM peak hour and generally between 150 and 200 vehicles during other hours of the day. Not only will

the displacement of existing vehicles increase congestion on the A44 and A4260 but there will be significant adverse impacts for existing local residents who will be forced to undertake longer journeys on often congested roads to access local facilities. Further details of the January 2019 survey and a consideration of its implications is provided in the Railton Submission on Matters 6 and 7 on behalf of Begbroke and Yarnton Green Belt Association (BYG).

2.7. It is concluded that the overall Spatial Strategy is **unsound** because:

- **The closure of Sandy Lane is a critical element of the access strategy yet there has been no modelling of the implications of closing Sandy Lane. There can therefore be no rational basis for adopting a policy that requires this link to be closed;**
- **Without the closure of Sandy Lane, the allocations will fundamentally undermine the objectives of the A44/A4260 Study.**



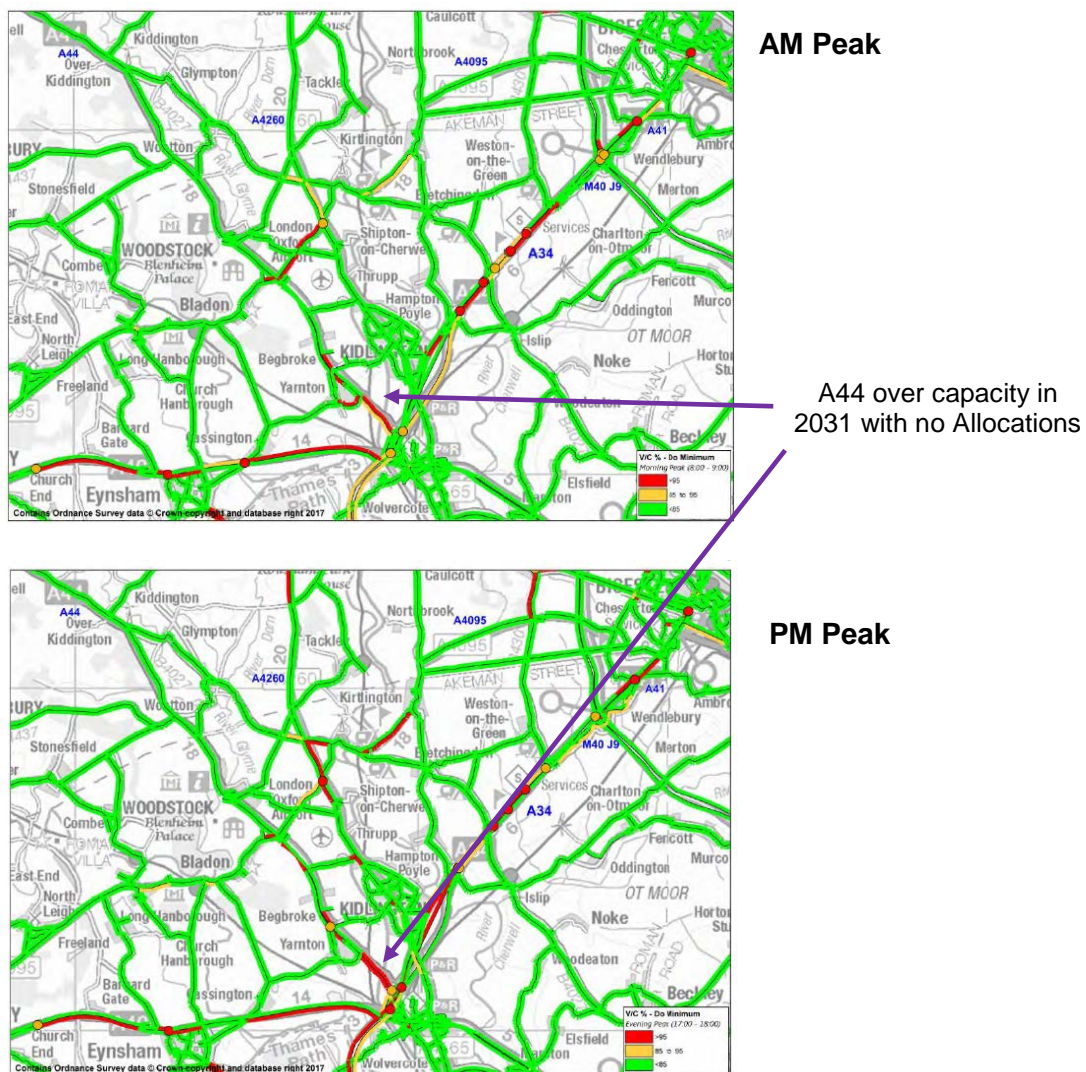
### 3. IMPACT ON A44

3.1. Evidence of congestion (existing and future) on the A44 is available from several sources:

- The Oxford Strategic Model (OSM) as reported in the Transport Assessment;
- The A44/A4260 Corridor Study (Atkins, April 2017) that builds on the objectives set out in the Oxfordshire Local Transport Plan (LTP); and
- A 'logic check' assessment of the ability of the A44 to accommodate predicted future traffic flows based on its operational capacity.

3.2. The OSM predicts that sections of the A44 will be over capacity (red links) in 2031 **without** the proposed allocations:

Figure 2: Links over capacity (red): 'Do Minimum' AM and PM Peak Hours, 2031



Source: Figures 20 and 21 of Appendix 7 of Transport Assessment, July 2017

3.3. Information about observed existing delays on the A44 and A4260 is available from the A44/A4260 Corridor Study (Atkins, April 2017). The study states that existing

southbound delays on the A44 south of Sandy Lane and on the A4260 through Kidlington in the AM peak hour are high, generally over 200 seconds per mile and in some cases over 400 seconds per mile (see Figure 2-1 of A44 and A4260 Corridor Study). The key existing issues are summarised in the report and include:

- *Significant southbound delay approaching the A4260 Kidlington roundabout;*
- *Northbound and southbound delay on the A4260 through Kidlington;*
- *Southbound delay on the A44 from Yarnton towards the A34/A44 roundabout;*
- *Delay per mile increases south of the A44 and A4260's junctions with Sandy Lane/Yarnton Road; and*
- *In general, less delay to the north of the corridor, although there are some delay hotspots, such as at the Langford Lane/A4260 and A4095/A44 junctions. (A44 A4260 Study, section 2.1.2)*

- 3.4. This observed travel time data reported in the A44/A4260 Study therefore suggests that the OSM 'do minimum' predictions are an under-estimate of likely congestion in 2031.
- 3.5. The A44 in the vicinity of the rail and canal crossings has a capacity of 1,590 vehicle per hour in the busiest direction of flow<sup>1</sup>. Once a link exceeds its capacity, traffic no longer flows freely and queues and delays rapidly increase. Table 2-1 of the A44/A4260 indicates that the A44 south of Yarnton currently carries around 1,240 vehicles in the busiest direction of flow in the peak hours (22% below maximum link capacity). The modelling work indicates that there will be a 36% increase in overall car trips between 2013 and 2031 just from background growth (Table 13 of Appendix 5 of the Transport Assessment). This is 14% above the level (22%) that would bring the A44 to its operational capacity in the peak hours. It therefore appears that the A44 would operate over its *link* capacity in 2031 even without traffic associated with the proposed allocations. In this situation, there would be no free flow of traffic, peak periods would be characterised by long delays and any additional vehicle trips would add to already significant queues.
- 3.6. If Sandy Lane were closed, the additional car trips generated by the proposed PR8 and PR9 allocations (potentially around 1,000 in the peak hours based on typical peak hour trip generation rates) would have no choice but to use the A44. Furthermore, Sandy Lane would no longer be available, as it is at the moment, as a side turning enabling vehicles on the A44 to divert across to the A4260 in the event of congestion on the A44

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<sup>1</sup> Table 2 of TA 79/99, 'Traffic Capacity of Urban Roads' assuming the A44 at this point is a 'high standard single carriageway'

(or vice versa) to relieve the congestion. Despite this overwhelming evidence of a likely severe impact on the A44 if Sandy Lane were closed, there has been no modelling to show the extent of what is likely to be a severe impact.

- 3.7. It is concluded that the proposed Spatial Strategy is unsound because there has been no reliable modelling of the impact of the proposed allocations on the A44, which is likely to be severe.**

#### **4. FLAWED AND BIASED SITE SELECTION PROCESS**

4.1. The Railton Objection Report provides a detailed assessment of the flaws and biases in the area of search assessment process (as set out in Section 5 of the Transport Assessment). The following summarises the key points:

- Area A that includes the sites at Yarnton and Begbroke is given a 'green' rating for car mode share based on the use of observed Kidlington data rather than on more appropriate data for Yarnton and Begbroke that would give the areas an 'amber' rating.
- Area A is given a 'green' rating for proximity to sustainable transport with no objective justification. The application of the assessment criteria in Table 5-2 of the Transport Assessment would suggest that an amber rating would be appropriate for the major allocation sites in Area A.
- A 45 minute travel time to jobs is adopted based on a 'balance' of commuter travel times derived from the National Travel Survey (29 minutes), an Oxford Mail newspaper article that quotes an ESRI survey of 3,000 people across the UK (51 minutes) and a Guardian article that quotes a TUC study (55 minutes) (see paragraph 5.12 of Transport Assessment). Not only are the small-scale studies unreliable and potentially biased but the story being told in the newspaper articles is that such long commutes are not acceptable and certainly not desirable. Area A emerges as 'accessible' on the basis of a travel time of 45 minutes. In earlier assessments (High Level Transport Assessment, ITP, May 2016) a reliable and unbiased national 30-minute threshold based on the National Travel Survey was adopted, resulting in an 'amber' rating for Area A.
- Area A is given a 'red' rating for congestion. However, the weight given to this important impact was limited as no consideration is given to the associated negative impacts of emissions and air quality, nor to the negative impact that congestion will have on the ability to deliver sustainable transport schemes or the effectiveness of those schemes.
- Area A is rated 'green' for the 'Proximity to Planned Local Transport Investment' metric despite the planned local improvements being fundamentally undermined by the proposed allocations (see section 2 above).
- Area A is rated 'green' for proximity to a rail station despite there being no station within walking distance of the major allocation sites. In addition, an unsubstantiated binary distinction between a train travel time of less or more than

10 minutes is applied. In reality, there is no evidence to suggest that significantly longer train journey times would deter commuters from using a service. The adoption of an arbitrary 10-minute journey time threshold has the effect of favouring the use of the Oxford Parkway station over other stations.

- 4.2. It is concluded that the overall Spatial Strategy is **unsound** because the area of search assessment process is fundamentally flawed and biased towards sites in Area A.

## **5. RELIANCE ON LONDON OXFORD AIRPORT P&R**

- 5.1. The modelling work assumes a number of mitigation measures including a new park and ride (P&R) at London Oxford Airport.
- 5.2. The delivery of the proposed P&R at London Oxford airport cannot be guaranteed since it relies upon the acquisition of a significant amount of land from a private sector organisation. There is no commitment from the airport operator to make land available and there has been no work to demonstrate that the airport can operate successfully into the future without the land that could be used for a P&R. The Oxford Bus Company, the current Oxford P&R operator, has also made it is clear that it is not convinced that a P&R located beyond a 20-minute bus travel time (as is the case here) would be viable (see representations made by Oxford Bus Company in Statement of Consultation, **document PR93**).
- 5.3. The TA does not make it clear how the assumed presence of the park and ride has influenced future year modelled flows. Clarification has been sought on this point from OCC. If it has been assumed that the park and ride will be intercepting a significant proportion of southbound vehicle trips in the development scenarios, then the results of the modelling will be significantly under-estimating the level of congestion that would arise if the P&R was undeliverable or ineffective.
- 5.4. **It is concluded that the proposed Spatial Strategy is unsound because it relies on mitigation that may not be deliverable or effective.**

## 6. CONCLUSION

6.1. This submission concludes that the proposed Spatial Strategy is **unsound** for the following reasons:

- **The closure of Sandy Lane is a critical element of the access strategy yet there has been no modelling of the implications of closing Sandy Lane. There can therefore be no rational basis for adopting a policy that requires the link to be closed;**
- **Without the closure of Sandy Lane, the allocations will fundamentally undermine the objectives of the A44/A4260 Study;**
- **There has been no reliable modelling of the impact of the proposed allocations on the A44;**
- **The area selection process was fundamentally flawed and biased towards sites in Area A that includes sites at Yarnton and Begbroke; and**
- **The proposed Spatial Strategy relies on mitigation that may not be deliverable or effective.**