

BOB HINDHAUGH ASSOCIATES LTD
HIGHWAY DEVELOPMENT MANAGEMENT, TRAFFIC ENGINEERING AND TRANSPORT
PLANNING.
Registered Company No 7149206

TRANSPORT ROUTE CONGESTION ASSESSMENT.
ON A419/A420/A415 LINK

ON BEHALF OF
WESTERN VALE VILLAGES CONSORTIUM OF
PARISH COUNCILS LISTED

AS A

**REPRESENTATION TO THE VALE OF WHITE HORSE DISTRICT COUNCIL
EMERGING LOCAL PLAN TO 2029 BY REFERENCE TO ITS DETRIMENTAL
TRAFFIC AND ROAD SAFETY EFFECTS ON THE LOCAL HIGHWAY NETWORK
(A419/A420/A415 LINK)**



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CLIENTS – Western Vale Villages Consortium of Parish Councils (“WV”)”)

Wanborough PC
Bourton PC
Bishopstone PC
Ashbury PC
Compton Beauchamp Parish Meeting
Longcot PC
Watchfield PC
Shrivenham PC

And a number of other councils along the A420 associated with WV, namely,

Faringdon Town Council
Uffington PC
Buckland PC
Great Coxwell PC
Hinton Waldrist PC
Littleworth Parish Meeting
Kingston Bagpuize PC
Buckland PC
Fyfield and Tubney PC
Fernham Parish Meeting
Frilford Parish Meeting
Hatford Parish Meeting
Little Coxwell PC
Pusey Parish Meeting

And
with the valued support of CPRE Oxon

14th MAY 2013

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TRANSPORT ROUTE CONGESTION ASSESSMENT

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EXECUTIVE SUMMARY

The local highway network link from the M4 at Junction 15 via the A419/A420 interchange to Oxford is already and demonstrably running at 70% -75% of its full operational capacity at peak times. Neither Swindon Borough Council nor the Vale of White Horse District Council have provided any up to date evidence by way of traffic assessments based on the forecast transport requirements of existing riparian residents and businesses likely to be affected by additional planned housing and industrialisation along this corridor. Nothing relevant appears in either the VWHDC or the SBC draft local plans. Nor has additional traffic likely to be generated by such forecast development been factored into either of these plans. Through various standard traffic assessments using robust vehicle trip rates, this Assessment demonstrates that the existing highway infrastructure cannot be expected to cope with any new development without substantial and seemingly unbudgeted expenditure.

There is no clearly defined timetable or delivery mechanism within any of the emerging local plans that further demonstrate the processes or procedures for delivery of any reasonable form of sustainable transport solution that would significantly reduce the traffic generation growth effects on this link. The predicted modal shift of 15% as highlighted in the Swindon Transport Strategy are optimistic without any background evidence to substantiate this figure, it is difficult to accept this as a realistic objective..

It is reasonable to conclude following this Assessment that there will be significant transport or highway related reasons why the proposed development allocations should not be encouraged unless infrastructure and sustainable transport provision is fully identified and committed.

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1.0 INTRODUCTION

1.1 Bob Hindhaugh Associates Ltd have been appointed to prepare a Transport Route Congestion Assessment (“the Assessment”) on behalf of Western Vale Villages (“WVV”) Consortium of Parish Councils and others associated with it to demonstrate to the Vale of White Horse District Council (“VWHDC”) that all development in this area with direct traffic links onto the A420 will have a detrimental and adverse traffic effect on the A420 Swindon to Oxford link road. The Assessment will also be submitted to Swindon Borough Council. The report will also demonstrate that with the additional traffic the proposed developments will generate, the A420 link will be significantly congested for long periods in the day which will create further congestion on the lesser highway network through unwanted and unwarranted ‘rat running’ and ‘bottlenecks’ creating major hold ups in the local area. The route location plan is shown in Appendix 1.

1.2 I have held discussions with WVV and others and I have, using existing traffic count data issued by Oxfordshire County Council along with other recent traffic count data from the VWHDC planning portal, carried out extensive traffic analysis and highway assessments in the area. The format of this report and its processes are considered accurate and applicable. Based on these discussions with WVV, the purpose of the Assessment is to consider the significantly high transport implications the Local Plan development proposals will have on the local highway network and to demonstrate how the levels of accessibility by sustainable modes of transport are currently inadequate and do not help to reduce new trips by car in line with current policy.

1.3 The Assessment will also demonstrate that the proposed Local Plan developments (and other applied for developments in the area) will materially affect current traffic conditions, which will significantly increase the levels of peak time congestion residents already endure; and that these proposals are not in accordance with local and national planning policy and guidance. One key factor of any future planned development is the transport sustainability of any proposed development and this is considered as a fundamental issue which is clearly set out and defined in the National Planning Policy Framework (“NPPF”). An accessibility assessment of the alternative modes of travel, e.g., Walking, Cycling, and Public Transport use and provision is presented in Section 5 of the Assessment.

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The structure of the report is as follows:

- Section 2 describes in detail the existing routes, traffic effects on the surrounding area, and the local highway network.
- Section 3 examines the transport policy as set out in the NPPF, Regional Policy and the emerging Vale of White Horse District Council (VWHDC) and Swindon Borough Council (SBC) local plan development proposals with regard to local issues.
- Section 4 considers the Vale of White Horse District Council (VWHDC) and Swindon Borough Council (SBC) Local Plan development proposals and their direct impact with regard to additional extensive traffic flows on the proposed A419(T) – A420 – A415 link and surrounding rural network. It also provides a brief explanation of existing local problems and issues.
- Section 5 considers the above policy in terms of local sustainable transport infrastructure in relation to the route corridors and the surrounding rural area including pedestrian and public transport links on the route between Swindon and Oxford centres;
- Section 6 details the trip generation/attraction associated with both the existing traffic situation and the proposed Local Plan land uses in this area in order to determine the net impact on vehicular movements associated with the current deposited/committed planning applications and large scale developments proposal within the emerging local plans on the local highway network. This includes a description of the technical assessments between the A419/A420 White Hart roundabout junction, up to the A415 junction taking into account the affected priority junctions on this link; Furthermore, the proposed 'Eastern Villages' to the East of Swindon will undoubtedly have a detrimental traffic impact on the A420 Swindon to Oxford route. This additional cross boundary traffic flow must also be given serious consideration as part of this Assessment, in presenting to the Inspector a fully impartial and robust report.

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- Section 7 provides a detailed breakdown of key traffic management concerns on the A419 (T) A420 – A415 Transport Route Corridor that further impact on delays and congestion.

- Section 8 provides a conclusion to the report and makes suggested recommendations.

1.4 In summary, the report is prepared in connection with the traffic and transportation implications on the A419 (T) - A420 White Hart Roundabout – A415 junction that the proposed development sites contained within both the Swindon Borough Council and the Vale of White Horse District Council Local Plans will have a bearing directly on this strategic link and other roads locally. While I have assessed the local plans independently, I have also taken into account other committed, permitted, and submitted development proposals previously accepted by the Vale of White Horse District Council prior to the Local Plan development proposals being produced, and since.

1.5 The effects of traffic on other local roads that have a direct link to the A420 has also been considered. However, to compile a robust case, detailed consideration of the cross boundary vehicle trips as part of the emerging Swindon Borough Council Local Plan, particularly sites on the Eastern side of Swindon have also been included to represent a realistic case in terms of the traffic situation and its impact.

**2.0. DESCRIPTION OF LOCAL ROADS AND OF THE ROUTE A419/A420 /A415 AFFECTED BY
PLANNED DEVELOPMENT**

2.1 AREA LOCATION

2.2 The highway link under consideration in this Assessment is from the A419 (T)/A420 White Hart roundabout along the length of the A420 until it meets with the junction of the A415. (***A point to be noted is the A419(T) is within the Wiltshire boundary area. However, it does have a significant role to play in the cross boundary traffic flow levels on the A420 Swindon to Oxford link***). A plan of this route is shown in **Appendix 1** of this report. As part of the assessment, other junctions which are already experiencing congestion and stress have also been reviewed and analysed. These junctions on the A420 from West to East are described in some detail below.

2.3 ROUTE DESCRIPTION

2.4 The route is typically urbanised soon after the White Hart roundabout towards Gablecross roundabout, with a number of access points to Sainsbury's supermarket, Thornhill Road, and Horstmann Close. The Police Headquarters is close by heading East with a signalised junction that has no right turning facility when travelling West along the A420. I will discuss these junctions in more detail in paragraph 2.9 below.

2.5 The A420 becomes predominantly rural within a short distance with verges, no footways, and no street lighting. As the A420 approaches Acorn Bridge (a railway bridge crossing over the A420) the carriageway narrows down to 3.7 metres with a 4.8 metre height restriction. (Signage instructs large vehicles to keep to the centre of the carriageway). The A420 is 50 mph limited at this point and the carriageway feels constrained. The Forward Stopping Site Distance ("FSSD") at the bridge should be a minimum of 160m. One my site inspection, I do not consider the actual FSSD is to the appropriate standard for that of a 50pmh speed limit. (The existing network characteristics and defects are described in Section 7 of this report)

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2.6 Continue travelling east towards Oxford along the A420 approaching Lower Field Farm, there is a right turn into Townsend Road towards Shrivenham. When exiting Townsend Road onto the A420, there is a considerable delay for traffic especially when making the right turn manoeuvre towards Oxford at peak times. This delay is due to the high volume of traffic travelling west towards Swindon, even with the presence of a traffic speed camera close to this junction to slow vehicles down. This still does not provide a sufficient break in traffic flow to allow vehicles to gain access. From my site inspection, this appears to have the opposite effect by intensifying the traffic build up at this location particularly on the Townsend Road/Cleyfields junction. (Cleyfields is a well-established 'rat run' in the local area) This is further confirmed in the attached photograph survey in Appendix 4 to this report. Continue along the route East towards Oxford on the A420 and again long queues form at three arms of the 4 arm Watchfield Roundabout.

2.7 From the Watchfield Roundabout, travelling east towards Oxford the A420 becomes very rural in its characteristics with variant 60mph then 50mph speed limits until it reaches the Faringdon Roundabout. This section has two directional speed cameras before it eventually reaches the Faringdon Roundabout at its junction with the A417. The evidence of this extensive queuing problem is highlighted in the photographic survey, (N25 and N26). Also highlighted in photograph N27 is an example of the congestion levels at Faringdon Road on the approach route to Watchfield Roundabout. Although not as severe as other highlighted junctions, any increase in vehicular movements at this location as a result of increased development must have a significant and detrimental impact at the Faringdon Road/Majors Road junction with potential queuing levels extending into Shrivenham Village. Inevitably, without road improvements, this problem would be further exacerbated by any future development proposals creating increased levels of 'rat running' in this location.

2.8 Park Road, Faringdon, experiences regular peak time congestion with traffic queues along its length when heading south towards the A420. Vehicles wanting to turn right at the roundabout and travel West towards Swindon, actually drive along the centre of the carriageway at frequent intervals which is a dangerous practice which is born out of frustration due to excessive queues. The speed limit at this location is 50mph which reduces to 30mph when travelling north towards Faringdon. There are proposals for a 350 unit housing estate and 7.3 hectares (75000m²) of mixed used employment allocations within the VWHDC emerging Local Plan.

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2.8 Appendix 1A sets out and identifies to some extent the impact on the local network of the proposed distribution of traffic of both committed and permitted development and the extent of the traffic effects the VWHDC emerging Local Plan will have, based upon current traffic patterns close to this strategic route. I have also considered the major impact of the Swindon Borough Council emerging Local Plan initiative – the ‘Eastern Villages’ development - proposals will have on the A420 – A415 link.

2.9 **KEY JUNCTIONS AFFECTED BY BOTH VWHDC AND SWINDON LOCAL PLANS:**

1) The 5 arm White Hart roundabout (RAB) junction with A4312 (Oxford Road) /Ermin Street / A419 / Merlin Way / A420.

2) Sainsbury's Toucan Crossing and Gablecross 5 arm Roundabout junction with Sainsbury's / Thorn Hill Road / Horstmann Close / A420.

3) A420 Police H.Q. Signalised junction (with no right turn heading west)

4) Townsend Road junction onto A420, (queuing and right turn issues)

5) Watchfield 4 arm RAB junction with A420 / Majors Road B4508 / Faringdon Road.

6) Faringdon 3 arm RAB junction with A420 / A417 Park Road.

(Junction N1) The 5 arm White Hart interchange roundabout (RAB) junction with A4312 (Oxford Road) / Ermin Street / A419 / Merlin Way / A420, is mainly a single carriageway road, circa 7.3m wide. It is classed as part of the Principal Route Network (“PRN”) and is the major strategic distributor road linking Swindon and Oxford and towns and villages along this route. It is also the main traffic feeder road onto the A419 (T) to junction 15 of the M4 motorway. It also provides vital transport and traffic links to other subsidiary towns and big villages such as, e.g., Faringdon and villages such as Shrivensham. In addition, access and egress is also provided to a number of smaller villages, for example, Great Coxwell. It is subject to a speed limit of 40mph, although in specific locations along the route there are 30mph speed limits in place. In the main it does not have the benefit of street lighting.

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There are currently some limited footways/cycleways on or adjacent to the road with the exception of the major junction zones as mentioned above. The footways on each side of the road terminate after relatively short distances, providing no safety areas for pedestrians or cyclists alike. This junction not only links Swindon to Oxford, Bristol and Heathrow airports but also links Swindon to the Midlands via the M5 Motorway.

(Junction N2) Sainsbury's Toucan Crossing and the Gablecross 5 arm Roundabout junction with Sainsbury's / Thorn Hill Road / Horstmann Close / A420. This is a major junction serving retail developments. Large vehicles exiting from Thorn Hill Road onto the A420, during peak times have to wait until the signals at the Toucan crossing turn red before they can gain access onto Gable Cross Roundabout. This is due to high volumes of traffic heading East towards Oxford.

(Junction N3) A420 Police H.Q. This signalised junction has no right turn when heading West towards Swindon. This forces vehicles to drive up to and around **junction 2**, Gablecross Roundabout, which further exacerbates the congestion issues at this location.

(Junction N4) Townsend Road junctions onto A420. At peak times queues form and back up along Townsend Road and the minor road signposted to Bourton. Traffic travelling from Shrivenham, Bourton, Ashbury, and Bishopstone experience long delays waiting to gain entry onto the A420 at this location. Right turn movements are near impossible at peak times due to the large volumes of traffic travelling on the route.

(Junction N5) Watchfield 4 arm RAB junction with A420 / Majors Road B4508 / Faringdon Road. Traffic travelling east towards Oxford have the benefit of a filter lane which avoids the Watchfield Roundabout. At peak time in particular long traffic queues form in both directions along the A420 approaching this junction.

(Junction N6) The Faringdon 3 arm Roundabout junction of A420 / A417 Park Road experiences congestion at peak times as traffic builds up in both directions heading towards Faringdon with long queues forming very quickly. In addition to this, the heavy volumes of traffic heading away from or out of Faringdon using Park Road also experience traffic queues with right turners driving along the middle

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of Park Road towards oncoming traffic to gain access onto the A420 before heading west towards Swindon.

3.0 NATIONAL AND REGIONAL TRANSPORTATION POLICY

3.1 Overview

3.1.1 The Assessment examines the proposed Local Plan development proposals of the Vale of White Horse District Council in the context of the relevant traffic and transportation policy guidance issued by the Department for Transport (“DfT”) and the Department for Communities and Local Government (“DCLG”), together with local policies issued by VWHDC. As part of this Assessment detailed consideration must also be given to significant SBC development proposals to the East of Swindon known as the ‘**Eastern Villages**’. These are very substantial development proposals (fully described in the SBC draft Local Plan) that will have a far reaching effect on traffic levels on the A419/A420.

3.1.2 A wide ranging approach needs to be fully considered when providing a suitable and deliverable development transport strategy which is the backbone of any emerging Local Plan policy document. The local highway and planning authorities must work very closely together to ensure that any development aspirations can be fully integrated into the highway network without adding to congestion on any of the strategic routes, or at the very least they must be completely satisfied that all resulting predicted traffic flows can be safely accommodated on the existing highway network. All such issues must be taken into account relating to current and emerging policy and guidance documents. In terms of the VWHDC Local Plan, I have balanced this Assessment on the following key policies relating to new residential and employment developments as proposed in the emerging VWHDC and SBC Local Plans.

- National Planning Policy Framework (“NPPF”), March 2012,
- Manual for Streets (“MfS”)
- Vale of White Horse Council’s current Development Plan

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- Vale of White Horse District Council emerging Local Plan 2029.
- Oxfordshire County Council Local Transport Plan 2013-2030
- Elements of the Swindon Emerging Local Plan, in particular the proposed Eastern Villages.

3.1.3 The golden thread running through current national and local policies is to promote and deliver and enhance sustainable transport objectives. This is a key factor in defining any sound transport strategy as part of both these Councils' emerging local development plans to 2026 and 2029 respectively. There is a range of documents that provides advice and guidance identifying that the historic approach of adopting rigid policies and standards and then considering any housing or employment development proposals later and in isolation of each other is just not appropriate or desirable in today's world. These include, for example, NPPF, MfS, and its companion guide Manual for Streets 2 ("MfS2").

3.2 NATIONAL PLANNING POLICY FRAMEWORK ("NPPF"):

3.2.1 The Government's commitment to sustainable development is emphasised in NPPF regarding transport related issues, this includes the basic land-use planning principle to:

"actively manage patterns of growth to make the fullest possible use of public transport, walking, and cycling and focus significant development in locations which are or can be made sustainable" (Core Planning Principles - Para 17).

3.2.2 In my view the emerging VWHDC Local Plan and its proposed major development options do not take into account this NPPF policy requirement as I will demonstrate later in **Section 5** of this Assessment.

3.2.3 With regard to promoting sustainable transport and reducing further congestion on highway links, NPPF also sets out quite clearly that: **"Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel."** (Promoting Sustainable Transport - Para 29), and identifies that **"Local planning authorities should therefore**

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support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport." (Promoting Sustainable Transport - Para 30).

"Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- safe and suitable access to the site can be achieved for all people; and
- Improvements can be undertaken within the transport network that cost effectively limits the transport impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe." (Promoting Sustainable Transport - Para 32). This is a pivotal issue for the Parish Councils and residents who rely on the A420. I will discuss the technical elements in more detail later in this Assessment.

3.2.4 NPPF goes on to state that:

"Developments should be located and designed where practical to:

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;

- **incorporate facilities for charging plug-in and other low emission vehicles;**

and

- **Consider the needs of people with disabilities by all modes of transport."**
(Promoting Sustainable Transport - Para 35)

3.3 MANUAL FOR STREETS

3.3.1 MfS was published by the DfT and DCLG in 2007, while its companion document MfS2 was published in 2010. Both documents give advice on the design of residential streets and roads, giving specific guidance on:

- Connections to surrounding areas;
- Connections through the site;
- Building lines;
- Building heights; and
- Routes for utilities.

3.4 REGIONAL POLICY

3.4.1 The Regional Spatial Strategy ("RSS") for the South East to 2026 was formerly known as the South East Plan. The RSS was published in 2009 and set out a framework for development and investment in the region over the next 20 years. The RSS provides a strategic, upper tier, of planning guidance covering the region as a whole and complements national policy to provide an understanding of how the delivery of such policies can address specific challenges and opportunities in the South-East. The RSS is part of the statutory development plan for every local authority in the South-East which must each prepare Local Development Documents ("LDD") and Local Plans which generally conform with the RSS. Planning applications are to be considered against the provisions of the RSS

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and relevant Local Plans. This document was along with many other Regional Strategies revoked in March 2012 under the Localism Act 2011. It is nevertheless of value.

3.4.2 The Government announced in the Coalition Agreement its intention to “rapidly abolish regional spatial strategies and return decision-making powers on housing and planning to local councils”.

The objective was to make Local Plans, and where desired neighbourhood plans, the basis for local planning decisions.

POLICY T1: MANAGE AND INVEST

Relevant regional strategies, local development documents and local transport plans should ensure that their management policies and proposals:

- i). **are consistent with, and supported by, appropriate mobility management measures,**
- ii). **achieve a re-balancing of the transport system in favour of sustainable modes as a means of access to services and facilities,**
- iii). **foster and promote an improved and integrated network of public transport services in and between both urban and rural areas**
- iv). **encourage development that is located and designed to reduce average journey lengths**
- v). **improve the maintenance of the existing transport system**
- vi). include measures that reduce the overall number of road casualties
- vii). **include measures to minimise negative environmental impacts of transport and where possible, to enhance the environment and communities through such interventions**
- viii). investment in upgrading the transport system should be prioritised to support delivery of the spatial strategy by:
 - a). supporting the function of the region’s international gateways and inter-regional movement corridors.
 - b). developing the network of regional hubs and spokes.
 - c). **facilitating urban renewal and urban renaissance as a means of achieving a more sustainable pattern of development.**
 - d). improving overall levels of accessibility.

3.4.3 This key transportation policy T1 as above, has been retained in the short term and is referred to in the VWHDC Local Plan, which is correct process as it provides a policy overlap which helps underpin the government's objectives for sustainable transport in a hierarchical system. It is quite clear that this approach to development now places a greater emphasis on local planning and highway authorities to be more responsible and specific in delivering their emerging local plans in a way to meet local needs and specific requirements.

3.5 LOCAL POLICY

3.5.1 At a local level, the content, scope and methodology of any Transport Assessment ("TA") or Transport Statement ("TS") must be discussed and agreed with the relevant local authority ensuring it seeks to achieve sustainable transport patterns and limits the traffic impact on the local network in accordance with the Council's own adopted and relevant policies.

3.5.2 The current VWHDC Local Plan 2011 was adopted in 2006. This Plan provided approved policies as a guide to the future development and use of land within the area up until 2011. It is divided into a number of chapters covering specific topics including, traffic impact, public services and transport. The importance of the traffic and transport issues in contributing towards sustainable development and additional congestion levels is so fundamental that they are integrated throughout any Local Plan. Allocations for land uses such as these should be made, so far as it is practicable, in such a way that will minimise the need for motorised transport and avoid further local issues on already congested highway networks. Similarly, there are policies to strengthen and enhance the function and attractiveness of the town centres and local shopping centres, consistent with the objective of reducing the need to travel and the distance needed to travel by private car.

3.5.3 Any well drafted emerging local plan should set out the following objectives fully and how these aims and aspirations are to be funded, delivered and by whom, particularly at the Part 1 developmental stage.

Strategic Objective 8: Reduce the need to travel and promote sustainable modes of transport.

Strategic Objective 9: Ensure new development is accompanied by appropriate and timely infrastructure delivery to secure effective, and wherever possible, sustainable transport choices for new residents and businesses.

Such a process at the very least provides the EIP Inspector, the politicians approving the plan, statutory consultees, and the general public with an opportunity of having at least some idea and understanding of what is likely to happen in their local communities and prepare responses as to the ‘Soundness and ability of the plan to be delivered’ particularly in its relation to the Accessibility, Traffic,

Transport and infrastructure requirements necessary to support the development proposals around the district. At the time of preparing and sumitting this report, there is no Transport Assessment available from the Council on which to analyse or indeed provide a more rebuttal based response to the plan in line with the following key areas.

- ***Ensure that public and other transport links effectively allow people to get to places of work;***
- ***Reduce the need to travel;***
- ***Maintain and enhance existing transport infrastructure; and***
- ***Provide travel choices.***

3.5.4 In my opinion the VWHDC Local Plan does not clearly demonstrate how the following general policies in relation to transport and new developments are to be secured. It does however make strong cross references to the Oxfordshire Local Transport Plan and the NPPF.

In considering proposals for new development, any council will have regard to:

- ***The requirement to reduce the need to travel, especially by car;***
- ***To ensure that the development is accessible by a variety of means of transport;***
- ***The need to minimise the effects of traffic generation; and,***
- ***The need to produce a Travel Plan.***

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It is also stated that public transport facilities will be improved wherever the opportunity arises, and that new development will only be allowed where it can be well served by public transport or improves public transport services.

Policy TR 4 Pedestrians and Walking

The council will permit new developments if they include the following where they are currently lacking and their provision would be of benefit:

- ***Safe and convenient pedestrian routes connecting the development to surrounding local area and facilities;***

- ***Measures to protect and enhance public rights of way affected by development; and,***
- ***Measures to ensure the safety of pedestrians.***

Policy: TR 4 Cycling

In considering proposals for new development, the council will seek, where appropriate, improvements to facilities for cyclists through:

- ***Safe, secure and covered cycle parking based on council standards; and***
- ***The provision of adequate changing facilities, showers and lockers.***

Policy TR 4: Car Parking

It is stated that developments should provide car parking in accordance with maximum car parking standards.

Levels significantly less than the standards will be acceptable where:

- ***The proposal is within the outer areas of Oxford; or Abingdon***
- ***The proposal is in an area that is highly accessible by public transport/cycling; and;***
- ***The proposal is within a short walking distance of a public car park.***

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In addition, reduced car parking provision may be acceptable where a Travel Plan has been implemented.

**3.6 VALE OF WHITE HORSE DISTRICT COUNCIL (VWHDC)/OXFORDSHIRE COUNTY
COUNCIL (OCC) LOCAL TRANSPORT PLAN 2012-2030**

3.6.1 In carrying out this Assessment, it is broadly accepted by WVV together with other listed parish council's, and CPRE that to ensure growth, economic development, and stability in the area some development in the Vale area needs to take place. What is of major concern to the WVV and others is the relatively high proportion of development identified and allocated in this predominantly rural area.

3.6.2 If residential development as set out in this emerging local plan development was restricted to a sensible limit of between 10% and 15% of the current village sizes then, in principle, there would be no major objections as this would stimulate growth in these areas at a representative level whilst still support local amenities. This would be so provided that, together with the sustainable development, infrastructure links were greatly improved as mentioned in paragraph 1.2 of the emerging local plan. There is a number of anomalies and sweeping statements contained within this plan which I will outline from Paragraph 4.16 later in this section.

3.6.3 Both VWHDC as the Local Planning Authority and OxCC as the local highway authority, have responsibility for the delivery and implementation of the Local Transport Plan ("LTP"). In line with national and regional policy objectives. the LTP is integral to this process as it follows a similar theme for continuity, in that it promotes policies and measures to achieve improvements particularly for alternative modes of travel within the Council's geographical area and is a key strategy in which to align the Local Plan and generally for the basis of the traffic and transportation elements and foundations within the Local Plan.

**3.7 KEY AREAS OF CONTENTION WITHIN PART 1 OF THE EMERGING VWHDC LOCAL
PLAN 2029.**

3.7.1 To assist the Inspector, I have outlined some of the critical points and concerns of WVV and others with regard to the delivery of sustainable transport measures that if delivered could have a beneficial effect on traffic congestion. I have examined the key elements and statements set out in

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VWHDC Local Plan in section 4 -**Table I** below, which poses the relevant questions as to the viability and delivery of these key policy measures within the planned period up to 2029.

The page numbers and chapters correspond with those set out in the Local Plan documents, which align quite clearly to the NPPF and the former Regional Spatial Strategy (The South East Plan) in terms of traffic management and sustainable transport and measures.

3.7.2 I have only covered key policy issues and statements in the Local Plan document that have a significant effect on the Vale area with regard to traffic generation and sustainable transport issues. What is very clear is that the plan does not consider in any detail the traffic congestion, and development effects of the emerging Swindon Local Plan which shares much of the same highway network and the detrimental effects this plan will have on both Vale and VWHDC Local Plan as a whole. It seem to indicate that cross boundary discussions have not been held at or at any detailed level or at all, to the extent that development sites as allocated could have been relocated onto brownfield sites elsewhere within each Council's area. I have outlined below, some of the key concerns of WVV and others about these potential development allocations.

What is concerning in terms of delivery of the infrastructure measures required in support of all the emerging development allocations is that **that there are significant funding gaps of £415 million up to 2026 as quoted in the Oxford City Council C.I.L draft document. Without C.I.L funding it is my professional opinion that these gaps can never be filled.**

3.7.3 PRINCIPLES OF THE OXFORDSHIRE TRANSPORT STRATEGY AND ITS CONNECTION WITH SWINDON BOROUGH COUNCIL TRAFFIC IMPLICATIONS

3.7.1 The transport strategy for the future development aims of any emerging local plan provides the means to achieve the identified policy objectives by optimising the opportunity for access to/from any allocated site either now or in the future by non-car modes. This approach is in full accordance with all local, regional and national policies. Accessibility of any of the allocated sites for those travelling on foot and by cycle is set out in Section 5 of this report. The current accessibility of the allocated sites by public transport is also outlined in Chapter 5. The proposed development plan should also take into account the needs of the so-called "mobility impaired".

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3.7.2 It is considered that the approach for this development plan must be cohesive with good connectivity to/from the centre of Oxford, other major conurbations, and the surrounding area, for all modes of transport, motorised and non-motorised. These measures should be very real and very deliverable from any of these site allocations and would comply fully with the underlying principles set out in MfS & MfS2 and the VWHDC Local Transport Plan.

3.8 SUMMARY

3.8.1 The proposed Local Plan development proposals, as drafted, are not compliant with local and national policy for a number of reasons including but not limited to:

- Provision for access into and throughout the WV area namely, the A420, A415 and the A417 B4000 will be extremely congested for all road users. Apart from the traffic lights at the Police HQ, the only break in traffic flow on the A420 is at the roundabout junction with the Sainsbury's store when the pedestrian crossing is initiated.

This was observed during the morning peak when vehicles waited between 3-5 mins to access the roundabout and continue with their journey from Thornhill Road. When this occurs cyclists and pedestrians can proceed safely to cross.

- The development plan does not adopt the sustainable approach it seeks to project and which is specifically highlighted in both local and national policy as being absolutely necessary within the planning process.
- Its emerging potential development is not located close to town centres, efficient public transport facilities, and the surrounding residential areas will almost certainly need to travel by private car as this route is quite clearly an extensively used commuter route. The traffic impact of the proposed developments close to or impacting on this corridor will not conserve energy

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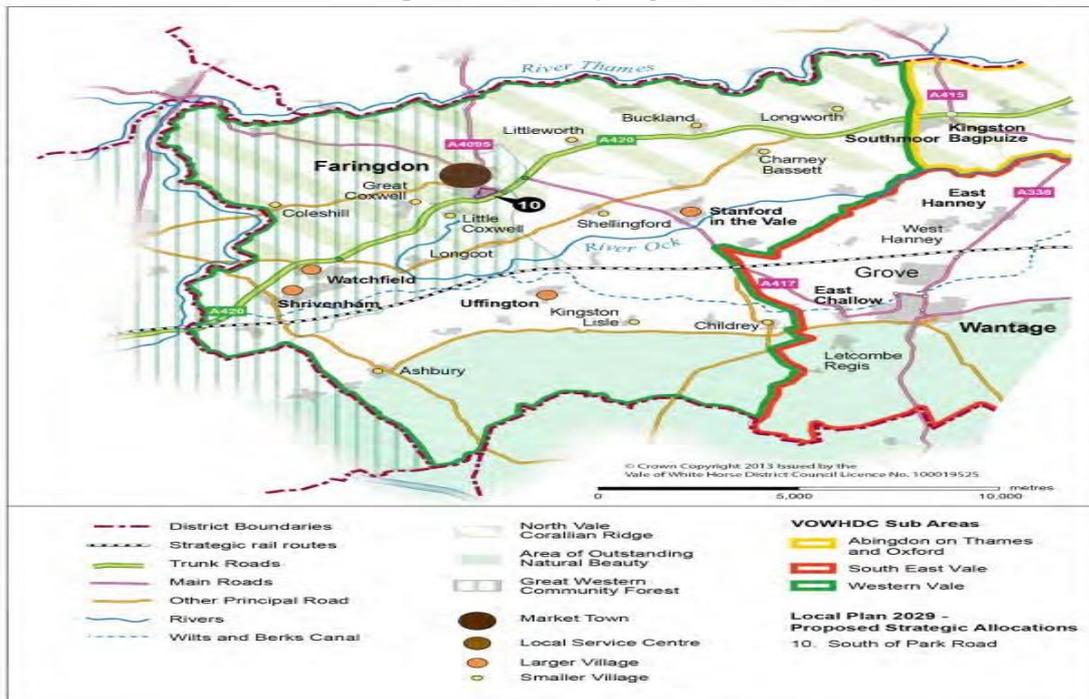
nor help limit the emission of greenhouse gases. On the contrary, the impact of additional significant traffic flows will only further degenerate air quality.

- The location of the proposed developments will NOT promote sustainability by reducing the number of car trips on this link as there is no promotion of sustainable modes of travel such as walking, cycling, and the use of public transport as public transport services in this area are particularly poor. There is no mention of the effective use of Travel Plans. A full highway assessment should be carried out before sites are put forward for allocation rather than afterwards; and
- The level of car parking throughout the development proposals needs to be balanced to ensure a level of restraint, and thus promote alternatives to car use.

3.8.2 Furthermore, as set out in the following section, good pedestrian and cycle linkages to a number of locations, facilities and public transport services all ensure that the development is sustainable as required by national and local policy.

**4.0 LOCAL PLAN DEVELOPMENT PROPOSALS AND COMMITTED DEVELOPMENT
AFFECTING THE HIGHWAY LINK A419/A420 WHITE HART ROUNDABOUT – A415.**

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4.1.1 Overview

4.1.2 Both the emerging Vale of White Horse (VWHDC) Local Plan 2029 and Swindon Borough Council (SBC) Local Plan 2026, will be the subject of a full Examination in Public (“EIP”). While I have not focused on the planning issues, I have examined both local plan documents, in terms of policies that have a direct bearing on the traffic and transportation aspects of the development plan process. I have set out these concerns in Tables 1 and 2 later in this section. There is further a significant number of planning applications already in the system and some that have recently been approved that will have a marked effect on the already congested A420 strategic highway route between Swindon and Oxford. This view on congestion is readily accepted and discussed by both authorities within the contents of the emerging plans. I will cover this in greater detail in section 6 of this report.

4.1.3 To provide a robust appraisal, I have looked at two Great Coxwell applications, and examined two Transport Assessments and one Design and Access statement of the major applications in the VWHDC planning portal. I have not seen any suitable scheme designs that would help reduce the level of congestion or which have considered in detail any realistic attempt to deal with sustainable transport measures to accompany these policy requirements. This Assessment will identify and thoroughly examine the key areas of these policy shortcomings and will highlight the key areas of the high levels of

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road congestion already widely accepted by both the VWHDC and OxCC.

4.1.4 To put some further highway related context into these proposals, in general terms the key overriding geometric features of the A420 road are as shown below. However, at key junctions the geometric layouts are greater to accommodate the additional traffic and turning movements. It is important to identify these characteristics as they will become more apparent later in Section 6 when a traffic flow analysis will be provided and demonstrate the high capacity levels that already exist and the effects on the route of all the impending and proposed development will :

- 3.7m, 5.5m, 6.5 and 7.3 variant carriageway widths
 - No footways along major lengths of the road
 - varied corner radii at its junction with A419(T) Road,
 - generally very good forward visibility when travelling in each direction (SSD)
-
- There are no fully integrated or segregated cycleway provisions other than around junctions
 - Full Traffic Signalised junctions located at Police HQ.

4.1.5 This Assessment is based on discussions with WVV and a number of other parish councils each of which has major traffic and congestion concerns about the extent of the development proposals on this congested link and the access roads to/from specific villages as identified earlier in my report. Traffic count surveys at have been provided by OxCC at various points along the route. (Appendix 3). The traffic survey represents Annual Average Daily Traffic flows (AADT). This information will be used to determine the flows currently and the net effects on the link when all development trip rates are applied together with national growth up to the end of the planned period. This work will clearly demonstrate that this road will be operating over capacity and does not conform with current national policy relating to link capacity. This element of the Assessment is covered in more detail in section 6. Furthermore, I have outlined below that the lack of any credible sustainable transport measures will only worsen the matters significantly for residents and current regular users of this road as part of their everyday business requirements.

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TABLE 1. KEY AREAS OF CONCERN REGARDING VWHDC EMERGING LOCAL PLAN 2029 - SUSTAINABLE TRANSPORT IN WESTERN VALE AREA.

<u>Chapter and Paragraph No</u>	<u>Page No</u>	<u>Issues and Concerns</u>	<u>Response/Comment</u>	<u>Action if any</u>
Local Plan 2029 Part 1: Strategic Sites and Policies Chapter 1 -1,2	13	The Local Plan Part 1 (LPP1) will set out the strategic priorities for the district to deliver sustainable development. It will identify the number of new homes and jobs to be provided in the area for the plan period up to 2029. It will also make appropriate provision for retail, leisure and commercial development and for the infrastructure needed to support them. The LPP1 will set out the Spatial Strategy for the appropriate location of development across the district, and will allocate large scale (referred to as strategic) development sites. It will include district-wide policies to ensure that development contributes to meeting the Strategic Objectives of the plan, such as policies relating to sustainable construction and protection of the built, historic and natural environment.	This statement is very wide ranging as at this present time the Council do not have their own district Transport Appraisal that demonstrates the effects all the proposed development will have on the highway network and at this stage could not guarantee delivery. In addition, there are some significant development proposals just over the council boundary line in the eastern area Swindon. The Vale area is in a midway position where development impacts from both local authority areas will have a serious traffic impact on the local road network surrounding them as can be seen in section 6 of this Assessment which covers traffic impact and generation.	OxCC Transport Assessment and sustainability Plan
Chapter 1 – 1.12	16	The Council has established working groups at Wantage and Grove, Harwell and Didcot. For Faringdon, representatives of the neighbourhood plan steering group are working with council officers. A smaller village's alliance has also been set up for the more rural parishes.	The key question is, where is the evidence to support this case? There are over 140 Hectares of business development planned which by definition will have major highway and traffic operation implications	Council Officers to set up working group with WVV Parishes.
Chapter 2 – 2.2	18	Main settlement areas within the Vale are market towns of Abingdon on Thames, Faringdon and Wantage which provide essential services for rural areas of which there are more than 70 across the Vale. Grove functions as the local service centre.	In the absence of an area wide transport appraisal it is anticipated that cross vehicular movements will be a major concern by adding to the already congested local highway network here.	OCC To develop Transport Assessment to identify cross traffic flows on the network.
Sub Areas: Key Challenges		Western Vale Faringdon, Great Coxwell, Watchfield, Shrivenham, Asbury, Bishopstone, Bourton and the Acorn Bridge.	The main areas of concern here. However, the other sub areas present a wider impact that may also be detrimental to highway congestion as traffic	Council Officers to set up working group with WVV Parishes.

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			seeks alternative routes when travelling on the network.	
Chapter 2 -2.17	22	Balancing housing and employment growth can help to ensure that the future labour force matches the requirements of businesses, reduces the need for in-commuting and provides a more sustainable pattern of development.	This is a credible argument and may be true. However, if there are no suitable, reliable, alternatives business users and residents alike will predominantly use and need a car and as previously stated by the Council, bus services are not sufficient, clear without large scale investment this won't change current travel patterns. Furthermore, there is nothing in this document to support or enforce increased impacts from future developments as part of this local plan.	Stronger development control process required. Perhaps a topic paper setting out delivery mechanisms.
Chapter 2 – 2.21	22	Many residents of the Vale commute to the surrounding regional centres of Oxford, Swindon and Reading to shop.	As is the common theme throughout this document, the mode of travel is predominantly by car as these areas are hard to get to by the alternative modes of transport and public transport referred to in the plan.	
Chapter 2 – 2.23	26	The Vale of Whitehorse is well situated in relation to the strategic transport network. The A34 trunk road runs through the district close to the eastern edge, providing access between the M4 to the south and m40 to the north and to oxford. The A420 and A417 provide links to Swindon in the west and Dicot in the east. The district has good access to Oxford airport (30km) and London Heathrow (60km).	These airport distances maybe true, however many residents in this area also use Bristol airport for ease of access avoiding congested routes. This statement finally recognises the A420 as part of the strategic network.	
Chapter 2 – 2.24	26	There are some good bus services in the Vale between the main settlements. However from main transport areas bus services are not sufficient to provide a meaningful alternative to the car.	Bus 47, Bus 46 & 48 Bus 65, Bus 66, Swindon, Shrivenham, Faringdon, Oxford runs along the A420. Bus Timetables in Appendix *** of this report.	
Chapter 2 – 2.25	26	The main London to Bristol / South Wales railway line runs through the Vale with no intermediate stations. Didcot is the nearest station close the Vale's Eastern boundary. There remains a long term ambition for a station to be reopened at Grove to provide easier rail access. The Council state that	This is a long term ambition and has no real weight within this document as a sustainable mode of transport. In my view the provision of good reliable rail infrastructure is extremely expensive and time consuming to deliver. It is unlikely this will ever materialise as part of this Local Plan up to 2029 so it will not be recognised as a sustainable mode of travel as it will have no beneficial impact on road	

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			traffic.	
Chapter 2 – 2.26	26	partly for the reasons outlined above, car ownership within the district is relatively high and likely to continue to form the main form of transport. Road traffic has grown rapidly and is predicted to increase in the coming decades.	This is a key policy area that should be fully identified as part of any local authority traffic and transportation study work. I would strongly suggest that car ownership for vale residents is essential as due to the amount of hamlets, villages, towns, and focal points having no other suitable and reliable sustainable transport alternatives. The cost of running and providing more regular services that could be relied upon, would be considered uneconomic for VWHDC to run due to low patronage and also difficult to operate given the road widths and poor forward visibilities.	OxCC and VWHDC to set out key aims to overcome this in Transport Assessment prior to site allocation process
Chapter 2	27	The Local Plan states ‘Supporting sustainable and accessibility Key Challenges and opportunities’. Ensuring there are improvements to public transport, cycling and walking to provide alternatives to travel by car and to help minimise traffic congestion.	The does not provide any confidence as it does say how this is to be developed and delivered. There are no key policies outlining at what stage any improvements are to be made and by who. These are in my view broad sweeping statements to continue to work with partners to address current capacity issues. Do these partners include the surrounding local authorities as the traffic impact from the neighbouring Swindon Borough Council whose development plan traffic generation will have a significant effect?	OxCC and VWHDC to set out key aims to overcome this in Transport Assessment prior to site allocation process
	27	Supporting viable measures to help people in rural areas without a car to access the services available in the market towns.	Any increase in bus services alongside increased traffic volumes from development’s with cause chaos in the rural lanes and won’t be economically viable to run, again this is just quoting governmental desires to assist with sustainability agenda,	
	27	Improving transport infrastructure to support employment growth.	What infrastructure improvements are being proposed? , There does not appear to be an appropriate list of achievable improvements as no base Traffic Assessment has been completed yet	OxCC and VWHDC to set out key aims to overcome this in Transport Assessment prior to site allocation process
Chapter 3 – Key	33	Coordinate new growth with the timely provision of appropriate	There is no indication of what Infrastructure	As above.

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Outcomes Point 5		infrastructure to ensure the delivery of development in a sustainable and balanced way.	improvements and completion dates contained with the plan. If the Council are still awaiting the transport appraisal, how can they determine what is to be provided	
Supporting economic prosperity Key outcomes Point 2	34	Ensure appropriate investment in infrastructure	As mentioned above it is not yet known what is required or how they can ensure delivery of such projects in the absence of their own transport assessment.	As above
Sustainable transport and accessibility Key outcomes Point 1	35	Prioritise development to where the need to travel by car can be minimised	This is quite an ambiguous statement to make. it's almost impossible to achieve as they the Council have already stated on numerous times that the Vale is heavily reliable on the car and will be by the nature of the land and number of villages etc. Can only be determined when TA completed.	As above
Point 2	35	Secure contributions from new development towards improving services and facilities for more sustainable forms of transport.	It is assumed this will be through the 106 and possibly the CIL process, they use the words towards, meaning large developments will come forward without solving existing issues as there is no adopted infrastructure plan as yet, and it certainly doesn't link up with this draft local plan.	As above
Point 3	35	Help promote car sharing and sustainable initiatives	Evidence required to demonstrate any other successful initiatives within the local area on which to build upon.	VWHDC and OCC travel plan teams
Point 4	35	Continue to work with Oxfordshire County Council to better understand existing and identify likely future constraints to the road network, to develop solutions and seek funding's to help address them.	Clearly no specific funds in place to even start dealing with the congestion issues. What is more concerning is that there is no mention here of Swindon Council and the issues on their adjoining network and cross network congestion! This document is all about improving the A34 and not the areas of concern we have.	Oxfordshire County Council LTP3 and TA to outline these issues.

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Point 6	35	Safeguard land for road schemes required as a result of new development allocated in the local plan or identified in the local transport plan.	Some of this has been done. I have not however seen mentioned any costings for the work and therefore, some of the schemes are not obviously viable. CIL will tell us more, but at this stage it is very unclear and uncertain.	
Providing supporting Infrastructure and Services Paragraph 4.35	53	Infrastructure has been traditionally provided or funded by developers through legal agreements under section 106. This system is being partially replaced by the community infrastructure levy. There is no C.I.L policy in place, this document is running alongside the local plan consultation and the highways infrastructure plan. The local plan cannot operate correctly without these.	A lot of the proposed infrastructure improvements will come forward as a direct result of C.I.L funding in the future. Without C.I.L. these improvements would not be able to be funded. C.I.L funding is dictating where developments take place as 80% of C.I.L funding has to be spent in the vicinity of the development. In my opinion this is not a reason to include developments in areas that cannot take the increase in vehicular movements of existing traffic flows, yet alone the scheme they are being funded from.	
Core policy 5: Providing supporting Infrastructure and Service	54	Infrastructure requirements will be delivered directly by the developer wherever possible and appropriate. Development proposals must demonstrate that a full regard has been paid to the Infrastructure Delivery Plan to ensure that a wider strategic infrastructure requirements are appropriately addressed.	What about C.I.L. this paragraph is weak and doesn't guarantee any improvements, especially if C.I.L doesn't get adopted. A strong policy is required here. If a community Infrastructure levy is adopted, a CIL charging schedule will be prepared and CIL revenue used to provide improvements. This indicates that VWHDC local plan has yet to adopt CIL and that, CIL adoption in my opinion should have come forward first, along with Parish Plans, Neighbourhood plans and an infrastructure plan.	VWHDC

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4.2 ACCESS BY ALTERNATIVE MODES OF TRANSPORT – KEY CORE POLICIES

VWHDC Local Plan - Core Policy 29: Promoting Sustainable Transport and Accessibility

I have highlighted the key elements of this this policy that are critical to the traffic impact on the A420 link. VWHDC has confirmed it will work with Oxfordshire County Council and others to develop their sustainable aims as set out below:

- i). actively seek to deliver the transport infrastructure and measures which improve movement in the Science Vale UK area as identified in the County Council's Local Transport Plan's ("LTP"), Science Vale UK Area Strategy and the Science Vale UK Integrated Transport Package, in partnership with South Oxfordshire District Council
- ii). **actively seek to ensure that the impacts of new development on the strategic and local road network are adequately mitigated**
- iii). **support measures identified in Oxfordshire County Council's LTP including the relevant local area strategies for the district**
- iv). support improvements for accessing Oxford
- v). **ensure that transport improvements are designed to minimise effects on the amenities of the surrounding area**
- vi). **encourage the use of sustainable modes of transport and support measures that enable a modal shift to public transport, cycling and walking in the district**
- vii). **promote and support improvements to the transport network that increase safety, improve air quality and/or make our towns and villages more attractive**

- viii). ensure adequate parking is delivered on new developments in accordance with Oxfordshire County Council's published standards

- ix). all developments that generate significant amounts of movement must be supported by an appropriate transport assessment or statement and travel plan that is agreed by Oxfordshire County Council, and

- x). promote electronic communications allowing businesses and residents to operate throughout the district and to provide services and information that reduce the need to travel.

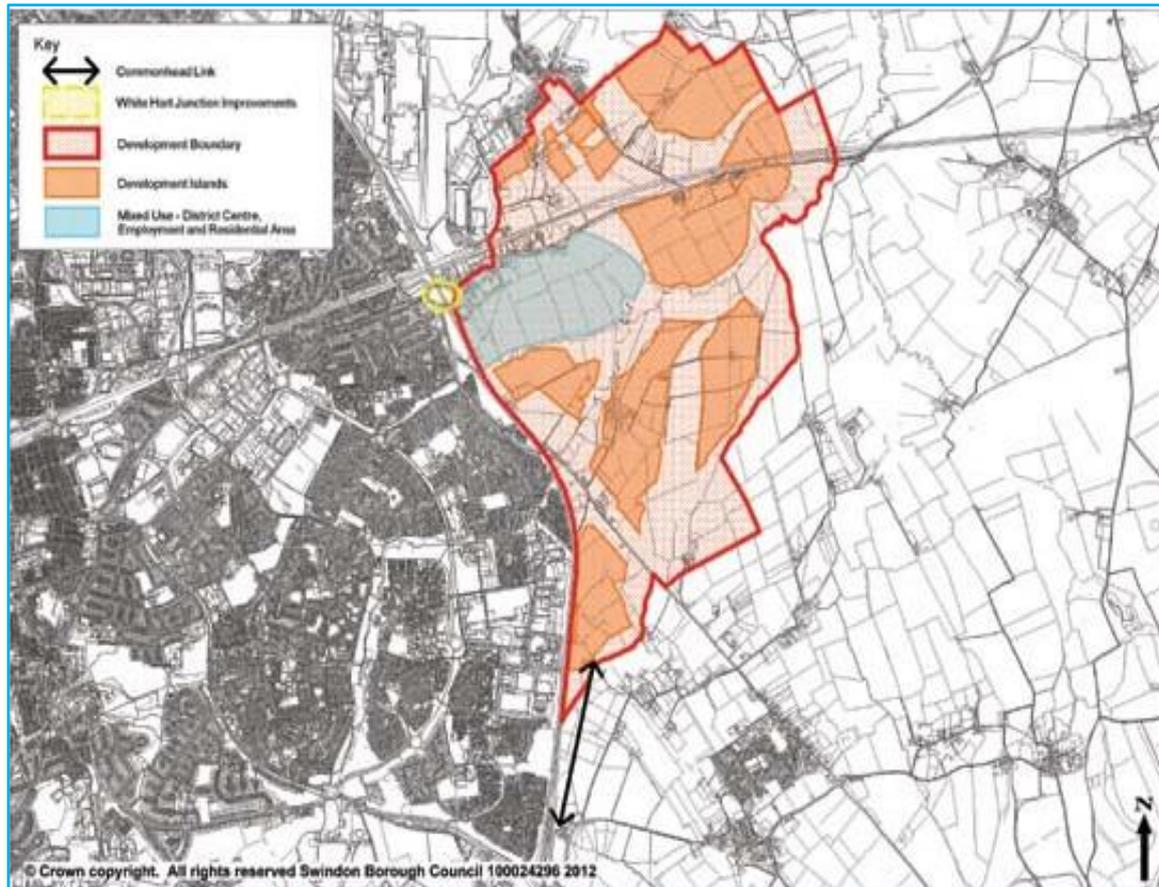
4.3.1 As previously mentioned this emerging plan relies on the Oxfordshire Local Transport Plan (LTP) 2030 and in particular the LTP policy **TR4** which provides the transport sustainability issues, measures and method of delivery supporting alternative modes of transport to help reduce the reliance of private car use within the County. I have covered the specific issues relating to pedestrian, cycling and public transport aims and provided a view on Mobility impaired road users. The needs of those with mobility impairment are an important component of emerging development plans.

4.4 SUMMARY

4.4.1 In summary the emerging VWHDC Local Plan has not cohesive. It makes wide and generalised statements but fundamentally it fails to recognise in any detail or with any substance the need to have regard to effective and sustainable travel measures. It is all 'if', 'but' and 'maybe' generic sweeping statements and does not comply with either the NPPF, its own core policy 29, or the recently approved Local Transport Plan Policy TR4.

4.5 KEY ISSUES FROM THE SWINDON LOCAL PLAN 2026 THAT HAVE AN EFFECT ON THE
A419(T)/A420 JUNCTION TO THE A415.

Figure 1 Development Area of Major concern



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4.5.1 It is accepted that the consultation period for the Swindon Local Plan is now closed. Many of the parish councils listed at the beginning of this report have already made representations to SBC regarding the traffic and transportation issues on the local highway network that will have a significant impact on them. I have examined the transport and sustainable transport policies within the emerging Swindon Borough Council (“SBC”) Local Plan.

4.5.2 I have set out below in Table 2 below the key areas of concern in terms of delivery of any infrastructure improvements. There appears to be no mechanism in the plan to identify the build volumes which trigger infrastructure provision although SBC admits the need for infrastructure. It has been confirmed in working party meetings with SBC officers and with Wanborough, Bishopstone, and Bourton parish council’s, that several thousand homes could be built prior to the implementation of the proposed and so-named “Diamond Interchange” at White Hart.

4.5.3 To add to local concerns SBC have emphasised there will be no ‘relief road’ to Commonhead and that traffic must be ‘managed’ via the existing road network. It is important to emphasise that within their transport plan they have taken account of the ‘Green-bridge’ to Covingham for carrying public transport (although we know anecdotally that SBC are planning to change this to a pedestrian only crossing. This needs testing in cross examination at the EIP.

4.5.4 The key concerns of the local parish councils and local residents are about the level and scale of development being proposed in the East of Swindon as indicated in Figure 1 and the traffic impact on the A419(T), A420, M4 junctions 15 and 16 and the local road network this proposal will have. As with the WWHDC, SBC readily accept that there is congestion on this network now and as a result, many drivers are using the surrounding village roads as ‘rat runs’ particularly in the peak times to try and avoid queuing. So far as is so far known, these “rat runs” have not been formally identified and mapped.

4.5.5 Due to the extensive scale of the proposed development being put forward for allocation in the Swindon Local plan in Policy NC3: New Eastern Villages - including Rowborough and South Marston

Village Expansion, there are major concerns about the traffic effects this development will create. In the absence of any major infrastructure improvements it is likely that the M4 junction 15 and 16 together with the A419 (T) and A420 local highway routes will be congested for long periods of the day.

4.5.6 On my site visits to this area it was apparent that significant traffic queuing problems also occur to other junctions in the locality. One such example is the 5 arm roundabout at Greenbridge, Swindon from the Oxford Road which is already congested but will experience far greater congestion if 'traffic flow' is increased from White Hart. This is a principal route into Swindon Town Centre and one of the suggested Rapid Transport System routes.

4.6 Policy NC3: New Eastern Villages - including Rowborough and South Marston Village Expansion

Land to the East of the A419, as defined on the Proposals Map, is allocated for a mixed-use development. The form of the development shall comprise a series of new distinct villages and an expanded South Marston village. The development shall provide an overall average density of 40 dwellings per hectare; comprising of:

- **About 6,000 dwellings at the New Eastern Villages (South of the A420);**
- **About 1,500 dwellings at Rowborough (North of the A420), and**
- **500 dwellings at South Marston.**

Sustainable transport links including:

- A rapid transit link to Swindon Town Centre from the Eastern Villages serving and through the district centre as part of phase 1 of the development;
- Additional public transport services to connect with Swindon and internally within the development;
- An improved gateway junction at White Hart to manage additional demand and deliver high quality public realm;

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- Improvements to the Oxford Road/Drakes Way and Covingham Road/Dorcan Way transport corridors;
- A green bridge across the A419 near Covingham Drive to provide for walking, cycling, and public transport;
- A new road link to the Commonhead Roundabout;
- A new road link under or across the Bristol to London railway line connecting the development north and south, and new and/or improved accesses to the A420 for proposed residential and employment uses;
- A 1000 (3ha.) space Park and Ride site; and
- **Measures to minimise rat-running through existing adjacent villages and east Swindon.**

4.6.1 It is quite clear that the proposals outlined above are extensive and are designed to meet the aims of Theme 4 as part of the strategic objectives of the local plan. As with the VWHDC emerging plan, I have not seen any suitable scheme designs that would help reduce the level of congestion or which have considered in detail any realistic attempt to deal with sustainable transport measures to accompany these policy requirements. This Route Assessment will identify and thoroughly examine the key areas of these policy shortcomings and will highlight the key areas of the high levels of road congestion already widely accepted by both the SBC

4.6.2 The Swindon emerging Local Plan follows very similar themes to the VWHDC plan as it tends to focus heavily on the delivery of sustainable travel and in trying to persuade people to switch from car use to alternative modes of travel. In considering Policy NC3 the council is relying very heavily on a rapid transit system to the Town Centre via the very congested White Hart Roundabout and Oxford Road.

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4.6.3 I have reservations about this process as there is no indication within the Local Plan of what level of development will trigger the implementation of this system.

I also understand that there will be no separate bus lanes constructed to give the bus a 'free flow' lane into the centre. Therefore, buses will still be caught up in the congestion and there will be no incentive to switch travel modes.

An example of this is in Chester where priority bus lanes were provided on a congested route into the city and the service is poorly supported with low levels of patronage since it began operation.

4.6.4 In terms of modal shift, the consultants JMP who prepared the Swindon Transport Strategy have made some very optimistic predictions that up to 15% of people will transfer to bus travel as part of this policy. From experience in other areas the maximum levels being achieved is around 3 - 5%. The figure of 15% would also be a key factor in terms of vehicle trip rates they have used in the Transport Strategy of around 0.52, rather than a recognised level of 0.74 which I have used in section 6 of this Assessment.

4.6.5 What is more concerning is that reference to congestion is made frequently in the emerging SBC Local Plan, but no indications of what the congestion levels are at present. There is evidence now of rat running through the local villages due to this congestion. This problem will be worsened if these proposals are allowed to proceed. The officers at SBC have already confirmed that several thousand house could be built and occupied before any relief measures are fully implemented.

4.7 SUMMARY

4.7.1 In summary the emerging SBC Local Plan has the same problems and shortcomings as the VWHDC Local Plan in that it fails to provide any information about how the measures outlined above are to be delivered, funded or any trigger point for initiation.. It also makes ambitious generalised statements but it fails to recognise in any detail or with any substance what is required to provide sustainable travel measures. The 15% modal shift is too high and therefore unrealistic in an area that is widely recognised as having high car usage. This does not comply with either the NPPF or indeed SBC core transport policies TR1 and TR2 or its Strategic Transport objective No 4.

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TABLE 2. KEY AREAS OF CONCERN REGARDING SBC EMERGING LOCAL PLAN 202 - EFFECTING TRAFFIC CONDITIONS IN THE WESTERN VALE AREA.

<u>Chapter and Paragraph No</u>	<u>Page No</u>	<u>Issues and Concerns</u>	<u>Response/Comment</u>	<u>Action if any</u>
Part 3. Fig 6	33	Sets out the major allocations with a direct impact 1) Tadpole Farm 2) Kingdown Farm 3) Eastern villages including Rowborough & South Marston Village Expansion 4) Commonhead 5) Wichelstowe	The location and access arrangements from some of these strategic sites have a direct traffic impact on the A419 (T) A420 and the M4 (around 8000 houses).	
Policy SD2: the Sustainable Development strategy (C).Outside Swindon	34	South Marston will be extended as part of the allocated strategic extension site to develop opportunities within Swindon's urban area. Development at Broad Blunsdon, Chiseldon, Wanborough and Bishopstone will be supported where it delivers at least the quantum of development identified within the plan and responds positively to address local needs through the Neighbourhood Plan process	It is not known if these neighbourhood plans have been completed. These neighbourhood and Parish Plans are key to getting the right future improvements schemes especially if CIL comes forward.	
Policy SD2 (D)	34	Around 22,000 dwellings between 2011 and 2026 are proposed with the Swindon Borough Council area and are phased as follows: 1,150 average per annum between 2011 and 2026 d. 119.5 hectares of employment land coming forward. 1,625 average per annum between 2016 and 2026	Whilst all this development is not on the eastern side of the Borough Area, it is considered that around 35% will have a direct impact on the A420 ccreating further congestion issues and creating ran runs and bottle necks in traffic flow, when added to the trip rates from VWHDC developments.	
Strategic Objective04 Theme 4: transport Paragraph 4.176	94	Sets out policies relating to: Improve key transport gateways and corridors Provide good access to Swindon Town Centre and key destinations Reduce severance caused by transport corridors Minimise congestion and therefore journey time, noise and air quality Promote travel choice, cycling and walking	In traffic and transportation and sustainable transport acceptability terms these policies do not provide the improvements or measures to deal with the extent of the predicted congestion impacts they will create	

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		Support good public transport services Encourage innovative transport initiatives for rural areas		
Paragraph 4.177	94	The transport issues faced in Swindon are common to many other towns and cities across the country. These include, traffic congestion at peak travel times, air quality, and an effective public service particularly to rural areas	The Council are themselves recognising the key issues of congestion on the strategic links at peak times	Transport strategy becoming outdated (4 years old)
Paragraph 4.178	94	New development will also pose further challenges such as minimising impact on existing transport network throughout the day.	This policy again accepts the increased detrimental effects development will have on the road network.	SBC/Wilts CC
Paragraph 4.179	94	Therefore, there remains a need to improve the transport network to improve accessibility and reduce journey times	The Council are admitting there is a need for improvements to be made, but at this stage does not state how.	SBC
Policy TR1: Sustainable Transport Networks	97	(a), The council will use its planning and transport powers to help reduce the need to travel, and support and encourage the sustainable, safe and efficient movement of people and goods within and through the borough. This will be achieved by: Enabling a reliable and efficient transport network that: Minimises congestion Maximises consistent journey times Maximising opportunities to walk and cycle Reducing severance caused by transport corridors and the dominance of the car on the street scene Delivering walkable mixed use developments Good public transport Reducing the need to travel Promoting more travel choices Minimising the impact of congestion Medium to long distance vehicle movements will be positively encouraged through site access/egress, road design and other highway measures to access the strategic highway network rather than rat-run through inappropriate rural roads.	The Council continues to acknowledge that at present there are severe traffic congestion on the local network and yet the policies are not clearly defined on how they are to be delivered and what trigger points will be used to start implementation of key measures. In addition all will be very difficult to achieve, deliver and monitor.	SBC/Wilts CC and HA

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Paragraph 4.182	98	Swindon's position on the strategic transport network, with fast links by road and rail to London, Heathrow Airport and many other areas is a key strength for the town. Within Swindon there is congestion at peak hours but it can be unpredictable in the places it affects and the times it occurs. North-south movements are particularly affected.	This statement may be factual, however as demonstrated in section 6 of this report West – East movements are particularly affected at present without the strategic allocations proposed and mentioned above.	Update the SBC Transport Strategy 2009 to current actual traffic flow rates rather than predicted low levels.
Paragraph 4.183	98	Generally residents have good access to services and facilities on foot or by public transport within Swindon, but this is more limited in the rural areas. There are also difficulties in making bus journeys across Swindon without the need to change in the town centre. The railway line is a barrier for movements between the town centre and the northern parts of the town, particularly by walking or cycling.	This is a vital issue within the rural area. Car usage is very high and recognised by both VWHDC and SBC due to the poor, unsubscribed bus services that currently operate in the area	Wilts CC and OxCC to address.
Paragraph 4.184	98	The aims for transport within Swindon Borough are to deliver a vibrant local economy, Short distance trips by walking and cycling will be encouraged through design, mixed use development and housing density. Encouraging trips to Swindon Town Centre is important in supporting regeneration objectives, attracting investment and jobs and diverting trips that currently leave Swindon for other destinations. The Plan recognises that not all trips will be made to the town centre and therefore aims to encourage journeys within the town. Access to the strategic transport network is critical to Swindon's economy and it is essential that growth does not undermine this strength.	Significant traffic problems do occur at other junctions such as the 5 arm roundabout at Greenbridge, Swindon (from the Oxford Road) which is already congested but which would experience further problems if 'traffic flow' is increased from White Hart. SBC's assessment is that trip generation to the Town Centre is likely to be the most significant destination and this same route will be shared by public transport links.	SBC To address in updated Transport Strategy
Paragraph 4.185	99	The transport network has an important role to play in supporting economic growth, regeneration and housing growth. Congestion and poor journey time reliability results in lost productive time for business and impacts on the cost and time spent on journeys to and from work. This is particularly important for freight movements in Swindon's distribution and logistics sector.	The issues surrounding this statement are already having a significant and detrimental effect now, particularly on the A420 Swindon –Oxford link.	
Paragraph 4.186	99	To support town centre regeneration and Swindon's economic growth the aim is to facilitate ease of movement into, out of and around the town centre. Sustainable travel choices will be enhanced so that the car does not dominate or have a detrimental impact on the environment, or the quality of the experience in the town centre. The strategy seeks to improve the capacity and	There is no clear indication of how this statement can be delivered. There is no specific indication of how these measures are to be funded, timescale for implementation or no trigger points to determine delivery.	

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		performance of the existing road network by discouraging through traffic and reducing circulating traffic.		
Access to Services and Facilities Paragraph 4.197	101	Swindon's communities should be walkable neighbourhoods, well served by public transport to ensure all people are able to access health and education facilities, employment, retail and leisure facilities. This is particularly important to people without access to a car, on low incomes, living in rural areas, with disabilities and young and old people. In general Swindon has good access to services and facilities and bus coverage is good to Swindon town centre. However cross-town trips require passengers to change in central Swindon. This is time-consuming, inconvenient and in effect limits personal choice for certain members of the community. In rural areas opportunities for walking, cycling and access to public transport is limited due to its isolated nature. Conventional rural public transport will be promoted and cost-effective community-based and demand responsive transport schemes will be explored.	This is a common theme through the transport elements of the local plan. These are key areas of concerns for rural Parish Council's within the Borough and demonstrate exactly why these areas rely heavily on the use of the private car. To be explored is not the answer as it gives no guarantees to the rural community in terms of reasonable sustainable travel.	More firm proposals to be prepared and submitted by SBC
Policy TR2: Transport & Development	102	There are a number of policy sub sections contained within this policy of which I will discuss in the main body of my report as the whole policy is an absolute necessitate to ensure congestion is managed or significantly improved as part of the development plan.	If these major allocations are recommended for approval they could prove to have extensive traffic associated problems on the network. To provide TA's after acceptance is meaningless particularly if the development is unable to provide the measures necessary to support the infrastructure and sustainable measures.	BBC to provide accurate plans of measures necessary to make the highway operation no worse than now.
Key Issues	105	As well as the identification and provision of new infrastructure, ensuring that it is provided at the right time can be critical, both from a deliverability and cost point of view, as well as ensuring that the capacity is in place to serve new development when it becomes occupied.	The process outlined in totally acceptable in theoretical terms. However, without funding in place it is undeliverable. CIL is not in place and S106 funding will not raise enough to meet the needs and demands on the network.	

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<p>Policy IN1 Infrastructure Provision</p>	<p>107</p>	<p>In order to make a positive contribution to the sustainable growth of Swindon, all development, including development adjacent to but outside the Swindon Borough boundary, shall where appropriate, and within the context of economic viability make provision to:</p> <p>a) meet the cost of new infrastructure made necessary by the development;</p> <p>b) mitigate the impact of development on existing infrastructure;</p> <p>c) provide for the on-going maintenance of infrastructure delivered as a result of development where appropriate;</p> <p>d) contribute to the delivery of strategic infrastructure to address the cumulative impacts of development; and,</p> <p>e) contribute to initiatives to increase the effectiveness and efficiency of infrastructure.</p>	<p>Again as in the above policy, this is the standard approach for securing development. However, it does not totally safeguard development delivery as it will allow the authority to make changes that may not achieve the desired outcomes for the highway network.</p>	
<p>Policy NC3: New Eastern Villages - including Rowborough and South Marston Village Expansion</p>	<p>179</p>	<p>a. Land to the East of the A419, as defined on the Proposals Map, is allocated for a mixed-use development. The form of the development shall comprise a series of new distinct villages and an expanded South Marston village.</p> <p>b. The development shall provide: an overall average density of 40 dwellings per hectare; comprising:</p> <ul style="list-style-type: none"> • about 6,000 dwellings at the New Eastern Villages (south of the A420); • about 1,500 dwellings at Rowborough (north of the A420), and • 500 dwellings at South Marston. <p>high quality public realm including outdoor civic public space; sustainable transport links including:</p> <ul style="list-style-type: none"> • a rapid transit link to Swindon Town Centre from the Eastern Villages serving and through the district centre as part of phase 1 of the development; • additional public transport services to connect with Swindon and internally within the development; • an improved gateway junction at White Hart to manage additional demand and deliver high quality public realm; 	<p>From a highway capacity and congestion perspective, these proposals will have a major effect on safe highway operations. Both SBC and their neighbouring authority VWHBC have made constant reference throughout their local plans about congestion on the strategic routes. There is the likelihood of around 4500 vehicle trips on the A420 link in peak hours. Around 4000 two way vehicle movements if good travel plans increase sustainable travel by around 5%. With this level of development it is impossible to see how rat running through adjacent villages will be reduced, The green bridge although it is stated to be for public transport – it is more likely the public transport companies will not use this facility and wish to remain on the network to pick up additional passengers.</p>	

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		<ul style="list-style-type: none">• improvements to the Oxford Road/Drakes Way and Covingham Road/Dorcan Way transport corridors;• a green bridge across the A419 near Covingham Drive to provide for walking, cycling and public transport;• a new road link to the Commonhead Roundabout;• a new road link under or across the Bristol to London railway line connecting the development north and south, and new and/or improved accesses to the A420 for proposed residential and employment uses;• a 1000 (3ha.) space Park and Ride site; and• measure's to minimise rat-running through existing adjacent villages and east Swindon. <p>an extensive green infrastructure network that maximises opportunities for habitat connectivity and enhanced biodiversity including a parkland extending the River Cole green infrastructure corridor and connecting with Nightingale Wood; sports and leisure facilities, including playing pitches a leisure centre and a 25m swimming pool;</p>		
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5.0 SUSTAINABILITY

5.1 PEDESTRIAN AND WALKING ACCESSIBILITY

5.1.1 As previously stated, where pedestrian access is concerned, the general consensus of an acceptable walking distance is considered to be a maximum of 2km which under normal walking conditions takes around 20mins, as stated within the former planning policy PPG13. Although the guidance is now superseded the current policies such as NPPF and design guides still follow this statistic.

5.1.2 It is well established and accepted that walking is the most healthy mode of travel at the local level, and offers the greatest potential to replace short car trips, particularly under 2km. Many guidance notes and memoranda suggest a preferred maximum distance of 2000m for walk commuting trips. A 400m walking distance equates roughly to a time of approximately 5 minutes, based upon average walking speeds.

5.1.3 MfS make reference to what is termed the 'walkable neighbourhood' as set out below and this view is fully supported in MfS2.

"Walkable neighbourhoods" are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot.

There are very limited local facilities on the A420 route within a reasonable walking distance from the proposed development plan allocation sites as there are no footways on this route that provide connections other footways. The location of the strategic housing and employment sites allocated in the local plan for Faringdon are a clear example that they would not present opportunity for residents and employees alike the opportunity to walk to local facilities within 5 minutes, and comply with the view held within the above mentioned MfS1 and MfS2 objectives. There are facilities at the Sainsbury's superstore at Gablecross, which are located several miles away.

5.1.4 In summary, the facilities as mentioned above are not all located within a convenient practical walk of the proposed development sites. The A420 in the vicinity of these two example sites does not have footways or street lighting.

5.1.5 The existing pedestrian facilities in this area are very sparse as it is predominantly rural in its characteristics. A revision of the Plan is necessary to ensure that appropriate pedestrian facilities are integrated.

5.2 CYCLING ACCESSIBILITY

5.2.1 Cycling is widely recognised as a sustainable, healthy and environmentally friendly form of transport. As discussed, cycling is identified in the transport section under Policy TR 4 of the Local Transport Plan. PPG13 also emphasised that cycling also has the potential to substitute for shorter car trips, particularly those less than 5km a 20minute cycle time. If these distances are maintained they could form part of longer journeys by public transport. With regard to cycling provision in the local area, there are no cycle routes around the proposed Local Plan allocated sites.

5.2.2 In addition, I cannot find in any policy documentation used for the purpose of developing the emerging local plan anything that promotes a number of highways in the area as on-street cycle routes. These routes in principle should run along the majority of principal highway networks. The Local Plan does not clearly demonstrate this potential or its associated facilities. The A420 does not have a specific cycle routes designation and is not close to any part of the National Cycle Network route.

5.2.3 In summary, the destination opportunities for residents and business users within a 3km cycle ride of the potential development sites, should any of the proposed allocated sites be approved, are very poor and do not permit cyclists and pedestrians alike the opportunity to access safely a full range of amenity and employment locations within easy access of the A420. The proposed development sites do not include the introduction of pedestrian/cycle links between the sites and the surrounding infrastructure, within the local development framework for the Western Vale area of the VWHDC area.

As such and as previously identified in section 3 of my report Local Plan is the delivery is flawed as it does not comply with the Oxfordshire Local Transport Plan to 2030, which has been adopted by VWHDC council particular reference to policy TR 4.

5.3 PUBLIC TRANSPORT ACCESSIBILITY

5.3.1 Bus provision within the vicinity of the route has been examined. Guidance published by the IHT 'Planning for Public Transport in Developments' (1999), recommends that the preferred maximum walking distance to a bus stop should be 400m, approximately equating to a five minute walk.

5.3.2 This is supported by advice given by the DfT 'Inclusive Mobility', which suggests that the maximum acceptable walking distance to public transport facilities from any development is some 400m and this distance should be reduced by 10 metres for every 1 metre of gradient rise or fall. The bus stops on the A420 link are located more than the prescribed 400m from any of the proposed development sites.

5.3.3 The bus service 65 and 66 provides half hourly peak hour services to the major hubs of Oxford and Swindon. Although at the time of writing this report OxCC was considering an additional 4 services in a limited attempt to improve traffic congestion on the A420 link, with additional services from Faringdon and Shrivenham. This village service 66 combines to provide a service on a 120 minute cycle in both directions, Monday to Saturday in off peak hours.

5.3.4 The VWHDC Local Plan part 1 states in 2.24 that in more rural parts of the Vale, away from main transport corridors, bus services are not sufficient to provide a meaningful alternative to the car. It is also stated as a key objective in the sustainable transport and accessibility objectives of the Local Plan that the securing of developer contributions from new developments to improve more sustainable modes of transport is desirable through emerging CIL policy. **This is because car ownership in the VWH area is recognised within the VWH local plan as being relatively high. And this area being of a particular high car usage rate compared to the rest of the Council geographical area.**

5.4 SUSTAINABILITY SUMMARY

5.4.1 VWHDC does not comply with its own prescribed and adopted transport policy **TR4** as set out in the OxCC Local Transport Plan 2030. There is reference to developers of individual sites having to make provision through Transport Assessments (TA) and Transport Statements (TS) with attached travel plans, but that is far too late as there could be other third party reasons why they cannot be delivered. At this stage all relief measures should be clearly defined and identified. Nothing is set out. w VWHDC fails to meet these policy objectives adequately or indeed at all.

5.4.2 PEDESTRIANS

5.4.3 Good pedestrian connectivity between the proposed residential and employment developments and the surrounding area is a key component of any local plan and in particular is a key area in a development transport strategy. This is converted into practice by a combination of on-site development layouts that recognise pedestrian desire lines and provides enabling pedestrian facilities e.g. footways, roads that discourage high speeds, and a sense of place that is safe for pedestrians. Pedestrian links between any of the proposed sites (approved or allocated) and the surrounding area should be set out and information should be provided and/or enhanced as part of this local plan.

5.4.4 There is no evidence at all within this plan about good pedestrian links and it is my view that the VWHDC is not complying with its own prescribed and adopted transport policy **TR4** as set out in the Oxfordshire County Council Local Transport Plan 2030. To be fair, there is reference to developers of individual sites having to make provisions through Transport Assessments (TA) and Transport Statements (TS) with attached travel plans, but in my professional opinion that is far too late in the planning process, as there could be other third party reasons as to why mitigation measures cannot be delivered. It is vitally important at this stage that all improvement measures should be clearly defined and identified. Nothing is set out and in my view VWHDC has failed to meet these policy objectives fully.

5.5 CYCLING

5.5.1 As above, there are no specific details of any cycle links on this route proposed by this local plan. This is covered in more detail below in this section of my report. In essence, the local plan does not demonstrate the promotion and connectivity between the proposed local plan sites and the surrounding areas. Due to the sites' close proximity to this route, it thereby offers no real encouragement for residents or business employees to choose cycling as an alternative mode of travel and transport as there is no safe and secure network available.

5.5.2 The local plan document and topic papers relating to transport and infrastructure mention, sustainability constantly but with no positive recommendations. Again as mentioned above in Paragraph 3.3 this causes the Local Plan to fail to comply with Policy **TR 4** of the Oxfordshire County Council Local Transport plan 2030. A plan of the National Cycle Route is attached as appendix 9 to this Assessment to demonstrate the remote locations that form the principal development areas.

5.6 MOBILITY IMPAIRED ROAD USERS

5.6.1 The needs of those with mobility impairment are an important component of emerging development plans. This category of road user is mentioned in the new NPPF in that, the detailed considerations of development will undertake to discuss the facilities to be provided to assist the mobility impaired, taking account of current guidance and specifications. Again as part of my examination of the traffic effects of the emerging Local Plan there are no clear definitions regarding measures for this user group. The Local Plan on this basis fails to meet the fundamental policy guidelines as set out in the National Planning Policy Framework.

6.0 TRAFFIC IMPACT ON A419/A420 – A415 STRATEGIC LINK

6.1 TRAFFIC GENERATION

6.1.2 A vital component of any emerging development plan is the impacts the additional traffic generated will have on the local highway network. It is important when planning any major development proposals that the highway authority have some form of district wide Traffic and Transportation Assessment that informs the Local Planning Authority of the current traffic levels and, more so, the predicted traffic levels the plan will generate. **This Assessment is intended to set the base line traffic effects that both Local Plans' traffic generation will have on the A420. More detailed traffic modelling will be prepared and presented in evidence to each EIP on behalf of WVV and other parish council's and organisations who have already made representations to each authority.**

6.1.3 In order to assess any potential impact that may result from the proposals on the surrounding local highway network, it is necessary to forecast the number of trips that would be generated by the proposed Local Plan development proposals as well as the current large scale development planning applications on deposit as set out in **Table 3** below. To record, analyse and assess the overall traffic implications on the A420, I have broken down the data gathering process into three distinct major components

- Current situation with permitted, submitted and likely development proposal prior to the emerging VWHDC and SBC Local Plans;
- The traffic and transport impact with all allocated sites through the Local Plan traffic added to the network link; and
- Total cumulative effect on the network by adding all traffic together with natural growth.

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6.1.4 To validate the traffic impact I have used the Trip Rate Information Computer System (TRICS) 2009(b) database, version 6.4.1, to establish the associated trip rates during the weekday AM and PM peak periods. Sites in Greater London, Ireland, Scotland and Wales were removed in order to retain a representative sample. Averages of the 85% trip rates were extracted to ensure a reasonable level of statistical confidence.

6.1.5 TRAFFIC FLOW DATA GATHERING.

6.1.6 To address the traffic situation on the A420 with regard to the VWHDC Local Plan, I have used the following method. To signify that the current peak hour traffic flows are an accurate representation of the traffic, I have used the traffic count data supplied by Oxfordshire County Council. These vehicle counts have been used to benchmark the current traffic flow rates. To obtain a total traffic flow on the link, I have added all current planning application development and Local Plan development sites within the Western Vale area as mentioned in **Paragraph 6.1.2** above and made some slight adjustments to represent a modal shift of road users to alternative measures. I have added all the predicted traffic flows from the proposed developments in the East of Swindon as outlined in section 4 of this Assessment. A request was made to Wiltshire County Council for traffic flow data on the A419 (T) and at the time of writing this Assessment no traffic count data has been provided. The purpose of this exercise was to determine the current traffic flows on the local road network.

6.1.7 It can be seen from the tables in **Appendix 3** of this Assessment that the A420 carries large amounts of existing vehicle movements. At present, the total two way 12 hours flows are around 14000 per day, Monday - Friday. Of this daily total some 3360 travel on the network in the AM and PM peak times. This equates to around 25%, which is not uncommon on roads of this type. It should also be noted that there is also a high HGV percentage as shown below in **Tables 6 and 7**. To these actual traffic flow rates, I have added the simulated trip rates of the proposed trip generation of all VWHDC Local Plan residential allocation sites that have an effect on this link. These trip rates were obtained from the TRICS database, from the category residential 50-250 houses use class. The derived 85% trip rates and trip generation are summarised in the following tables.

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6.1.8 In addition to this, I have also reviewed a number of Transport Assessments submitted in support of the following planning applications as shown in **Table 3** in the last 2 months to demonstrate this approach is correct. I would point out that only one Consultant – Peter Brett Associates (“PBA”) has, in my view, used the appropriate trip rates based on rural locations of between 0.82 and 0.82 in terms of the development proposals in planning application P13/V0139/O at Fernham Fields Land to the East of Coxwell Road Faringdon.

TABLE 3
RECENT LARGE SCALE DEVELOPMENT PLANNING APPLICATIONS AWAITING A DECISION

Planning Application No	Brief Description of Proposal
P12/V2283/O	Cowan's Camp Depot High Street Watchfield Oxfordshire SN6 8TE Residential development for up to 100 dwellings; provision of Extra Care Housing comprising 50 No. apartments to meet the needs of the elderly (Class C2); provision of two Learning Disability Homes comprising 17 No. bedrooms in total (Class C2); together with means of access.
P13/V0139/O	Fernham Fields Land to the East of Coxwell Road Faringdon Outline planning application for residential development, public open space and associated infrastructure and new access.
P13/V0399/O	Land off Colton Road Shrivenham Oxfordshire Outline application for a residential development of up to 73 new homes, public open space and new site accesses.
P13V071FUL	Demolition of existing buildings. Proposed change of use of existing building, land and extension to create garden centre with associated car parking, delivery area, external display and sales area, restaurant and toilets and staff offices and facilities. Formation of improved access on to A420.

6.1.9 The other large scale development applications recently submitted in the local area have all used proportionately low trip rates of around the 0.60 mark, which in my view is unrepresentative of the actual situation.

6.1.10 Notwithstanding all the proposals set out in the Local Plan for development up to 2029, there is at present a number of recently submitted applications within the Vale area that will have major effects on the local highway network and in particular the A420 corridor. Of the proposed development sites i.e. all residents living on the proposed Local Plan development during the peak periods, this would not generate any estimated cycle trips in each of the AM and PM peak periods and no walking trips.

6.1.11 In addition to the above and to identify the full impact, this report also considers the traffic effects of the proposed Eastern Villages and employment park proposals just across the county border in the SBC area.

6.2 CAPACITY EFFECTS ON THE A420 LINK RURAL LINK USING TA 46/97.

6.2.1 CAPACITY = [A - B * Pk%H]

Where, Pk%H is the percentage of 'Heavy Vehicles' in the peak hour. The term 'Heavy Vehicles' are vehicles with an axle weight of 3 tonnes or greater.

6.2.2 Both A and B are predetermined figures, in this case this capacity calculation is derived from the Department for Transport Technical Guidance Note TA 46/97.

6.2.3 A = 1380 and B = 15.0. In tables above, I have already determined the HGV traffic on the road link is 11 - 18%. Therefore for the rural section of the A420 road, the capacity is around **1250** vehicles per hour in one direction. Therefore it can be assumed the two- way operational flow could be around **2500** per hour. However, two key points emerge here. At Accord Bridge the carriageway widths are reduced 3.7m in each direction, and there are sections of dual carriageway of which capacity levels are not in question

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6.2.4 From the obtained count data it can be clearly seen that including all the associated traffic using the route, this road at present operates at around 70-76% of its full design capacity which includes all the HGV traffic flows along the length of the link. This is a view accepted by both VWHDC and Oxfordshire County Council (as Highway Authority) in all the currently available public documents that congestion is a key concern when developing these plans.

6.2.5 As the western section of the A420 is within the 'built up' area I have also used the Department of Transport Technical Guidance Note TA Tables 2 and 3 (TA 77/99) – Traffic Capacity of Urban Roads as shown below:-

TABLE 4 - EXTRACT OF TABLE 2 OF DEPARTMENT OF TRANSPORT TECHNICAL NOTE TA 79/99

	ROAD TYPE				
	Urban Motorway	Urban All-purpose			
	UM	UAP1	UAP2	UAP3	UAP4
General Description	Through route with grade separated junctions, hardshoulders or hardstrips, and motorway restrictions.	High standard single/dual carriageway road carrying predominantly through traffic with limited access.	Good standard single/dual carriageway road with frontage access and more than two side roads per km.	Variable standard road carrying mixed traffic with frontage access, side roads, bus stops and at-grade pedestrian crossings.	Busy high street carrying predominantly local traffic with frontage activity including loading and unloading.
Speed Limit	60mph or less	40 to 60 mph for dual, & generally 40mph for single carriageway	Generally TA 46/9740 mph	30 mph to 40 mph	30mph
Side Roads	None	0 to 2 per km	more than 2 per km	more than 2 per km	more than 2 per km
Access to roadside development	None. Grade separated for major only.	limited access	access to residential properties	frontage access	unlimited access to houses, shops & businesses

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Parking and loading	none	restricted	restricted	unrestricted	unrestricted
Pedestrian crossings	grade separate	mostly grade separated	some at-grade	some at-grade	frequent at-grade
Bus stops	none	in lay-bys	at kerbside	at kerbside	at kerbside

TABLE 5 - EXTRACT OF TABLE 3 OF DEPARTMENT OF TRANSPORT TECHNICAL NOTE TA 79/99

		Two-way Single Carriageway- Busiest direction flow (Assumes a 60/40 directional split)									Dual Carriageway			
		Total number of Lanes									Number of Lanes in each direction			
		2			2-3	3	3-4	4	4+	2		3	4	
Carriageway width		6.1m	6.75m	7.3m	9.0m	10.0m	12.3m	13.5m	14.6m	18.0m	6.75m	7.3m	11.0m	14.6m
Road type	UM	Not applicable										4000	5600	7200
	UAP1	1020	1320	1590	1860	2010	2550	2800	3050	3300	3350	3600	5200	*
	UAP2	1020	1260	1470	1550	1650	1700	1900	2100	2700	2950	3200	4800	*
	UAP3	900	1110	1300	1530	1620	*	*	*	*	2300	2600	3300	*
	UAP4	750	900	1140	1320	1410	*	*	*	*	*	*	*	*

Table 2 Capacities of Urban Roads
One-way hourly flows in each direction

- Notes:
1. Capacities are in vehicles per hour.
 2. HGV ≤ 15%
 3. (*) Capacities are excluded where the road width is not appropriate for the road type and where there are too few examples to give reliable figures.

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6.2.6 It can be seen from this theoretical relationship between the traffic flow capacities on the A420 that the full operational capacity in each direction of flow is somewhere between 1020 and 1320 in the peak hour. These flows are direct link flows and do not represent capacity issues on the major junctions.

TABLE 6 - CURRENT TRAFFIC FLOW SUMMARY – WEEKLY AVERAGE OF EXISTING AM PEAK TRAFFIC ONTO A420 LINK (2013)

Traffic flow	All Traffic West	All Traffic East	Total
AADT	1350 (71%)	563 (29%)	1913
HGV content	15%	18%	

TABLE 7 - CURRENT TRAFFIC FLOW SUMMARY – WEEKLY AVERAGE OF EXISTING PM PEAK TRAFFIC ONTO A420 LINK

Traffic flow	All Traffic West	All traffic East	Total
AADT	592 (34%)	1106 (66%)	1698
Trip flows	11%	14%	

6.2.7 It can be seen with the current link flow rates that in the morning peak period, for the traffic heading west and in the evening peak heading east, the A420 is already above Department for Transport's theoretical operating capacity for a route of this nature.

6.3 ADDITIONAL DEVELOPMENT TRAFFIC WITH DIRECT IMPACT ON THE A420 IN WESTERN VALE AREA.

6.3.1 To determine the additional development traffic likely to have a direct impact on the route I have interrogated the TRICS database to obtain realistic and robust vehicle trip rates for the new major housing and employment developments currently being considered and those strategic sites mentioned in the VWHDC emerging Local Plan. **Tables 8 and 9** below are the likely vehicle trip rates these proposals will generate onto the network at peak times.

TABLE 8 - SUMMARY OF TRIP GENERATION FOR PROPOSED EMPLOYMENT RELATED DEVELOPMENT PER 100m2 OF GROSS FLOOR AREA (GFA).

Peak	Trip Rates	
	Arrive	Depart
AM	0.20	0.54
PM	0.48	0.31

TABLE 9 - SUMMARY OF TRIP GENERATION FOR PROPOSED RESIDENTIAL UNIT

Peak	Trip Rates	
	Arrive	Depart
AM	0.20	0.54
PM	0.48	0.31

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6.3.2 When using the above mentioned vehicle trip rates the additional predicted demand onto the A420 can be determined as set out below in the following tables.

**TABLE 10 - TRICS TRIP RATE SUMMARY – AM PEAK FOR MAJOR PLANNING APPLICATIONS
 DEVELOPMENT TRAFFIC AS ABOVE ONTO A420 LINK (RESIDENTAIL USE)**

Land Use	Unit	Arrivals	Departures
Residential	Housing Unit	0.20	0.54
Trip Rate	423	85	228

**TABLE 11 - TRICS TRIP RATE SUMMARY – PM PEAK FOR MAJOR PLANNING APPLICATIONS
 DEVELOPMENT TRAFFIC ONTO A420 LINK**

Land Use	Unit	Arrivals	Departures
Residential	Housing Units	0.48	0.31
Trip Rate	423	203	131

**TABLE 12 - TRICS TRIP RATE SUMMARY – AM PEAK FOR VWHDC LOCAL PLAN
 DEVELOPMENT TRAFFIC AS ABOVE ONTO A420 LINK (RESIDENTAIL USE)**

Land Use	Unit	Arrivals	Departures
Residential	Housing Unit	0.20	0.54
Trip Rate	337	67	182

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TABLE 13 - TRICS TRIP RATE SUMMARY – PM PEAK FOR VWHDC LOCAL PLAN DEVELOPMENT TRAFFIC ONTO A420 LINK

Land Use	Unit	Arrivals	Departures
Residential	Housing Units	0.48	0.31
Trip Rate	337	162	104

TABLE 14 - TRICS TRIP RATE SUMMARY – AM PEAK FOR OTHER DEPOSITED PLANNING APPLICATIONS AWAITING DECISION IN VWHDC

Land Use	Unit	Arrivals	Departures
Residential	Housing Unit	0.20	0.54
Trip Rate	4700	940	2538

TABLE 15 - TRICS TRIP RATE SUMMARY – PM PEAK FOR OTHER DEPOSITED PLANNING APPLICATIONS AWAITING DECISION IN VWHDC

Land Use	Unit	Arrivals	Departures
Residential	Housing Units	0.48	0.31
Trip Rate	4700	2256	1457

** It noted that not all the predicted vehicle trips in tables 13 and 14 will have a direct impact on the A420. However, due to the location of some applications it would be reasonable to assume around 30% of these flows will use the A420 within the peak hours for travel to work and the school run. On this basis around **1000** will use the link in the morning peak and around **1100** in evening peak.*

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TABLE 16 - TRICS TRIP RATE SUMMARY – AM PEAK FOR VWHDC LOCAL PLAN DEVELOPMENT TRAFFIC ONTO A420 LINK (PROPOSED EMPLOYMENT TRAFFIC)

Land Use	Unit	Arrivals	Departures
Employment	Housing Units	1.66	0.58
Trip Rate per 100m2 GFA	750	1245	435

TABLE 17 - TRICS TRIP RATE SUMMARY – PM PEAK FOR VWHDC LOCAL PLAN DEVELOPMENT TRAFFIC ONTO A420 LINK (PROPOSED EMPLOYMENT TRAFFIC)

Land Use	Unit	Arrivals	Departures
Employment	B1,B2 and B8	0.26	1.30
Trip Rate per 100m2 GFA	750	195	975

TABLE 18 - TRICS TRIP RATE SUMMARY – AM PEAK FOR SWINDON LOCAL PLAN DEVELOPMENT TRAFFIC ONTO A420 LINK RESIDENTIAL

Land Use	All	Arrivals	Departures
Residential	Housing Units Including Eastern Villages	0.20	0.54
Trip Rate	8000	1600	4320

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TABLE 19 - TRICS TRIP RATE SUMMARY – PM PEAK FOR SWINDON LOCAL PLAN DEVELOPMENT TRAFFIC ONTO A420 LINK

Land Use	All	Arrivals	Departures
Residential	Housing Units as above	0.48	0.31
Trip Rate	8000	3840	2480

NB These flows represent a case with no modal shift, Swindon Borough Council are placing a great emphasis for the new rapid transit system being fully function.

TABLE 20 - TRICS TRIP RATE SUMMARY – AM PEAK FOR SWINDON LOCAL PLAN DEVELOPMENT TRAFFIC ONTO A420 LINK (PROPOSED EMPLOYMENT TRAFFIC)

Land Use	Unit	Arrivals	Departures
Employment	B1 and B2	1.66	0.58
Trip Rate per 100m2 GFA	1000	1660	580

TABLE 21 - TRICS TRIP RATE SUMMARY – PM PEAK FOR SWINDON LOCAL PLAN DEVELOPMENT TRAFFIC ONTO A420 LINK (PROPOSED EMPLOYMENT TRAFFIC)

Land Use	Unit	Arrivals	Departures
Employment	B1,B2 and B8	0.26	1.30
Trip Rate per 100m2 GFA	1000	260	1300

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6.3.4 To provide a robust assessment I have made the assumption that the proposed development traffic from the proposed development sites within the VWHDC Local Plan up to 2029 will have a proportionate split in flow when entering the existing highway network. I have assumed a 70-30 split in distributing traffic onto the network for both peak periods (trip rate x 0.70 and Trip rate x 0.30) travelling west in the AM Peak and similar figures reversed flow in the PM peak on the A420 link in line with the current proportionate splits of existing traffic flows.

6.3.5 In the am peak, traffic flow towards Oxford will be around 3334 vehicles with the remaining 7835 travelling west towards Swindon, South to the M4 and North to the M5 and beyond. In the pm peak the likely traffic flows are 3264 towards Swindon and around 7100 towards Oxford.

6.4 **TOTAL PREDICTED TRAFFIC RELATIONSHIP WITH OPERATIONAL CAPACITY LIMITS**

6.4.1 Tables 22 and 23 below show the proposed total trips onto the A420 link junction in the AM and PM peak periods.

TABLE 22 - PROPOSED TOTAL TRIPS ONTO A420 LINK JUNCTION AM PEAK

Land Use	ALL DEVELOPMENT PROPOSALS OF BOTH LOCAL PLANS	WESTBOUND FLOWS TOWARDS SWINDON	EASTBOUND FLOWS TOWARDS OXFORD
All Predicted Development (No alternative modes of transport)*		9265*	3958*
Existing Traffic	AADT 2013	1350	563
Increase allowing Modal shift predictions and linked trips	It is reasonable to assume a 30% reduction for this.	6485	2771
Total likely increase		1350+6485= <u>7835</u>	2771+563= <u>3334</u>

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TABLE 23 - PROPOSED TOTAL TRIPS ONTO A420 LINK PM PEAK.

Land Use	ALL DEVELOPMENT PROPOSALS OF BOTH LOCAL PLANS	WESTBOUND FLOWS TOWARDS SWINDON	EASTBOUND FLOWS TOWARDS OXFORD
All Predicted Development (as above)		3817*	8631
Existing Traffic	AADT 2013	592	1106
Increase allowing Modal shift predictions and linked trips	It is reasonable to assume a 30% reduction for this.	2672	6042
Totals		2672+592 = <u>3264</u>	1106+6042 = <u>7184</u>

6.4.2 As demonstrated above, the various land-uses that will impact on the A420 Swindon – Oxford Link Road would generate an additional traffic flow total of vehicular movements in both peak periods of around 10000 movements using the TRICS Database. Even if we were to accept the lower trip rates of around 0.52 as set out in the JMP Transport Strategy on behalf of the Council, as comparable with other major planning applications mentioned below, we would still see significant increases in traffic flows of around 6000 in the AM Peak and 6000 in the PM Peak in the absence of any reasonable alternative modes of transport.

6.4.3 I have outlined the normal traffic generation approach for this development in the scoping meeting with WV. We have to consider robust trip rates with that of the database indicative of 0.74-0.89 or somewhere within this range, as the locations of the proposed developments are in predominantly car-borne locations with no real sustainable travel choices of which to choose from. It should also be noted that some delivery and service vehicles will also take access from the link on a daily basis although this rate is low.

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6.4.4 This predicted flow is in addition to the current flow rates on the A420 link and will join this route at various junctions. It should be pointed out that these figures are predictions in 2029 at the end of the planned period. It is certain that flows will incrementally increase over the development years. It is imperative to reduce traffic that both planning authorities design, provide and fully implement sound workable public transport services as development stages progress, should the EIP Inspector approve the current development allocations in their entirety.

6.4.5 It is my considered opinion that due to the peripheral location of the site allocations there is, and will be, the potential for a higher trip rate, particularly in the winter and both SBC and VWHDC should consider the worst case situation as identified, particularly if there is no or limited public transport provision within a reasonable walking distance to the sites.

6.4.6 Another major point worth noting, is that as part of the PBA Transport Assessment submitted in support of planning application no P13/V0139/O, without including the traffic impact of the other three developments as mentioned, came to the conclusions of their study that the **A420/Park Road junction will be operating at 97% of its operational capacity in 2017. This does not allow for any of the VWHDC development allocations or policies.**

6.4.7 I also consider that these predicted trip rates could be increased even further, to correspond with lack of adequate sustainable means of travel as previously identified. In this case it would not be unreasonable to predict a further addition of around 10% on the above predicted flows in line with current sustainable travel to work patterns, particularly as the sites is not relatively close to any definitive footway/cycleway links.

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6.4.8 On both parameters this route will have serious capacity related issues if the VWHDC allocated development sites are allowed to proceed and even more, a total stand still if the cross boundary issue of SBC are ever allowed to proceed with the scale of the Eastern Villages proposal.

6.4.9 The significantly high levels of traffic generation of these emerging development plans together with committed and permitted development before any Local Plan is formally adopted, together with natural growth, will have a massive detrimental effect in terms of operation and safety on the highway network with major unsustainable and damaging differences to the operational capacity either in 2014 and more particularly in 2029 on traffic generation grounds due to the proportionate traffic impact on the Vale area .

6.5 **SUMMARY**

6.5.1 It can be seen that the proposed SBC and the VWHDC Local Plan proposals together with other planned developments will result in a very large increase in vehicular trips during the peak periods of around 6000 in both peak hours. However these projected traffic flows can be notionally further increased by around 10% due to the lack of any reasonable alternative means of travel to work other than by car. It is clear from the traffic counts that this link is a highly used commuter route and with the predicted further significant traffic levels it will become even more difficult to gain reasonable access from any of the junctions mentioned earlier in this Assessment, without having to wait for a considerable time. I have myself experienced trying to exit from the B4000 to turn right towards Oxford in the morning peak and waited in a queue for around 11 minutes. Quite clearly with all the predicted traffic these proposed developments will have on this part of the network, drivers will try to find alternative routes to their destinations. This will cause further network hold ups on current rat runs which could result in further highway safety concerns.

6.5.2 Therefore, traffic flows on the A420 caused by all the proposed developments will be significantly higher than those currently observed during the AM and PM peak periods. These projected flows will cause demonstrable harm in terms of congestion, increased accident levels, and environmental harm. The costs to the economy in terms of delays will be high. It has already been identified by both the VWHDC and SBC that significant shortfalls in the infrastructure needs to balance the highway operational requirements and adding significant traffic flows to an already congested network will only make the situation undeliverable over the planned period. There will be, in my view, a material impact on the safe operations of the local highway network. I recommend in the absence of any indication from the VWHDC and indeed SBC, of how they intend to deal with the difficulties likely to result, that the Inspector at the forthcoming EIP does not encourage development without adequate infrastructure planning. What is needed is the validation of sensible and deliverable solutions to the congestion issues on the A420 link road. In other words, no development without infrastructure improvement.

7.0 OTHER HIGHWAYS CONSIDERATIONS - A420 LINK, BETWEEN OXFORD AND SWINDON

7.1 Below is a list of existing issues and concerns currently affecting the A420 link between Swindon and Oxford. All of these issues will be further worsened by any significant increase in vehicular numbers along its length, especially during peak times. This section clearly highlights some of the existing issues that cause further delays and disruption to the free flow of traffic when travelling on this route. It is anticipated that as part of any development site delivery, the local highway authority, OxCC, would actively seek to rectify some of these concerns, together with other major route scheme investigations prior to the adoption of the Local Plan in final form so as to ensure soundness.

7.2 A survey was carried out between the Faringdon 3 arm roundabout (RAB) junction with the A417 west up to the 5 arm White Hart RAB junction with A4312 (Oxford Road) / Ermin Street / A419 / Merlin Way / A420. The key issues are:

- The majority of the A420 is a clearway with no stopping on carriageway, walking on the verges or cycling. During several driven inspections this was being accepted by road users with no

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evidence of stationary vehicles, pedestrians or cyclists. It is my professional opinion that for pedestrians or cyclists, most of the A420 would be very hazardous to use in its current form.

- There are several unregulated but signed crossing places for pedestrians, wishing to cross over the A420 when walking along a public right of way that crosses the road. These crossing places are dangerous and should be better signed with a reduction in speed on their approach.
- The A420 has no allocated cycling facilities, with only the odd very short length of footway and with very limited street lighting along its length, the road is very rural in its characteristics.
- The average carriageway width varies between 7.3 and 8.0 metres with a maximum of 10 metres at the odd location and as such speed limits fluctuate between 50 / 60 mph along most of the A420 with small sections of 30 / 40 mph. Overall for the majority of its length the A420 has a speed limit of 50 mph or higher.
- An area of particular concern is that, on the approach to the roundabouts at Faringdon and Watchfield, instead of advising motorists to slow down, the speed limit increases to the national speed limit (60mph), which therefore is advising motorists of a higher speed just before the hazard of an approaching RAB.
- There is a large number of spacing chevrons along the A420 indicating that along this route there are continuing concerns with regard to speeding traffic and incidents. Some of these chevrons are yellow backed. Others on server bends are dirty and faded and without any yellow backing which would highlight the signage in the dark thus enhancing road safety along the route. This is a common inconsistency along this entire length.
- Road signing along considerable lengths of the A420 is not in accordance with standards with road markings in poor condition. This is very concerning as most of the A420 does not have a system of street lighting, footways, cycle ways and remains a clear way. I would suspect that due to the high levels of traffic using the route the road markings are continually being eroded and no money in the highway maintenance budget to keep up with required works.

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- Heavy peak time traffic movements along this section of the A420 take the afternoon peak time traffic movements past beyond 1830hrs. The volume and high level of traffic is consistent with the heavy reliance of the motor vehicle as highlighted within the draft local plan.

- The A420 appears to have a reasonable bus service. However due to the limited bus stops and pedestrian links to surrounding villages, the existing bus services are very under used with most buses virtually empty in each direction of travel to either Swindon or indeed Oxford.

- There are many long straight lengths of carriageway along the A420 which can if left uncontrolled, encourage speed and overtaking. I consider this has been a constant problem with OxCC as speed enforcement cameras are regularly sited along the route. There is some uncertainty as to whether most have been turned off and therefore unable to actively enforce any speeding issues.

- The A420 is an elevated carriageway with a high number of farm and other accesses climbing up towards the A420 to gain access. This inclined approach reduces visibility further and is a hazard for all approaching vehicles using the A420. This is a concern for so many individual access warning signs along its length. There are an unusually high number of tractor warning and access signs along the entire length of the A420.

- Park Road Faringdon has queuing vehicles heading south towards the RAB (junction with the A420) at peak times. I have witnessed some vehicles wanting to gain access towards Swindon actually drive along the centre of Park Road towards the relatively high flows of oncoming traffic heading into Faringdon. There are proposals for both large housing and commercial developments at this location. For this road to operate safely and efficiently without increasing journey times for existing users, there will need to be major infrastructure improvements at this location.

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- There are several 7.5 ton weight restrictions off the A420 forcing this weight of vehicle to travel much further to gain access. The A420 has a high percentage (11% - 18%) of HGV traffic using it during peak time due to the surrounding industrial sites and retail parks.
- The length of an HGV will take up more road space, slow traffic up and use more of the designed queuing lengths at priority junctions. This results in increased journey times for other motorists especially during the peak hours. This situation was fully observed to be the case.

The condition of parts of the A420 is poor in parts and has been signed with skid warning and hump warning signs.

- Turning right out of Great Coxwell, Coxwell Road onto the A420, turning right is difficult with high waiting times.
- Turning right out of Townsend Road onto A420 is very difficult with high waiting times. There are also queuing issues along Townsend Road and Cley fields.
- On both approaches to Acorn Bridge, the carriageway road narrows with kerbing encouraging tall vehicles to drive in the centre of the carriageway to avoid bridge strikes as there is a 4.8 metre height restriction. Forward visibility is restricted on the approach to Acorn Bridge heading east.
- At the Police HQ signals there is "No Right Turn" ban heading east towards Swindon. This forces all traffic past the Police HQ and around the Sainsbury's RAB.
- Sainsbury's Gable Cross 5 arm RAB junction with Sainsbury's / Thorn Hill Road / Horstmann Close / A420 with a Toucan Crossing and is a real concern especially at peak times and backs up from the 5 arm White Hart roundabout (RAB) junction with A4312 (Oxford Road) / Erwin Street / A419 / Merlin Way / A420 up to the Toucan crossing in both directions.
- At the Sainsbury's 5 arm RAB, there is an approach speed of 40 mph with multiple turning movements in all directions. Queuing off Thorn Hill Road is especially difficult for an HGV turning right towards Swindon. An HGV may have to wait several minutes especially during peak times before there is a gap in the traffic to enable this right turn movement. When the Toucan crossing signals turn red, this allows a turning movement to take place. This clearly demonstrates the volume of traffic that a HGV is facing at peak times when exiting Thorn Hill Road onto the A420. The industrial estate off Thorn Hill Road is proposing to increase in size therefore increasing HGV movements at this location.

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- It is evident by the design and improvements speed cameras etc. that the A420 is and has been a hazardous route, there have been lots of recorded incidents along its length for a considerable length of time and a local's fear to walk or ride a bike along its length

SUMMARY:

The A420 between the A417 and A419 has numerous design flaws, defects and hazards and does not fully comply with the design standards contained within DMRB. Any increase in vehicular movements along its length will add to the problems highlighted above and placing all road users at risk of incident. Any new developments seeking requiring the A420 for access should consider all of the above issues and contribute to fully mitigate their direct impact. There should be no exceptions as the A420 is operating at capacity at peak and includes many defects and hazards.

Local authorities should bring the A420 up to standard before even considering any future development that would increase vehicular movements along this length and provide a clear infrastructure plan to accommodate the impact of further developments as well as maintaining the existing road surface, signing and lining along this length.

8.0 CONCLUSIONS

8.1 This Assessment has considered the transport and highway implications for the proposed development sites being put forward by Vale of White Horse District Council, current planning applications awaiting a decision, and the effects of the Eastern Villages proposals across the county border in Swindon. I have examined the predicted additional traffic flows as part of any pre-local plan development proposals and the major development allocations of the Swindon Local Plan, namely the Eastern Villages and employment park proposals all of which have significant cross boundary traffic issues. I have also examined the traffic effects on the local link roads from the A419 (T)/A420 Roundabout to the A420/A415 junction along the A420 corridor.

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8.2 These development proposals do not strike any balance in terms of delivery. They do not encourage the use of sustainable modes of transport via new pedestrian/cycleway links or adequate public transport provision. The emerging Local Plan is diminished by its seeming lack of any strategic thinking when developing the document and does not evenly distribute development across the VWHDC geographical area. There is a number of brownfield sites that could be utilised and help preserve the rural concepts of the Vale area.

8.3 VWHDC clearly accepts that this is a congested route about which it should have already expressed major concerns. Some of the proposed development sites are not near or adjacent to the local centres and therefore fail to create good accessibility opportunities by sustainable modes such as walking, cycling and public transport.

8.4 It has been demonstrated that the proposed developments will result in a significant increase of around 6000 two way trips during the AM peak period and of 6000 two-way trips during the PM peak at the end of the planned period in 2029. In the absence of any prescribed measures in place to encourage alternative modes of travel these additional vehicle trips will only greatly worsen an already congested highway network, which in turn could increase the accident risk potential for all road users. Therefore, traffic flows to and from the proposed development allocation sites will be disproportionately high in comparison to other rural areas and are in my view unsound

8.5 In the absence of any practical solutions put forward by either or both Council's it is therefore arguable that due to the possible frustration of drivers caught up in excessive congestion levels, these Local Plan proposals could contribute to existing road safety problems.

8.6 In their current form the emerging Local Plans of both Councils are in contravention of many of its existing policies applicable to transport assessment and sustainable travel. They fail to comply with the Government's flagship National Planning Policy Framework ("NPPF"). They also fail to deliver any high quality development in the heart of Oxfordshire and to the East of Swindon. The opportunity for access by sustainable modes is neither realistic nor achievable. In Swindon for example there is significant weight being placed on a 'Rapid Transit system' without bus lanes. Systems of this type take a long time to implement and it is safe to say that a significant amount of development will have taken

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place prior to its It is reasonable to conclude that there are some demonstrable transport or highway related reasons why the proposed developments should not be permitted through the Local Plan EIP process without the commitment to adequate infrastructure provision.

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