CUDDESDON AND DENTON NEIGHBOURHOOD PLAN

APPENDIX E

ASSESSMENT OF CYCLING ROUTE TO OXFORD THROUGH HORSPATH

1 Summary

- 1.1 Planning policies at the national, county and district council levels all seek to promote the wider use of cycling for short journeys.
- 1.2 For example, the Oxfordshire County Council Active & Healthy Travel Strategy states: "Our vision is to make cycling a safe, simple and accessible option for people of all ages." The Department for Transport has published a Cycling and Walking Investment Strategy which states: "We want to make cycling and walking the natural choices for shorter journeys, or as part of a longer journey".
- 1.3 The recent NIC report *Running Out Of Road* shows that in reality cycling in Oxford is not taken seriously enough and provision for cycling is poor. It also states that "*Provision for out-city commuters is key, but barely exists.*"
- 1.4 The route from Cuddesdon to Oxford through Horspath could be used as case study to demonstrate the poor and inadequate provision.
- 1.5 Bad design of current infrastructure and lack of maintenance together with the speed and volume of vehicles as well as blind bends and at times narrow roads all make this route unattractive to cyclists.
- 1.6 In particular there are two features which are Critical (fail) Safety Factors, using the TFL Cycling Level of Service assessment: the entrance to the new sports ground on the south side of Horspath Road and the eastern chicane on Cuddesdon Road.

2 Introduction

- 2.1 It takes about half an hour to cycle the six and a half miles from Cuddesdon into the centre of Oxford, quicker than driving and taking the Park and Ride bus. The return journey is slightly longer because of the climb up the hill from Horspath. The route is used by leisure cyclists; by residents to commute into Oxford and by students at the college to commute out from Oxford to Cuddesdon. It is also used as a commuter route from Garsington to Oxford.
- 2.2 The complete route from Cuddesdon goes through Horspath; crosses the Eastern By-Pass on Horspath Road and then goes along Barracks Lane at the back of Cowley Marsh, joining the Cowley Road by Bartlemas Close.
- 2.3 However there are a number of hazards on the route which deter other keen cyclists from using it. This Appendix summarises the policy background and presents an assessment of the route from a cyclist's perspective.

3 Policy background

Responsibilities

3.1 Local responsibilities for cycling are split between Oxfordshire County Council and South Oxfordshire District Council. The District Council can set planning policies to promote cycling as part of new developments. The County Council is the Highways Authority responsible for managing the local road network including cycling. They both operate within a framework set by national government.

South Oxfordshire District Council

3.2 The South Oxfordshire *Local Plan* includes the following objective under the heading of Objective 4 – Infrastructure:

OBJ 4.2 Make sustainable transport, walking and cycling an attractive and viable choice for people, whilst recognising that car travel and parking provision will continue to be important in this rural District.

3.3 There are several site-specific references to cycling in the Local Plan and one general policy TRANS2: Promoting Sustainable Transport and Accessibility:

The (District) council will work with Oxfordshire county council and others to:

••••

iii) Ensure new development is designed to encourage walking and cycling, not only within the development, but also to nearby facilities, employment and public transport hubs

iv) Support provision of measures which improve public transport (including Park & ride), cycling and walking networks within and between towns and villages in the district

v) Promote and support improvements to the transport network which increase safety, improve air quality, encourage use of sustainable modes of transport and/or make our towns and villages more attractive

Oxfordshire County Council

- 3.4 Oxfordshire County Council has set out its overall strategy in *Connecting* Oxfordshire Local Transport Plan 2015-2031 Volume I: Policy & Overall Strategy.
- 3.5 In his introduction, Councillor Ian Hudspeth the Leader of the Council states:

"So there needs to be a significant shift away from dependence on private cars, towards more people using forms of transport that use less road capacity and damage the environment less – where possible walking, cycling, and/or using public transport." 3.6 The relevant Goals and Objectives from the Strategy are:

Goals	Objectives	
Goal 2 - To reduce	Reduce the proportion of journeys made by private	
emissions, enhance	car by making the use of public transport, walking	
air quality and	and cycling more attractive	
support the transition	Influence the location and layout of development to	
to a low carbon	maximise the use and value of existing and planned	
economy	sustainable transport investment	
	Reduce per capita carbon emissions from transport	
	in Oxfordshire in line with UK Government targets	
Goal 3 - To protect	Mitigate and wherever possible enhance the	
and enhance the	impacts of transport on the local built, historic and	
environment and	natural environment	
improve quality of life	Improve public health and wellbeing by increasing	
(including public	levels of walking and cycling, reducing transport	
health, safety and	emissions, reducing casualties and enabling	
individual wellbeing)	inclusive access to jobs, education, training and	
	services.	

Table 1 – Goals and Objectives from Oxfordshire Local Transport Plan 2015-2031 Volume I

3.7 Volume 4 of the Local Transport Plan originally set out a Cycling Strategy. An updated version has been published called *Active & Healthy Travel Strategy*. Both include a number of statements of intent on the importance of promoting cycling as an alternative to driving for appropriate journeys, such as:

Para 3.5 Our vision is to make cycling a safe, simple and accessible option for people of all ages. In order to do this, we will consider adopting the six Good Design Outcome factors in the London Cycling Design Guide. ... The six factors are as follows: Safety, Directness, Comfort, Coherence, Attractiveness and Adaptability.

NPPF

3.8 The National Planning Policy Framework has a chapter on Promoting sustainable transport. Paragraph 104 states:

Planning policies should:

•••

d) provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans);

Government

3.9 In 2017, the Department for Transport published its Cycling and Walking Investment Strategy. Again it largely a statement of intent with the overall ambition:

We want to make cycling and walking the natural choices for shorter journeys, or as part of a longer journey.

- 3.10 The Strategy aims to deliver by 2040:
 - Better Safety 'A safe and reliable way to travel for short journeys'
 - Better Mobility 'More people cycling and walking easy, normal and enjoyable'
 - Better Streets 'Places that have cycling and walking at their heart'
- 3.11 The document then sets out an action plan to deliver these objectives.

NICE

- 3.12 The National Institute for Clinical Excellence has published a number of documents encouraging people to be more physically active, including cycling, such as Public Health Guideline [PH41] *Physical activity: walking and cycling* (November 2012) which states that "pedestrians and cyclists should be considered before other user groups in the design process this helps ensure that they are not provided for as an afterthought".
- 3.13 NICE guideline [NG90] *Physical activity and the environment* (March 2018) recommends that "*pedestrians, cyclists and users of other modes of transport that involve physical activity are given the highest priority when developing or maintaining streets and roads*".
- 3.14 Lastly the consultation draft NICE quality standard *Physical activity:* encouraging activity in the general population (January 2019) suggests "Local authorities develop and maintain connected travel routes that prioritise pedestrians, cyclists and people who use public transport."

Gilligan Report

- 3.15 In 2018, The National Infrastructure Commission published a report by Andrew Gilligan called Running out of road – Investing in cycling in Cambridge, Milton Keynes and Oxford. Though an independent report and therefore not a policy document, it is an important challenge to current policy and delivery. Some of the key findings include:
 - The roads of Oxford and Cambridge are close to a tipping point.
 - Growth cannot succeed without addressing transport but the usual approaches do not work.
 - Oxford and Cambridge are uniquely suited to cycling.
 - Cycling is a serious mode in both places.
 - But it is not taken seriously enough.

- Provision for cycling in Oxford is poor, in Cambridge better but will become inadequate.
- Provision for out-city commuters is key, but barely exists.

4 Cycle Audits

- 4.1 There are a number of tools which can be used to assess the suitability and safety of cycle routes. These include:
 - Transport for London Cycling Level of Service assessment (CLOS)
 - The Cycling Route Audit Tool (CRAT) published in the Welsh Active Travel Design Guidance.
 - Non-motorised user audits (NMU) published in the Design Manual for Roads and Bridges

5 Design Guidance

- 5.1 Publically available design manuals for cycling infrastructure include:
 - Oxfordshire County Council published the Oxfordshire Cycling Design Standards in 2017
 - DfT Local Transport Note 1/04 Policy, Planning and Design for Walking and Cycling
 - DfT Local Transport Note 2/08 Cycle Infrastructure Design.

6 Assessment of route

- 6.1 The route through Horspath to the Eastern By-pass is shown in Figure 1. Table 2 presents an assessment of the route from the Eastern By-pass into Cuddesdon using the list of frequent problems in *Annex A Guidance and Prompts* from the *Design Manual for Roads and Bridges HD42/05 Non-Motorised User Audits.* Where appropriate there are also comments based on the CLOS and CRAT tools.
- 6.2 The analysis identifies a long list of issues using the guidance in the NMU Audit Annex C. They simplify down to a small number of root issues:
 - Poor design of current cycling infrastructure;
 - Lack of maintenance of current cycling infrastructure, particularly essential safety features;
 - Inadequate cycling infrastructure for the current speed and volume of vehicles;
 - Inadequate cycling infrastructure for road conditions Blind bends; sections of narrow road and a long straight hill encouraging speeding (sometimes described as a 'ski jump').
- 6.3 What might have been suitable for these roads when they were a quiet country lane used only by village residents is now unsuitable for a road which

is used as a main route for rush-hour traffic with up to 900 motor vehicles per hour at peak times in the weekday rush hours¹.

- 6.4 The analysis also shows that some sections of this route score as Critical (fail) under the CLOS scheme. The sections are shown in Table 2.
- 6.5 What is most concerning is that the critical safety failures are the result of poor design:
 - The road markings at the exit from the BMW works are ambiguous. The sight lines make it difficult for cars leaving the works to see cyclists until it is too late.
 - The recently constructed entrance to the new Oxford City sports ground on the south side of Oxford Road, Horspath, prioritises car drivers over cyclists and fails to meet current design standards.
 - The eastern chicane on Cuddesdon Road was modified in 2011 after a fatality. Half the chicane was removed to allow cars to speed through the chicane safely. Unfortunately the cycle by-pass was also removed, making it dangerous for cyclists. As a result, the design now fails to comply with then current DfT guidance and with the recently published *Oxfordshire Cycling Design Standards*.
 - More than this the road width at the restriction is "between 3.1m and 3.9m (which) should be avoided as it is in this range that motorists will often attempt to overtake cyclists where there is insufficient room to pass safely". (LTN 1/04 Planning and Design for Walking and Cycling Paragraph 4.3.12)
- 6.6 It should be said that in the summer of 2017, the County Council installed a cyclist warning signs and bollards at the chicane. Experience afterwards suggests that these have had little impact on the behaviour of drivers towards cyclists through the chicane. In 2018, the County Council conducted a Stage 4 Road Safety Audit (RSA) and concluded that the modified chicane was safe because there had been no personal injury road traffic collisions in the previous 36 months. This is a very limited assessment which ignores all the other evidence and the Council's own Cycling Design Standards.

¹ Measurement by a member of Horspath Parish Council communicated September 2018 "900 vehicles per hour as the maximum number of vehicles passing 7 Cuddesdon Road, (by adding both directions totals together) in the busiest hour of the morning weekday rush hours during some sample counts"



Figure 1 – Map of route from Cuddesdon to Eastern By-Pass

Copyright © <u>OpenStreetMap</u> contributors opendatacommons.org Taken from https://www.cyclestreets.net/journey/63848348/#balanced

Section	Issue	CLOS score – Critical (fail)
BMW Gate 7 exit	Blind exit – drivers can't see cyclists as they leave the site, particularly cyclists coming from the ring road.	Safety Factor - Heavy streams of turning traffic cut across main cycling stream.
Entrance/ exit to/from new sports ground on south side of Horspath Road	Recent design which prioritises car drivers over cyclists. No warning to drivers that this is a cycle path.	At start/ end of events and when traffic is queuing past the entrance: Safety Factor - Heavy streams of turning traffic cut across main cycling stream.
Oxford Road/ Cuddesdon Road through centre of village with blind bends including bridge	Cars attempt to overtake and then cut in when they see an oncoming car. Westbound, cars overtake on the sharp bend and cut in on cyclists who do not turn as tightly.	Comfort Factor - Effective nearside space in secondary position <1.5 m
Cuddesdon Road from Copcot Close Chicane to junction at top of hill and along Wheatley Road to turning off to Cuddesdon	Car speeds are up to 60 mph. Particularly bad on the hill where the road narrows on the brow.	Feeling of Safety Factor - 85th percentile greater than 30mph (where cyclists are not segregated) The narrow hill also fails on: Comfort Factor - Effective nearside space in secondary position <1.5 m
Eastern chicane on Cuddesdon Road	Cars fail to give way or attempt to overtake through the chicane which is not wide enough for bicycle and car.	Safety Factor – Nearside lane in range 3.2m to 4.0m.

Table 2 – Sections of the road that fail under the CLOS scoring

Road	Length/Junction	Description	Issues – Taken verbatim from Annex A Non-motorised User Audit
Horspath Rd	Eastern By-Pass to BMW works exit	Route is an on-pavement cycle lane recently repainted but never swept.	Accumulation of debris in facilities
	BMW Gate 7 exit	Poor visibility of cyclists for drivers emerging from car works. Ambiguous on-road signage which requires all road users to give way – therefore drivers normally ignore cyclists' right-of-way. A CLOS critical safety fail "Heavy streams of turning traffic cut across main cycling stream."	Inadequate inter-visibility with other users for personal safety
	BMW Exit to Roman Road	Narrower on-pavement cycle lane. Potential for conflict with pedestrians and on-coming cyclists	Narrow cycle lanes
	Roman Road crossing	Clear unambiguous markings - vehicles have priority and reasonable sight lines.	None
Horspath Road	Entrance/ exit at new sports ground on south side.	There has been at least one incident when a car turning right into the sports ground knocked over a cyclist on the path. Queuing traffic made it difficult to see the cyclist. The as-built design fails to follow modern design practice and prioritises cars rather than cyclists. Rather than encouraging cyclists, it will deter them and push	Potential CLOS Critical Failure - Safety Factor - Heavy streams of turning traffic cut across main cycling stream at the start / end of sports events.
Horspath	Roman Road	Boute is a shared cycle / nedestrian on-navement nath with	Accumulation of debris in facilities
Road/	crossing to end of	adequate width. Covered in grit for much of its length from	

Table 3 – Assessment of cycling route from Eastern By-pass to Cuddesdon

Road	Length/Junction	Description	Issues – Taken verbatim from Annex A Non-motorised User Audit
Oxford Road, Horspath	cycle lane in Horspath	various road operations - resurfacing the road a few years ago; Thames Water operations and now the sports ground development. Not normally swept. Punctures in thinner road bike tyres are common but also in hybrid bikes with thicker tyres.	Facilities provided inadequate (on- carriageway and off-carriageway) for all the different types and numbers of cycle users
		Because of the grit cyclists with road bikes tend not to use it, preferring the road instead.	Obstruction of routes by overgrown trees, hedges and low branches
		Nearer Horspath the hedges are allowed to grow out over the path, reducing the effective width and creating an eye hazard.	Poor signing (information, warning and regulatory) along routes
		At the end of the path, where cyclists rejoin the road, there is no	Other audits/ guidance:
		signage to warn drivers that cyclists are rejoining the carriage way.	Road speed limit is 40 mph and then 60 mph. Therefore for cyclists using the road, scores as Critical (fail) by CLOS as "Speed of traffic where not segregated 85th percentile >30mph"
Oxford Road Horspath	Chicane at entrance to village	The chicane at the entrance to Horspath by the Village Hall has a cycle by-pass for eastbound traffic. It is straight but narrow.	Not an issue since not normally used but design fails to comply with DfT
		No approach lane so access is blocked when cars are queueing. Exit ends in a give way sign to cars in either direction. They are swept at best once a year so the surface is usually covered in grit and debris. Not normally used since the cycle path begins/ ends the village side of the chicane.	guidance
The rest of the route is on the road.			

Road	Length/Junction	Description	Issues – Taken verbatim from Annex A Non-motorised User Audit
Oxford Road/ Cuddesdon Road	Blind bends, including bridge through village	Speed limit 30mph. Actual speeds normally less than 30 mph. Vehicles attempt to overtake on the blind bends without being able to see whether it is safe to do so. Cut in dangerously when they realise it is not. Most respond when the cyclist takes the primary position to minimise overtaking but some become aggressive. Westbound Some cars overtake on the very sharp hairpin bend. Visibility is good but the cars can take a much tighter line than cyclists causing the cyclist to run out of road as the car cuts in around the bend	Fear of motorised traffic danger Inadequate provision of separate routes/tracks <i>Other audits/ guidance:</i> Scores as Critical (fail) under CLOS as effective road width in secondary position is <1.5m.
Cuddesdon Road	Side roads – Manor Farm Road and Gidley Way	Vehicles misjudge speed of cyclists on main road and come out causing a risk of collision.	Fear of motorised traffic danger Provision for crossing of side roads inadequate
Cuddesdon Road	Speed bumps	Speed limit 30mph. Speeds often above 30 mph to judge by speed indicator. Design of speed bumps is cyclist friendly but: Eastbound Parked cars on or near a bump force cyclists further out into the middle of the road than into oncoming traffic.	Poor detailing of design – designer hasn't visited or cycled the route

Road	Length/Junction	Description	Issues – Taken verbatim from Annex A Non-motorised User Audit
Cuddesdon Road	Middle chicane by Copcot Close	Speeds through middle chicane normally below 30 mph. Chicane has two cycle by-passes. These are cranked and narrow making them difficult to use. No approach lane so access is blocked when cars are queueing. Exit ends in a give way sign to cars in either direction. They are swept at best once a year, meaning the surfaces is normally covered in debris and plants. Cyclists therefore have to use the main carriageway. Because the width is visibly restricted vehicles don't normally try to overtake or fail to give way, though this has happened. Westbound For much of the last winter, the cycle by-pass was blocked by branches toppled when the hedge was cut from the far side but not removed.	Poor detailing of design – designer hasn't visited or cycled the route Narrow cycle lanes Poor detailing where cyclists move from on-carriageway to off- carriageway and vice versa Inadequate routes through traffic calming features/schemes Accumulation of debris in facilities Obstruction of routes by overgrown trees <i>Other audits/ guidance:</i> The design of the cycle by-passes fails to comply with the DfT guidance.
Cuddesdon Road	Gates	There are a number of wooden roadside structures along the Cuddesdon road designed to look like fixed gates and part of the original safety scheme. Two of these have recently been repainted. Others have been abandoned.	Failure to maintain safety infrastructure (not mentioned as a problem in NMU audit)
Cuddesdon Road	Middle chicane to eastern chicane	30 mph speed limit normally exceeded. Typical speed is 40 mph but sometimes up to 50-60 mph.	Scores as Critical (fail) in CLOS because "85th percentiles > 30 mph"

Road	Length/Junction	Description	Issues – Taken verbatim from Annex A Non-motorised User Audit
		The road at this point is comparatively wide and straight with good visibility. Cars tend to give enough room to cyclists.	
Cuddesdon Road	Eastern chicane	 good visibility. Cars tend to give enough room to cyclists. 30 mph speed limit. If no oncoming cars, speeds are normally above speed limit and sometimes up to 50-60 mph. This chicane is discussed in more detail in the text. It has been modified to remove one half of the chicane after a fatality to make it safe for speeding drivers. In doing this it has been made unsafe for cyclists. Westbound The bypass is cranked and narrow making it difficult to use. No approach lane so access is blocked when cars are queueing. Exit ends in a give way sign to cars in either direction. It is normally blocked by vegetation apart from a month or so after it is swept at best once a year. Cyclists therefore use the main carriage way. Eastbound Cyclists have to use the main carriageway because the east bound by-pass has been removed, ignoring the fact that this is still a width restriction requiring a by-pass. The carriage way width is 	Fear of motorised traffic danger Inadequate width Designs that do not support effective maintenance, e.g. leading to poor cleaning. Dazzle by vehicle headlights Poor detailing of design – designer hasn't visited or cycled the route Narrow motorised traffic lanes Narrow cycle lanes Speed and volume of motor traffic Inadequate routes through traffic calming features/schemes <i>Other audits/ guidance:</i> Fails to comply with DfT guidance
		now some 3.7-3.8 m wide within the widths between 3.1m and 3.9m (which) should be avoided as it is in this range that motorists will often attempt to overtake cyclists where there is insufficient room to pass safely. (LTN 1/04 Planning and Design for Walking and Cycling Paragraph 4.3.12)	Scores as a Critical (fail) in CLOS because width is in range 3.2m to 4.0m

Road	Length/Junction	Description	Issues – Taken verbatim from Annex A Non-motorised User Audit	
			Classified as critical by CRAT as width between 3.2m and 3.9m.	
			Non-provision of eastbound by-pass contravenes Oxfordshire Cycling Design Standards	
Cuddesdon Road	Gates	There were two wooden roadside structures along the Cuddesdon road designed to look like fixed gates, just uphill of the eastern chicane. They were an important safety feature helping to make the gap through the chicane look smaller than it is. One is overgrown with brambles and one has rotted.	Failure to maintain safety infrastructure (not mentioned as a problem in NMU audit)	
Cuddesdon	Eastern chicane	Speed limits 60 mph. Actual speeds up to 60mph. Road narrows	Narrow motorised traffic lanes	
Road	up hill to junction	lificantly.	Speed and volume of motor traffic	
	Road	Eastbound - uphill	Other audits/ guidance:	
		Cyclists are slow so cars overtake narrow on the hill.	Cyclists are slow so cars overtake at speed and close as road is narrow on the hill.	Classified as critical by CRAT 85th percentile > 37mph
		Westbound – downhill Cyclists going downhill are much faster so overtaking is less frequent and normally wider.	Scores as Critical (fail) by CLOS as	
			Speed of traffic where not segregated 85th percentile >30mph.	
			And because effective width in secondary position< 1.5m	
	Brow of hill on Cuddesdon Road	Speed limits 60 mph. Actual speeds up to 60mph	Narrow motorised traffic lanes Speed and volume of motor traffic	

Road	Length/Junction	Description	Issues – Taken verbatim from Annex A Non-motorised User Audit
		Cars overtake on the brow of the hill when they don't have the visibility to see if it is safe. Cut in dangerously when they realise it is not.	Fear of motorised traffic danger Dazzle by vehicle headlights Other audits/ guidance: Classified as critical by CRAT as above
Cuddesdon Road/ Wheatley Road Junction	T-junction	Eastbound turning left Vehicles try to overtake too close to the junction Westbound turning right Wheatley Road has a 60 mph speed limit. Cars going straight on sometimes try to overtake as the cyclist is turning right down the hill.	Speed and volume of motor traffic Lack of provision of facilities at junctions <i>Other audits/ guidance:</i> Scores as Critical (fail) by CLOS as Speed of traffic where not segregated 85th percentile >30mph
Wheatley road from junction with Cuddesdon Road to junction with Wheatley Road, Cuddesdon	T-junction	Eastbound turning right Wheatley Road has a 60 mph speed limit. Cars going straight on sometimes try to overtake as the cyclist is turning right into Cuddesdon Westbound turning left Not normally an issue	Speed and volume of motor traffic Lack of provision of facilities at junctions <i>Other audits/ guidance:</i> Scores as Critical (fail) by CLOS as Speed of traffic where not segregated 85th percentile >30mph

Road	Length/Junction	Description	Issues – Taken verbatim from Annex A Non-motorised User Audit
Wheatley Road, Cuddesdon	Junction to village	Speed 60 mph but low volume of traffic.	None