CD 9.11 (d)

COLNEY HEATH PARISH COUNCIL

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date	version	
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Land adjacent to Colney Heath Football Club, Colney Heath, St Albans

PROOF OF EVIDENCE

SUSTAINABILITY

Colney Heath Parish Council Rule 6 Party

Planning Inquiry

PINS Ref : APP/B1930/W/23/3333685

LPA REF: 5/2022/0599

Summary

The Colney Heath Parish Council's (CHPC) case is that the application site is not sustainable as defined in the National Planning Policy Framework (NPPF) CD 1.4 so any development would be contrary to the objectives of the NPPF.

Walking and cycling are sustainable modes of travel, however the pavements and cycle routes within, and beyond, the village are substandard and, in some cases, dangerous. This document contains our detailed assessments of the local pavements and cycling routes

Colney Heath does not have a railway station and is served with a limited bus service which offers only limited alternatives to the use of a car for most day-to-day needs.

The village contains a primary school, a small convenience store and no medical facilities, so for most services and amenities residents must travel beyond the village and, due the demand for these facilities in the area, these are dispersed across a wide area.

This document records the current location of facilities used by Coloney Heath residents.

All the evidence concludes that Colney Heath is not a sustainable place to build more homes and cannot be made sustainable in the short term.

Sustainability

1. Achieving sustainable development is a core objective within the National Planning Policy Framework (NPPF) (CD 1.4) including paragraphs 1,9 and 10. The evidence provided considers and demonstrates that the proposed site is not sustainable and does not meet the sustainability objectives within the NPPF.

Need to Travel

Employment

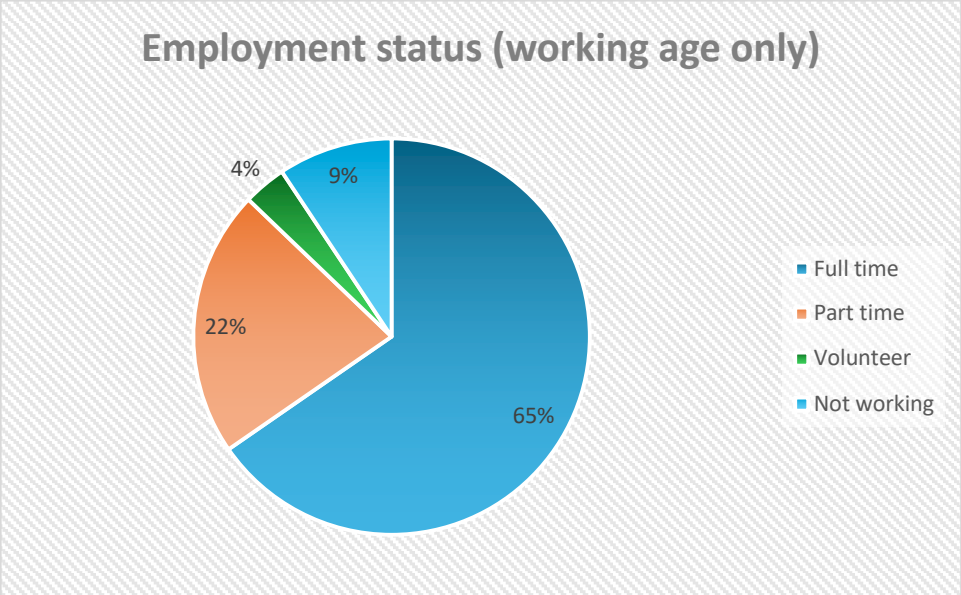
2. Colney Heath village provides limited employment opportunities. Many of the jobs are part-time.

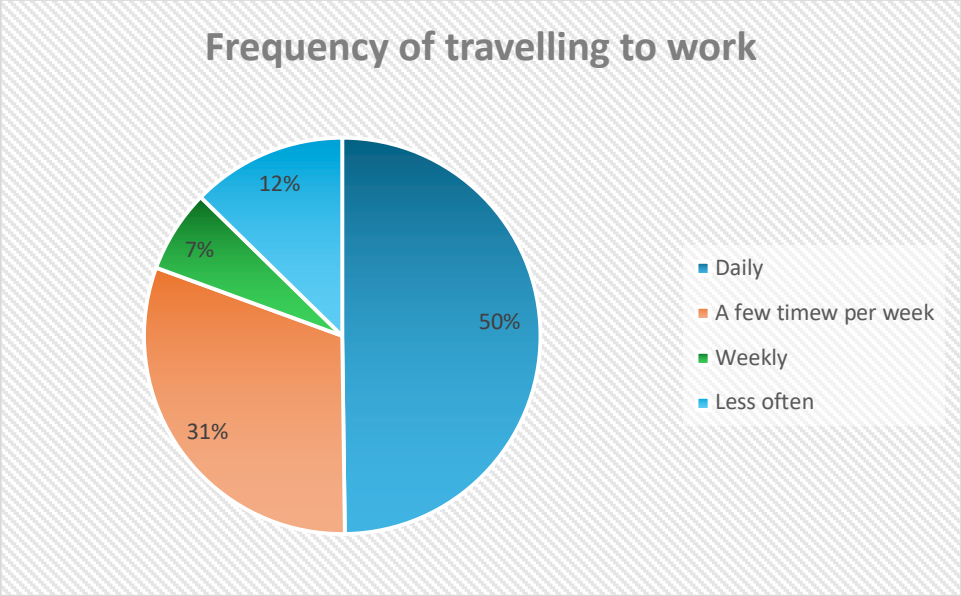
Business/employers	Services provided	workers (headcount)
CH JMI primary school	Primary school	36
St Marks Church	Religious and community	4
J.Day Stone	Stone, stoves, firewood	10
Day Brothers	Coal, haulage, firewood	5
The Rice	Indian takeaway food	7
CH Shop&Post office	Shop and post office	0
Colney Cuts	Hairdresser	2
The Crooked Billet	Public house	9
CH Football Club	Football and Social Club	10
CH Village Hall	Meeting and recreation	1
Treasure Tots	Pre-school	4
T.Taylor & Sons	Builder	4
BHG	Car dealers	7
Tollgate farm	Farmwork, welding, classic car repair	17
Total	9% of electorate (1298)	116

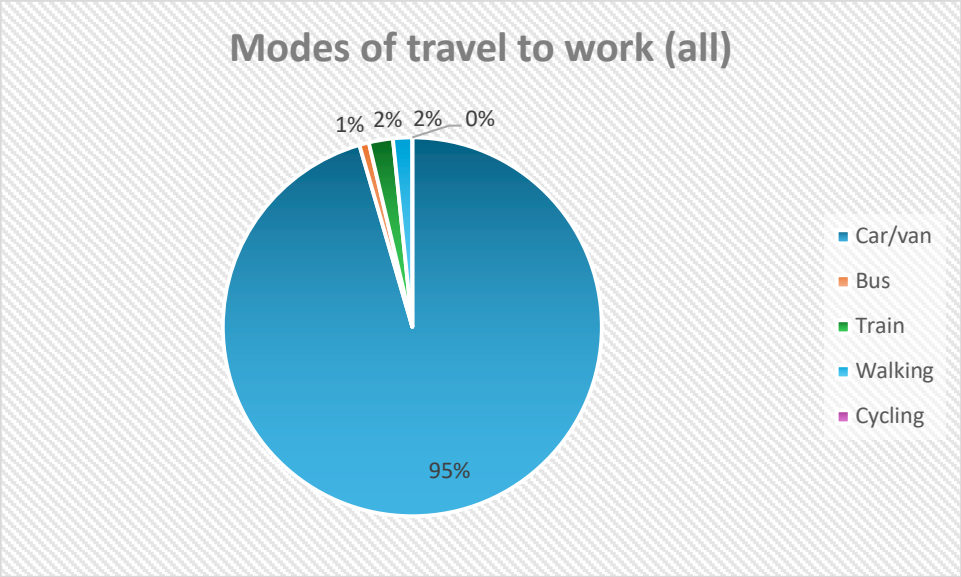
The largest employment site in Colney Heath is the school, the village also contains several small offices typically employing 2-3 people. The village shops and public house are small family run businesses and mostly employing family members. Tollgate Farm has a yard with several businesses operating from it. Two other builder's yards are either within or within close proximity to the village.

3. 4Colney Heath residents' association undertook a travel survey in 2024 CD 17.6 (the "CHRA-T2024"). This received over 450 responses and identified employment status, the modes of travel used by residents and the distances travelled.

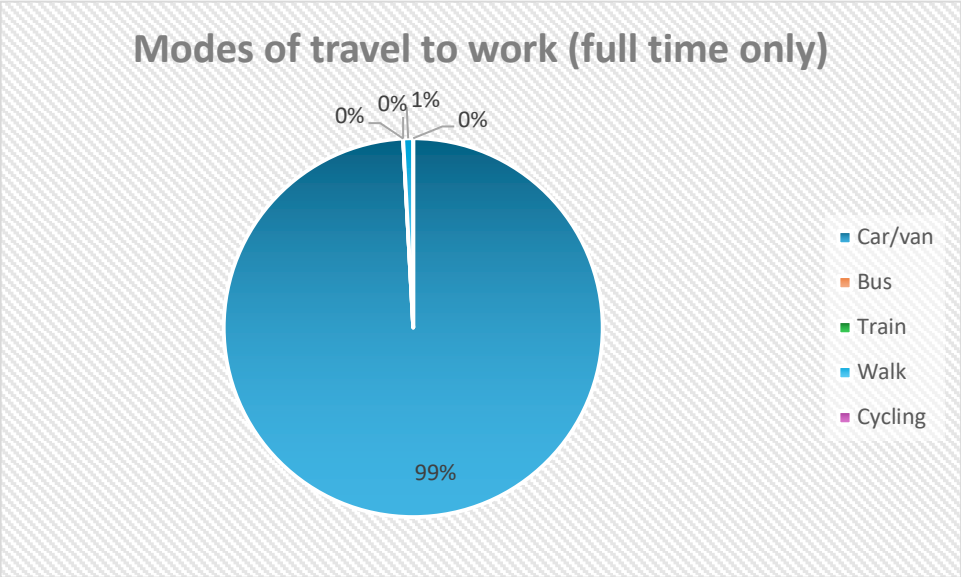
4. The survey CHRA -T2024 recorded 31.8 % people working at home (excluding any volunteer work) for some of the working week. The survey also requested information on the distance travelled to work; the median distance was 8.5km. This demonstrates the lack of employment within, or near the village, which means that most people must travel to work. While they may not commute every day, over 80% of residents commuted to work several times a week or more,







5. None of the respondents recorded cycling as a mode of travel to work from Colney Heath village. When the data is analysed to include only those in full-time employment, the data shows very little difference with only records car/van and walking as modes of travel to work.



Distance travelled to main place of employment.

6. The CHRA -T2024 survey also requested information of location (postcode) of employment. This was analysed as follows-

All respondent's employment location to centre of postcode supplied.

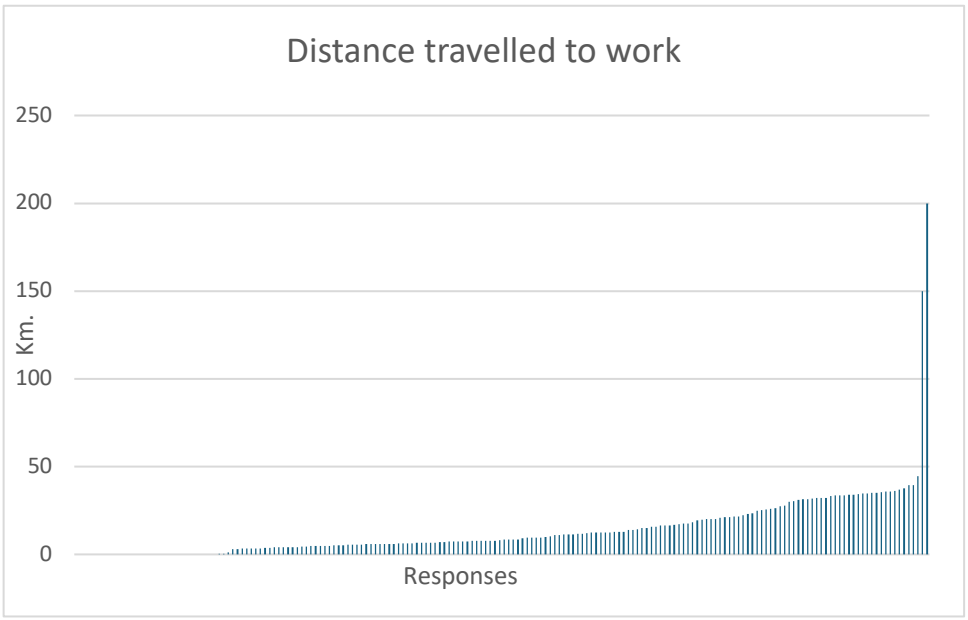
If distance < 5km to the employment site, then the central residential point in the road of residence was used.

If distance > 7.5km to the employment site, then distance to the centre of the village was used.

Assessment		Median	Average
All respondents distance to main place of employment		8.5km	14.6km
Minimum distance to main place of employment	0.0km (working at home)		
Maximum distance to main place of employment	200km.		
Daily commuters' distance to main place of employment		9.3km	12.4km
Commuting a few times per week to main place of employment.		7.4km	13.85km
Commuting once per week to main place of employment		7.75km	25.4km

7. In CHRA-T2024 (CD17.6) an additional question was asked about resident's alternative locations of employment. This was analysed as above, however some people responded with multiple locations so in each case the most distant location was used in the analysis as this was considered to offer the possibility of identifying differing modes of travel.

Assessment		Median	Average
Distance to alternative employment site		33.7km	49.2km
Minimum distance to alternative employment site	6km		
Maximum distance to alternative employment site	202km.		



8. The travel to work data shows that Colney Heath residents need to travel to work, over varying distances and to a wide range of locations. The greatest number of journeys, 99% of journeys, are by car or van reflecting on the lack of real alternative modes of travel from the village.

Sustainable Travel

9. The proposed site would not be compliant with the core sustainability objectives in NPPF (CD1.4) paras 74, 89, 108c, 109 and 114a, as the site does not offer a genuine choice of transport modes.

' Para 74 The supply of large numbers of new homes can often be best achieved through planning for larger scale development, such as new settlements or significant extensions to existing villages and towns, provided they are well located and designed, and supported by the necessary infrastructure and facilities ***including a genuine choice of transport modes.*** **[**Our emphasis] *Working with the support of their communities, and with other authorities if appropriate, strategic policy-making authorities should identify suitable locations for such development where this can help to meet identified needs in a sustainable way.'*

Para 89*. 'Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements, and in locations that are not well served by public transport. In these circumstances it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable* ***for example by***

improving the scope for access on foot, by cycling or by public transport*.* [Our emphasis] *The use of previously developed land, and sites that are physically well-related to existing settlements, should be encouraged where suitable opportunities exist*.'

Para114. *'In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

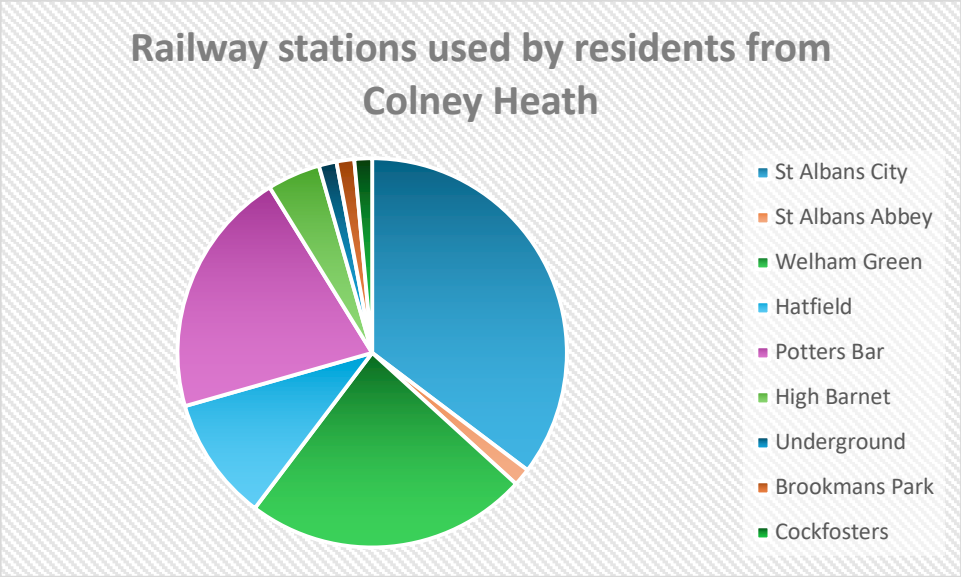
a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location; ' relevant section only.

10. The CHPC's case is that the proposed site does not meet the NPPF criteria or objectives for a sustainable site these are considered in following section.

Trains

11. Colney Heath has no railway stations. The nearest is Welham Green (4.6km away). All railway stations are beyond an acceptable walking distance. The most direct cycling route to Welham Green via Tollgate Road and Dixons Hill Road is considered unsafe for most cyclists. The longer safer route via Roestock Lane and South Way is considered safer however the inspector for the Tollgate Road appeal found that this route lacks coherence and directness (*Appeal Decision Land to the rear of 42-100 Tollgate Road APP/B1930/W/23/3323099 paras 83, 84 CD14.37)*

12. The CHRA-T2024 (CD 17.6) identified several railway stations used by residents however the trains were only one element of a multi-mode travel journey with part of the journey being normally completed by car.



Distances to local Railway stations

Welham Green	4.6km via Tollgate Road
Welham Green	5.8km via Roestock Lane and South Way
Hatfield	6.3km via Cycle route 61
St Albans City	6.5km via Alban Way (cycle route 61)
St Albans Abbey	7.7km via Alban Way (cycle route 61)

13. Cycle routes from Colney Heath to cycle route 61 (Albans Way) via Colney Heath Lane or Smallford Lane have been assessed as being High risk. See appendix (b) for the full assessment. St Albans District Council's (SADC) infrastructure plans for St Albans and Harpenden (CD17.2) identified the need for improvement on cycle route 61 including improved access, lighting, and widening at pinch points. The SADC's improvement plan also identified capacity issues for cyclists.

14. The Alban Way, cycle route 61, is a shared route without any separation of walkers and cyclists, so many cyclists and walkers have safety concerns over its use.

15. Cycling route assessments have been undertaken for part or all of these routes. In some cases the assessments only included the stretch from the village to the point where route joined a national cycle route. Walking and cycling assessments are included in Appendix (b) and (c).

Buses

16. Buses are considered a sustainable mode of travel. However, Colney Heath has more bus stops than buses. Buses only offer a six day a week service and may be

broken into three groups (i) standard services (ii) primarily school services and (iii) primarily shopper services.

(i) standard bus service

17. The 305 service offers a near “normal” service, departing from Potters Bar to New Greens St Albans, however these are the first and last journeys only. The daytime service only operates between central St Albans, St Peters Street and Colney Heath. The first bus through the village is at about 0740hrs and the last through bus is 1747hrs. This service offers five journeys is each direction Monday to Saturday; the timetabling on this service differs slightly on school days. There is no service in the evenings or Sundays.

(ii) School bus service

18. The 355 and 356 services operate on school days only between Enfield and Nicholas Breakspear school with a single journey in each direction. This service is available to the general public, but its route offers little benefit to Colney Heath residents other than school children.

(iii) Shopper services

19. The 200 service operates on Mondays only with a single journey in each direction between Essendon (a village on the road between Hartford and Potters Bar) and Colney Fields Retail Park London Colney where Sainsburys and M&S are located. For this service the bus stop is in Tollgate Road, 850m from the site.

20. The 230 service operates only on Wednesday with single journey in each direction between Welwyn Garden City and St Albans.

21. The 312 service also operates only on Wednesdays with single journey in each direction between Bell Bar (a small community between Welham Green and Potters Bar) and Hatfield Tesco’s store.

22. All bus timetables are included in appendix (a)
Due to the current and timetabling of these services they offer only limited access to employment sites or schools. The use of buses would be only chosen when locations are within an acceptable walking time of the bus stops, and the bus timetabling is suitable to achieve the desired arrival and departure times, or within acceptable walking distance if time is less critical.

23. The survey CHRA-T2024 (CD17.6) recorded no children travelling to Colney Heath JMI school by bus. This was anticipated due to no buses running at suitable times. For children attending secondary schools 9% travelled by bus to and from Colney Heath village. Analysis shows a wide range of schools attended by children from the village many not on suitable bus routes. See paragraph 36 for details.

24. An analysis undertaken by the BBC in February 2023 showed that Hertfordshire had suffered a 56.55% reduction in bus services, see appendix (d).

25. As part of National Bus strategy 'Bus Back Better' (published March 2021) Hertfordshire has been awarded a grant to improve bus services. None of the proposed improvements would change or improve the bus service in Colney Heath.

26. The conclusion is that bus services to and from Colney Heath are inadequate and are not about to improve significantly in the range of destinations, or frequency of service, and therefore do not offer a realistic alternative sustainable mode of travel.

Cycling

27. No dedicated cycle routes run through Colney Heath village. St Albans Cycling and Walking improvement scheme (LCWIP) (CD17.2) has not undertaken any formal assessment of local cycling routes so the CHPC has undertaken assessments of the key routes. These assessments were undertaken by a residents, one with a long professional experience of traffic issues. LTN 1/20 was used as the reference for the assessments. Details of these can be found in appendix (b).

28. Principle routes to and from Colney Heath

    1) Welham Green via Tollgate Road
    2) Welham Green via Roestock Lane and South Way
    3) Coursers Road
    4) Alban way and St Albans via Colney Heath Lane
    5) Alban Way and St Albans via Smallford Lane
    6) Samual Ryder School via Barley Mow Lane
    7) Samual Ryder School via A414 and Nightingale Lane
    8) Samual Ryder School via A414 and London Road

    For routes to meet the LTN 1/20 standard they must achieve a 70% pass rate

No	Route	Assessment - Key points	%	LTN 120 Standard	Critical factors failed
1	Welham Green via Tollgate Road (2.2 miles)	**Dangerous and strenuous** ● Differential in speed of vehicle and cycles ● Shared carriageway ● Gradient 2.1% for a distance of 750m ● Restricted vision corners ● Standing water ● High collision rate junction ● Unlit ● Parked cars ● No room for evasion ● Alternate line of traffic leaving cyclist facing oncoming traffic ● Isolated without natural surveillance. ● Over desired maximum	**26%**	**Failed**	9, 10, 12, 15
2	Welham Green via Southway and Travellers Lane (3.2 miles)	**High Risk** ● Differential in speed of vehicle and cycles 60 mph roads ● Shared carriageway ● Steep gradient to Roehyde roundabout ● Poor lighting ● Fear of crime at the underpass ● Alternate line of traffic leaving cyclist facing oncoming traffic ● Isolated without natural surveillance. ● Over desired maximum distance	**26%**	**Failed**	9, 10, 12
3	Colney Fields via Coursers Road (2.1 miles)	**Dangerous** ● Differential in speed of vehicle and cycles ● Shared carriageway ● Restricted vision corner ● High usage by HGV ● Turning HGV ● Standing water and mud on road ● High risk roundabout ● Unlit ● Poor road surface	**14%**	**Failed**	9, 10, 11, 12, 15

No	Route	Assessment - Key points	%	LTN 120 Standard	Critical factors failed
		● No room for evasion ● Isolated without natural surveillance. ● Over desired maximum distance			
4	Colney Heath Lane via High Street (1.9 miles)	**High Risk** ● Differential in speed of vehicle and cycles ● Shared carriageway ● Overhanging trees reduce to poor illumination. ● Alternate line of traffic leaving cyclist facing oncoming traffic ● Isolated without natural surveillance.	**26%**	**Failed**	15
4	Smallford Lane via High Street (1.9 miles)	**High Risk** ● Differential in speed of vehicle and cycles ● Shared carriageway ● Unlit ● Alternate line of traffic leaving cyclist facing oncoming traffic ● Isolated without natural surveillance. ● There are no facilities listed in Smallford Lane ● Need to dismount and cross carriageway to access the Alban Way	**27%**	**Failed**	9, 10, 12, 15
5	South Hatfield (Hilltop) (1.4 miles)	**Strenuous and prohibited** ● Gradient 4.83% for a distance of 475m ● Fear of crime at the underpass ● “cycling prohibited” on Lane End ● Isolated	Not scored too strenuous and prohibited	**Failed**	

No	Route	Assessment - Key points	%	LTN 120 Standard	Critical factors failed
6	Hatfield Town Centre (2.5 miles)	**High Risk** ● Over desired maximum distance ● Standing water on Roestock Lane ● Multiple alternate long lines of parked vehicles leaving cyclist facing oncoming traffic. ● High (recorded incidents) collision risk in underpass ● Fear of crime from underpass ● Poor quality of carriageway surface ● Route is badly overgrown and poorly maintained. ● Pedestrians and cyclists are not physically separated. ● Blind junctions on route ● Crossing 30 mph dual carriageway ● Low tree branches across route	**24%**	**Failed**	9, 10, 12, 15
No	**Route**	**Assessment**	**%**	**LTN 120 Standard**	**Critical factors failed**
7	Samuel Ryder school via Barley Mow Lane	**High Risk** ● Blind/dangerous road junctions ● Differential in speed of vehicle and cycles ● Shared carriageway ● Unlit ● Isolated without natural surveillance.	**32%**	**Failed**	11,12,15
No	**Route**	**Assessment**	**%**	**LTN 120 Standard**	**Critical factors failed**

No	Route	Assessment - Key points	%	LTN 120 Standard	Critical factors failed
8	Samuel Ryder School via A414/Nightingale Lane	**High Risk** ● Blind/dangerous road junctions ● Differential in speed of vehicle and cycles ● Shared carriageway ● Pedestrians and cyclists are not physically separated.	**36%**	**Failed**	11,12,15
9	Samuel Ryder School via A414 and London Road	**High Risk** ● Blind/dangerous road junctions ● Differential in speed of vehicle and cycles ● Shared carriageway ● Pedestrians and cyclists are not physically separated.	**46%**	**Failed**	

29. Cycle route 61 has not been included in the CHPC cycling assessment. The SADC infrastructure plans for St Albans and Harpenden (CD17.2) identified the need for improvement on cycle route 61 known locally as Alban Way including improved access, lighting, and widening at pinch points. The SADC improvement plan also identified capacity issues for cyclists. Alban Way, cycle route 61, is a shared route without any separation of walkers and cyclists, so many cyclists and walkers have safety concerns over its use.

Conclusion

30. The journeys by cycle to the facilities specified in both the appellants' s Transport Assessment (CD 4.18) and the Transport Framework Travel Plan (CD4.19) are either too high risk, too far, or both, for all ages and abilities. Each journey assessed failed against the Infrastructure Design LTN 1/20 standards by failing to achieve the required 70% score and also failed on one or more critical factors. Therefore, the contention that day to day activities can be achieved by cycle is not accepted by the CHPC.

Walking

31. The CHRA-T2024 (CD17.6) survey recorded the following levels of walking as the mode of travel to the following :

Primary school (Colney Heath JMI)	26.9%
Secondary schools	8.5%
Employment	2.7%
Shopping (main - weekly, monthly etc)	0.75%
Healthcare – doctors	0.48%
Healthcare – dentist	0.75%

32. The survey records a level of walking within the village and to nearby locations. For other needs walking is only a very minor mode of travel. CHPC believes that this is is due to the distances involved, state of the pavements, lack of a pavement resulting in road safety issues, and the need to carry shopping. The data from the travel survey fully supports these conclusions.

33. Few of the pavements in the village and beyond meet the Welsh pavement assessment standard (CD 16.12), the methodology approved by HCC. Coursers Road which leads to London Colney and Colney Fields retail area is particularly dangerous. This is also true of Tollgate Road between the eastern end of the village and Welham Green. Neither of these roads have any pavements or lighting and both are outside of 30mph zones.

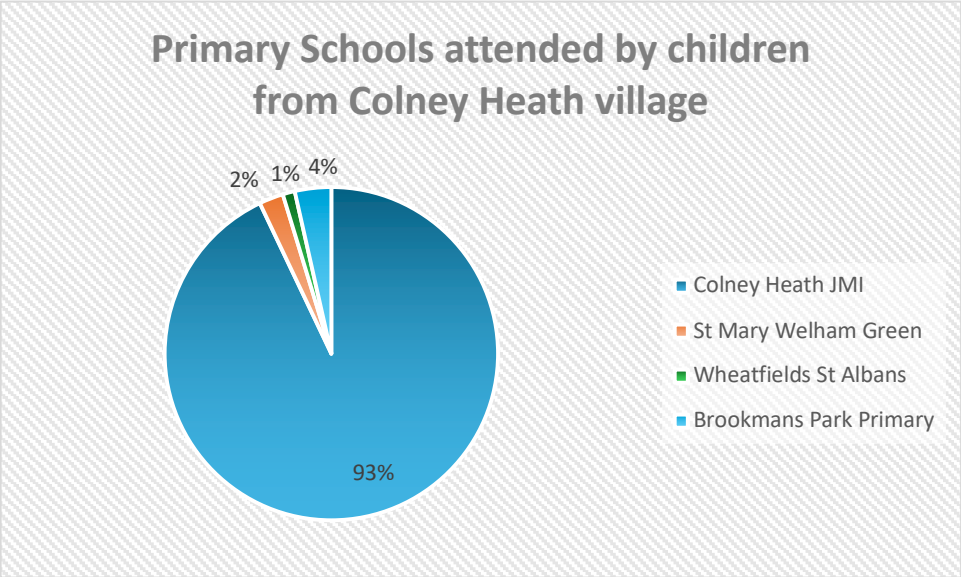
34. A score of 70% should normally be regarded as minimum level of provision overall (max score 40 100%). CHPC pavement assessments are in appendix (c).

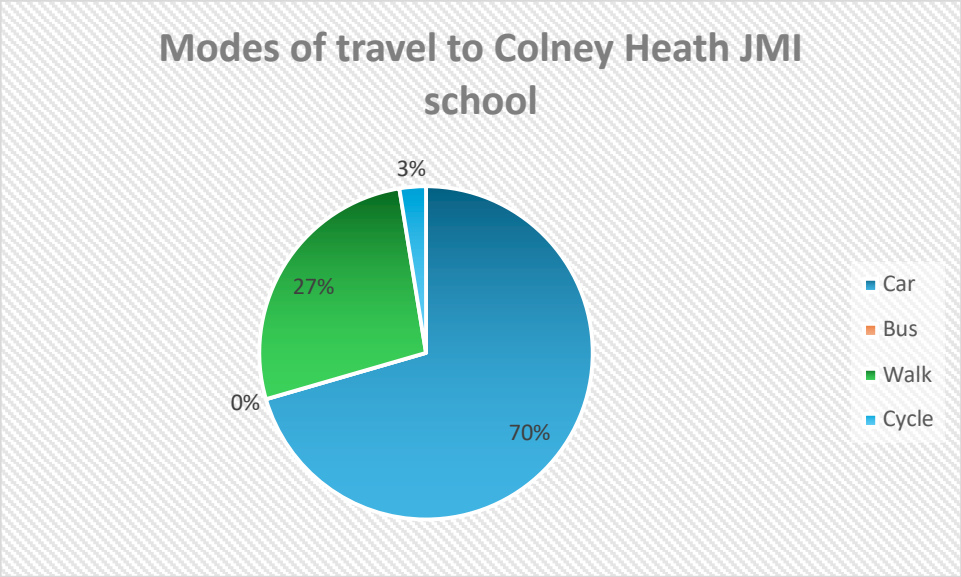
No.	Route	Assessment key points	%	Status
1	High Street Roestock lane-school	● Overgrown hedges reducing width ● Narrow in places min 900mm ● Poor visibility near shops ● Missing tactile paving	**60**	**Failed**
2	High Street school to A414	● Parking on pavement ● Lack of tactile paving	**52.5**	**Failed**
3	Colney Heath Lane	● Narrow pavement in close proximity to fast traffic 40mph ● Dangerous crossings A414 and mid route	**50**	**Failed**

No.	Route	Assessment key points	%	Status
4	Roestock Lane	• Overgrown hedges • Narrow pavement min 600mm • Poor surface quality	**57.5**	**Failed**
5	Bullen Green to Hatfield Hilltop	• Poor maintenance of subway • Risk of crime in subway • lighting not effective due trees shading the path • Narrow path <1m • Poor surface quality	**57.5**	**Failed**
6	Smallford Lane/Station Road	• Overgrown path	**50**	**Failed**

Access to facilities

Primary schools





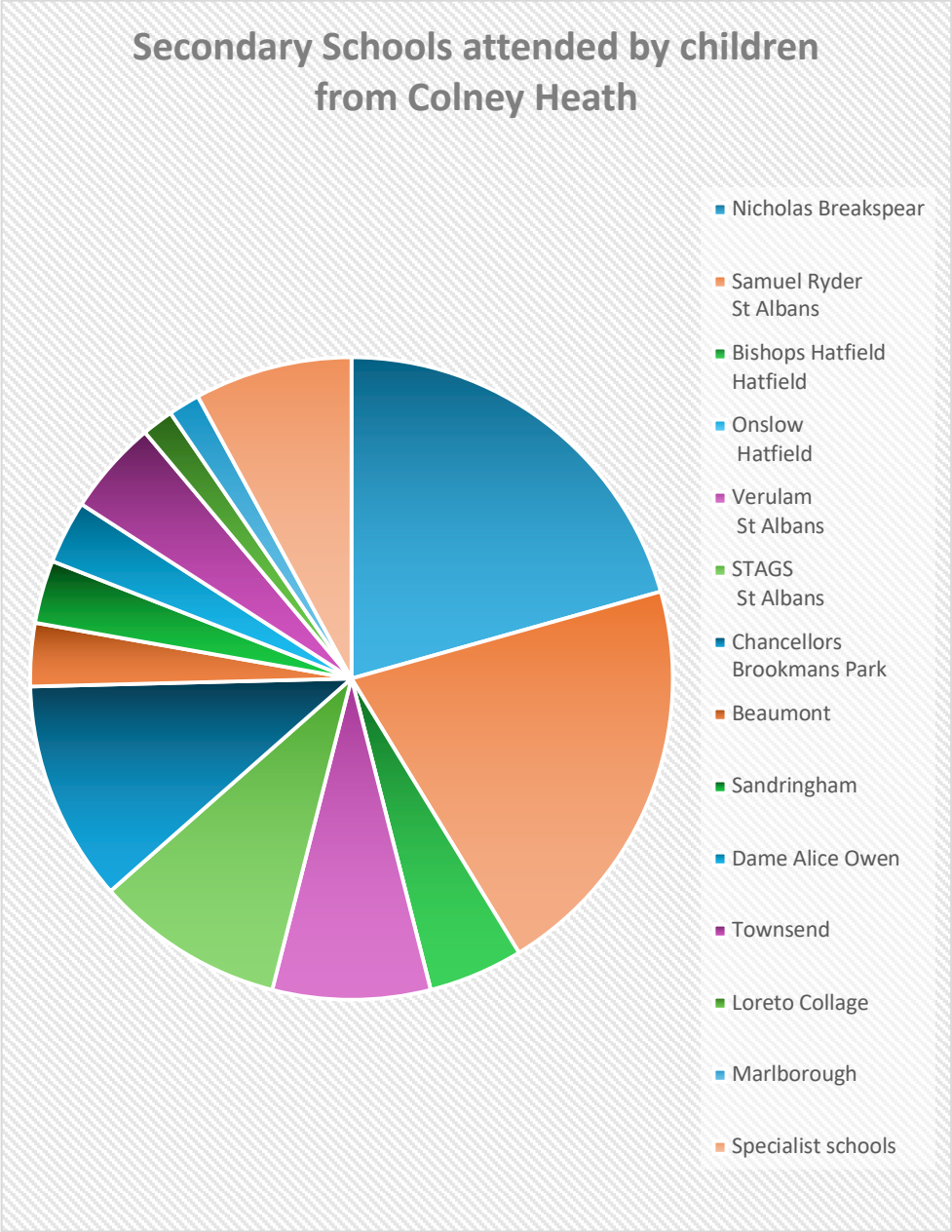
35. Distances travelled to Colney Heath school CHRA-T2024 (CD17.6)

Median distance (centre of road to school*)	1.2km
Minimum distance (centre of road to school*)	0.25km
Maximum distance (centre of road to school*)	12.2km

(*) CHRA T2024 (CD17.6) survey only asked for street of residence not house number or name.

The modes of travel to Colney Heath school and their impact is also considered in CHPC proof of evidence on Highways and Traffic CD 9.11 (c).

Secondary schools

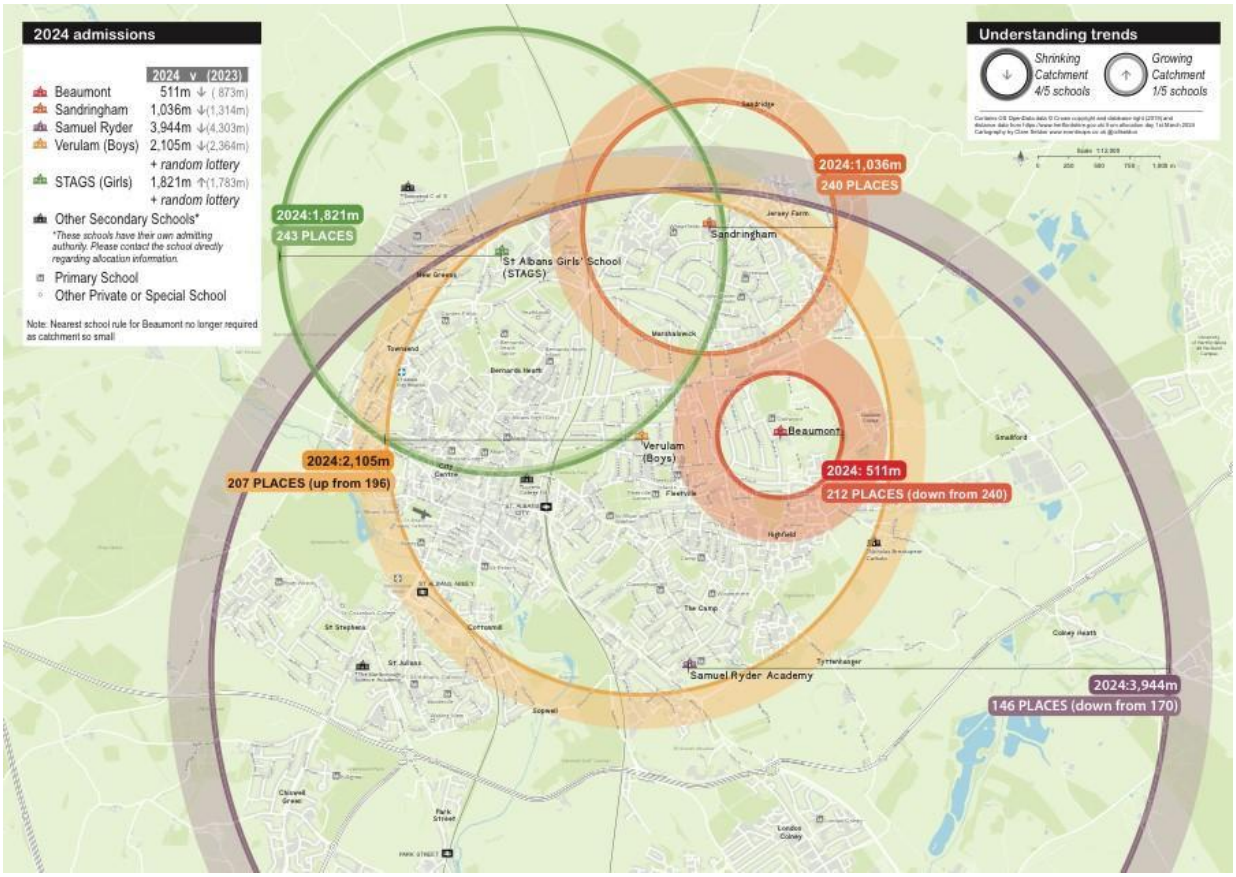


36. Distance to local secondary schools - walking by shortest route

Nicholas Breakspear (RC)	2.8km
Samuel Ryder	5.0km
Bishops Hatfield (girls)	3.7km
Onslow St Audrey	3.9km
Verulam	5.2km
St Albans Girls (STAG)	7.7km
Chancellor's Brookman's Park	6.5km
Beaumont	4.0km

Sandringham	6.4km
Dane Alice Owen Potters Bar	7.3km
Townsend (CofE)	8.7km
Loreto Collage (girls) RC	6.7km
Marlborough	5.1km

37. Nicholas Breakspear school is the nearest school to the village but as a faith school will be unsuitable for most students. It has an admission policy which priorities Roman Catholic (RC) families so this also restricts access to the school.

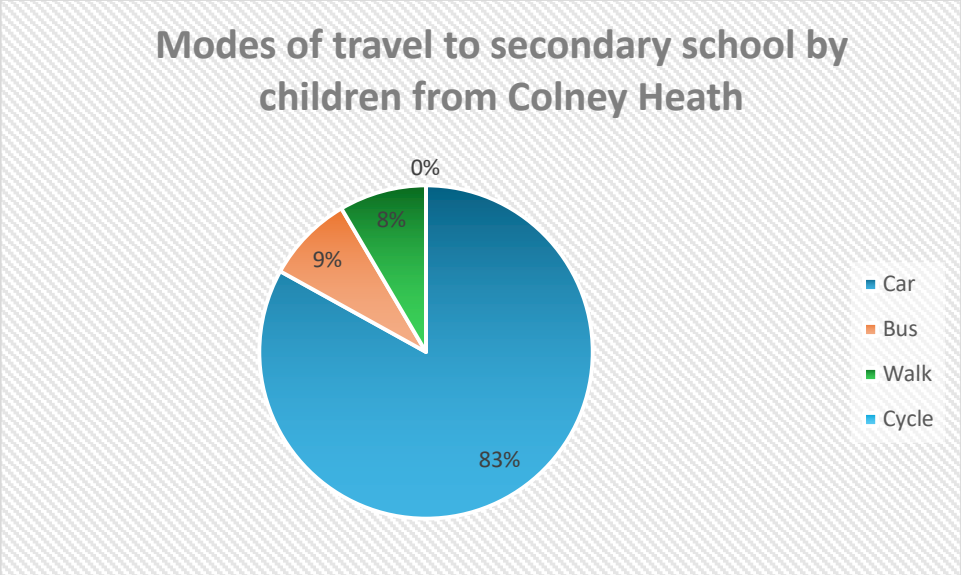


St Albans school admissions zones 1st March 2024

38. In the March 2024 St Albans school admissions round, Appendix (e), the only secondary school with Colney Heath within its catchment area was Samuel Ryder Academy. This school has no direct bus routes linking the village, and our cycling route assessments show that the cycle routes are unsafe. Comments made to a Colney Heath resident by the school concluded that most parents felt it was unsafe for children to cycle to this school.

39. Only Nicholas Breakspear school is within a practical walking distance of the village, but the route via Colney Heath Lane scores poorly in our pavement assessments. There is some evidence that some children do walk to this school.

40. All other schools are either at, or beyond, an acceptable walking distance and most of the possible routes would be along unsatisfactory pavements, see pavement assessment in appendix (c). All the possible cycle routes have been found to be either dangerous or unsafe, so cycling is not considered a viable alternative. Any additional housing development would rely on unsustainable modes of travel on unacceptable routes which is contrary to both national and local policies.



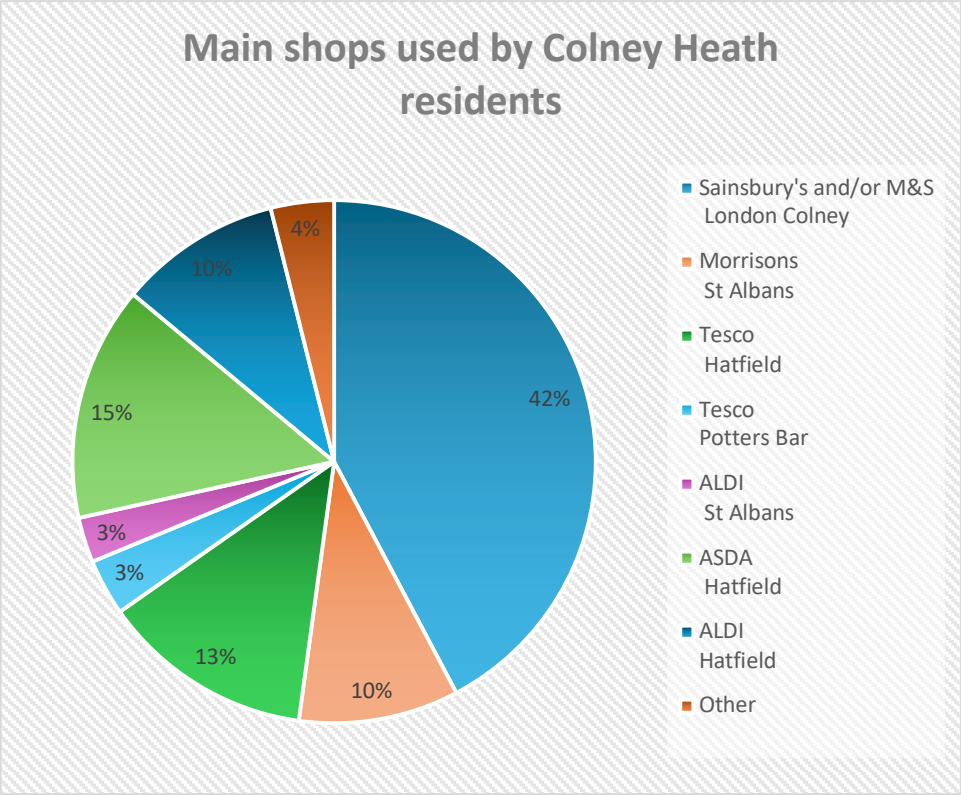
41. Statistics provided by Herts County Council for the last 5 years show that these schools are consistently significantly oversubscribed as seen in the table below. An increase in school-age population due to further housing development in the area would put even more pressure on the schools and consequently, the quality of education available to resident children.

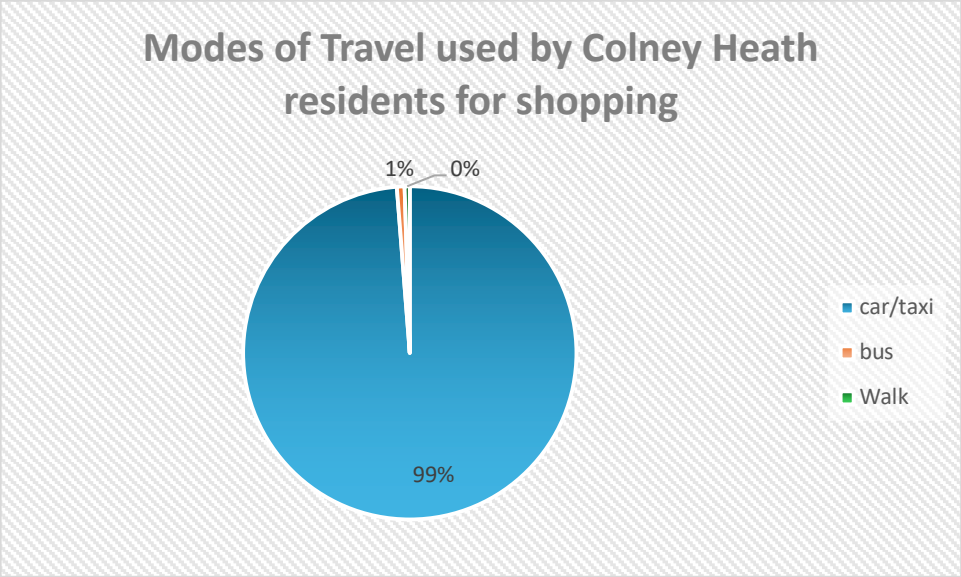
School	Cycling Distance	Applications 2018-2022	Allocations 2018-2022	Apps/Allocations
Nicholas Breakspear	2.8km	369/507/535/523/545	180	303%
Samuel Ryder	5.0km	756/870/819/765/733	133-159	533%
Beaumont	4.0km	1280/1324/1269/1154/1225	210-240	523%

Loretto Collage	6.7km	436/499/493/447/443	160	277%
Sandringham	6.4km	1243/1280/1007/1099/1031	240-242	430%
Marlborough	8.1km	660/735/672/621/650	212/240	271%

Retail

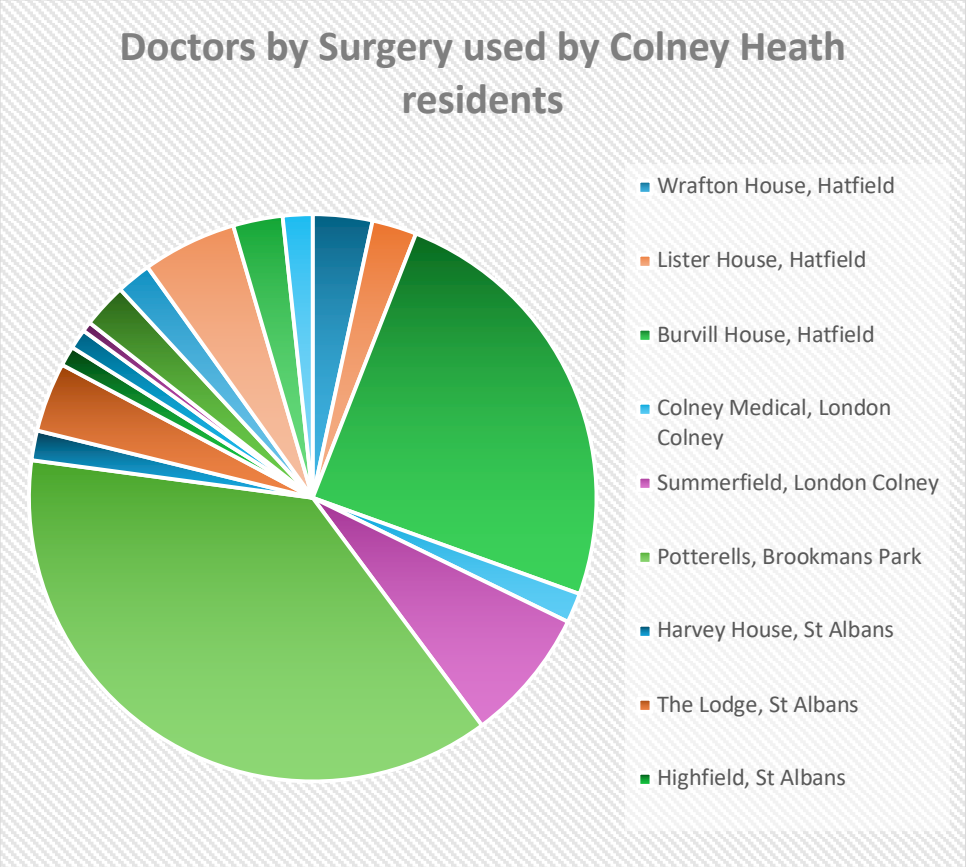
42. Colney Heath only has one small convenience store/post office, a hairdresser, and an Indian takeaway. The convenience store is a small shop offering a limited range of goods that do not provide many needs for provisions. This results in a need for people to travel to a larger retail facility for their main shopping requirements.





Healthcare

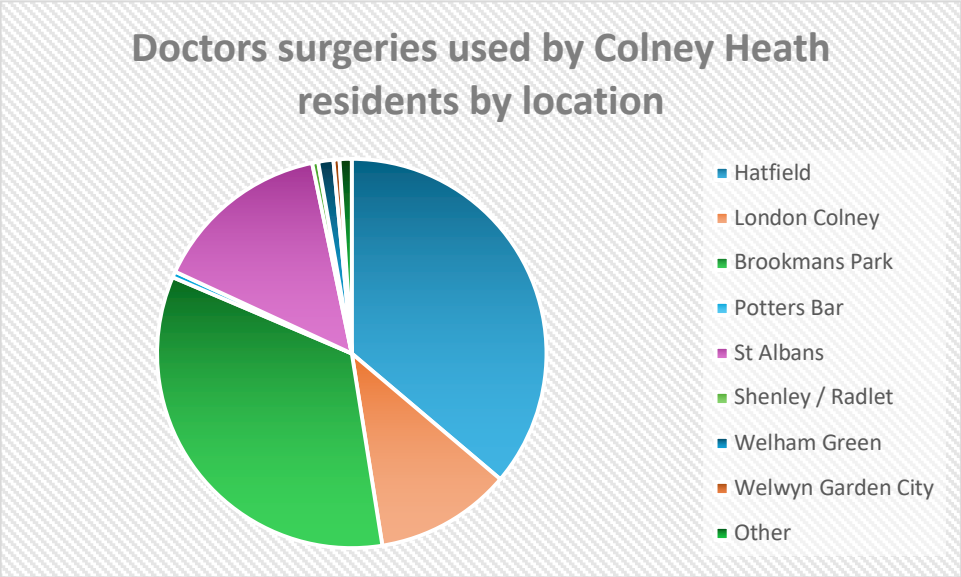
43. Doctors – Colney Heath village does not have a doctor's surgery, therefore people must travel beyond the village for GP services.



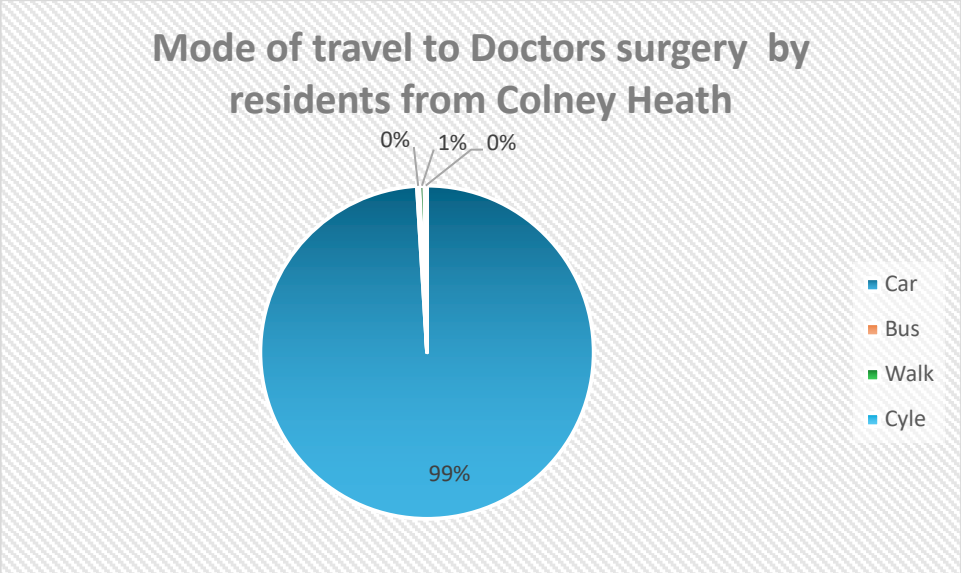
44. None of the most used doctor's surgeries are within desirable walking distance or on a direct bus route with buses operating during the day.

45. Walking distance from the centre of Colney Heath village to the most widely used surgeries are as follows :

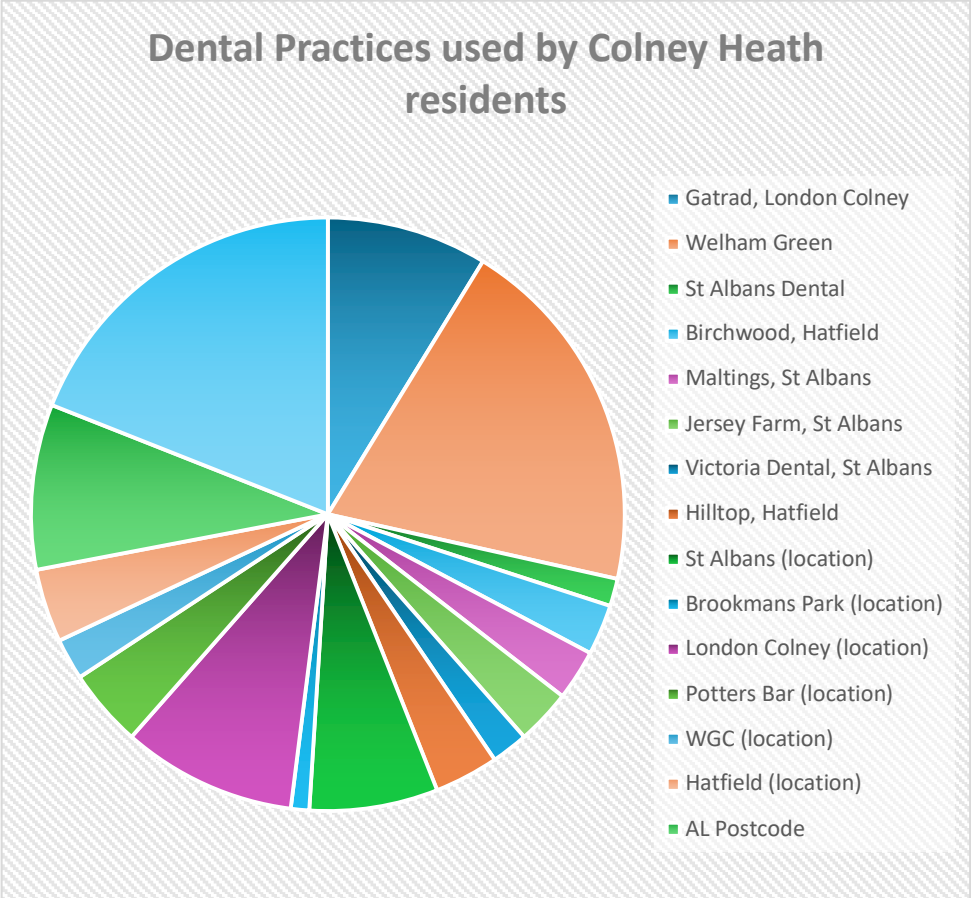
Burvill House surgery, Hatfield	4.0km
Summerfield Health Centre London Colney	4.9km
Potterells surgery Brookmans Park	4.9km

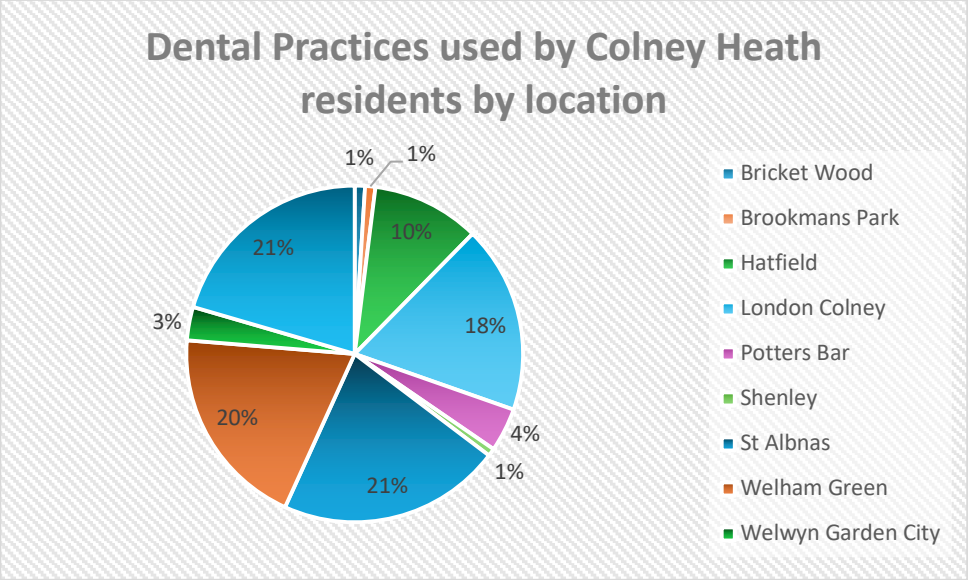


46. None of the most used doctor's surgeries are on bus route and most, especially for unwell people, are beyond practical or acceptable walking distances.

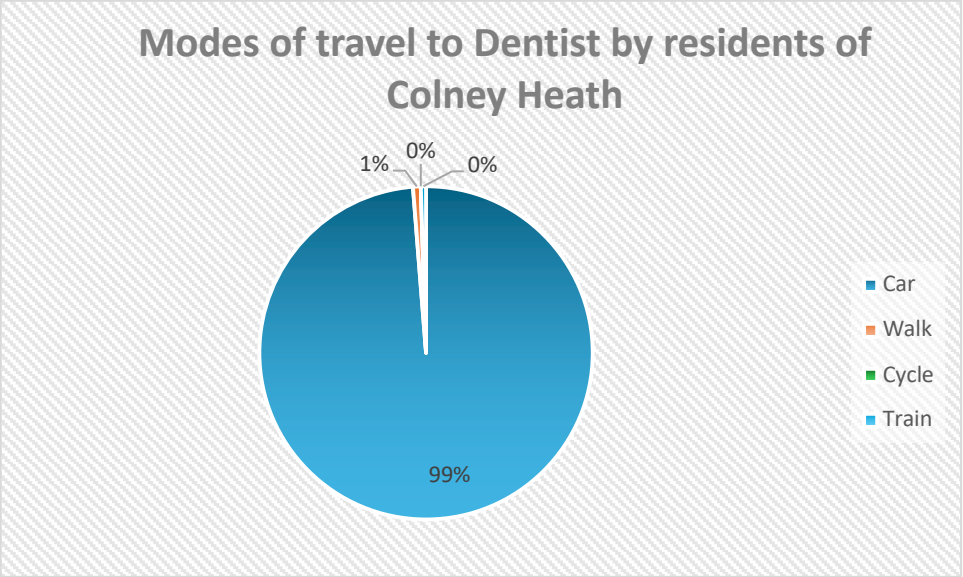


Dentists





47. The noticeable fact from the CHRA-T2024 (CD17.6) survey data is the diversity of locations people travel to for a dental appointment, with 21% of people travelling beyond the local towns for dentist. This could be due to the difficulty in obtaining an NHS dentist locally,



Hospitals

48. The nearest A&E hospitals are either Watford General Hospital or Lister Hospital in Stevenage. Neither of these hospitals is on a direct bus route and journeys require multi-changes. St Albans City hospital offers an urgent care hub by appointment only. Queen Elizabeth 2 hospital in Welwyn Garden City also offers urgent care. Again, neither of these hospitals are on a direct bus route and journeys require multi changes.

Agricultural Land

49. NPPF (CD1.4) para 180 states

Planning policies and decisions should contribute to and enhance the natural and local environment by:

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

Footnote - 62 *'Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. The availability of agricultural land used for food production should be considered, alongside the other policies in this Framework, when deciding what sites are most appropriate for development.'*

NPPF Annex 2: Glossary

'Best and most versatile agricultural land: Land in grades 1, 2 and 3a of the Agricultural Land Classification.'

The appellant grades the land on the application site as grade 2 agricultural land, a grading to which CHPC agree, therefore any development on the land would contrary to para 180 of the NPPF, which protects the most versatile farmland in England.

Can Colney Heath be made Sustainable?

50. Colney Heath is a Green Belt settlement which restricts development in the village. The character of the village is also an important factor to be considered. The evidence shows clearly that current residents travel widely to access the essential facilities including employment, shopping, education, and for healthcare.

51. Employment – currently the local area is losing more employment sites than its gaining including the planned loss of Smallford Works and Glinwells Nursery. Both are strategic sites within the draft SADC Local Plan which is now post Reg18. No new sites are currently proposed this side of St Albans in the draft Local Plan.

52. Shopping/Retail – no additional facilities are planned, any significant expansion of retail facilities in the village is unlikely on economic grounds.

53. Education – No new primary schools planned in the area. A possible new secondary school fronting onto Hatfield Road is in draft Local Plan but it would be sometime before construction could start.

54. Healthcare – accessing doctors is clearly an issue as demonstrated by the wide range of surgeries used by residents; no new surgeries are currently under consideration. Accessing dentists is again clearly an issue demonstrated by the wide range of surgeries used by residents, no new surgeries are currently under consideration.

55. Hospitals – no new hospitals are currently planned, and the distances to the existing hospitals require multiple changes on public transport this can be a significant challenge without the use of a car.

Sustainable modes of Transport

56. Walking – some upgrades are possible but the distance from the village to access any facilities would remain a significant issue. No significant upgrades are currently planned, and new major upgrades could be very costly in financial and environmental terms. The proposed upgrades to the walking/cycling route beside the A414 between London Colney and Hatfield using the S106 monies would not provide desirable or practical alternative routes to the facilities and services used by residents of Colney Heath. (CD17.5)

57. Cycling – none of the current SADC planned improvements would assist with cycling to and from the village. The proposed upgrades to the walking/cycling route beside the A414 between London Colney and Hatfield using the S106 monies would not provide desirable or practical alternative routes to the facilities and services used by residents of Colney Heath. (CD.17.5)

58. Buses – the current services are primary school and shopper services. To offer a real alternative the services would need to link to more locations on a regular basis with either new routes and/or the existing weekly services becoming daily with regular services between 7.00am and 7.00pm.

59. Hertsmere's Local Plan now at reg18 stage (CD 16.20) is proposing a large-scale development of c.5000 homes on the southeast side of Coursers Road known as Bowmans Cross. This may in the future provide some new facilities including schools and healthcare. The site is only likely to be developed in the later stages of Hertsmere Local Plan (LP) post 2035 the LP lasting until 2040. The site is currently an active quarry with the land nearest to the village still to be quarried. As the Infrastructure delivery plan and current LP are for different levels of development at Bowmans Cross and were prepared several years apart, its proved impossible to draw any significant timelines as to when new facilities will be built and become operational.

Conclusion

60. No significant improvements are currently planned in sustainable modes of transport linking Colney Heath with local facilities. Accessing secondary schools from the village in obtaining a place and for travel remains a challenging issue for many parents and their children: as no significant changes are planned in the short term.

Any S106 monies from this site would make little or no difference. The level of investment required to make Colney Heath village a sustainable location in planning terms is very significant and vastly in excess of that which could be offered by the appellant.

End

Appendix a) Bus timetables

Centrebus

Essendon Mill – Colney Fields Retail Park 200

MONDAYS ONLY **from 3rd October 2022**

Notes:	
Essendon Mill, Low Rd, Millgreen Cottages	0951
Essendon, High Rd, opp War Memorial	0953
Essendon, Glebe Cottages	0955
Wildhill, Woodside Place, The Woodman PH	0958
Bell Bar, Woodside Lane, The Firs	1003
Bell Bar, opp Cock o' The North PH	1004
Brookmans Park, Gt North Rd, Kentish Ln	1006
Brookmans Park, Moffats Lane	1008
Brookmans Pk, Blue Bridge Rd, opp Bradmore Gn ≠	1010
Welham Green, Huggins Lane	1015
Welham Green, Dixons Hill Rd, Stop D	1019
Colney Heath, Hall Gdns, Admirals Cl	1023
Colney Fields Retail Park	1030

Notes:	
Colney Fields Retail Park, Stop B	1235
Colney Heath, High St, Roestock Lane	1240
Colney Heath, Hall Gardens, opp Admirals Cl	1241
Welham Green, Huggins Lane	1249
Welham Green, Dixons Hill Rd, Stop E	1253
Brookmans Park, Blue Bridge Rd, Bradmore Grn ≠	1257
Brookmans Park, Moffats Lane	1259
Brookmans Park, Gt Nth Rd, opp Kentish Ln	1301
Bell Bar, Cock o' The North PH	1303
Bell Bar, Woodside Lane, opp The Firs	1304
Wildhill, Woodside Place, opp The Woodman PH	1309
Essendon, Glebe Cottages	1312
Essendon, High Rd, War Memorial	1314
Essendon Mill, Low Rd, opp Millgreen Cottages	1316

NOTES: ≠ - Near Railway Station

OPERATOR: Centrebus *Customer Care:* 0116 410 5050

THIS SERVICE OPERATES AS HAIL & RIDE IN SCHOOL LANE, EAST VIEW AND GLEBE COTTAGES, BETWEEN THE WOODMAN AND THE FIRS AND BETWEEN DIXONS HILL ROAD AND HUGGINS LANE

NO SERVICE ON OTHER DAYS OR PUBLIC HOLIDAYS

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Centrebus

Welwyn Garden City – St Albans 230

WEDNESDAYS ONLY **from 3rd October 2022**

Notes:	
Welwyn Garden City, Bus Station, Stop F ⇌	1032
W G City, Ludwick Way, Verulam Close	1036
Welwyn Garden City, New QEII Hospital, Stop A	1044
Hatfield Railway Station, Stop 2 ⇌	1052
Hatfield, Town Centre, Stop W	1056
Oxlease, Travellers Lane, Oxlease Drive	1058
South Hatfield, Travellers Lane, Millwards	1100
Welham Green Railway Station, Stop B ⇌	1103
Welham Green, Huggins Lane	1105
Welham Green, Dixons Hill Rd, Stop D	1109
Colney Heath, High St, opp Roestock Lane	1114
Oaklands, Nicholas Breakspear School	1120
Oaklands, Hatfield Rd, Colney Heath Lane	1122
Fleetville, Hatfield Rd, Morrisons	1126
St Albans Railway Station, Stop D ⇌	1131
St Albans, St Peter's Street	1137

Notes:	
St Albans, St Peter's Street, Stop 1	1400
St Albans Railway Station, Stop A ⇌	1406
Fleetville, Hatfield Rd, opp Morrisons	1411
Oaklands, opp Nicholas Breakspear School	1417
Colney Heath, High St, Roestock Lane	1423
Welham Green, Huggins Lane	1430
Welham Green, Dixons Hill Rd, Stop C	1434
Welham Green Railway Station, Stop A ⇌	1435
South Hatfield, Travellers Ln, opp Millwards	1438
Oxlease, Travellers Lane, opp Oxlease Drive	1440
Hatfield, Town Centre, Stop V	1442
Hatfield Railway Station, Stop 6 ⇌	1446
Welwyn Garden City, New QEII Hospital, Stop B	1454
Welwyn G C, Ludwick Way, Knella Rd	1500
W G City, Ludwick Way, opp Verulam Close	1501
Welwyn Garden City, Bus Station ⇌	1505

NOTES: ⇌ - Near Railway Station

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Metroline

Potters Bar/Colney Heath – St Albans/Sandridge 305

MONDAYS TO FRIDAYS — from 27th March 2021

Notes:	Sch	NSch							
Potters Bar, High Street, Bus Garage	0714	0721							
Brookmans Pk, opp Bradmore Green ≠	0721	0728							1632
Welham Green, Dixons Hill Rd, Stop D	0726	0733							1637
Colney Heath, Hall Gardens, Admirals Cl	|	|		1010		1235		1455	|
Colney Heath, High St, opp Roestock Lane	0733	0740		1012		1237		1457	1644
Smallford, Station Rd, opp Wilkin's Grn Lane	0741	0747		1018		1243		1503	1650
Hill End, Hill End Lane, Russet Drive	0749	0754		1024		1249		1509	1656
Tyttenhanger Green, The Plough PH	|	|	0851	|	1111	|	1336	|	|
Fleetville, Hatfield Rd, Morrisons	0755	0759	0858	1028	1118	1253	1343	1513	1701
St Albans City Railway Stn, Stop D ≠	0806	0809	0903	1033	1123	1258	1348	1518	1706
St Albans, St Peter's Street, Stop 13	0812	0814	0910	1039	1130	1304	1355	1524	1712
St Albans, Sandridge Rd, opp Lancaster Rd	|		0915		1135		1400		
St Albans, Firbank Road, Beech Road	|		|		1138		1403		
New Greens, High Oaks Terminus	0820		|		|		|		
Sandridge, Langley Grove, Lyndon Mead			0923		1147		1412		

SATURDAYS — from 27th March 2021

Notes:								
Potters Bar, High Street, Bus Garage	0737							
Brookmans Pk, opp Bradmore Green ≠	0744							
Welham Green, Dixons Hill Rd, Stop D	0749							
Colney Heath, Hall Gardens, Admirals Cl	0757		1010		1235		1500	1620
Colney Heath, High St, opp Roestock Lane	0759		1012		1237		1502	1622
Smallford, Station Rd, opp Wilkin's Grn Lane	0805		1018		1243		1508	1628
Hill End, Hill End Lane, Russet Drive	0811		1024		1249		1514	1634
Tyttenhanger Green, The Plough PH	|	0851	|	1111	|	1336	|	|
Fleetville, Hatfield Rd, Morrisons	0815	0858	1028	1118	1253	1343	1518	1638
St Albans City Railway Stn, Stop D ≠	0820	0903	1033	1123	1258	1348	1523	1643
St Albans, St Peter's Street, Stop 13	0825	0910	1039	1130	1304	1355	1529	1650
St Albans, Sandridge Rd, opp Lancaster Rd		0915		1135		1400		1655
St Albans, Firbank Road, Beech Road		|		1138		1403		1658
Sandridge, Langley Grove, Lyndon Mead		0923		1147		1412		1707

NOTES: ≠ - Near Railway Station **Sch** - Schooldays only **NSch** - Non Schooldays only

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Metroline

Sandridge/St Albans – Colney Heath/Potters Bar 305

MONDAYS TO FRIDAYS

from 27th March 2021

Notes:						Sch	NSch	
Sandridge, Langley Grove, Lyndon Mead	0923		1147		1412			
Sandridge, nr St Leonard's Church	0925		1149		1414			
New Greens Estate, Townsend School	|		|		|	1540		
St Albans, Firbank Road, Beech Road	0930		1154		|	|		
St Albans, Sandridge Rd, Lancaster Rd	0934		1158		1419	|		
St Albans, St Peter's Street, Stop 1	0940	1045	1205	1310	1425	1550	1550	1720
St Albans City Railway Stn, Stop A ≠	0946	1051	1211	1316	1431	1556	1556	1726
Fleetville, Hatfield Rd, opp Morrisons	0951	1056	1216	1321	1436	1601	1601	1731
Tyttenhanger Green, The Plough PH	|	1104	|	1329	|	|	|	|
Hill End, Hill End Ln, opp Russet Drive	0955		1220		1440	1605	1605	1735
Smallford, Station Rd, Wilkin's Green Lane	1001		1226		1446	1612	1612	1742
Colney Heath, Hall Gardens, Admirals Cl	1008		1233		1455	|	|	|
Colney Heath, High St, Roestock Lane						1617	1617	1747
Welham Green, Dixons Hill Rd, Stop E						1622	1622	1752
Brookmans Park, Bradmore Green ≠						1626	1626	1756
Potters Bar, High Street, Bus Garage								1803

SATURDAYS

from 27th March 2021

Notes:								
Sandridge, Langley Grove, Lyndon Mead		0923		1147		1412		1707
Sandridge, nr St Leonard's Church		0925		1149		1414		1709
St Albans, Firbank Road, Beech Road		0930		1154		1419		|
St Albans, Sandridge Rd, Lancaster Rd		0934		1158		1423		1714
St Albans, St Peter's Street, Stop 1	0830	0940	1045	1205	1310	1425	1550	1720
St Albans City Railway Stn, Stop A ≠	0835	0946	1051	1211	1316	1431	1556	1726
Fleetville, Hatfield Rd, opp Morrisons	0840	0951	1056	1216	1321	1436	1601	1731
Tyttenhanger Green, The Plough PH	0848	|	1104	|	1329	|	|	|
Hill End, Hill End Ln, opp Russet Drive		0955		1220		1440	1605	1735
Smallford, Station Rd, Wilkin's Green Lane		1001		1226		1446	1611	1742
Colney Heath, Hall Gardens, Admirals Cl		1008		1233		1455	1618	|
Colney Heath, High St, Roestock Lane								1747
Welham Green, Dixons Hill Rd, Stop E								1752
Brookmans Park, Bradmore Green ≠								1756
Potters Bar, High Street, Bus Garage								1803

NOTES: ≠ - Near Railway Station **Sch** - Schooldays only **NSch** - Non Schooldays only

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Centrebus

Bell Bar – Hatfield

312

WEDNESDAYS ONLY — **from 3rd October 2022**

Notes:	
Bell Bar, Woodside Lane, The Firs	0945
Welham Green Railway Station, Stop B ≠	0949
Welham Green, Huggins Lane	0951
Welham Green, Dixons Hill Rd, Stop D	0955
Colney Heath, Hall Gdns, opp Admirals Cl	1001
Colney Heath, High St, opp Roestock Lane	1003
Hatfield, The Galleria, Stop C ↔	1010
Hatfield, Hillcrest	1014
Hatfield, Town Centre, Stop V	1016
Hatfield, The Ryde, Fawn Court	1018
Hatfield, Great North Rd, Tesco	1021

Notes:	
Hatfield, Great North Rd, Tesco	1205
Hatfield, The Ryde, Fawn Court	1209
Hatfield, Town Centre, Stop U	1212
Hatfield, Hillcrest	1214
Hatfield, The Galleria, Stop B ↔	1218
Colney Heath, Roestock Ln, High St	1224
Colney Heath, Hall Gardens, Admirals Cl	1226
Welham Green, Huggins Lane	1233
Welham Green, Dixons Hill Rd, Stop C	1237
Welham Green Railway Station, Stop A ≠	1238
Bell Bar, Woodside Lane, opp The Firs	1242

NOTES: ≠ - Near Railway Station ↔ - Interchange with Express Coaches

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Sullivan Buses

School Service Open To Public

Enfield – Nicholas Breakspear School

355

SCHOOLDAYS ONLY **from 3rd September 2021**

Notes:	
Enfield, David Lloyd Centre	0720
Enfield, Forty Hill, Clay Hill, Stop F	0723
Forty Hill, The Hop Poles, Stop P	0727
Clay Hill, Chase Side, Stop R	0730
Gordon Hill Railway Station, Stop A ≠	0732
Enfield, The Ridgeway, Hadley Rd, Stop Q	0734
Botany Bay, The Ridgeway, The Robin Hood	0737
Potters Bar, Southgate Rd, opp Highview Gdns	0745
Potters Bar, High Street, Bus Garage	0748
Little Heath, Hatfield Rd, Church Rd	0751
Swanley Bar, Hawkshead Rd, opp Swanley Cres	0754
Brookmans Pk, Blue Bridge Rd, opp Bradmore Gn	0756
Welham Green, Station Road, opp Bulls Lane	0759
Welham Green, Dixons Hill Rd, Stop D	0800
Colney Heath, Tollgate Rd, opp Fellowes Ln	0805
Colney Heath, High Street, opp Roestock Lane	0807
Colney Heath, High Street, opp Wistle Crescent	0808
Oaklands, Nicholas Breakspear School	0815

Notes:	
Oaklands, opp Nicholas Breakspear School	1520
Smallford, Colney Heath Ln, opp Barley Mow Lane	1522
Colney Heath, High Street, Wistle Cres	1524
Colney Heath, Tollgate Rd, Fellowes Ln	1527
Welham Green, Dixons Hill Rd, Stop E	1530
Welham Green, Station Road, Bulls Lane	1531
Brookmans Pk, Blue Bridge Rd, Bradmore Gn	1534
Swanley Bar, Hawkshead Rd, Swanley Cres	1537
Little Heath, Hatfield Rd, opp Church Rd	1540
Potters Bar, High Street, opp Bus Garage	1544
Potters Bar, Southgate Rd, Highview Gdns	1548
Botany Bay, The Ridgeway, The Robin Hood	1554
Enfield, Chase Farm Hospital, Stop B	1557
Gordon Hill Railway Station, Stop B ≠	1559
Clay Hill, Chase Side, Stop D	1601
Forty Hill, The Hop Poles, Stop G	1604
Enfield, Forty Hill, Clay Hill, Stop J	1608
Enfield, opp David Lloyd Centre	1610

NOTES: ≠ - Near Railway Station

OPERATOR: Sullivan Buses *Customer Care:* 01707 646803

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Sullivan Buses

School Service Open To Public

Potters Bar – Nicholas Breakspear School

356

SCHOOLDAYS ONLY

from 28th August 2022

Notes:	
Potters Bar Railway Station, Stop B ⇆	0735
Potters Bar, Mutton Ln, opp Cranborne Rd	0739
Potters Bar, Mutton Ln, Wroxham Gardens	0741
South Mimms, St Albans Rd, White Hart PH	0743
Ridgehill, B556, Packhorse Lane	0745
Ridgehill, B556, Salisbury Hall	0747
London Colney, St Annes Rd, High St	0752
London Colney, King's Rd, Shenley Ln	0757
London Colney, High Street, Kings Rd	0800
Oaklands, Nicholas Breakspear School	0815

Notes:	
Oaklands, opp Nicholas Breakspear School	1520
London Colney, High St, opp Leisure Centre	1527
London Colney, King's Rd, Shenley Ln	1529
London Colney, St Annes Rd, High St	1534
Ridgehill, B556, opp Salisbury Hall	1539
Ridgehill, B556, opp Packhorse Lane	1541
South Mimms, St Albans Rd, opp White Hart PH	1543
Potters Bar, Mutton Ln, opp Wroxham Gdns	1545
Potters Bar, Cranborne Road, Mutton Lane	1546
Potters Bar Railway Station ⇆	1550

NOTES: ⇆ - Near Railway Station

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Appendix (b)

Colney Heath Cycling Assessments

Authors: John Rowland, Resident Roestock Gardens

Ian Skelt, Resident Tollgate Road

Index of Documents

APPENDICES

1. INTRODUCTION

ASSESSMENT OF CYCLING ROUTES TO FACILITIES

1.1 The Appellant contends in the Transport Assessment (TA) that local facilities are accessible by cycle. To test this Cycling Assessments were completed comparing the routes available to the factors and standards in the Cycle Infrastructure Design published by the Department of Transport LTN 1/20 July 2020 (as quoted in the TA). A two-mile each way journey was used as a maximum.

1.2 In the Foreword to the Cycle Infrastructure Design the Minister of State with responsibility for cycling and walking state,

> *"Some (Infrastructure Design) is actually worse than nothing, because it entices novice cyclists with the promise of protection and then abandons them at the most important places".*

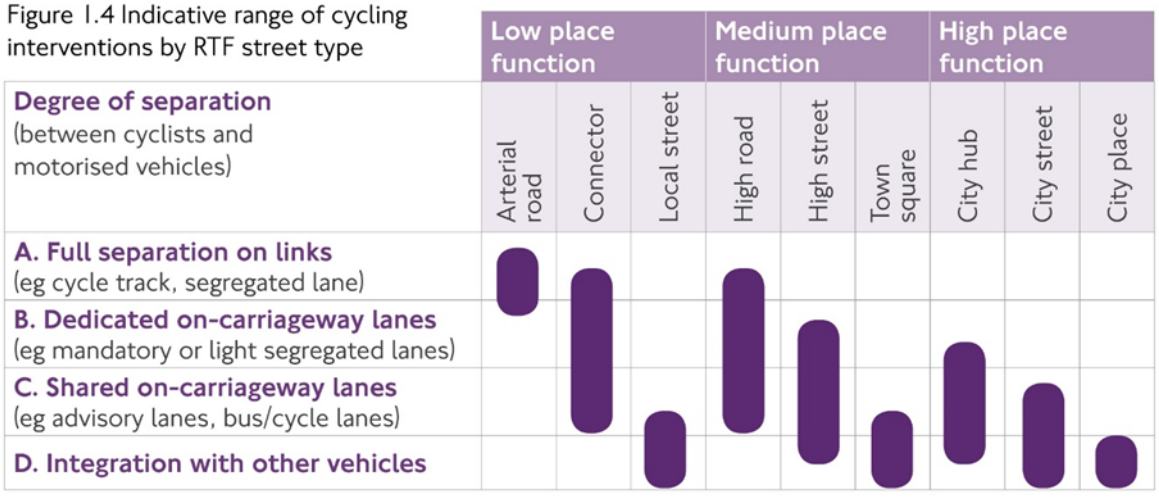
1.3 We contend that this proposal entices cyclists with no pretence of protection.

2. KEY POINTS FROM LTN 1/20

2.1 The appellant's Transport Assessment (TA) quotes the Dept of Transport LTN 1/20 document that sets down standards for cycle ways:

2.2 All cycle routes from Colney Heath use roads to connect with the SADC LWCP, stations or shops; therefore, they are classed as connector roads. See below LTN 1/20 mandatory cycle separations: n.b. Colney Heath does not feature and is outside of SADC's 10-year LWCP.

Figure 1.4 Indicative range of cycling interventions by RTF street type



2.3 No such recommended widths of cycle lanes or separation exist on roads in and around Colney Heath.

2.4 CDS 1.6.1, 2) Cycles must be treated as vehicles and not as pedestrians. On urban streets, cyclists must be physically separated from pedestrians and should not share space with pedestrians. Where cycle routes cross pavements, a physically segregated track should always be provided. At crossings and junctions, cyclists should not share the space used by pedestrians but should be provided with a separate parallel route.

2.5 The majority of cycle lanes in and around Colney Heath have shared carriageways with pedestrians.

2.6 From TfL LCDS 18. All designers of cycle schemes must experience the roads on a cycle. Ideally, all schemes would be designed by people who cycle regularly. But at a minimum, anyone who designs a scheme must travel through the area on a cycle to see how it feels.

2.7 In the Transport Assessment paragraph 3.33 the consultants quote the Inspector's Bullens Green decision "*I saw evidence on my site visits of both Bullens Green Lane and Fellowes* Lane *being well used for recreational purposes, including walkers and cyclists. Taking into account the average cycle times and distances to facilities outside of Colney Heath as set out within the facilities plan, I concur with HCC that cycling provides a reasonable alternative in this location to the private car.*

2.8 We have asked HCC to disclose how they assessed Colney Heath for cycling safety and have had no response. We deem that any approval of cycling as an alternative to the car must mean that **the routes must be cycled** before they can lightly be passed off as acceptable.

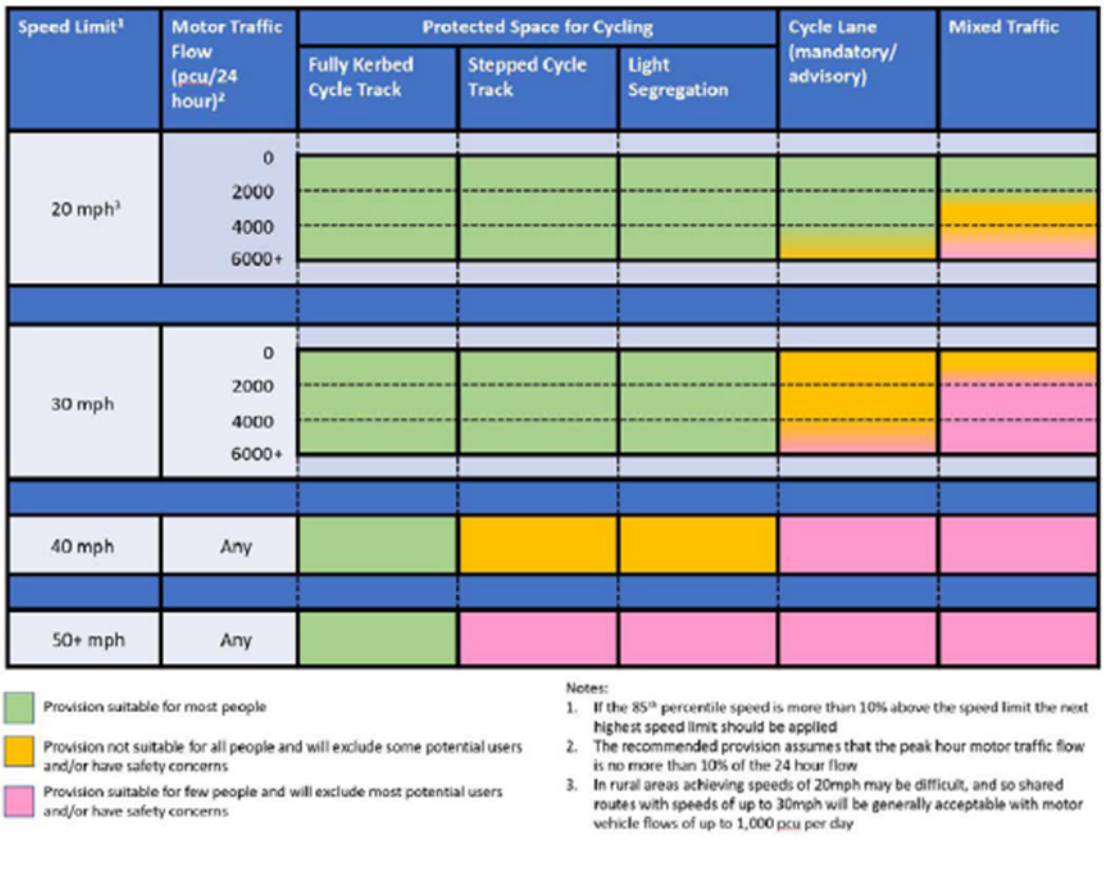
3. TRAFFIC SEPARATION

3.1 LTN 1/20 gives guidance on traffic separation by speed limit. The following extract applies:

> **"4.2** Figure 4.1 summarises the traffic conditions when protected space for cycling (fully kerbed cycle tracks, stepped cycle tracks and light segregation), marked cycle lanes without physical features and cycling in mixed traffic are appropriate.
>
> **4.4.3** More detail on the design of these types of cycle infrastructure is given in Chapters 6 and 7.
>
> **4.4.4** Figure 4.1 shows that:
> Protected space for cycling will enable most people to cycle, regardless of the volume of motor traffic, although stepped cycle tracks and light segregation are not generally considered suitable for roads with speed limits above 40mph in urban areas. Stepped cycle tracks and light segregation may be appropriate on some suburban and interurban roads with 40mph speed limits where HGV traffic is limited, and traffic flows are less than 6,000 PCU per day.

Although there may be fewer cyclists and pedestrians in rural areas, the same requirement for separation from fast moving motor vehicles applies. A well-constructed shared use facility designed to meet the needs of cycle traffic – including its width, alignment and treatment at side roads and other junctions – may be adequate where pedestrian numbers are very low."

Figure 4.1: Appropriate protection from motor traffic on highways



33

3.2 The following are examples of roads fall withing the red zone of the mixed traffic column on the above chart:

Location	30 mph	40 mph	60 mph
Tollgate Road 30 limit (See note 1 re 85 percentile greater than10% above limit)		Y	Y
Dixons Hill Road	Y	Y	Y
Roestock Lane	Y		
Bullens Green Lane	Y		
High Street	Y		
Colney Heath Lane	Y	Y	
Smallford Lane		Y	
Station Road		Y	
Coursers Road	Y		Y

Roehyde Way			Y
Southway			Y
Barley Mow Lane			Y
Highfield Lane	Y		
Drakes Drive	Y		
A414. The cycleway and footway are separated from the carriageway			Y

APPENDIX A Department of Transport LTN 1/20 July 2020 Appendix A

Cycling Level Service Tool

Appendix A: Cycling Level of Service Tool

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns		Cyclists cannot connect to other routes without dismounting	Cyclists can connect to other routes with minimal disruption to their journey	Cyclists have dedicated connections to other routes provided, with no interruption to their journey		
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route		Cyclists are 'abandoned' at points along the route with no clear indication of how to continue their journey.	The route is made up of discrete sections, but cyclists can clearly understand how to navigate between them, including through junctions.	Cyclists are provided with a continuous route, including through junctions		
	Density of network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width ie distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000	Route contributes to a network density mesh width 250 – 1000m	Route contributes to a network density mesh width <250m		
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as-the-crow-flies' distance as possible.	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		Deviation factor against straight line or shortest road alternative >1.4	Deviation factor against straight line or shortest road alternative 1.2 – 1.4	Deviation factor against straight line or shortest road alternative <1.2		

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Directness	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and give way frequency		The number of stops or give ways on the route is more than 4 per km	The number of stops or give ways on the route is between 2 and 4 per km	The number of stops or give ways on the route is less than 2 per km		
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions		Delay for cyclists at junctions is greater than for motor vehicles	Delay for cyclists at junctions is similar to delay for motor vehicles	Delay is shorter than for motor vehicles or cyclists are not required to stop at junctions (eg bypass at signals)		
	Time: Delay on links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle (including a cycle) ahead	Cyclists can usually pass slow traffic and other cyclists	Cyclists can always choose an appropriate speed.		
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient		Route includes sections steeper than the gradients recommended in Chapter 5	There are no sections of route steeper than the gradients recommended in Chapter 5	There are no sections of route which steeper than 2%		

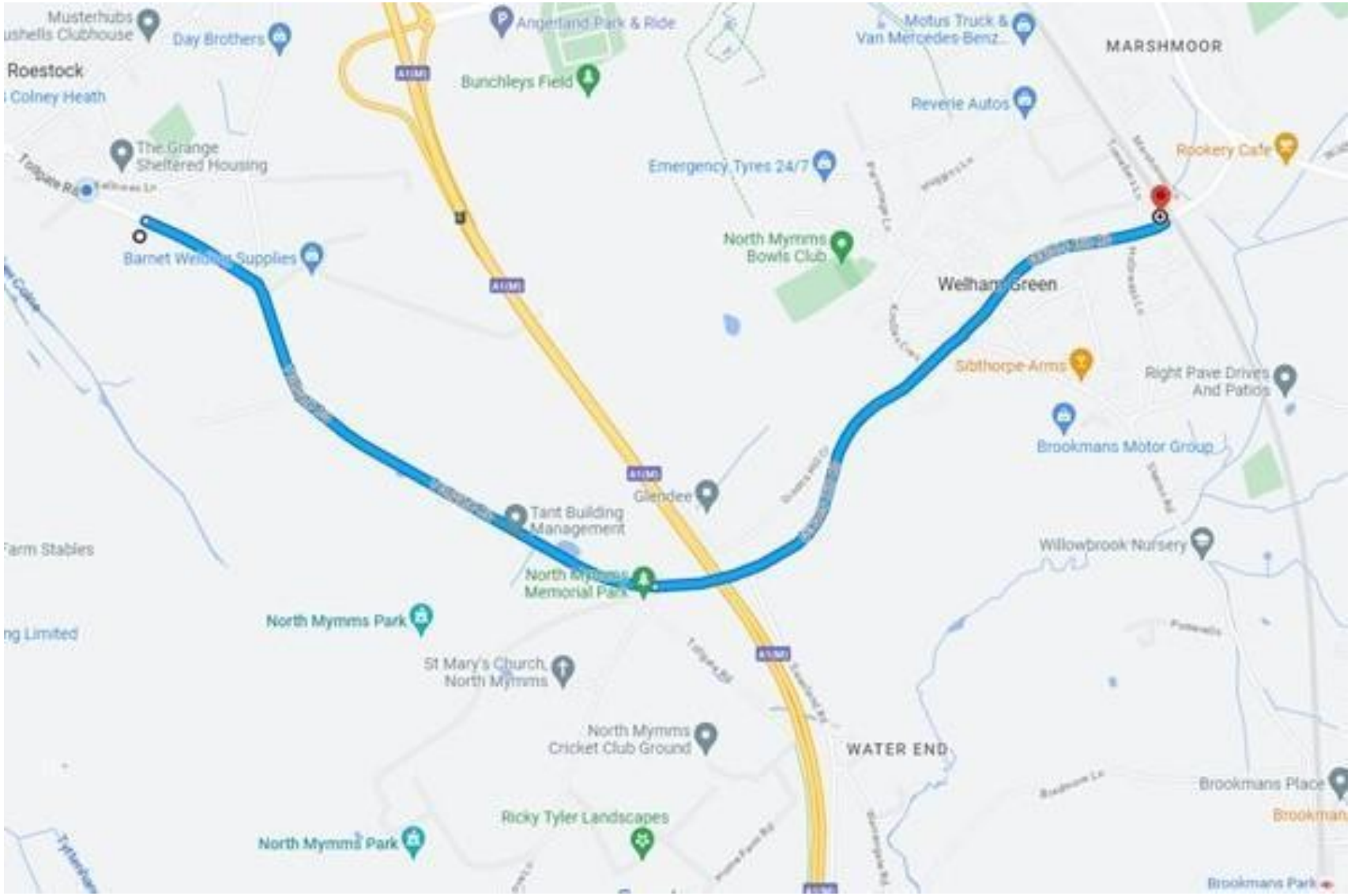
Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph		
			10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph		
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5%HGV	2500-5000 and <2% HGV	0-2500 AADT		
	Risk of collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	Cyclists sharing carriageway – nearside lane in critical range between 3.2m and 3.9m wide and traffic volumes prevent motor vehicles moving easily into opposite lane to pass cyclists.	Cyclists in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclists in cycle lanes at least 1.8m wide on-carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists on route away from motor traffic (off road provision) or in off-carriageway cycle track. Cyclists in hybrid/light segregated track; 85th percentile motor traffic speed max 30mph.		

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.		
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout		
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.		
	Reduce severity of collisions where they do occur	Wherever possible routes should include "evasion room" (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.		

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Comfort	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface		
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete paviours with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closelyjointed blocks undisturbed by turning heavy vehicles.		
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route		
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions		

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout		
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length		
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort Level remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A		
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.		
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand		
							Audit Score Total	**0**	**0**

APPENDIX B/B Route 1 Colney Heath to Welham Green Station



These points relate to: Cycle Infrastructure Design, Department of Transport LTN 1/20.

Factor	Ind	Comment	Score	
Connections	1	No indications that it is a cycle route	0	
Continuity and way finding	2	Cyclist are abandoned with no clear indication of the route.	0	
Density of Network	3	No mesh or grid connection with the SADC LWCP (outside of the planned area)	0	
Distance	4	Shortest Route and most Direct	2	
Frequency of stops to give way	5	No give way signs on this route	2	
Time delay at junctions	6	Delay same as for motor vehicles	1	
Time delay on links	7	There is one link, Dixons Hill Road from Knolles Crescent to Swanland Road is a part of NCR12. The north pavement of DHR is signed as a hybrid cycle/foot path. No delay	2	
Gradients	8	Gradient from North Mymms Manor to High Point in Tollgate Road is 4% for 600m. A strenuous hill for other than the fittest cyclist. There are examples of cyclist dismounting to walk up the hill.	0	
Reduce remove difference where cyclists are sharing the carriageway (through junctions)	9	Speed 85% traffic = 37.2 MPH (ref: TPS 5.11) from High Street to Bullens Green Lane Speed limit on shared carriageway from Bullens Green Lane to Dixon Hill Close 60 MPH includes the junction with Swanland Road that has a high RTC rate' Speed Limit Dixon Hill Road from Dixon Hill Close to Welham Manor 40MPG (note cycle/foot path) Welham Manor to rail station 30 mph	0	**CRITICAL**
Reduce remove difference where cyclists are sharing the carriageway	10	Speed 85% traffic = 37.2 MPH (ref: TPS 5.11) from High Street to Bullens Green Lane	0	**CRITICAL**

Factor	Ind	Comment	Score	
		Speed limit on shared carriageway from Bullens Green Lane to Dixon Hill Close 60 MPH includes the junction with Swanland Road that has a high RTC rate' Speed Limit Dixon Hill Road from Dixon Hill Close to Welham Manor 40MPG (note cycle/foot path Swanland to Knolles Crescent) Welham Manor to rail station 30 mph		
Avoid High Volume Traffic	11	AADT rate is 2500 to 5000	1	
Risk of Collision	12	No cycle lane on shared carriageway No cycle preference at junctions Not segregated, at risk of collision from behind or alongside.	0	**CRITICAL**
Avoid complex design	14	There is no cycle lane design	0	
Consider and reduce risk from kerbside	15	Parked cars cause risk from opening doors and avoidance into centre of carriageway and into oncoming traffic. No buffer between parked cars and cyclists	0	**CRITICAL**
Reduce severity of collisions	16	In Tollgate Road (rural) there is no evasion area as high verge and hedges close to carriageway.	2	
Surface quality	17	Numerous minor defects in road surface Standing water on and across the carriageway by the Sinclair Farm 30MPH signs and at the bottom of the gradient by North Mymms Manor memorial	0	
Surface Type Cycle routes should be surfaced in smooth bound materials that are unaffected by weather and are well-maintained at all times of year	18	No special surface for cyclists exists.	0	
Effect width without conflict	19	Therefore, no minimum separation for cyclist exists on the whole route with exception of cycle pedestrian path from junction Swanland Road to	0	

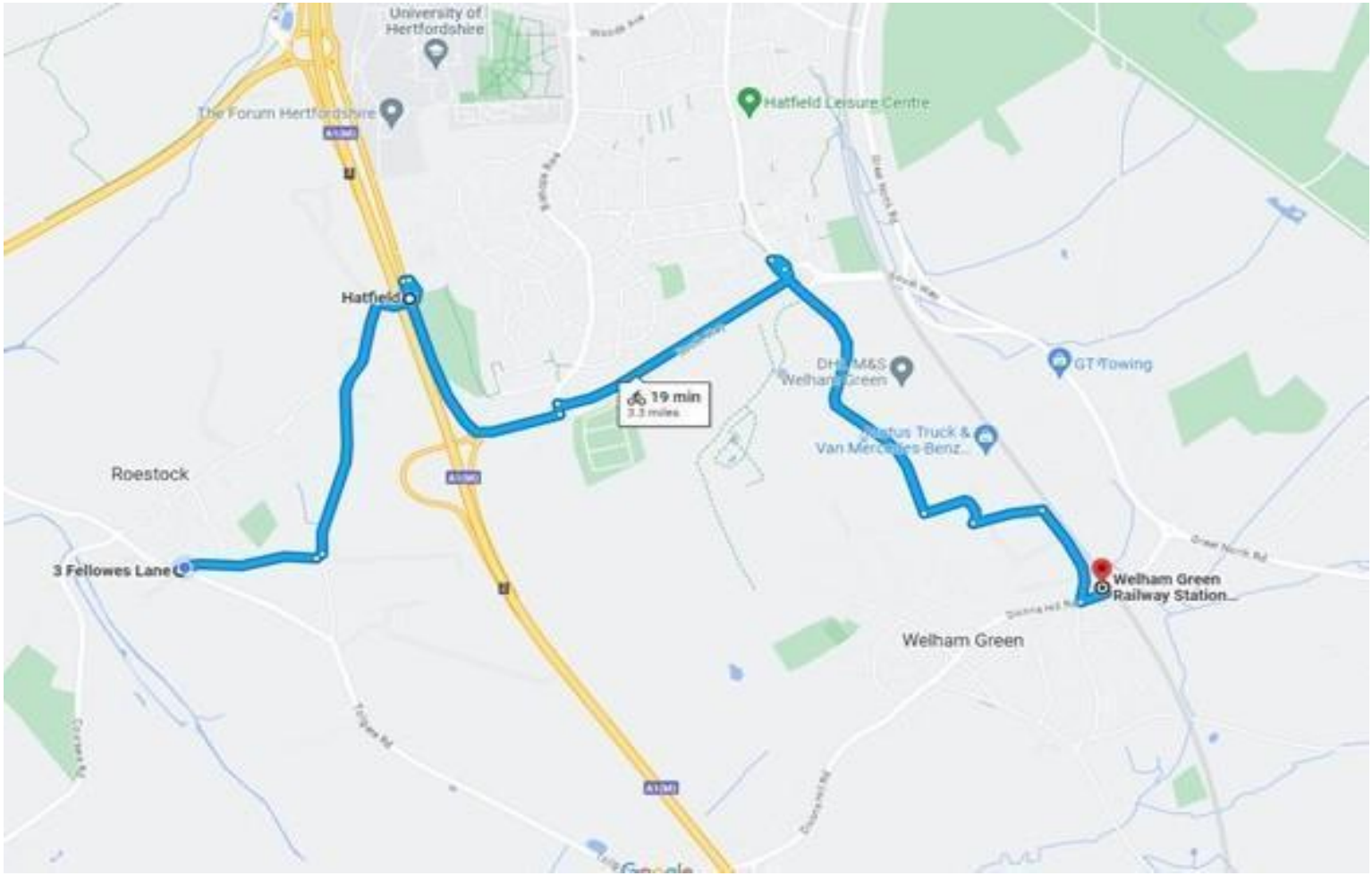
Factor	Ind	Comment	Score	
		Knolles Crescent (NCR12. This is without a verge separating it from carriageway		
Way finding	20	No signs for cyclists along this route	0	
Social safety and perceived vulnerability for user	21	Tollgate Road (rural) is unlit from Bullens Green Lane to Swanland Road	0	
Isolation	22	Activity is away from public surveillance particularly between Bullens Green Lane and Welham Manor	0	
Disabilities	23	No footpath for a significant part of the route	N/A	
Minimise street clutter	24	There are no signs	N/A	
Secure cycle parking	25	Cycle storage only available at Welham Green Station	2	
Audit Score			**12**	

Critical Junctions or other significant hazards	
Tollgate Road	Parked traffic creates single alternate lane that can leave cyclist facing oncoming traffic, including large goods vehicles, travelling at speed. Also, door opening is a hazard
Junction of Bullens Green Lane blind right hand turn for north bound traffic)	Bullens Green Land enters Tollgate Road on a bend with restricted vision because of buildings. As a result, traffic turning right into BGL have little or no vision of cyclists and visa versa.
Tollgate Road Section 2 Bullens Green Lane Junction to Swanland Road	This is a narrow, single carriageway two-way road. National speed limit of 60mph Tall grass verges and hedges limiting vision near entrance to Bluebell Cottage. Significant Gradient 2.1% for 600m. Examples of cyclists walking up the hill. No cycle lane No footpath No illumination

Junction with Swanland Road	High personal injury rate traffic collisions
Junctions Station Road Dellsome Road	Four-way crossroad junction with turning traffic into and out of Dellsome Lane. High risk environment.

APPENDIX B/C - Route 2: Colney Heath to Welham Green Station via (A1(M) Tunnel), Southway and Travellers Lane (NCR 12), Pooleys Lane, Parsonage Lane and Dellsome Lane (3.2 miles, 5.12 km) Gradient

These points relate to: Cycle Infrastructure Design, Department of Transport LTN 1/20.



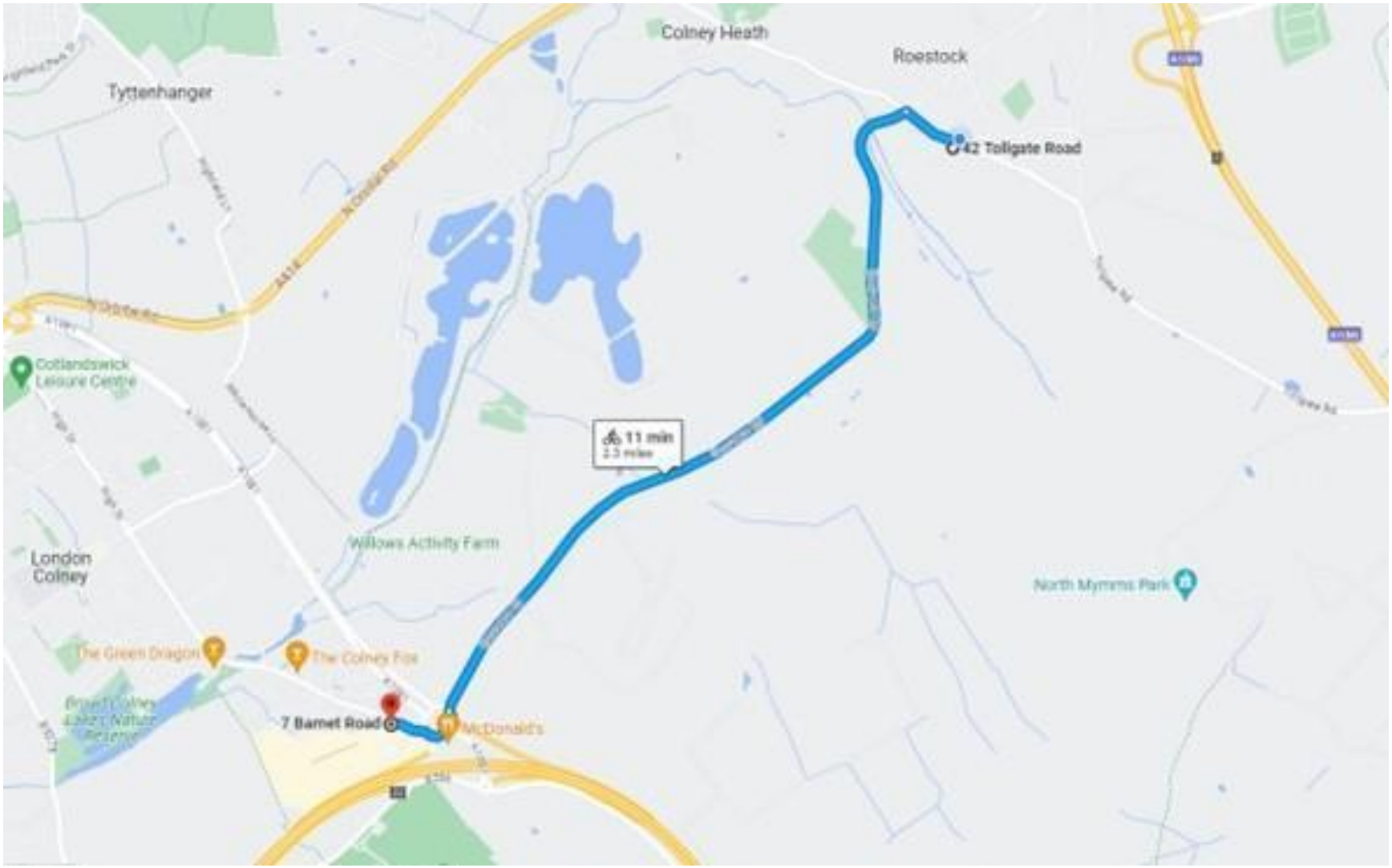
Factor	Ind	Comment	Score	
Connections	1	The route connects with National Cycle Route (NCR) 12 for part of the route.	1	
Continuity and way finding	2	The route itself is not signed; NCR 12 is signed but the major part is unsigned. There is no clear indication of the route unless aware of NCR12	0	
Density of Network	3	Apart from NCR12 the route is not connected to any other mesh of cycle paths	NA	
Distance	4	The route is not the shortest route. Shorter routes are hazardous.	0	
Frequency of stops to give way	5	The number of stops is kept to a minimum	2	
Time delay at junctions	6	Time delay at junctions is like that of motor vehicles	1	
Time delay on links	7	Links NCR 12 at Southway j/w Travellers Lane	1	
Gradients	8	There is a significant gradient of 19m in 475m = 2.1% in Roehyde Way from the exit of A1(M) Tunnel to Roestock Roundabout	1	
Reduce remove difference where cyclists are sharing the carriageway (at junctions)	9	Roehyde Way and Southway national speed limit roads (60 mph). Remainder, Pooleys La, Parsonage La and Dellsome La are 30 mph or less. The Travellers La cycle/footpath has no limit.	0	**CRITICAL**
Reduce remove difference where cyclists are sharing the carriageway (carriageway)	10	Roehyde Way and Southway are wide national speed limit roads (60 mph) with fast moving traffic. Remaining roads: Pooleys La, Parsonage La and Dellsome La 30 mph or less	0	**CRITICAL**
Avoid High Volume Traffic	11	Roehyde Way and Southway have high volume traffic.	1	**CRITICAL**
Risk of Collision	12	Cyclists on the carriageway, not segregated, at risk of collision from behind or alongside.	0	**CRITICAL**
Risk of collision	13	There is a risk of collision at both Roestock Roundabout and Travellers Lane Roundabout	0	
Avoid complex design	14	.	NA	

Factor	Ind	Comment	Score	
Consider and reduce risk from kerbside	15	Pooleys Lane, Parsonage Lane and Dellsome Lane have a risk of parked cars causing single alternate line of traffic and opening of car doors	1	**CRITICAL**
Reduce severity of collisions	16	Travellers La cycle/footpath enclosed by high fences	1	
Surface quality	17	Minor and occasional defects	1	
Smooth level surface	18	There a some bumpy surfaces	0	
Effective width without conflict	19	Travellers La cycle/footpath is narrow for over half length	1	
Way finding	20	No route-finding signs other that on NCR12 that are waymarking only for a small portion of route	0	
Social safety and perceived vulnerability for user	21	The route is illuminated. However, the Travellers La cycle/footpath is overgrown, and the level of illumination is poor. The A1(M) Tunnel is explained elsewhere, The Travellers La footpath is isolated and lacks natural surveillance	0	
Isolation	22	Roehyde Way, Southway are only observed by passing traffic. Travellers Lane has no natural surveillance and is the most isolated.	0	
Disabilities	23		N/A	
Minimise street clutter	24		N/A	
Secure cycle parking	25	Cycle storage only available at Welham Green Station	2	
Audit Score			**13**	

CRITICAL JUNCTIONS AND OTHER SIGNIFICANT HAZARDS	
A1(M) Tunnel	The Tunnel is assessed on another route but generally: Isolated, fear of crime, vandalism, flooding and poor or poorly maintained lighting, broken road surface.
A1(M) Tunnel to Southway	Significant gradient from tunnel to Roestock roundabout.
Roestock Roundabout	Three exits and three entries to roundabout including motorway slip roads. Fast traffic from all directions

Travellers Lane Roundabout	A five-arm roundabout with fast traffic approaching on A1000. On route to Welham Green risk can be mitigated by using cycle/footpath bridge with ramp. On return normal entry into roundabout from Travellers La.

APPENDIX B/D - Route 3 Colney Heath to Colney Fields, London Colney via Coursers Road



These points relate to: Cycle Infrastructure Design, Department of Transport LTN 1/20.

Factor	Ind	Comment	Score	
Connections	1	No indications that it is a cycle route	0	
Continuity and way finding	2	There is not a continuous route or discrete sections. Cyclists are abandoned with no clear indication of route.	0	
Density of Network	3	No mesh or grid connection with the SADC LWCP (outside of the plan's area)	0	
Distance	4	Shortest and most direct Route	2	
Frequency of stops to give way	5	Three give way signs on this route. Roundabout at junction High Street, roundabout at A1081 Bell Roundabout (Hazardous) and Barnet Road junction with entrance to Colney Fields.	2	
Time delay at junctions	6	Delay same as for motor vehicles except for increased risk for cyclists at Bell roundabout where negotiating two traffic lanes and five entries/exits is dangerous.	0	
Time delay on links	7	There are no links to other cycle paths	N/A	
Gradients	8	The route is generally flat.	2	
Reduce remove difference where cyclists are sharing the carriageway	9	Tollgate Road: Speed of 85% traffic = 37.2 MPH (ref: TPS 5.11). Coursers Road from High Street to Mill House. Speed limit on shared carriageway Coursers Road to Barnet Road including Bell roundabout National Speed Limit 60 mph Speed Limit Barnet Road – 30 mph	0	**CRITICAL**
	10	Tollgate Road: Speed of 85% traffic = 37.2 MPH (ref: TPS 5.11). Coursers Road from High Street to Mill House 30 mph on open road.	0	**CRITICAL**

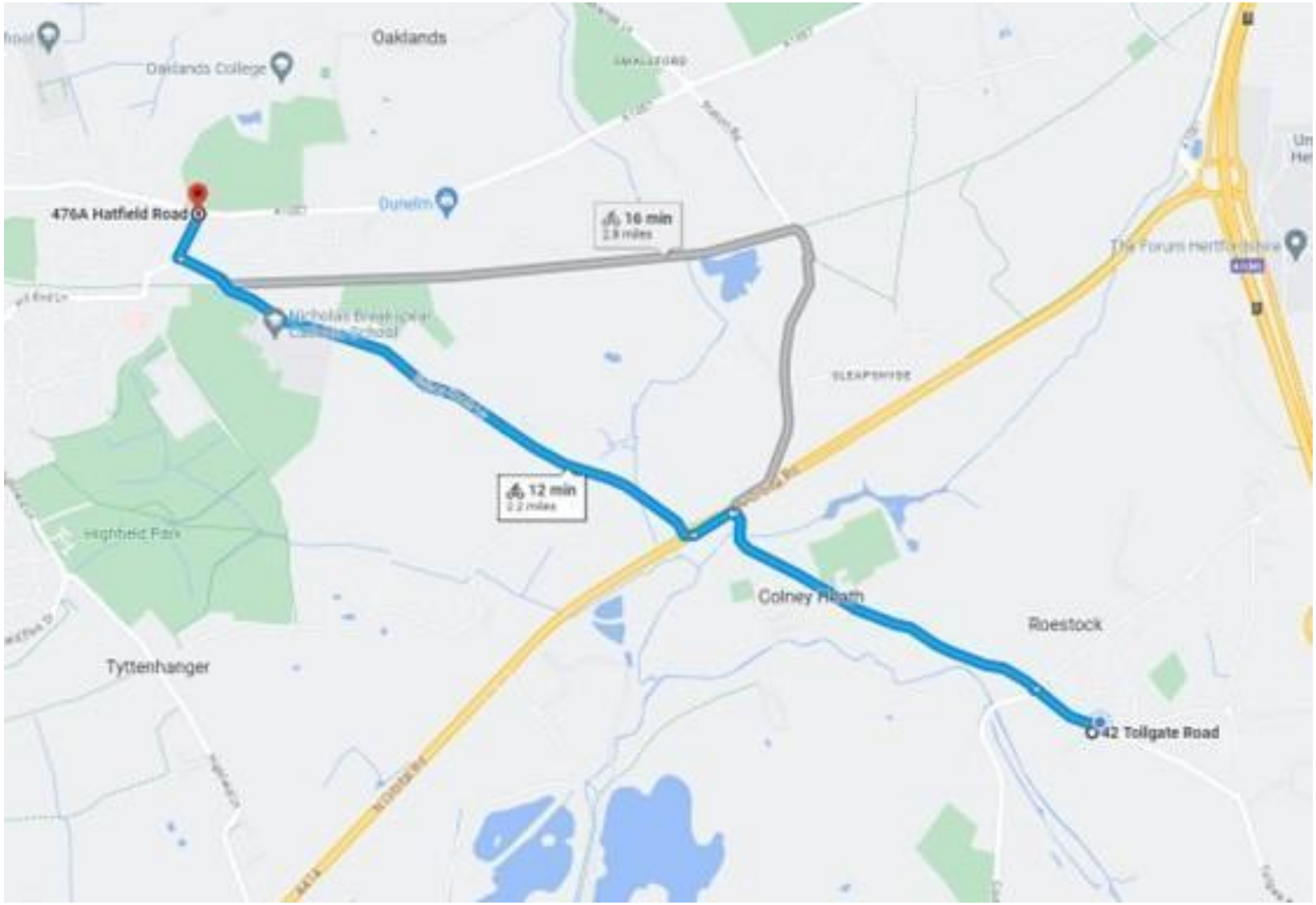
Factor	Ind	Comment	Score	
		Speed limit on shared carriageway Coursers Road to Barnet Road National Speed Limit 60 mph Speed Limit Barnet Road – 30 mph		
Avoid High Volume Traffic	11	Bell roundabout where risk of collisions is greatest has very high volumes of traffic.	0	**CRITICAL**
Risk of Collision	12	High speed differential between cyclists and vehicles No segregation No cycle lane on shared carriageway High risk of collisions from behind or alongside. No cycle preference at junctions	0	**CRITICAL**
Risk of collision	13	Conflicting cycle and motor traffic not separated at Bell roundabout a major junction. No separation of cyclists and mv	0	
Avoid complex design	14	There is no cycle lane design	NA	
Consider and reduce risk from kerbside	15	Kerbside risk primarily is poorly defined and broken edges of road surface in Coursers Road. Cyclists at risk of being “pushed “into kerb by passing vehicles particularly HGV No buffer zone around parked cars	0	**CRITICAL**
Reduce severity of collisions	16	In Coursers Road there are places where hedges and ditches are close to the road that either reduce evasion area or increase risk.	0	
Surface quality	17	The surface of Coursers Road has longitudinal ruts and broken surface in vicinity of Fredericks Wood. For the remainder of Coursers Road, the tarmacadam surface is broken on both sides with deep drain gullies. Verge is being cut back away from road surface by passing vehicles leaving a loose surface. Uneven surface where utility trench resurfaced. Standing water frequently across road between entrances to Willows Farm and landfill site. Numerous minor defects some major.	0	

Factor	Ind	Comment	Score	
		Vehicles leaving landfill site deposit mud on the road that in wet weather is a slip hazard and muddy spray affects vision.		
Smooth level surface	18	No special surface for cyclists exists. The road surface is bumpy with a loose surface in places.	0	
Effective width without conflict	19	No cycle lane. Therefore, no minimum separation for cyclist exists on the whole route Single carriageway Road just sufficient for two HGV to pass with care. Cyclists reliant on the skill, patience, and visibility available for passing motorists.	0	
Way finding	20	No signs to assist cyclists along this route.	0	
Social safety and perceived vulnerability for user	21	Most of the route is unlit. Significant areas under trees reducing light.	0	
Isolation	22	Major part of route is isolated. Activity is away from public surveillance.	0	
Disabilities	23	No footpath on this route Too dangerous for pedestrians	0	
Minimise street clutter	24	There are no signs	N/A	
Secure cycle parking	25	No cycle storage	0	
Audit Score			**6**	

CRITICAL JUNCTIONS AND OTHER SIGNIFICANT HAZARDS	
Bell RAB	Two Lane National speed limit six- arm RAB with 5 entries and six exits including a A1081 major dual carriageway, M25 on and off slip roads, a single carriageway road and a dual-carriageway Barnet Road

	Generally continuous flow of fast traffic with intermittent short breaks to allow safe access into RAB. Requires crossing of both high-speed entries to and exits from RAB and changing lanes.
Landfill entrance/exit	T junction with side road. Right turning HGV across traffic lane or beside cyclists into site HGV exiting site Mud on road in wet weather
Willows Farm entrance/exit	T junction with side road. Right turning vehicles across traffic lane or beside cyclists. Left turning vehicles into farm.
Lawsons entrance/exit	T junction with side road. Right turning HGV across traffic lane or beside cyclists.
Bio-digester entrance/exit	T junction with side road. Right turning HGV across traffic lane or beside cyclists into site HGV exit site
Bend in vicinity of 3 Coursers Road	Limited visibility (blind) bend Partially under trees

APPENDIX B/E - Route 4 Colney Heath to Colney Heath Lane via High Street



These points relate to: Cycle Infrastructure Design, Department of Transport LTN 1/20.

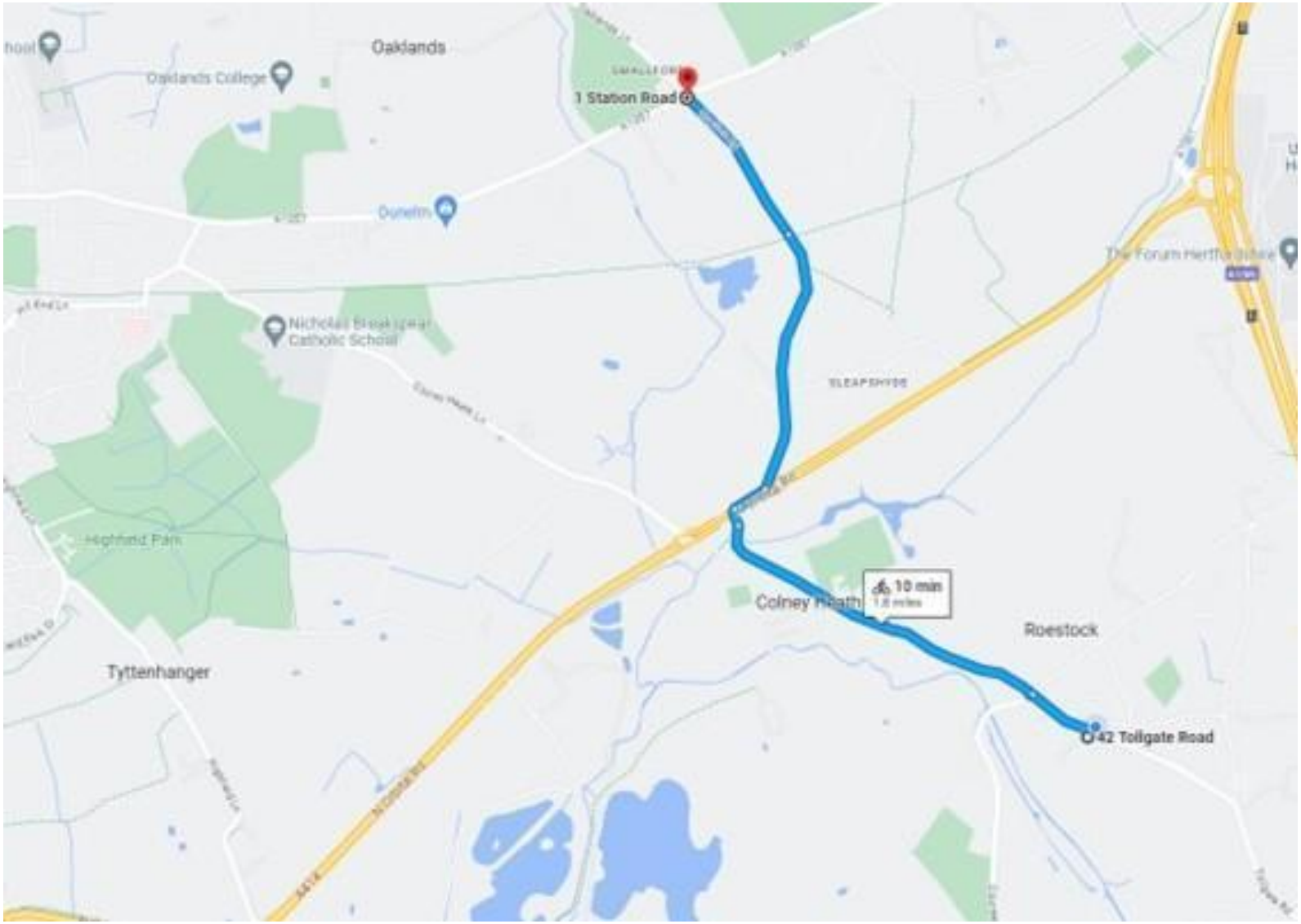
Factor	Ind	Comment	Score	
Connections	1	No indications that it is a cycle route	0	
Continuity and way finding	2	There is not a continuous route or discrete sections. Cyclists are abandoned with no clear indication of route.	0	
Density of Network	3	No mesh or grid connection with the SADC LWCP (outside of the plan's area)	0	
Distance	4	Shortest and most direct Route	2	
Frequency of stops to give way	5	Three give way signs on this route. Roundabout at junction High Street, 'Longabout' at High Street junction A414 and crossing Colney Heath Lane at A414. The latter has poor sightlines until in carriageway.	1	
Time delay at junctions	6	Delay same as for motor vehicles but increased risk for cyclists	1	
Time delay on links	7	There are no links to other cycle paths. There is an unsigned link with National Cycle Route (NCR) 61 the Alban Way that crosses this route	N/A	
Gradients	8	The route is generally flat. High Street has an upward gradient from Church La to Cutmore Drive. Colney Heath Lane has a long1.35% gradient of 21m over 1.35 km 1.35% that is challenging.	1	
Reduce remove difference where cyclists are sharing the carriageway	9	Tollgate Road: Speed of 85% traffic = 37.2 MPH (ref: TPS 5.11). High Street 30 mph limit with similar conditions to Tollgate Road. A414 50 mph limit CHL 40 and 30 mph limit	1	**CRITICAL**
	10	Tollgate Road: Speed of 85% traffic = 37.2 MPH (ref: TPS 5.11). High Street 30 mph limit with similar conditions to Tollgate Road.	1	**CRITICAL**

Factor	Ind	Comment	Score	
		A414 50 mph limit CHL 40 and 30 mph limit		
Avoid High Volume Traffic	11	High volume traffic on A414 is avoided by use of a bridge or a signalised crossing and a hybrid cycleway alongside but separated from A414.	1	**CRITICAL**
Risk of Collision	12	High speed differential between cyclists and vehicles There is no cycle lane on shared carriageway apart from 0.1 mile on A414 Substantial risk of collisions from behind or alongside. No cycle preference at junctions CHL in 40 mph limit there is a section of narrow road that causes vehicles to slow when passing in opposite directions. Substantial risk of collision with cyclists.	0	**CRITICAL**
Risk of collision (Junctions)	13	Conflicting cycle and motor traffic separated at A414 longabout a major junction by signal-controlled crossing and a pedestrian bridge. No separation at Tollgate Road and High Street roundabout,	0	
Avoid complex design	14	There is no cycle lane design	NA	
Consider and reduce risk from kerbside	15	High Street has parked cars on southside reducing road width to single alternate lane creating risk from pedestrians entering road and opening doors particularly in vicinity of shop. Recessed parked cars on north kerb of High Street by Wistlea Crescent.	0	**CRITICAL**
Reduce severity of collisions	16	Hedges and trees close to east side of carriageway in CHL between Barley Mow Lane and 30 limit leave no room for evasion with risk of cyclist being “trapped”,	0	
Surface quality	17	There are potholes and subsidence in the High Street and poorly resurfaced utility trenches,	1	
Smooth level surface	18	No special surface for cyclists exists. The road surface is bumpy.	0	

Factor	Ind	Comment	Score	
Effective width without conflict	19	With the exception of 0.2 mile section on A414 there is no minimum separation for cyclist exists on the route. Single carriageway road in places reduced by parked cars to single alternate line of traffic, Cyclists reliant on the skill, patience, and visibility available for passing motorists.	0	
Way finding	20	No signs to assist cyclists along this route.	0	
Social safety and perceived vulnerability for user	21	High Street is illuminated. Colney Heath Lane is lit. Significant areas under trees reducing illumination.	1	
Isolation	22	The section of Colney Heath Lane between A414 and the 30-mph limit is not under natural surveillance. Church Lane to A414 is not overlooked.	1	
Disabilities	23	There are footpaths on this route. In parts of Colney Heath Lane it is narrow and overgrown,	N/A	
Minimise street clutter	24	There are “mixed use pedestrian/cyclist” signs on A414 hybrid cycleway that do not interfere with movement.	N/A	
Secure cycle parking	25	No cycle storage	0	
Audit Score			**11**	

CRITICAL JUNCTIONS AND OTHER SIGNIFICANT HAZARDS	
Colney Heath Lane – 40 speed limit area	The section of 40 mph road between Barley Mow Lane and the 30 limit signs narrows to such an extent that traffic slows to pass notably buses to and from school. This put cyclists at risk of collision from behind or alongside.

APPENDIX B/F - Route 4 Colney Heath to Smallford Lane via High Street



These points relate to: Cycle Infrastructure Design, Department of Transport LTN 1/20.

Factor	Ind	Comment	Score	
Connections	1	No indications that it is a cycle route	0	
Continuity and way finding	2	There is not a continuous route or discrete sections. Cyclists are abandoned with no clear indication of route.	0	
Density of Network	3	No mesh or grid connection with the SADC LWCP (outside of the plan's area)	0	
Distance	4	Shortest and most direct Route	2	
Frequency of stops to give way	5	Three give way signs on this route. Roundabout at junction High Street, and 'Long-about' at High Street junction A414 and entry into Smallford Lane	1	
Time delay at junctions	6	Delay same as for motor vehicles but increased risk for cyclists	1	
Time delay on links	7	Links with Alban Way (NCP 61) that crosses route. Signs concealed by overgrown trees Time delay as cyclist in carriageway have to stop on a bend on 40 mph road and cross the road to cycle way (Peggy's Path) entry	0	
Gradients	8	The route is generally flat. High Street gradient from Church La to Cutmore Drive. Smallford Lane has a short gradient at old rail bridge but alternate route available.	2	
Reduce remove difference where cyclists are sharing the carriageway	9	Tollgate Road: Speed of 85% traffic = 37.2 MPH (ref: TPS 5.11). High Street 30 mph limit with similar conditions to Tollgate Road. A414 50 mph limit Smallford Lane 40 mph limit	0	**CRITICAL**
	10	Tollgate Road: Speed of 85% traffic = 37.2 MPH (ref: TPS 5.11). High Street 30 mph limit with similar conditions to Tollgate Road. A414 50 mph limit	0	**CRITICAL**

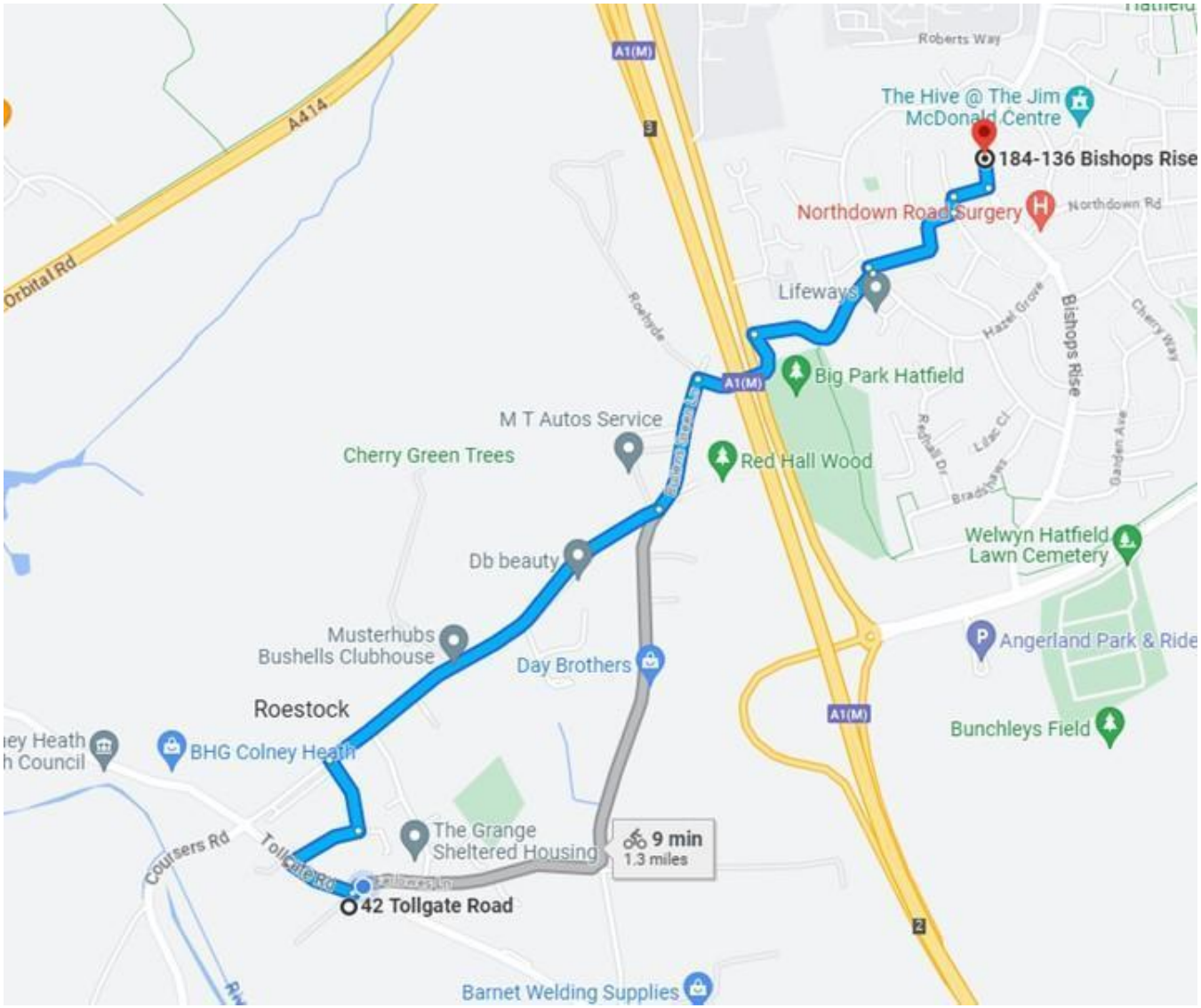
Factor	Ind	Comment	Score	
		Smallford Lane 40 mph limit		
Avoid High Volume Traffic	11	High volume traffic on A414 is avoided by use of a bridge or a signalised crossing and a hybrid cycleway alongside but separated on northside of A414.	2	
Risk of Collision	12	High speed differential between cyclists and vehicles There is no cycle lane on shared carriageway. High risk of collisions from behind or alongside. No cycle preference at junctions High risk if cycling across Smallford Lane bridge as dog leg reduces vision and effective use of the road. Alternate route "bridge bypass" not clearly signed, is overgrown, is liable to flooding, and requires cyclists to cross 40 mph road twice.	0	**CRITICAL**
Risk of collision	13	Conflicting cycle and motor traffic separated at A414 long-about a major junction. No separation at Tollgate Road and High Street roundabout,	0	
Avoid complex design	14	There is no cycle lane design	NA	
Consider and reduce risk from kerbside	15	High Street has parked cars on southside reducing road width to single alternate lane creating risk from oncoming vehicles, pedestrians entering the road and opening doors particularly in vicinity of shop. Parked cars on northside in vicinity of Wistlea Crescent. HGV car carrier vehicle unloading in High Street.	0	**CRITICAL**
Reduce severity of collisions	16	The walls of Smallford Lane bridge are the edge of the carriageway. Potential for cyclists to be trapped against wall.	0	
Surface quality	17	There are potholes and subsidence in the High Street and poorly resurfaced utility trenches,	1	
Smooth level surface	18	No special surface for cyclists exists. The road surface is bumpy.	0	

Factor	Ind	Comment	Score	
Effective width without conflict	19	A414 0.2 miles of cycle/pedestrian path. Otherwise, no minimum separation for cyclist exists on the whole route. Single carriageway road in places reduced by parked cars to single alternate line of traffic, Cyclists reliant on the skill, patience, and visibility available for passing motorists.	0	
Way finding	20	No signs to assist cyclists along this route. The lack of signage and an overgrown path to Alban Way makes connecting difficult.	0	
Social safety and perceived vulnerability for user	21	The route is illuminated.	2	
Isolation	22	The section from Church Lane to Smallford Lane is not under surveillance. Smallford Lane from the vicinity of Sleapshyde Lane to Smallford Bridge is not under surveillance	1	
Disabilities	23	There are footpaths on this route, in parts of Smallford Lane footpaths are narrow and overgrown,	N/A	
Minimise street clutter	24	The route has natural surveillance	N/A	
Secure cycle parking	25	No cycle storage	0	
Audit Score			**12**	

CRITICAL JUNCTIONS AND OTHER SIGNIFICANT HAZARDS

Smallford Lane 40 speed limit area	The speed differential put cyclists at risk of collision from behind or alongside.
Smallford Lane Bridge	Narrow Road Poor visibility Car to car conflict Bypass not signed or visible Alban Way crossing under bridge floods
Smallford Works – Old entrance.	Poor sight lines for drivers
Smallford Lane - Northbound entry to “Peggy’s Path	Crossing 40 mph road on blind bend in both directions.

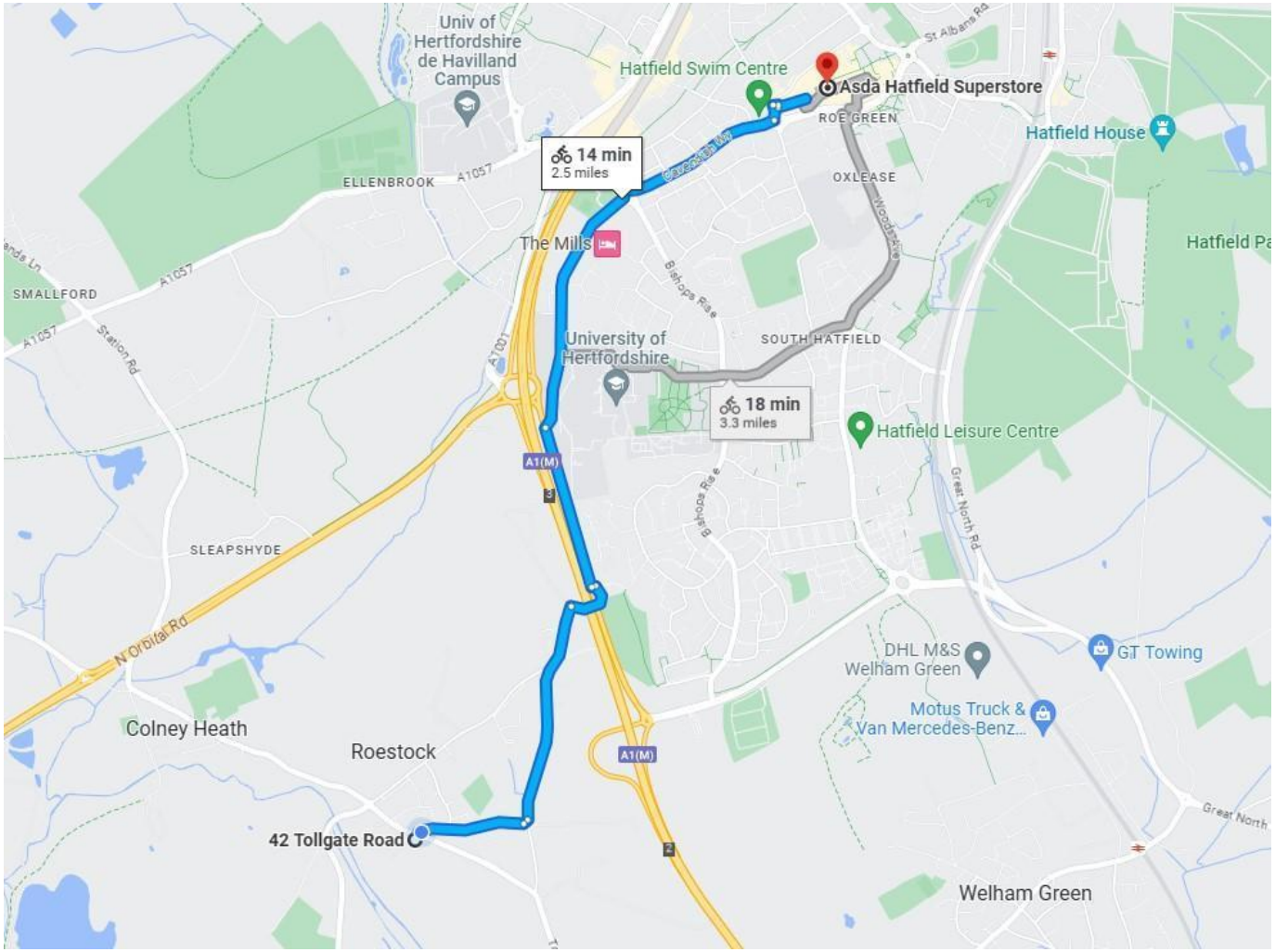
APPENDIX B/G Route 5 Colney Heath to Hatfield Hilltop Shops via Roestock Lane



The Transport assessment and the travel plan documents states that there are shops and a chemist located at Hatfield Hilltop. This statement presumably indicates that these are easily accessible for both cyclist and pedestrian. To reach them is along Roestock Lane under the underpass and up Lane End, (where our Parish Councillor was violently mugged). From the underpass exit to Hilltop shops is a distance of 600m. The rise in elevation is from 71m at the tunnel exit rising to 110m at the shops. This is a gradient of 4.83%. There is a 'no cycling' sign at the entrance to Lane End so some of this route is impossible to cycle.

APPENDIX B/H Hatfield Town Centre via Roestock Lane

Route 6 Colney Heath to Hatfield Town Centre via Roestock Lane



These points directly relate to: Cycle Infrastructure Design Dept of Transport LTN 1/20 July

Factor	I*	Comment	Score	**Critical**
Connections	1	No indications that it is a cycle route	0	
Continuity and way finding	2	There is not a continuous route. There are discrete sections. Cyclists are abandoned with no clear indication of route.	0	
Density of Network	3	No mesh or grid connection with the SADC LWCP (outside of the plan's area)	0	
Distance	4	Shortest and most direct Route	2	
Frequency of stops to give way	5	• Roundabout at junction High Street. • Tudor Close see photo of risk • Broadway bus route (twice) • University car park exits • Gated bus only lane (college lane) see photo • Watery lane (see photo) • Tomsfield • Bowls Club • St Albans Road West • Lemsford Road (see photo)	0	
Time delay at junctions	6	Delays due to slowing down and checking for motor vehicles (see above e.g. Tudor Close, Watery Lane etc) as cyclists have no priority.	1	
Time delay on links	7	There are no links to other cycle paths	N/A	
Gradients	8	Short steep gradients on four parts of the cycle route 061 at underpasses and Lemsford Road.	1	
Reduce remove difference where cyclists are sharing the carriageway	9	Tollgate Road: Speed of 85% traffic = 37.2 MPH (ref: TPS 5.11). Roestock Lane 30MPH (no actual speed known)	0	**CRITICAL**

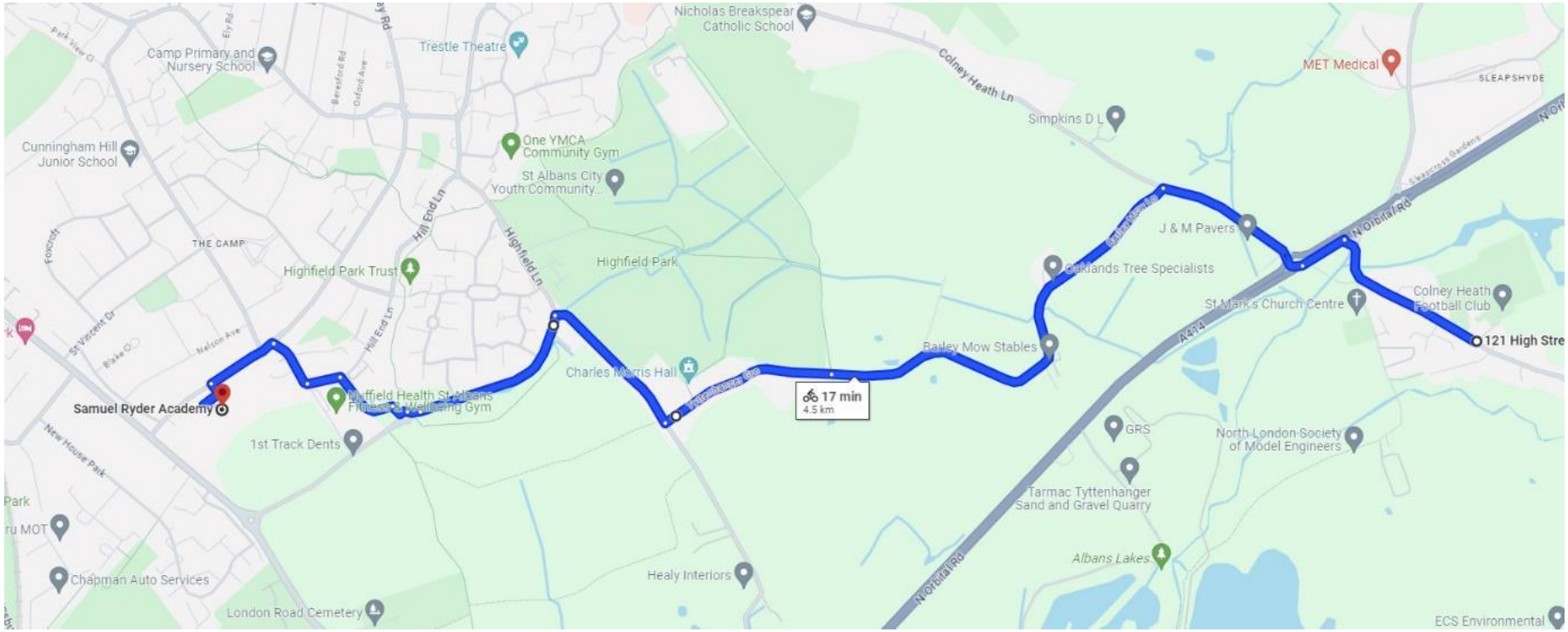
Factor	I*	Comment	Score	**Critical**
Junctions	10	Tollgate Road: Speed of 85% traffic = 37.2 MPH (ref: RPS 5.11). Roestock Lane 30 mph	0	**CRITICAL**
Avoid High Volume Traffic	11	Tollgate Road peak traffic 500 VPH	1	**CRITICAL**
Risk of Collision	12	Known collisions with other cyclists in underpasses due to misplaced bollards and poor lighting due to lights being painted with graffiti* (see photo) and angled approach into the underpass. Blind spots from underpasses at Roestock Lane and beside the Galleria (see photos) Risk of collision with pedestrians on cycle lane.	0	**CRITICAL**
Risk of collision	13	Bikes and pedestrians share parts of the route. Delineated cycle and pedestrian parts of the route overgrown and not fit for purpose (see photos).	0	
Avoid complex design	14	No cycle route indicated from High Street roundabout. The part of the route where there is a cycle lane is out of date with current design standards and confusing in places and is piecemeal. See Photo	1	
Consider and reduce risk from kerbside	15	Parked 'chicanes of cars' provide kerbside risks. Turning onto the bottom of Roestock Lane from the roundabout the cyclist is immediately met with the situation at the Service Road junction. See also Meadway and Roestock Lane chicane photos. (see photo) Roestock Lane suffers from poorly defined and overgrown verge reducing the road to one and a half lanes near the Chalkdrawers Arms. Pedestrian exit from a gate at the University building causes people to step directly onto the funnelled cycleway at the bus gate in College Lane. (see photo)	0	**CRITICAL**
Reduce severity of collisions	16	Underpass at Roestock Lane has caused collisions between cyclists due to sloping, gradient 4% and the angled approach	0	

Factor	I*	Comment	Score	**Critical**
		to it from the access roads (see photo). Bollards at the immediate entrances reduce width		
Surface quality	17	Underpass at Roestock Lane is full of rubbish (incl. car tyres) and broken bottles which are often the cause of punctures.	0	
Smooth level surface	18	Surface for cyclists is old and has been made worse by utility workings. The road surface is bumpy with a loose surface in places. Potholes across junctions	1	
Effective width without conflict	19	Surface has well established vegetation growing though the surface. Brambles and trees reduce and obstruct cycle lane. (see photos) Therefore separation for cyclist only exists for a small part of the whole route	0	
Way finding	20	Confusing signs along this route. End route signage causes a disjointed feel.	1	
Social safety and perceived vulnerability for user	21	The route has to pass through the underpass at Roestock Lane. It is isolated and has poorly lit approaches. It is covered in graffiti, including the roof lighting boxes. Remnants of burnt out motor scooter are still visible. It has had the lighting vandalised and car tyres spread across the dark cycle path causing an accident where the cyclist was badly hurt. A hundred metres from the underpass in Lane End, Tony Burns a Parish Councillor was violently mugged (police investigated). Drug and nitrous oxide use. As a result parents are frightened to let their children use the tunnel. It is subject to heavy flooding, making it impassable to both pedestrians and cyclists. It was flooded in early December 2022 for six weeks. It was eventually cleared by a water tanker only to be flooded again for another period shortly afterwards with the returning tanker breaking the saturated	0	

Factor	I*	Comment	Score	**Critical**
		approach road surface (see photos). This was finally resurfaced on August 3rd 2023.		
Isolation	22	Part of route is isolated with extreme anxiety at the underpass. Activity is away from public surveillance. N.B. This now recognised by Herts Police as a known safety concern and they have recently installed CCTV there.	0	
Disabilities	23	Short steep gradients on four parts of the National 61 cycle route at underpasses and Lemsford Road.	1	
Minimise street clutter	24	Bus shelter opposite Galleria causes narrowing and pedestrians to stand in cycle lane.	1	
Secure cycle parking	25	Cycle storage at Hatfield Town centre.	2	
Audit Score			**12**	

CRITICAL JUNCTIONS AND OTHER SIGNIFICANT HAZARDS	
A1(M) Pedestrian underpass	**The underpass on this route is for many parents a no go area for their children**
Roestock Lane	The long chicanes of parked cars are dangerous as they squeeze the road width and cause blind spots
Tudor Close	Tudor Close junction is overgrown and is high risk as vehicles turning left approach from behind the trees at high speed some 40cm from the junction (cycle path crossing). Cyclists have to stop and peer carefully around the trees to see if anything is coming.
Tomsfield	Vehicles from Tomsfield exits from below the cycle path behind trees. Cyclists have to stop and check to ensure they can safely cross.
Hatfield University	During the semester periods the cycle path is busy with students and other pedestrians, meaning slower cycling, potential collisions (people on their phones) and conflicts between pedestrians and cyclist.

Appendix B/I Route 7 Colney Heath to Samual Ryder School via Barley Mow Lane



Route map

Total distance 4.5km

These points relate to: Cycle Infrastructure Design, Department of Transport LTN 1/20.

Factor	Ind	Comment	Score	Critical
Connections	1	Limited connections	1	
Continuity and way finding	2	Most of this lacks any route signs; the most confusing sector is from Highfield Park Drive to the school.	0	
Density of Network	3	Only links to 4 other routes	0	
Distance	4	Within 120% of the shortest route	2	
Frequency of stops to give way	5	10 stops or points to give way	1	
Time delay at junctions	6	A414 CH long-about crossing	1	
Time delay on links	7	No significant delays	2	
Gradients	8	Section/s of the route have a gradient greater than the desirable limits. Barley Mow Lane has a gradient of > 2.5% for 400m LTN1/20 Max 150m	0	
Reduce remove difference where cyclists are sharing the carriageway (through junctions)	9	Drakes Drive 30mph	0	
Reduce remove difference where cyclists are sharing the carriageway	10	The greater part of this route is shared with motor vehicles, along narrow lanes, which are only 2.4m wide along substantial lengths.	1	

Factor	Ind	Comment	Score	Critical
Avoid High Volume Traffic	11	High Street CH c6000 vehicles per day Colney Heath Lane (968242) 5246 vehicles per day (2009) Drakes Drive (Marshall Drive) 851591 15,441 total 349HGV 2008	0	**Critical**
Risk of Collision	12	High Street CH Barley Mow Lane Drakes Drive	0	**Critical**
Conflicting movements at junctions	13	Drakes Drive	0	
Avoid complex design	14	Faded and or missing signs, cycle route hops between shared cycle way and on road sections, complex design in Cell Barns Lane area.	0	
Consider and reduce risk from kerbside	15	High Street CH, Colney Heath Lane, Tyttenhanger, Cell Barns Lane area Drakes Drive	0	**Critical**
Reduce severity of collisions	16	Barley Mow Lane – narrow road 2.4m wide with few safe refuges. Road shared with 2.4m wide HGVs	1	
Surface quality	17		2	
Surface Type Cycle routes should be surfaced in smooth bound materials that are unaffected by weather and are well-maintained at all times of year	18	Mud, grass and rotting leaves, causing potential skidding and falls, sticks that cause sudden violent stopping when caught in gears and spokes, tree roots projecting through cycle lane surfaces, on roads and pavements.	0	

Factor	Ind	Comment	Score	Critical
Effect width without conflict	19	Barley Mow Lane and Tyttenhanger High Street is 8m width. Lorries (2.4m width) use this road. Parked cars are 2ms wide + 0.5m safe passing distance for cyclists. Total vehicle width along parked cars is 2.4+2.4+ 2.5= 7.3m	0	
Way finding	20	Most of this lacks any route signs, the most confusing sector is from Highfield Park Drive to the school.	0	
Social safety and perceived vulnerability for user	21	The greater part of this route is unlit. Conversations with the Samuel Ryder school secretary regarding the numbers of pupils cycling to school indicated that parents are not prepared to let their children cycle to school.	0	
Isolation	22	Barley Mow and Nightingale Lanes are dark at night and very isolated	0	
Disabilities	23	No impact or change	1	
Minimise street clutter	24	The current signs are of appropriate size and number however some parts of the route require additional signage.	2	
Secure cycle parking	25	Samuel Ryder has a bike shed but it is little used due to parents not willing to let their children cycle to school.	2	
Audit Score			**16**	

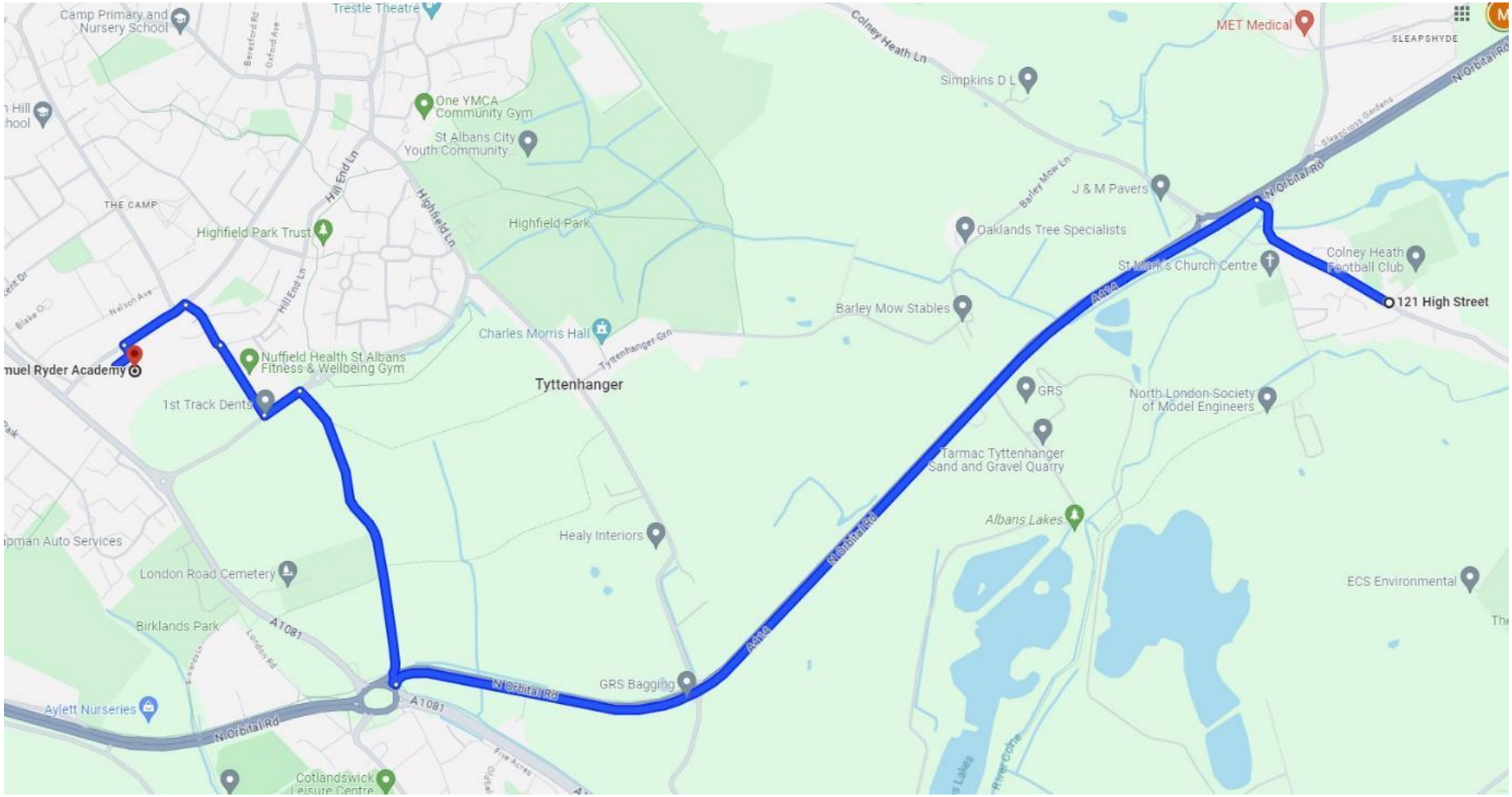
Critical Junctions or other significant hazards	
High Street Colney Heath*	The High Street is 6.5m wide. HGV Lorries (2.4m width) use this road. Parked cars are 2ms wide + 0.5m safe passing distance for cyclists. Total vehicle width along parked cars is 2.4+2.4+ 2.5= 7.3m (see picture taken 27/02/2024 at 11.30 am).
High Street Colney Heath	Return journeys having crossed A414 to join the High Street CH is dangerous, crossing the road due to traffic speeds leaving the long-about. Unlike other parts of the A414 crossing this sector is not controlled.

Critical Junctions or other significant hazards	
Colney Heath Lane near A414	Crossing Colney Heath Lane at A414 poor sight line along Colney Heath Lane, due to the bend onto the Long about. The speed limit on this bend is 40mph and gives little or no warning to a cyclist of approaching traffic. Cyclist has to come to a complete stop and peer round the bend to cross the junction safely. The high speed (50MPH) exit from the A414 east bound and crossing the top from the long about from west bound lane compounds the danger at this junction. Both X and Y distances are below those recommended in the Manual for Streets. SADC LCWIP identifies this crossing requires extra care.
Barley Mow Lane	Narrow width of Barley Mow Lane which is only 2.4m in places with hedgerows or ditches on both sides. While undertaking the assessment an HGV, 2.4m wide came along the lane occupying the entire road width, its tyres eating into the verge on both sides of the road.
Tyttenhanger Green	The road is twisting, with relatively narrow with cars intermittently parked on both sides.
Highfield Park Drive near Nightingale Lane	Crossing Highfield near Nightingale Lane – hedge results in a poor sight line on traffic coming from London Road.
Drakes Drive from Cell Barns Lane to the school	The route joins Drakes Drive at two mini roundabouts, the SADC LCWIP identify these as significant risks and appears on priority list for improvement. Drakes Drive forms part of ring-road round St Albans and has a significant level of traffic including large numbers of HGVs. The return journey is considered even more dangerous due the crossing of oncoming traffic.

The High Street has some 800 vehicles movements recorded between 8.00 and 9.00am opposite the Newsagents. Whilst it may be viewed as a rural road it is situated between the M25 and A1M. The frequent incidents on any of these means that traffic uses Colney Heath as a rat run and traffic can queue from the M25 junction 22 all the way along Coursers Road and through the village through both the High Street and Tollgate Road.

Ref 19 HGV at Long about 27-02-2024 11.30 a.m.

Appendix B/J Route 8 Colney Heath to Samuel Ryder School via A414 and Nightingale Lane



Route Map

Distance 4.9km.

These points relate to: Cycle Infrastructure Design, Department of Transport LTN 1/20.

Factor	Ind	Comment	Score	Critical
Connections	1	Limited connections	1	
Continuity and way finding	2	Lacks signs on much of the route from A414/Nightingale Lane to the school.	0	
Density of Network	3	Only links to 4 other routes	0	
Distance	4	Within 120% of the shortest route	2	
Frequency of stops to give way	5	8 stops or points to give way	2	
Time delay at junctions	6	A414 CH long-about crossing	1	
Time delay on links	7	Due to the width of cycleway passing is difficult along parts A414	1	
Gradients	8	Section/s of the route have a gradient greater than the desirable limits. The section of the route passing Knight's Wood alongside the A414 has a gradient > 2% for 600m plus (LTN1/20 Max = 150m). This also means that high speeds can be attained by cyclists descending the gradient causing potential problems for cyclists and pedestrians climbing the slope.	0	
Reduce remove difference where cyclists are sharing the carriageway (through junctions)	9	Drakes Dive 30mph	0	
Reduce remove difference where	10	High Street CH Nightingale Lane	1	

Factor	Ind	Comment	Score	Critical
cyclists are sharing the carriageway		Drakes Drive There is no separation for cyclists on these roads.		
Avoid High Volume Traffic	11	High Street CH c6000 vehicles per day Drakes Drive (Marshall Drive 851591 15,441 total 349HGV 2008	0	**Critical**
Risk of Collision	12	High Street CH Drakes Drive	0	**Critical**
Conflicting movements at junctions	13	Drakes Drive	0	
Avoid complex design	14	Missing and or faded signs, route difficult to follow at A414/Nightingale Lane junction complex design near Cell Barns Lane.	0	
Consider and reduce risk from kerbside	15	High Street Colney Heath and Cell Barns Lane area Drakes Drive No separation from parked cars along High Street, narrowed carriageway and opening of car doors adds to the risk of injury to cyclists by collision with open door or avoidance action causing a head on collision with oncoming traffic.	0	**Critical**
Reduce severity of collisions	16	Drakes Drive	1	
Surface quality	17	Surface breaking up in places tree roots distorting the surface.	1	
Surface Type Cycle routes should be surfaced in smooth bound materials that are unaffected by weather and are	18	1. Most of the route suffers from mud, causing potential skidding and falls 2. Sticks that can cause sudden violent stopping when caught in gears and spokes 3. Tree roots projecting through cycle lane surfaces, grass and rotting leaves on the surface providing poor grip.	0	

Factor	Ind	Comment	Score	Critical
well-maintained at all times of year				
Effect width without conflict	19	The cycleway along the A414 should grade '0' due width and shared use but due to low levels of use is graded as '1' However the point in ref 8 regarding gradient and cyclists high speed needs consideration. These paths are not gritted and so add an extra hazard at high speed in winter months.	1	
Way finding	20	The sector from A4114 via Nightingale Lane to the school lacks signs at key points.	0	
Social safety and perceived vulnerability for user	21	The greater length of the route is lit however both sections of Nightingale Lane both are unlit, very dark in winter causing a feeling of vulnerability.	1	
Isolation	22	The sector beside the A414 is set back from the road however stopping on the A414 would be difficult in the event of a problem. Nightingale Lane is not overlooked.	1	
Disabilities	23	No impact or change	1	
Minimise street clutter	24	The current signs are of appropriate size and number however some parts of the route require additional signage.	2	
Secure cycle parking	25	Samuel Ryder has a bike shed but it is little used due to parents not willing to let their children cycle to school.	2	
Total score			**18**	

Critical Junctions or other significant hazards

High Street Colney Heath	The High Street is 6.5m wide. HGV Lorries (2.4m width) use this road. Parked cars are 2ms wide + 0.5m safe passing distance for cyclists. Total vehicle width along parked cars is 2.4+2.4+ 2.5= 7.3m (see picture taken 27/02/2024 at 11.30 am).
High Street Colney Heath	Return journeys having crossed A414 to join the High Street CH is dangerous, crossing the road due to traffic speeds leaving the long-about. Unlike other parts of the A414 crossing this sector is not controlled.
Colney Heath Lane near A414	Crossing Colney Heath Lane at A414 poor sight line along Colney Heath Lane, due to the bend onto the Long about. The speed limit on this bend is 40mph and gives little or no warning to a cyclist of approaching traffic. Cyclist has to come to a complete stop and peer round the bend to cross the junction safely. The high speed (50MPH) exit from the A414 east bound and crossing the top from the long about from west bound lane compounds the danger at this junction. Both X and Y distances are below those recommended in the Manual for Streets. SADC LCWIP identifies this crossing requires extra care. Crossing SADC LCWIP identifies this crossing requires extra care
Highfield Lane	Wide radius entrance into Highfield Lane resulting in higher traffic speeds from A414. SADC LCWIP identifies this crossing requires extra care.
A414-Nightingale Lane junction	In Nightingale Lane there is reversing-turning bay into which the A414 cycle path runs this screened by a hedge with a poor sight line we noticed a refuse lorry reversing into this bay.
Highfield Park Drive-Nightingale Lane crossing	Crossing Highfield near Nightingale Lane – hedge results in a poor sight line on traffic coming from London Road.
Drakes Drive from Cell Barns Lane to school	The route joins Drakes Drive at two mini roundabouts, the SADC LCWIP identify these as significant risks and appears on priority list for improvement. Drakes Drive forms part of ring-road round St Albans and has a significant level of traffic including large numbers of HGVs. The return journey is considered even more dangerous due the crossing of oncoming traffic.

Assessor's notes

The High Street has some 800 vehicles movements recorded between 8.00 and 9.00am opposite the Newsagents. Whilst it may be viewed as a rural road it is situated between the M25 and A1M. The frequent incidents on any of these means that traffic uses Colney Heath as a rat run

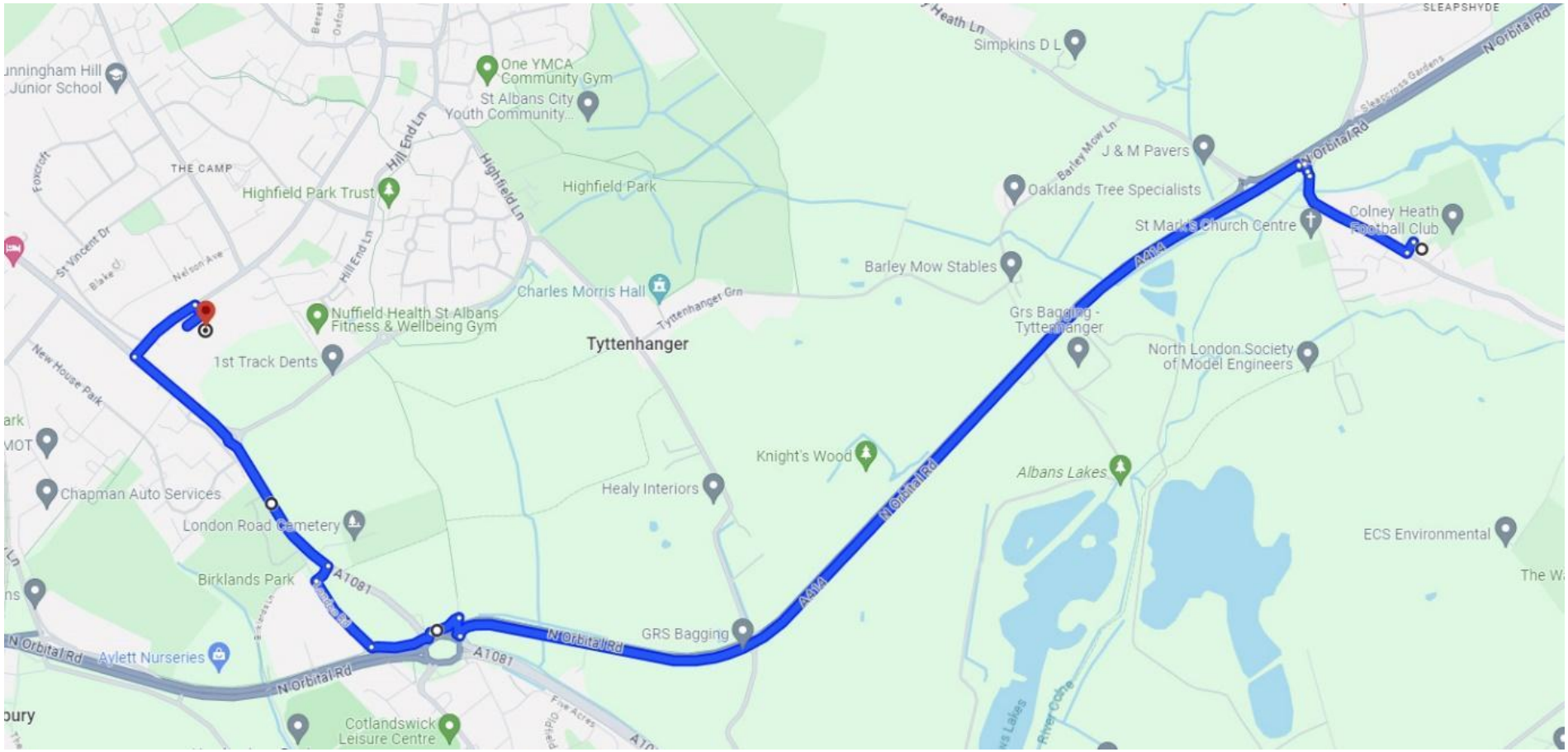
and traffic can queue from the M25 junction 22 all the way along Coursers Road and through the village through both the High Street and Tollgate Road.

The route between Hill End Lane and Samuel Ryder School has several possible sub-routes, however for this assessment only the safest most direct route has been included.

The reversing bay at junction at Nightingale Lane and A414 cycle route could be made much safer by the use of bollards to protect cyclist and pedestrians from reversing vehicles across the rear of the turning bay.

Nightingale Lane near A414 showing the state of surface and barriers across the route.

Appendix B/K Route 9 Colney Heath to Samuel Ryder School via A414 and London Road



Route Map

Distance 5.0km.

These points relate to: Cycle Infrastructure Design, Department of Transport LTN 1/20.

Factor	Ind	Comment	Score	Critical
Connections	1	Limited connections	1	
Continuity and way finding	2	Lacks signage on much of the route from A414/Nightingale Lane to the school.	0	
Density of Network	3	Only links to 4 other routes	0	
Distance	4	Within 120% of the shortest route	2	
Frequency of stops to give way	5	6 stops or points to give way	2	
Time delay at junctions	6	A414 CH long-about crossing London Road significant delays	0	
Time delay on links	7	Due to the width of cycleway passing is difficult along parts A414	1	
Gradients	8	Section/s of the route have a gradient greater than the desirable limits. The section of the route passing Knight's Wood alongside the A414 has a gradient > 2% for 600m plus (LTN 1/20 Max = 150m) This also means that high speeds can be attained by cyclists descending the gradient causing potential problems for cyclists and pedestrians climbing the slope.	0	
Reduce remove difference where cyclists are sharing the carriageway (through junctions)	9	Cyclists have to cross the high speed junction at the Long about. Speed off the Long about is 50MPH.	0	
Reduce remove difference where cyclists are	10	High Street CH The speed limit is 30MPH	1	

Factor	Ind	Comment	Score	Critical
sharing the carriageway				
Avoid High Volume Traffic	11	High Street CH c6000 vehicles per day 800 vehicles per hour between 8.00am and 9.00am. No count taken during a excess traffic period due to an 'M25 incident'.	0	
Risk of Collision	12	High Street CH No separation from parked cars along High Street, narrowed carriageway and opening of car's doors adds to the risk of injury to cyclists by collision with open door or avoidance action causing a head on collision with oncoming traffic.	0	
Conflicting movements at junctions	13		2	
Avoid complex design	14	Faded signs in London Road, confusing layout at crossing in London Road and Drakes Drive	0	
Consider and reduce risk from kerbside	15	No separation from parked cars along High Street, narrowed carriageway and opening of car doors adds to the risk of injury to cyclists by collision with open door or avoidance action causing a head on collision with oncoming traffic.	1	
Reduce severity of collisions	16		2	
Surface quality	17	Surface breaking in places, tree roots distorting the surface in places	1	
Surface Type Cycle routes should be surfaced in smooth bound materials that are unaffected by	18	1. Most of the route suffers from mud, causing potential skidding and falls 2. Sticks that can cause sudden violent stopping when caught in gears and spokes 3. Tree roots projecting through cycle lane surfaces, grass and rotting leaves on the surface providing poor grip.	0	

Factor	Ind	Comment	Score	Critical
weather and are well-maintained at all times of year				
Effect width without conflict	19	The cycleway along the A414 due width and shared use. The sector near London Road and Drakes Drive due to confusing layout	1	
Way finding	20	The sector from A4114 via London Road to the school lacks signs at key points.	1	
Social safety and perceived vulnerability for user	21	The entire route has street lighting.	2	
Isolation	22	The sector along the A414 is set back from the road however stopping on A414 would be difficult in the event of a problem.	1	
Disabilities	23	No impact or change	1	
Minimise street clutter	24	The current signs are of appropriate size and number however some parts of the route require additional signage.	2	
Secure cycle parking	25	Samuel Ryder has a bike shed but it is little used due to parents not willing to let their children cycle to school.	2	
Total score			**23**	

Critical Junctions or other significant hazards	
High Street Colney Heath	The High Street is 6.5m wide. HGV Lorries (2.4m width) use this road. Parked cars are 2ms wide + 0.5m safe passing distance for cyclists. Total vehicle width along parked cars is 2.4+2.4+ 2.5= 7.3m (see picture taken 27/02/2024 at 11.30 am).

Critical Junctions or other significant hazards	
High Street Colney Heath	Return journeys having crossed A414 to join the High Street CH is dangerous, crossing the road due to traffic speeds leaving the long-about. Unlike other parts of the A414 crossing this sector is not controlled.
Colney Heath Lane near A414	Crossing Colney Heath Lane at A414 poor sight line along Colney Heath Lane, due to the bend onto the Long about. The speed limit on this bend is 40mph and gives little or no warning to a cyclist of approaching traffic. Cyclist has to come to a complete stop and peer round the bend to cross the junction safely. The high speed (50MPH) exit from the A414 east bound and crossing the top from the long about from west bound lane compounds the danger at this junction. Both X and Y distances are below those recommended in the Manual for Streets. SADC LCWIP identifies this crossing requires extra care.
Highfield Lane	Wide radius entrance into Highfield Lane resulting in higher traffic speeds. SADC LCWIP identifies this crossing requires extra care.
A414-Nightingale Lane junction	In Nightingale Lane there is reversing-turning bay into which the A414 cycle path runs this screened by a hedge with a poor sight line we noticed a refuse lorry reversing into this bay.
London Road first part	Two routes are possible both are assessed as dangerous. a) cross London Road and cycle along west side along a cycle route, however the crossing on the London Colney roundabout is dangerous, at no time is the St Albans bound traffic stopped to let people cross. Traffic leaving the roundabout is fast and the sightline to see eastbound traffic leaving A414 entering London Road is also restricted and dangerous. SADC LCWIP identifies this crossing requires extra care. b) this route is not identified as cycle route and would involve cycling on a pavement the route on the is only 450-600mm wide, beside high-volume fast-moving traffic within 40mhp zone. The minimum 0.5m Separation is not provided.
London Road Nightingale Lane-Highfield Park Drive	Very narrow shared pedestrian and cycle space, high traffic speeds and high traffic volumes on the very adjacent London Road; this space is also shared with passengers waiting at the bus stop. The minimum 0.5m Separation is not provided.

Critical Junctions or other significant hazards	
London Road Fire station- Drakes Drive	A separate pedestrian and cycle routes exist along this sector however the pedestrian route does not follow the desired lines and the street furniture (railings) is damaged, so pedestrians use the cycle route which is also poorly signed. See photo below.
Drakes Drive London Road - school	A separate pedestrian and cycle routes exist along this sector however the pedestrian route does not follow the desired lines and the pedestrian route is narrow, so pedestrians use the cycle route which is also poorly signed.

Assessor's notes

The High Street has some 800 vehicles movements recorded between 8.00 and 9.00am opposite the Newsagents. Whilst it may be viewed as a rural road it is situated between the M25 and A1M. The frequent incidents on any of these means that traffic uses Colney Heath as a rat run and traffic can queue from the M25 junction 22 all the way along Coursers Road and through the village through both the High Street and Tollgate Road.

The reversing bay at junction at Nightingale Lane and A414 cycle route could be made much safer by the use of bollards to protect cyclist and pedestrians from reversing vehicles across the rear of the turning bay.

Walking assessments (c)

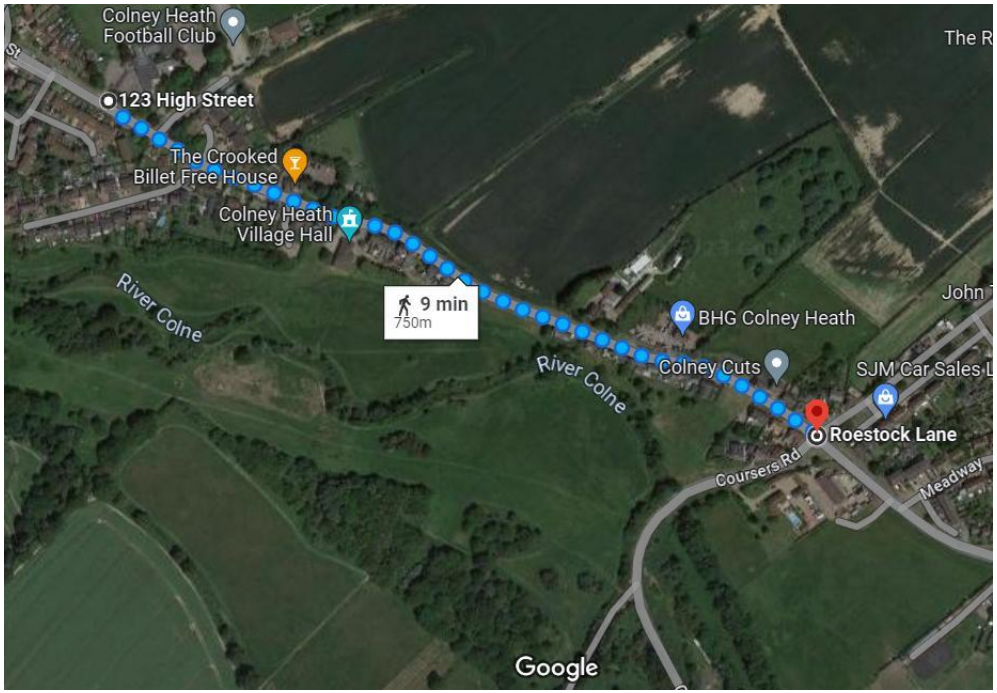
Colney Heath Pavement Assessment

This walking route assessment tool (WEAT) has been prepared by the Welsh Active Travel Design Guidance to assist local authorities in auditing walking routes. A score of 70% should normally be regarded as minimum level of provision overall (max score 40 100%).

Road / route name High Street Colney Heath

From opp. Queens Head High Street to Colney Heath JMI school High Street CH length of route 750m

Height difference 3m (Google Earth)



Route map

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
1 Attractiveness Maintenance	Footway well maintained with no significant issues	Minor littering. Overgrown vegetation Street furniture falling into disrepair e.g., paint peeling	Littering and/or dog mess present Seriously overgrown vegetation Street furniture falling into disrepair	**1**	Hedges overgrowing the path particularly in narrow sections of the path near the older cottages
2 Attractiveness Fear of Crime	No evidence of vandalism with appropriate surveillance	Minor vandalism. Lack of active frontage and natural surveillance (e.g., House set back or onto street)	Major or prevalent vandalism Evidence of criminal/antisocial activity. Route isolated, not subject to any natural surveillance Include where sight lines are inadequate.	**2**	
3 Attractiveness Traffic noise & pollution	Traffic noise & pollution do not affect attractiveness	Level of traffic noise and/or pollution could be improved	Severe traffic pollution and or traffic noise.	**1**	Very close to road with high volumes of traffic including HGVs
$ Attractiveness other	Example of other attractiveness Evidence of lighting not present or deficient Temporary features affecting the attractiveness waste bins Excessive use of guardrails or bollards			**1**	Bins on pavement
Attractiveness					
5 Comfort Condition	Footways level and in good condition with no trip hazards	Some defects noted, typically isolated (such as trenching or patching) or minor (such cracked but level pavers). Defects which are unlikely to result in a trip hazard or difficulty for prams or wheelchairs etc. Some crossovers resulting in uneven surface.	Large number of crossovers resulting in uneven surface, subsided or fretted pavement or significant uneven patching.	**0**	Number of crossovers resulting in uneven surface, significant uneven patching.

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
6 Comfort Footway width	Able to accommodate all users without give and take or walking on the road over 2m wide	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**0**	More than 50% of the route is below 1.5m wide near - No.41 1350mm No.81 1200mm Nr. Park Lane 900mm
7 Comfort Width on stagger crossings Pedestrian Islands/refuges	Able to accommodate all users without give and take or walking on the road over 2m wide to accommodate wheelchair users	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**2**	
8 Comfort Footway parking	No instances of vehicles parking on footways noted Clearance widths generally over 2m between permanent objects	Clearance widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road due to footway parking, some deviation from desire lines.	Clearance widths of less than 1.5m Footway parking requires users to give and take frequently, walk on roads and/or results in crowding/delays Footway parking caused significant deviation from desired line.	**2**	1 car was parked on the pavement on day of study however this is unusual.
9 Comfort gradient	There are no slopes on footway	Slopes exist but not exceeding 8 per cent (1 in 12)	Gradients exceed 8 per cent (1 in 12)	**2**	
10 Comfort other	Example of other comfort issues include Temporary obstructions restricting clearance width for pedestrians e.g., Driveway gates opening on footway Barriers or gates restricting access Bus shelters restricting clearance Poorly drained footway resulting in noticeable ponding issues or slippery surfaces			**0**	Roadway flooding resulting in wet slippery pathway and frequent splashing of pedestrians.
Comfort					

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
11 Directness Footway provision	Footways are provided to cater for pedestrian desire lines e.g., adjacent to roads	Footway provision could be improved to better cater for pedestrian desire lines.	Footway not provided to cater for the desire lines.	**2**	
12 Directness Location of Crossing in relation to Desire lines	Crossing follows the desire lines	Crossings partly divert pedestrians away from desire lines	Crossing deviant significantly from desire lines.	**2**	
13 Directness Gaps in traffic (where no controlled crossings present or likely to be present	Crossing of roads is easy, direct, and comfortable and without delay (<5s average)	Crossing the road direct but associated with some delay (up to average 15s)	Crossings of road associated indirect, or associated with a significant delay (>15s)	**1**	Due to traffic not stopping.
14 Directness Impact of controlled crossings	Crossing are single phase pelican or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s on island.	Staggered crossings add significantly to journey time. Likely to wait >10sin pedestrian island	**2**	n/a
15 Directness Greenman time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from longer green man time but unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	**2**	n/a
16 Directness Other	Examples of could include Routes to and from bus stops not accommodated Steps restricting access to all users Confusing layout			**2**	
Directness					
17 Safety Traffic volume	Traffic volume low, or pedestrians can keep a distance form moderate traffic volumes.	Traffic levels moderate and pedestrians in close proximity.	High volumes of traffic with pedestrians unable to keep their distance	**1**	High traffic volumes at peak time in close proximity to pedestrians
18 Safety Traffic speed	Traffic volume low, or pedestrians can keep a distance form moderate traffic speeds.	Traffic levels moderate and pedestrians in close proximity.	High traffic speeds with pedestrians unable to keep their distance	**1**	Traffic often over speed limit on narrow section of the route

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
19 Safety Visibility	Good visibility for all users	Visibility could be somewhat improved but unlikely to deter users.	Poor visibility like to result in collisions	**0**	Near shops due to parking
Safety					
20 Coherence Dropped kerbs & tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerb and tactile paving provided but not up to current standards	Dropped kerbs and tactile paving absent or incorrect	**0**	None at Park Lane
Coherence					
Total Score				**24**	**60% therefore below a satisfactory standard**

Date of assessment 19th April 2023

Initials of the person undertaking the study - MFR, JR

Any tactile paving should be photographed, and measurements made so they can be checked against the current standards as per **Guidance on the use of Tactile Paving Surfaces.**

Tactile paving information

Location	Roestock Lane	Crossing by The Cook	By the shops	Park Lane	Near Colney Heath School
Width	1600mm	2400mm	1200mm	None	1600mm
Length	800mm	1200mm	1100mm	None	800mm
Slope	slight	Slight	Slight	None	Slight
If ribbed direction of rids in relation to walking route.	Dots	Dots	Dots		Dots
Photo	Yes	Yes	Yes	Yes	Yes

Traffic Speed

Traffic speeds are not fully defined in the Active Travel Design Guidance so the following scoring should be used.

Pavement width	**Traffic speed - unrestricted**	**Traffic speed - 40mph**	**Traffic speed - 30mph**
Pavement >2m wide with min 500mm verge width	2	2	2
Pavement >2m wide no verge	1	2	2
Pavement 1.5-2m wide with min 500mm verge	0	1	2
Pavement 1.5-2m wide no verge	0	0	1
Pavement <1.5m wide	0	0	0

Junction of High Street and Park Lane – an example of the problem due to the width of the pavement

Colney Heath Pavement Assessment

This walking route assessment tool (WEAT) has been prepared by the Welsh Active Travel Design Guidance to assist local authorities in auditing walking routes. A score of 70% should normally be regarded as minimum level of provision overall (max score 40 100%).

Road / route name High Street, Colney Heath

From High Street, Colney Heath school to A414 North Orbital Road length of route 650m

Height difference 3m (this excludes the A414 foot bridge)

Route map (google maps) Colney Heath School to A414 Colney Heath Lane

Route map (google maps) Colney Heath School to A414 Smallford Lane

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
1 Attractiveness Maintenance	Footway well maintained with no significant issues	Minor littering. Overgrown vegetation Street furniture falling into disrepair e.g., paint peeling	Littering and/or dog mess present Seriously overgrown vegetation Street furniture falling into disrepair	**1**	Minor littering Some broken edges of path
2 Attractiveness Fear of Crime	No evidence of vandalism with appropriate surveillance	Minor vandalism. Lack of active frontage and natural surveillance (e.g., House set back or onto street)	Major or prevalent vandalism Evidence of criminal/antisocial activity. Route isolated, not subject to any natural surveillance Include where sight lines are inadequate.	**2**	
3 Attractiveness Traffic noise & pollution	Traffic noise & pollution do not affect attractiveness	Level of traffic noise and/or pollution could be improved	Severe traffic pollution and or traffic noise.	**1**	Speed of vehicles could be reduced
$ Attractiveness other	Example of other attractiveness Evidence of lighting not present or deficient Temporary features affecting the attractiveness waste bins Excessive use of guardrails or bollards				
Attractiveness					
5 Comfort Condition	Footways level and in good condition with no trip hazards	Some defects noted, typically isolated (such as trenching or patching) or minor (such cracked but level pavers). Defects which are unlikely to result in a trip hazard or difficulty for prams or wheelchairs etc. Some crossovers resulting in uneven surface.	Large number of crossovers resulting in uneven surface, subsided or fretted pavement or significant uneven patching.	**1**	

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
6 Comfort Footway width	Able to accommodate all users without give and take or walking on the road over 2m wide	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**1**	Examples of grass verge growing over paved area
7 Comfort Width on stagger crossings Pedestrian Islands/refuges	Able to accommodate all users without give and take or walking on the road over 2m wide to accommodate wheelchair users	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**2**	
8 Comfort Footway parking	No instances of vehicles parking on footways noted Clearance widths generally over 2m between permanent objects	Clearance widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road due to footway parking, some deviation from desire lines.	Clearance widths of less than 1.5m Footway parking requires users to give and take frequently, walk on roads and/or results in crowding/delays Footway parking caused significant deviation from desired line.	**1**	Authorised footway parking at Wistlea Crescent slightly narrows pavement. See notes on parking at Richardson Place.
9 Comfort gradient	There are no slopes on footway	Slopes exist but not exceeding 8 per cent (1 in 12)	Gradients exceed 8 per cent (1 in 12)	**1**	Slight gradient from bridge over stream at junction Church La and entrance to Football Club. See also assessor's notes
10 Comfort other	Example of other comfort issues include Temporary obstructions restricting clearance width for pedestrians e.g., Driveway gates opening on footway Barriers or gates restricting access Bus shelters restricting clearance Poorly drained footway resulting in noticeable ponding issues or slippery surfaces			**1**	Bus shelter, bus stops and telegraph pole in footway on south side by Wistlea Crescent No significant obstructions No gates opening onto footway

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
					Barriers in vicinity of pedestrian crossing appropriate. No standing water
Comfort					
11 Directness Footway provision	Footways are provided to cater for pedestrian desire lines e.g., adjacent to roads	Footway provision could be improved to better cater for pedestrian desire lines.	Footway not provided to cater for the desire lines.	**2**	Most facilities in village accessed via High Street
12 Directness Location of Crossing in relation to Desire lines	Crossing follow the desire lines	Crossings partly divert pedestrians away from desire lines	Crossing deviant significantly from desire lines.	**2**	Crossing outside school appropriate
13 Directness Gaps in traffic (where no controlled crossings present or likely to be present	Crossing of roads is easy, direct, and comfortable and without delay (<5s average)	Crossing the road direct but associated with some delay (up to average 15s)	Crossings of road associated indirect, or associated with a significant delay (>15s)	**1**	Dependent on time of day. Peak hours few gaps in traffic
14 Directness Impact of controlled crossings	Crossing are single phase pelican or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s on island.	Staggered crossings add significantly to journey time. Likely to wait >10sin pedestrian island	**1**	Outside school single phase
15 Directness Greenman time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from longer green man time but unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	**1**	See also assessor's notes
16 Directness Other	Examples of could include Routes to and from bus stops not accommodated Steps restricting access to all users Confusing layout			**0**	No crossing for bus stops at Wistlea Crescent.

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
Directness					
17 Safety Traffic volume	Traffic volume low, or pedestrians can keep a distance form moderate traffic volumes.	Traffic levels moderate and pedestrians in close proximity.	High volumes of traffic with pedestrians unable to keep their distance	**0**	Hi volumes during peak hours Pavements generally adjacent to carriageway.
18 Safety Traffic speed	Traffic volume low, or pedestrians can keep a distance form moderate traffic speeds.	Traffic levels moderate and pedestrians in close proximity.	High traffic speeds with pedestrians unable to keep their distance	**1**	Similar road, i.e., Tollgate Road assessed as 85 percentile of 37 mph
19 Safety Visibility	Good visibility for all users	Visibility could be somewhat improved but unlikely to deter users.	Poor visibility like to result in collisions	**2**	
Safety					
20 Coherence Dropped kerbs & tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerb and tactile paving provided but not up to current standards	Dropped kerbs and tactile paving absent or incorrect	**0**	Junctions at Park Lane, Cutmore Drive, Wistlea Crescent, Church Lane, cul de sac at 96 High Street and entrance to Football Club do not have both dropped kerbs and tactile paving.
Coherence					
Total Score				**21**	52.5% therefore below a satisfactory standard

Date of assessment: 8August 2023 and follow up and additional assessment February 2024

Initials of the person undertaking the study: IPS/MFR

Additional Information

Car parking on and restricting the pavement

Date - day	Date / Time	High Street	Richardson Place	Notes
24th February 2024 Saturday	10.30	1	7	Gap between cars only 300mm wide on path in Richardson Place.
26th February Monday	11.20	0	7	n/r
	11.45	0	9	Gap between cars only 600mm wide on path in Richardson Place.
	19.15	0	11	n/r
28th February Wednesday	15.00	0	4	Gap between cars only 350mm wide on path in Richardson Place.
	19.20	9	1	Gap between cars only 250mm wide on path in Richardson Place.

In the part of the High Street near Richardson Place three sub routes are possible

i) Continue walk on the pavement beside the road this involves crossing the turn ins for Richardson Place these have dropped curbs but no tactile paving.

ii) Follow the pavement in front of the hoses of Richardson Place this would involve no road or drive crossing but on pavement parking is an issue at times.

iii) Walk along the north side of the High Street before crossing nearer the A414 this avoids Richardson Place and number of minor road crossings but loses the advantage of zebra crossing. Authorised footway leaves a pavement width of about 1000mm. The crossing of Wistlea Crescent have dropped curb but no tactile paving minimum pavement width 750mm.

Assessor's notes

Crossing the A414 – two routes are possible the more direct using the controlled crossing or using the footbridge.

The foot bridge is considered the safest route, but this involves two 1 in 10 slopes each approximately 50m long.

The controlled crossing is two parts first crossing from the pave in the High Street to a small island in the junction to and from the High Street, then crossing the main A414, depending upon traffic flows the time is quite short so some people will need to pause in centre until the lights change again. The central refuge is of reasonable size to enable to people to wait safely.

Any tactile paving should be photographed, and measurements made so they can be checked against the current standards as per **Guidance on the use of Tactile Paving Surfaces.**

Tactile paving information

Location	High Street kerbside outside school southside	High Street kerbside outside school northside	High Street A414 southside
Width	240 cm	240 cm	400 cm
Length	40cm	40 cm	80 cm
Slope	Yes	Yes	Yes
If ribbed direction of rids in relation to walking route.	40x40cm stippled tiles	40x40cm stippled tiles	40x40cm stippled tiles
Photo			

Location	A414 across westbound carriageway	A414 across eastbound carriageway	A414 junction Colney Heath Lane west bound
Width	400 cm	400 cm	200 cm
Length	80 cm	80 cm	80 cm
Slope	Yes	Yes	Yes
If ribbed direction of rids in relation to walking route.	40x40cm stippled tiles	40x40cm stippled tiles	40x40cm stippled tiles
Photo			

Location	A414 junction Colney Heath Lane east bound	A414 junction Smallford Lane east bound	A414 junction Smallford Lane west bound
Width		160 cm	
Length		80 cm	
Slope		Yes	
If ribbed direction of rids in relation		40x40cm stippled tiles	

to walking route.			
Photo			

Colney Heath Pavement Assessment

This walking route assessment tool (WEAT) has been prepared by the Welsh Active Travel Design Guidance to assist local authorities in auditing walking routes. A score of 70% should normally be regarded as minimum level of provision overall (max score 40 100%).

Road / route name Colney Heath Lane

From A414 North Orbital Road to Hatfield Road length of route 1.2 Miles

Height difference 18m

Route map (Google Maps)

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
1 Attractiveness Maintenance	Footway well maintained with no significant issues	Minor littering. Overgrown vegetation Street furniture falling into disrepair e.g., paint peeling	Littering and/or dog mess present Seriously overgrown vegetation Street furniture falling into disrepair	**1**	West footway overgrown with some littering
2 Attractiveness Fear of Crime	No evidence of vandalism with appropriate surveillance	Minor vandalism. Lack of active frontage and natural surveillance (e.g., House set back or onto street)	Major or prevalent vandalism Evidence of criminal/antisocial activity. Route isolated, not subject to any natural surveillance	**1**	Lack of active surveillance from A414 to 30 limit sign.

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
			Include where sight lines are inadequate.		
3 Attractiveness Traffic noise & pollution	Traffic noise & pollution do not affect attractiveness	Level of traffic noise and/or pollution could be improved	Severe traffic pollution and or traffic noise.	**2**	30 mph limit in vicinity of most residential properties. Others set back
$ Attractiveness other	Example of other attractiveness Evidence of lighting not present or deficient Temporary features affecting the attractiveness waste bins Excessive use of guardrails or bollards			**0**	Lighting between Barley Mow Lane and 30 limit sign obscured by trees leaving pooled illumination
Attractiveness					
5 Comfort Condition	Footways level and in good condition with no trip hazards	Some defects noted, typically isolated (such as trenching or patching) or minor (such cracked but level pavers). Defects which are unlikely to result in a trip hazard or difficulty for prams or wheelchairs etc. Some crossovers resulting in uneven surface.	Large number of crossovers resulting in uneven surface, subsided or fretted pavement or significant uneven patching.	**1**	
6 Comfort Footway width	Able to accommodate all users without give and take or walking on the road over 2m wide	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**0**	Westside pavement narrow width too close to 40 mph traffic on narrow carriageway
7 Comfort Width on stagger crossings Pedestrian Islands/refuges	Able to accommodate all users without give and take or walking on the road over 2m wide to accommodate wheel chair users	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**0**	Less that 1.5 in places between Barley Mow La and 30 limit sign. Pedestrians must wait to pass or walk into narrow 40 mph road

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
8 Comfort Footway parking	No instances of vehicles parking on footways noted Clearance widths generally over 2m between permanent objects	Clearance widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road due to footway parking, some deviation from desire lines.	Clearance widths of less than 1.5m Footway parking requires users to give and take frequently, walk on roads and/or results in crowding/delays Footway parking caused significant deviation from desired line.	**2**	No footway parking observed
9 Comfort gradient	There are no slopes on footway	Slopes exist but not exceeding 8 per cent (1 in 12)	Gradients exceed 8 per cent (1 in 12)	**1**	There is a long slope from Barley Mow Lane NB School and a more strenuous gradient in both directions to top of bridge.
10 Comfort other	Example of other comfort issues include Temporary obstructions restricting clearance width for pedestrians e.g., Driveway gates opening on footway Barriers or gates restricting access Bus shelters restricting clearance Poorly drained footway resulting in noticeable ponding issues or slippery surfaces				
Comfort					
11 Directness Footway provision	Footways are provided to cater for pedestrian desire lines e.g., adjacent to roads	Footway provision could be improved to better cater for pedestrian desire lines.	Footway not provided to cater for the desire lines.	**2**	
12 Directness Location of Crossing in relation to Desire lines	Crossing follow the desire lines	Crossings partly divert pedestrians away from desire lines	Crossing deviant significantly from desire lines.	**2**	No crossings
13 Directness Gaps in traffic (where no controlled	Crossing of roads is easy, direct, and comfortable and without delay (<5s average)	Crossing the road direct but associated with some delay (up to average 15s)	Crossings of road associated indirect, or associated with a significant delay (>15s)	**2**	Crossing to and from NB School and associated bus stops

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
crossings present or likely to be present					
14 Directness Impact of controlled crossings	Crossing are single phase pelican or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s on island.	Staggered crossings add significantly to journey time. Likely to wait >10sin pedestrian island	**NA**	No controlled crossings
15 Directness Greenman time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from longer green man time but unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	**NA**	No Greenman
16 Directness Other	Examples of could include Routes to and from bus stops not accommodated Steps restricting access to all users Confusing layout				
Directness					
17 Safety Traffic volume	Traffic volume low, or pedestrians can keep a distance form moderate traffic volumes.	Traffic levels moderate and pedestrians in close proximity.	High volumes of traffic with pedestrians unable to keep their distance	**1**	No separation of carriageway and pavement for most of the route.
18 Safety Traffic speed	Traffic volume low, or pedestrians can keep a distance form moderate traffic speeds.	Traffic levels moderate and pedestrians in close proximity.	High traffic speeds with pedestrians unable to keep their distance	**1**	Less than 1.5 in 40 limit
19 Safety Visibility	Good visibility for all users	Visibility could be somewhat improved but unlikely to deter users.	Poor visibility like to result in collisions	**2**	
Safety					
20 Coherence Dropped kerbs & tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerb and tactile paving provided but not up to current standards	Dropped kerbs and tactile paving absent or incorrect	**0**	The following junctions do NOT have both dropped kerb and tactile paving:

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
					Barley Mow Lane Boissy Close Swans Close Hobbs Close Firwood Avenue
Coherence					
Total Score				**18**	

Date of assessment: 8August 2023

Initials of the person undertaking the study: IPS

Any tactile paving should be photographed, and measurements made so they can be checked against the current standards as per **Guidance on the use of Tactile Paving Surfaces.**

Tactile paving information

Location					
Width					
Length					
Slope					
If ribbed direction of rids in relation to walking route.					
Photo					

Traffic Speed

Traffic speeds are not fully defined in the Active Travel Design Guidance so the following scoring should be used.

Pavement width	**Traffic speed - unrestricted**	**Traffic speed - 40mph**	**Traffic speed - 30mph**
Pavement >2m wide with min 500mm verge width	2	2	2
Pavement >2m wide no verge	1	2	2
Pavement 1.5-2m wide with min 500mm verge	0	1	2
Pavement 1.5-2m wide no verge	0	0	1
Pavement <1.5m wide	0	0	0

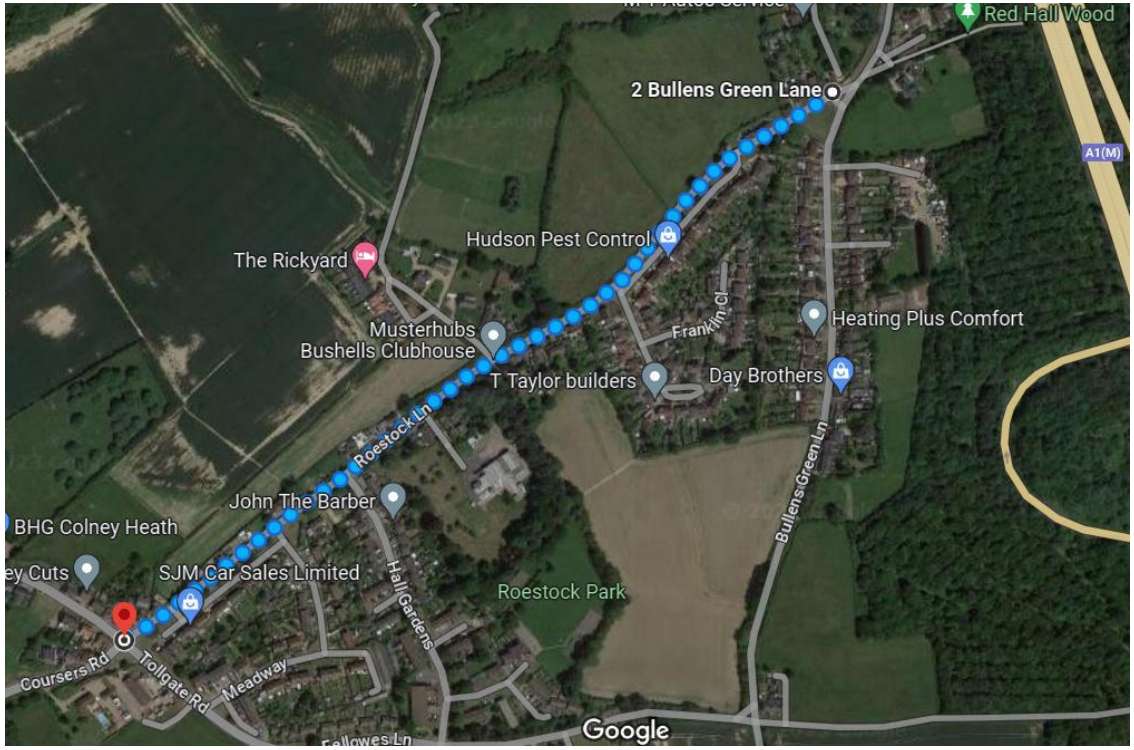
Colney Heath Pavement Assessment

This walking route assessment tool (WEAT) has been prepared by the Welsh Active Travel Design Guidance to assist local authorities in auditing walking routes. A score of 70% should normally be regarded as minimum level of provision overall (max score 40 100%).

Road / route name Roestock Lane

From Bullens Green Lane to High Street Colney Heath length of route 900m

Height difference 2m (Google Earth)



Map of route

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
1 Attractiveness Maintenance	Footway well maintained with no significant issues	Minor littering. Overgrown vegetation Street furniture falling into disrepair e.g., paint peeling	Littering and/or dog mess present Seriously overgrown vegetation Street furniture falling into disrepair	**0**	Pathway narrow and overgrown either side of water works
2 Attractiveness Fear of Crime	No evidence of vandalism with appropriate surveillance	Minor vandalism. Lack of active frontage and natural surveillance (e.g., House set back or onto street)	Major or prevalent vandalism Evidence of criminal/antisocial activity. Route isolated, not subject to any natural surveillance Include where sight lines are inadequate.	**2**	
3 Attractiveness Traffic noise & pollution	Traffic noise & pollution do not affect attractiveness	Level of traffic noise and/or pollution could be improved	Severe traffic pollution and or traffic noise.	**2**	
$ Attractiveness other	Example of other attractiveness Evidence of lighting not present or deficient Temporary features affecting the attractiveness waste bins Excessive use of guardrails or bollards			**0**	Waste bins on pathway
Attractiveness					
5 Comfort Condition					
6 Comfort Footway width	Able to accommodate all users without give and take or walking on the road over 2m wide	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**0**	Narrow below 1.5m along much of the route and only 600mm wide opposite The Granary
7 Comfort Width on stagger crossings Pedestrian Islands/refuges	Able to accommodate all users without give and take or walking on the road over 2m wide to accommodate wheelchair users	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**2**	

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
8 Comfort Footway parking	No instances of vehicles parking on footways noted Clearance widths generally over 2m between permanent objects	Clearance widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road due to footway parking, some deviation from desire lines.	Clearance widths of less than 1.5m Footway parking requires users to give and take frequently, walk on roads and/or results in crowding/delays Footway parking caused significant deviation from desired line.	**1**	On walkway parking
9 Comfort gradient	There are no slopes on footway	Slopes exist but not exceeding 8 per cent (1 in 12)	Gradients exceed 8 per cent (1 in 12)	**2**	Broadly level
10 Comfort other	Example of other comfort issues include Temporary obstructions restricting clearance width for pedestrians e.g., Driveway gates opening on footway Barriers or gates restricting access Bus shelters restricting clearance Poorly drained footway resulting in noticeable ponding issues or slippery surfaces			**0**	Pathway flooded and muddy in places, slip hazard.
Comfort					
11 Directness Footway provision	Footways are provided to cater for pedestrian desire lines e.g., adjacent to roads	Footway provision could be improved to better cater for pedestrian desire lines.	Footway not provided to cater for the desire lines.	**1**	Near Tollgate Road diversion from preferred line and **no** pathway link to the pavement in Bullens Green Lane
12 Directness Location of Crossing in relation to Desire lines	Crossing follows the desire lines	Crossings partly divert pedestrians away from desire lines	Crossing deviant significantly from desire lines.	**2**	n/a
13 Directness Gaps in traffic (where no controlled crossings present or likely to be present	Crossing od roads is easy, direct, and comfortable and without delay (<5s average)	Crossing the road direct but associated with some delay (up to average 15s)	Crossings of road associated indirect, or associated with a significant delay (>15s)	**2**	

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
14 Directness Impact of controlled crossings	Crossing are single phase pelican or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s on island.	Staggered crossings add significantly to journey time. Likely to wait >10sin pedestrian island	**2**	n/a
15 Directness Greenman time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from longer green man time but unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	**2**	n/a
16 Directness Other	Examples of could include Routes to and from bus stops not accommodated Steps restricting access to all users Confusing layout			**0**	No link to Bullens Green Lane East pavement.
Directness					
17 Safety Traffic volume	Traffic volume low, or pedestrians can keep a distance form moderate traffic volumes.	Traffic levels moderate and pedestrians in close proximity.	High volumes of traffic with pedestrians unable to keep their distance	**2**	
18 Safety Traffic speed	Traffic volume low, or pedestrians can keep a distance form moderate traffic speeds.	Traffic levels moderate and pedestrians in close proximity.	High traffic speeds with pedestrians unable to keep their distance	**2**	
19 Safety Visibility	Good visibility for all users	Visibility could be somewhat improved but unlikely to deter users.	Poor visibility like to result in collisions	**1**	Parking in Hall Gardens and Meadway, so reduced visibility.
Safety					
20 Coherence Dropped kerbs & tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerb and tactile paving provided but not up to current standards	Dropped kerbs and tactile paving absent or incorrect	**0**	No dropped kerb or tactile paving on many of the road crossings
Coherence					

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
Total Score				**23**	**57.5% therefore below satisfactory standard**

Date of assessment 19th April 2023

Initials of the person undertaking the study MFR, JR

Any tactile paving should be photographed, and measurements made so they can be checked against the current standards as per **Guidance on the use of Tactile Paving Surfaces.**

Tactile paving information

Location	Near Invicta Cottages	Roestock Gardens	Water works	Hall Gardens	Meadway
Width	None	None	None	None	None
Length	None	None	None	None	None
Slope	None	None	None	None	None
If ribbed direction of rids in relation to walking route.					
Photo taken	Yes	Yes	Yes	Yes	Yes

Location	Roestock Lane service Road	Near High Street			
Width	None	1600mm			
Length	None	800mm			
Slope	None	yes			

If ribbed direction of rids in relation to walking route.					
Photo taken	Yes	Yes			

Traffic Speed

Traffic speeds are not fully defined in the Active Travel Design Guidance so the following scoring should be used.

Pavement width	Traffic speed - unrestricted	Traffic speed - 40mph	Traffic speed - 30mph
Pavement >2m wide with min 500mm verge width	2	2	2
Pavement >2m wide no verge	1	2	2
Pavement 1.5-2m wide with min 500mm verge	0	1	2
Pavement 1.5-2m wide no verge	0	0	1
Pavement <1.5m wide	0	0	0

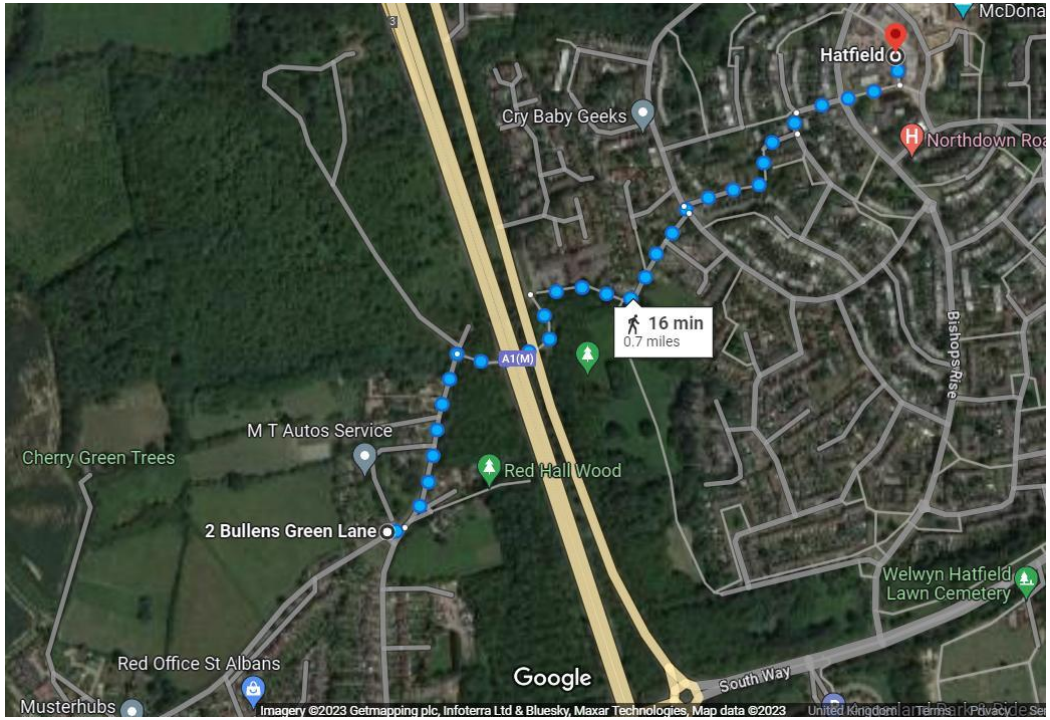
Colney Heath Pavement Assessment

This walking route assessment tool (WRAT) has been prepared by the Welsh Active Travel Design Guidance to assist local authorities in auditing walking routes. A score of 70% should normally be regarded as minimum level of provision overall (max score 40 100%).

Road / route name Bullens Green to Hatfield Hilltop

From Bullens Green Lane to Hilltop Hatfield length of route 1.1km

Height difference 30m (Google Earth)



Route map

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
1 Attractiveness Maintenance	Footway well maintained with no significant issues	Minor littering. Overgrown vegetation Street furniture falling into disrepair e.g., paint peeling	Littering and/or dog mess present Seriously overgrown vegetation Street furniture falling into disrepair	**0**	A1(M) subway & its approach and rural parts of route are all below standard, in

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
					need of major roadwork repair on slip road
2 Attractiveness Fear of Crime	No evidence of vandalism with appropriate surveillance	Minor vandalism. Lack of active frontage and natural surveillance (e.g., House set back or onto street)	Major or prevalent vandalism Evidence of criminal/antisocial activity. Route isolated, not subject to any natural surveillance Include where sight lines are inadequate.	**0**	In A1(M) subway vandalism and ASB Parish Councillor violently robbed in Lane End 100m north of subway.
3 Attractiveness Traffic noise & pollution	Traffic noise & pollution do not affect attractiveness	Level of traffic noise and/or pollution could be improved	Severe traffic pollution and or traffic noise.	**2**	Passes under A1M
$ Attractiveness other	Example of other attractiveness Evidence of lighting not present or deficient Temporary features affecting the attractiveness waste bins Excessive use of guardrails or bollards			**0**	Rural parts no street lighting, overgrown and/or mud on path
Attractiveness					
5 Comfort Condition	Footways level and in good condition with no trip hazards	Some defects noted, typically isolated (such as trenching or patching) or minor (such cracked but level pavers). Defects which are unlikely to result in a trip hazard or difficulty for prams or wheelchairs etc. Some crossovers resulting in uneven surface.	Large number of crossovers resulting in uneven surface, subsided or fretted pavement or significant uneven patching.	**0**	Pathway in bad condition in many places. A1(M) subway prone to flooding and closure, meaning no access to shops for long periods.
6 Comfort Footway width	Able to accommodate all users without give and take	Footway widths between approximately 1.5 and 2m Occasional need for give and	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited	**0**	Less than 1m wide in many places,

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
	or walking on the road over 2m wide	take between users and walking on the road.	footway width requires users to give and take frequently, walk on roads and/or results in crowding.		narrowest record was 600mm wide.
7 Comfort Width on stagger crossings Pedestrian Islands/refuges	Able to accommodate all users without give and take or walking on the road over 2m wide to accommodate wheelchair users	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**0**	Less than 1m wide in many places, narrowest record was 800mm, some area impossible for wheelchair users.
8 Comfort Footway parking	No instances of vehicles parking on footways noted Clearance widths generally over 2m between permanent objects	Clearance widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road due to footway parking, some deviation from desire lines.	Clearance widths of less than 1.5m Footway parking requires users to give and take frequently, walk on roads and/or results in crowding/delays Footway parking caused significant deviation from desired line.	**0**	Parking on pavement in Lane End
9 Comfort gradient	There are no slopes on footway	Slopes exist but not exceeding 8 per cent (1 in 12)	Gradients exceed 8 per cent (1 in 12)	**0**	Mostly satisfactory but 2 lengths are steep
10 Comfort other	Example of other comfort issues include Temporary obstructions restricting clearance width for pedestrians e.g., Driveway gates opening on footway Barriers or gates restricting access Bus shelters restricting clearance Poorly drained footway resulting in noticeable ponding issues or slippery surfaces			**0**	Slip hazard due to mud on path. Overhanging brambles and roses are a potential scratch and eyesight risk
Comfort					

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
11 Directness Footway provision	Footways are provided to cater for pedestrian desire lines e.g., adjacent to roads	Footway provision could be improved to better cater for pedestrian desire lines.	Footway not provided to cater for the desire lines.	**2**	Design considered satisfactory.
12 Directness Location of Crossing in relation to Desire lines	Crossing follow the desire lines	Crossings partly divert pedestrians away from desire lines	Crossing deviant significantly from desire lines.	**2**	Design considered satisfactory as it reduced some the steepest slopes
13 Directness Gaps in traffic (where no controlled crossings present or likely to be present	Crossing od roads is easy, direct, and comfortable and without delay (<5s average)	Crossing the road direct but associated with some delay (up to average 15s)	Crossings of road associated indirect, or associated with a significant delay (>15s)	**1**	Bishops Rise is a busy road and the natural (unmarked) crossing point is on a slight bend with traffic approaching uphill.
14 Directness Impact of controlled crossings	Crossing are single phase pelican or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s on island.	Staggered crossings add significantly to journey time. Likely to wait >10sin pedestrian island	**2**	n/a
15 Directness Greenman time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from longer green man time but unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	**2**	n/a
16 Directness Other	Examples of could include Routes to and from bus stops not accommodated Steps restricting access to all users Confusing layout			**0**	Steps on only access to the shops
Directness					
17 Safety Traffic volume	Traffic volume low, or pedestrians can keep a distance form moderate traffic volumes.	Traffic levels moderate and pedestrians in close proximity.	High volumes of traffic with pedestrians unable to keep their distance	**2**	See Bishops Rise comments

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
18 Safety Traffic speed	Traffic volume low, or pedestrians can keep a distance form moderate traffic speeds.	Traffic levels moderate and pedestrians in close proximity.	High traffic speeds with pedestrians unable to keep their distance	**2**	
19 Safety Visibility	Good visibility for all users	Visibility could be somewhat improved but unlikely to deter users.	Poor visibility likely to result in collisions	**2**	See Bishops Rise comments
Safety					
20 Coherence Dropped kerbs & tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerb and tactile paving provided but not up to current standards	Dropped kerbs and tactile paving absent or incorrect	**0**	Some crossing had no dropped curbs and/or tactile paving see below
Coherence					
Total Score				**17**	**57.5% Therefore below satisfactory standard**

Date of assessment 16th April 2023

Initials of the person undertaking the study MFR, JR

Any tactile paving should be photographed, and measurements made so they can be checked against the current standards as per **Guidance on the use of Tactile Paving Surfaces.**

Tactile paving information

Location	Corry's End	Fairholm	The Grange	Bullens Green Lane	Lane End south

Width	None	None	None	None	1600mm
Length	None	None	None	None	1600mm
Slope	None	None	None	none	level
If ribbed direction of rids in relation to walking route.	Flat no raised kerb				Dots
Photo					Yes

Location	Lane End / Hazel Grove	Lane End / Willow Way	Willow Way Bishops Rise		
Width	1600mm	None	None		
Length	2000mm	None	None		
Slope	level	None	None		
If ribbed direction of rids in relation to walking route.					
Photo	Yes		yes		

Traffic Speed

Traffic speeds are not fully defined in the Active Travel Design Guidance so the following scoring should be used.

Pavement width	**Traffic speed - unrestricted**	**Traffic speed - 40mph**	**Traffic speed - 30mph**
Pavement >2m wide with min 500mm verge width	2	2	2
Pavement >2m wide no verge	1	2	2

Pavement 1.5-2m wide with min 500mm verge	0	1	2
Pavement 1.5-2m wide no verge	0	0	1
Pavement <1.5m wide	0	0	0

A1(M) subway Roestock Lane – Hatfield flooding January 2023

Colney Heath Pavement Assessment

This walking route assessment tool (WEAT) has been prepared by the Welsh Active Travel Design Guidance to assist local authorities in auditing walking routes. A score of 70% should normally be regarded as minimum level of provision overall (max score 40 100%).

Road / route name: Smallford Lane and Station Road

From A414 North Orbital Road to Hatfield Road length of route 0.9 Miles

Height difference 5m

Route Map (Google Maps)

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
1 Attractiveness Maintenance	Footway well maintained with no significant issues	Minor littering. Overgrown vegetation Street furniture falling into disrepair e.g., paint peeling	Littering and/or dog mess present Seriously overgrown vegetation Street furniture falling into disrepair	**1**	Minor littering Overgrown vegetation on the Smallford Bridge "bypass (Peggy's Path) (southside) and path between bridge and Sleapshyde La.
2 Attractiveness Fear of Crime	No evidence of vandalism with appropriate surveillance	Minor vandalism. Lack of active frontage and natural surveillance (e.g., House set back or onto street)	Major or prevalent vandalism Evidence of criminal/antisocial activity. Route isolated, not subject to any natural surveillance Include where sight lines are inadequate.	**2**	No evidence of vandalism. Road overlooked except for Smallford Bridge "bypass across Alban Way and between Wilkins Green Lane and Sleapshyde Lane
3 Attractiveness Traffic noise & pollution	Traffic noise & pollution do not affect attractiveness	Level of traffic noise and/or pollution could be improved	Severe traffic pollution and or traffic noise.	**1**	40 mph roads Limited action to improve
$ Attractiveness other	Example of other attractiveness Evidence of lighting not present or deficient Temporary features affecting the attractiveness waste bins Excessive use of guardrails or bollards			**2**	Lighting functional
Attractiveness					
5 Comfort Condition	Footways level and in good condition with no trip hazards	Some defects noted, typically isolated (such as trenching or patching) or minor (such cracked but level pavers). Defects which are unlikely to result in a trip hazard or difficulty for prams or wheelchairs etc. Some	Large number of crossovers resulting in uneven surface, subsided or fretted pavement or significant uneven patching.	**1**	Minor broken surfaces and edges. No clear trip hazards

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
		crossovers resulting in uneven surface.			
6 Comfort Footway width	Able to accommodate all users without give and take or walking on the road over 2m wide	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**0**	Bridge bypass southside overgrown down to 1.0 m in places. Very narrow footpath over Smallford bridge. Not generally used in favour of bypass
7 Comfort Width on stagger crossings Pedestrian Islands/refuges	Able to accommodate all users without give and take or walking on the road over 2m wide to accommodate wheel chair users	Footway widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road.	Footway widths of less than 1.5m (i.e. standard wheelchair width) Limited footway width requires users to give and take frequently, walk on roads and/or results in crowding.	**1**	Crossing near A414 unsafe, safer to walk further into Smallford Lane and cross, but with no traffic island and higher traffic speeds however with better sightlines.
8 Comfort Footway parking	No instances of vehicles parking on footways noted Clearance widths generally over 2m between permanent objects	Clearance widths between approximately 1.5 and 2m Occasional need for give and take between users and walking on the road due to footway parking, some deviation from desire lines.	Clearance widths of less than 1.5m Footway parking requires users to give and take frequently, walk on roads and/or results in crowding/delays Footway parking caused significant deviation from desired line.	**2**	No examples of footway parking One example of parking on verge
9 Comfort gradient	There are no slopes on footway	Slopes exist but not exceeding 8 per cent (1 in 12)	Gradients exceed 8 per cent (1 in 12)	**1**	The is a gradient both ways up to Smallford Bridge but not generally used as a footpath.
10 Comfort other	Example of other comfort issues include Temporary obstructions restricting clearance width for pedestrians e.g., Driveway gates opening on footway Barriers or gates restricting access			**1**	Where the bridge bypass crosses the Alban Way, there are examples of impassible flooding

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
	Bus shelters restricting clearance Poorly drained footway resulting in noticeable ponding issues or slippery surfaces				resulting of the use of the very narrow path over the bridge.
Comfort					
11 Directness Footway provision	Footways are provided to cater for pedestrian desire lines e.g., adjacent to roads	Footway provision could be improved to better cater for pedestrian desire lines.	Footway not provided to cater for the desire lines.	**2**	The route is a direct route
12 Directness Location of Crossing in relation to Desire lines	Crossing follow the desire lines	Crossings partly divert pedestrians away from desire lines	Crossing deviant significantly from desire lines.	**2**	
13 Directness Gaps in traffic (where no controlled crossings present or likely to be present	Crossing of roads is easy, direct, and comfortable and without delay (<5s average)	Crossing the road direct but associated with some delay (up to average 15s)	Crossings of road associated indirect, or associated with a significant delay (>15s)	**2**	There are no controlled crossings. The route is east side only Generally the crossing are to northbound bus stops. Generally, it is only peak hours is there likely to be a delay.
14 Directness Impact of controlled crossings	Crossing are single phase pelican or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s on island.	Staggered crossings add significantly to journey time. Likely to wait >10sin pedestrian island	**NA**	No controlled crossing
15 Directness Greenman time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from longer green man time but unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	**NA**	No Greenman
16 Directness Other	Examples of could include Routes to and from bus stops not accommodated Steps restricting access to all users Confusing layout			**0**	Bridge bypass is an unsegregated cycle and pedestrian pathway resulting in potential

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
					conflict between pedestrians and cyclists also floods at times.
Directness					
17 Safety Traffic volume	Traffic volume low, or pedestrians can keep a distance form moderate traffic volumes.	Traffic levels moderate and pedestrians in close proximity.	High volumes of traffic with pedestrians unable to keep their distance	**1**	Traffic heavy during peak times. Pedestrians close to carriageway between Wilkins Green La and Sleapshyde La.
18 Safety Traffic speed	Traffic volume low, or pedestrians can keep a distance form moderate traffic speeds.	Traffic levels moderate and pedestrians in close proximity.	High traffic speeds with pedestrians unable to keep their distance	**1**	40 mph limit Pedestrians close to carriageway between Wilkins Green La and Sleapshyde La.
19 Safety Visibility	Good visibility for all users	Visibility could be somewhat improved but unlikely to deter users.	Poor visibility like to result in collisions	**2**	Visibility for pedestrians is generally good except for going over bridge that is unlikely.
Safety					
20 Coherence Dropped kerbs & tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerb and tactile paving provided but not up to current standards	Dropped kerbs and tactile paving absent or incorrect	**0**	There are dropped kerbs with tactile tiles at junctions with Wilkins Green Lane and North Orbital Road. The following junction do not have both a dropped kerb and tactile tiles: Sleapshyde Lane Sleapscross Gardens.

Audit categories	2 Green	1 Amber	0 Red	Score	Comments
Coherence					
Total Score				**20**	**50% Therefore below satisfactory standard**

Date of assessment: 8August 2023

Initials of the person undertaking the study: IPS

Any tactile paving should be photographed, and measurements made so they can be checked against the current standards as per **Guidance on the use of Tactile Paving Surfaces.**

Tactile paving information

Location	Station Road junction Wilkins Green Lane
Width	160 cm
Length	200 cm curved
Slope	Yes
If ribbed direction of rids in relation to walking route.	40x40cm stippled tiles

Photo	
Comment	4x4 tiles across path forming L

The flooded pavement route crossing of Alban Way winter 2024 (the crossing using the bridge is very narrow with no pavement)

Alban Way and the path route were impassable at this time.

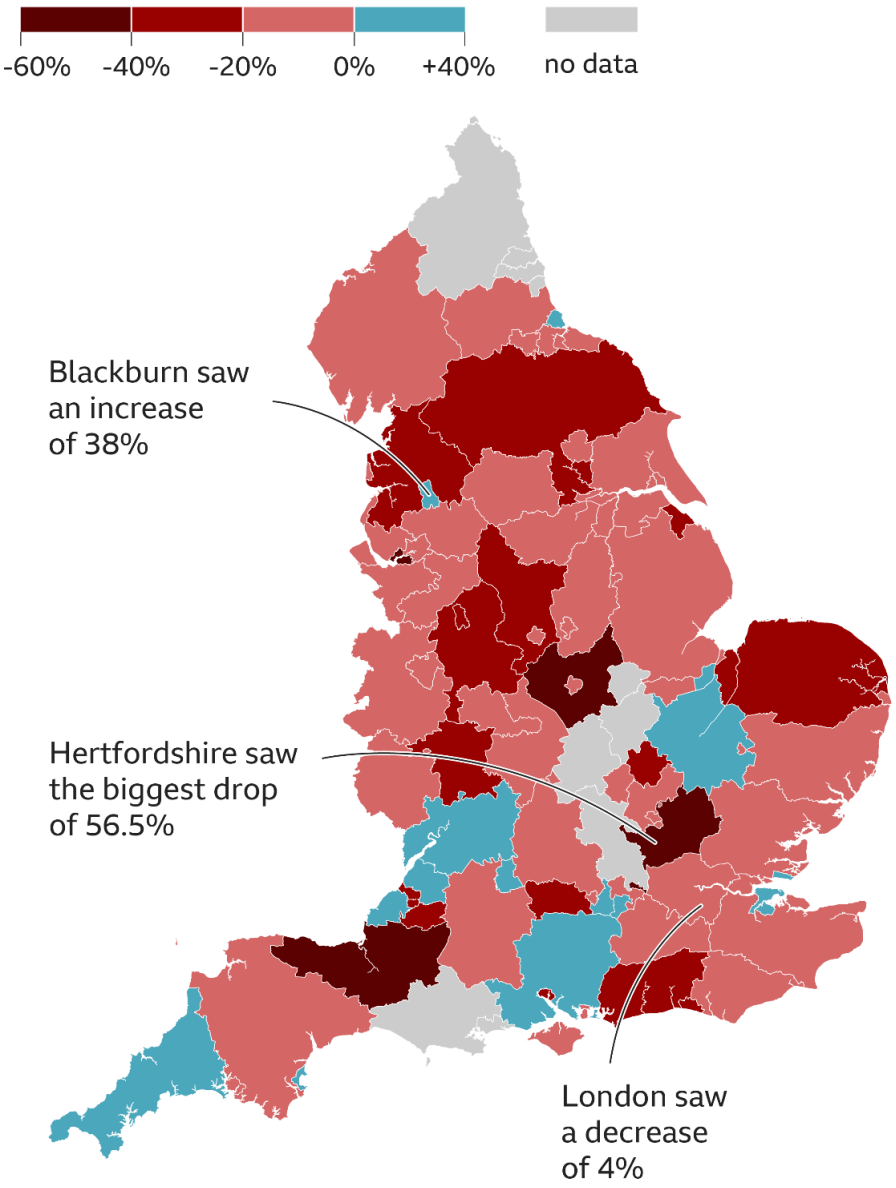
Appendix D

Bus cuts: How a city's bus service was quietly cut in half BBC 20 February 2023 Stoke-on-Trent www.bbc.co.uk/news/uk-64651414

Bus networks are shrinking across Britain, but the cuts have gone much deeper in some areas than others, BBC analysis has found. In some places, services have been slashed by more than a third. William McLennan met some of the people who are left behind when the buses stop running.

Bus services have been cut across England

Percentage change in vehicle miles on bus services in 2021-22 compared with 2016-17, by transport authority



Note: Data unavailable for newly formed or merged local authorities

Source: Department for Transport

BBC

On a cold February evening, Michael Middleton pulls a thick black beanie over his ears as he walks home beside a thundering dual carriageway after a late shift packing orders in a warehouse.

The number 6 bus used to deliver him home - warm and dry - within about half an hour of clocking off at 22:00, but since 2019 the service into Stoke-on-Trent no longer runs after 21:15.

So instead, he and a colleague follow a litter-strewn path beside the A50, shouting their conversation to each other to be heard over the roar of lorries.

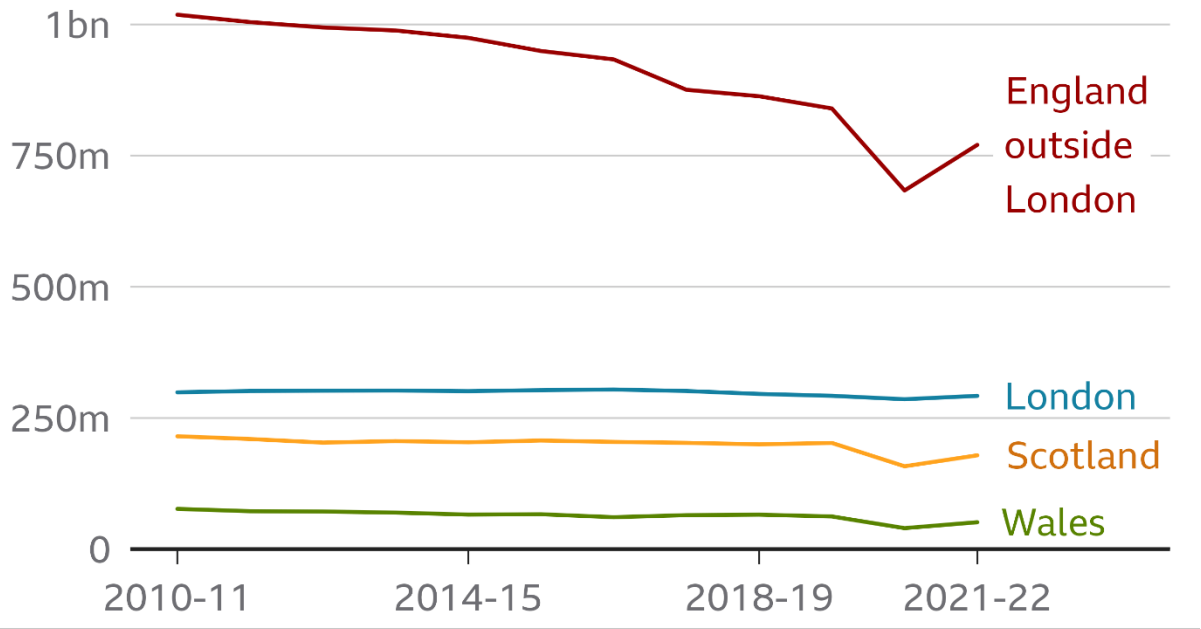
"We just try to block it out," the 61-year-old says. "We try to talk about anything to not think about it."
Across the city, bus services shrank by an estimated 37% in the five years to March 2022. Over an eight-year period from 2013-14, that reduction stands at 50%. In large part, the reductions have not come from the closure of entire routes. Rather, repeated timetable changes - often, passengers are told, in the name of improving "reliability" - have quietly cut services, reducing how frequently a bus arrives, or how late into the evening it runs.
It is an extreme example of a nationwide decline. Across Britain, the local bus network has shrunk by an estimated 14% between 2016-17 and 2021-22, BBC analysis of Department for Transport figures suggests. The total distance covered by buses each year fell by 210 million miles (338 million kilometres).

Demand for buses, which had been gradually declining for several years, plummeted during the pandemic and has not recovered. Passenger numbers across Britain, excluding London, remain about 20% below pre-pandemic levels, according to the **latest figures**.
For the past three years, the industry has been propped up by government grants totalling more than £2bn.
Despite the decline, buses still account for just under half of all public transport journeys in England. People from lower-income households are both more likely to use the bus, and less likely to have access to a car, **official statistics show**.
In Stoke-on-Trent, the level of car ownership is below the national average, and in several inner-city neighbourhoods, **more than 60% of households** do not have use of a car.
"Mainly round here now, it's all minimum wage," says Michael. He worked as a miner in the 1980s - then, after the pits closed, he was a supermarket floor manager, before spending 10 years caring full-time for his wife, who had a rare neurological condition. After she died four years ago, he took the job at the warehouse. "The money they pay you, you can't afford to run a car," he says.
Known as the Potteries, the city is made of six towns strung together by a network of busy A-roads and a shared industrial heritage.
Tens of thousands of people once worked in ceramics factories, but the city has been remoulded by the 20th Century collapse of British manufacturing. In its place, logistics and distribution companies have moved into warehouses across Stoke-on-Trent - now providing about one in 10 jobs.
Yet for low-paid employees, travelling to work has become a logistical nightmare in itself.
Early one February morning, in the far north of the city, Beverley Barnett stands on the pavement next to a chicken shop, the grey ground slick with drizzle.
Her face is lit by the screen of her smartphone, which she swipes compulsively to check whether her bus - the 3A - will arrive on time this morning.
The 38-year-old has allowed nearly an hour-and-a-half to make a journey that would take less than 20 minutes by car. Even so, she is often late into work at the secondary school where she supports children with special needs. Her managers are understanding, but she still worries about the impact on her job security.
"They're as accommodating as they can be, but the kids will be waiting to start," she says. "I do feel like I'm letting them down."

When she moved back to the city 11 years ago, she chose to live close to family, rather than within walking distance of work. At that time, it was a single bus journey lasting about 40 minutes, but the direct service was cut years ago.
She now faces the daily stress of a touch-and-go transfer at the city centre bus station. To make matters worse, she says, the frequency of early morning services was slashed during the pandemic and not restored. Even a short delay now means she will miss her connection and face a long wait for the next bus.
"I'll be checking [the app] all the time, thinking 'are we going to be on time'," she says. "The bus might be only five minutes late, but it adds almost an hour to my journey."
Later that day, Will Lovatt arrives at the bus station on his way home from college. The 18-year-old says unreliable buses regularly cause him to miss the start of lessons, and he fears it is having a "huge impact" on his education.
It is a sunny February afternoon, but he will soon be heading back to his family home in Werrington, on the eastern edge of the city. He would like to spend more time with friends, but the last bus to his village leaves at 19:30.
"It's very restrictive," he said. "By the time you get into something you have to say 'sorry guys I have to go'."
The Campaign for Better Transport has been receiving stories like this on an almost daily basis.
"Even if a bus route is not completely withdrawn, just making it so infrequent that it is impractical has the same impact," says Silviya Barrett, the group's director of policy and research.
Improving bus services - and persuading more people to switch from cars - is a key component of attempts to reach net zero carbon emissions, and must be a priority for the government, she says.
And yet, the costs of bus travel have risen much faster than those for driving. While car owners have enjoyed a 5% cut in fuel duty - which had already been frozen since 2011 - bus passengers have seen fares rise by more than 80% over the past 10 years, according to analysis by the RAC Foundation.
"People are not going to look at the options if it's cheaper for them to drive," Ms Barrett says.
The buses in Stoke-on-Trent, like the majority of services in England, are run by private companies. First Bus - the biggest operator in the city - says cuts to services are a direct result of dwindling demand. Passenger numbers on its services in the city have only returned to about 80% of pre-pandemic levels.
"There has been a gradual decline in demand, both in the Potteries but also across the UK," says Rob Hughes, the company's director of operations.
Even before Covid, the industry had been hit by the decline of the High Street, rise of online shopping and comparative fall in motoring costs.
"The pandemic has accelerated that decline in demand," Mr Hughes says, while rising fuel costs and a nationwide driver shortage have heaped on more costs.
It is a "pivotal time for the industry", he says.

Bus services fell most in England outside London

Estimated vehicle miles travelled, year to March 2010-11 to 2021-22, by GB nation and London



Source: Department for Transport

BBC

When private operators decide to alter or end a loss-making service, they must first inform the local authority - which has the option of stepping in with funding to keep the buses running. But in Stoke-on-Trent, the council has opted not to do that in recent years. It declined to comment when asked about this.

Across England, about 13% of services are supported by councils, although transport experts say this number has been falling steadily as local authority budgets shrunk.

"Irrespective of the model used to fund bus services, provision needs to match demand," says Mr Hughes. "We obviously can't run buses without passengers."

On Friday, the government announced a three-month extension of the Bus Recovery Grant, which had been due to end in March. It has also extended a £2 cap on single fares, intended to encourage people on to buses.

The Local Government Association had warned thousands more bus routes could be lost without further support. It welcomed the three-month extension, but said the government needed a "long-term, reformed bus funding model with significant new money".

Before the extension was announced, Mr Hughes told the BBC that First Bus had already begun telling local authorities which services could be cut without further support.

The government says it is committed to improving services across the country. It asked all local authorities to work with bus operators to develop "bus service improvement plans", and has awarded £1bn in funding.

Stoke-on-Trent City Council will receive £31m for its plans, which, among other things, aims to reduce fares, increase the frequency of services and provide more buses in the evening.

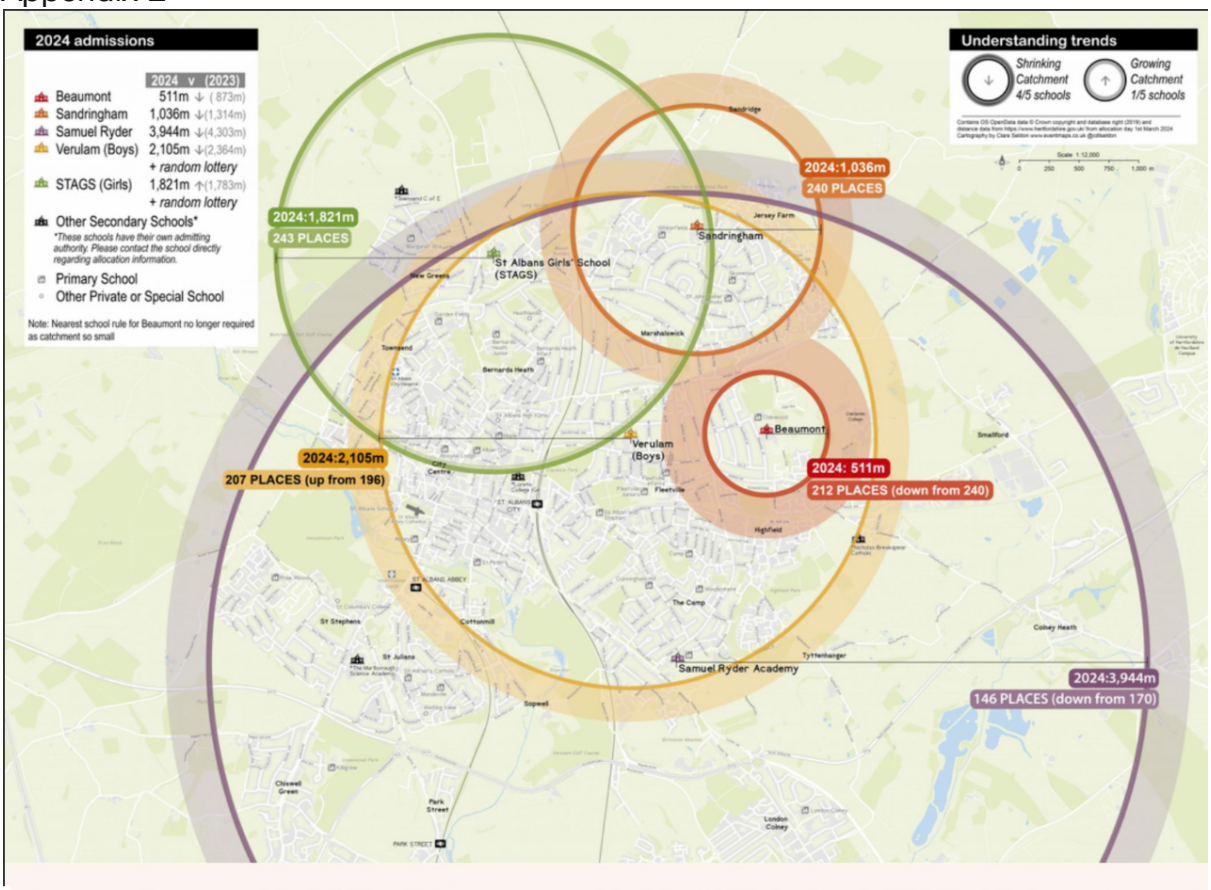
For Michael, change could not come soon enough. "The hours that we work, the bus services just don't suit," he says. "It doesn't serve us at all."

In his mining days, he never had to worry about getting to work. "The collieries put on their own work buses, so that wasn't a problem," he says. "[They] really looked after you. It was a different world."

He worries what impact the lack of public transport will have on the next generation. "If they went into the city centre to go to the pictures or something, there's no way back," he says. "They are being cut off from society."

Data analysis by Will Dahlgreen, Becky Dale, Rob England, Jonathan Fagg and Vanessa Fillis

Appendix E



Parents' frustrations over fall in places at secondary school

St Albans county councillors have furiously condemned HCC after it drastically reduced the boundaries for next year's intake of Year 7 pupils at Beaumont School.

On instruction from County Hall, the hugely popular 'Outstanding' school has reduced its intake from eight back down to seven forms following a couple of years taking the larger cohort, meaning the catchment has shrunk by 336m, a situation compounded by the building of two new housing estates on former school land.

This has left pupils who would have normally expected to attend the school in Year 7 being allocated places at single-sex and faith schools far from their homes.

County representatives Cllrs Chris White and Anthony Rowlands issued a joint statement in response to the change.

"HCC's unexplained decision to allocate 210 rather than 240 places at Beaumont School has caused outrage and dismay among local parents.

"As the two county councillors for the Beaumont catchment area, we are appalled that at no point has the Education Department made any attempt to inform us as local representatives of their decision.

"They were well aware that this decision would cause a furore.

"The leader of HCC, Cllr Richard Roberts, and the executive member for education, Cllr Caroline Clapper, have a lot of questions to answer.

"The school wish to admit 240 pupils. We expect the council to enable them to do so and to pledge to do so without further delay."

But HCC has said pupils who have not got into Beaumont are provided with school places elsewhere in the district, and there will be no change to this year's policy.

Cllr Caroline Clapper said: "We understand the disappointment of parents who applied for places at Beaumont School for next year but were not successful. In our planning for school places across St Albans, we

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