

Cycling Level of Service Assessment (CLoS) based on LTN 1/20							
Project Number	60677657						
Scheme	Ostman Road						
Location	York						
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Version Number							
Assessment By	MF						

Cycling Level of Service (CLOS)

Existing	Option 1	Option 2	Option 3

Key Requiremen	t Factor	Design Principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)		Comments	Score	Comments	Score	Comments	Score	Comments
	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.	Ability to join/leave route safely and easily considering left and right turns		Cyclists cannot connect to other routes without dismounting	minimal disruption to	dedicated connections to other routes provided, with no interruption to	Score 1	Quiet street cyclsists to ride on carriageway	1	Quiet street cyclsists to ride on carriageway	1	Quiet street cyclsists to ride on carriageway	1	Quiet street cyclsists to ride on carriageway
Coherence	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.	their journey Cyclists are provided with a continuous route, including through junctions	2	Connects existing advisory cycle routes of Danebury Avenue / Tostig Avenue.	2	Connects existing advisory cycle routes of Danebury Avenue / Tostig Avenue.	2	Connects existing advisory cycle routes of Danebury Avenue / Tostig Avenue.	2	Connects existing advisory cycle routes of Danebury Avenue / Tostig Avenue.
	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.  Routes should follow the shortest ootion available and be as near	on mesh width i.e. distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000  Deviation factor	Route contributes to a network density mesh width 250 - 1000m	Route contributes to a network density mesh width <250m	1	Sections of the York Cycle Network within 500m distance.	1	Sections of the York Cycle Network within 500m distance.	1	Sections of the York Cycle Network within 500m distance.	1	Sections of the York Cycle Network within 500m distance.
	Distance	to the 'as the-crow-flies' distance as possible.	Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		against straight line or shortest road alternative >1.4	against straight line or shortest road alternative 1.2 – 1.4	against straight line or shortest	2	Most direct route	2	Most direct route	2	Most direct route	2	Most direct route
	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, pedestrianonly zones etc.	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		2	Scaled from 0.4km scheme	0	Scaled from 0.4km scheme	0	Scaled from 0.4km scheme	0	Scaled from 0.4km scheme
	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 (e.g. bypass at signals)	1	Cyclists ride with other motor vehicles	1	Cyclists ride with other motor vehicles	1	Cyclists ride with other motor vehicles	1	Cyclists ride with other motor vehicles
	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	pass slow traffic and other cyclists	appropriate speed.	0	Width doesn't account for overtaking on on-street quiet route	0	Width doesn't account for overtaking on on-street quiet route	0	Width doesn't account for overtaking on on-street quiet route	0	Width doesn't account for overtaking on on-street quiet route
	Gradients	Routes should avoid steep gradents where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradent and allow users to retain momentum gained on the descent.	8.Gradient		Route includes sections steeper than the gradients recommended in Figure 4.4	gradients recommended in Figure 4.4	There are no sections of route which steeper than 2%	2	1.9% 20ft over 0.2 miles	2	1.9% 20ft over 0.2 miles	2	1.9% 20ft over 0.2 miles	2	1.9% 20ft over 0.2 miles
	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.	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	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit
	Avoid high motor	Cyclists should not be required to share the carriageway with		85th percentile > 37mph (60kph) >10000 AADT,	85th percentile >30mph 5000-10000	85th percentile 20mph-30mph 2500-5000 and	85th percentile <20mph 0-2500 AADT	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit
	traffic volumes	high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.  Where speed differences and high motor vehicle flows cannot be		or >5% HGV  Cyclists sharing	AADT and 2-5%HGV Cyclists in	<2% HGV  Cyclists in cycle	Cyclists on	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit
	collision	where speed unirentees are night motor vernice inovergative. See Table 6.2. This separation can be achieved at varying degrees through orthogonal cyte lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	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 motior yehicles moving easily into opposite lane to pass cyclists.	Cyclests in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclass In Cycle lanes at least 1.8m wide on carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists or 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.	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pc;24h and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24h and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <0000pcu24h and 20mph speed limit	2	Lanes between 3m and 3.2m and assume Motor Traffic Flow <2000pcu/24hr and 20mph speed limit
		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.			Side road junctions frequent and/or untreated. Major junctions, conflicting cycle/motor traffic movements not separated	effective entry treatments. Major junctions, principal	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.	o	Side road junctions untreated	2	Continuous footways across sideroads	2	Continuous footways across sideroads	2	Continuous footways across sideroads
	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	improved	Clear, understandable, simple road markings and road layout	1	Faded road markings	2	New road markings	2	New road markings	2	New road markings
	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.	activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	with kerbside activity (e.g. nearside cycle lane <2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity - e.g. less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.		0	Excessive unrestricted parking along the footway - On-street quiet route, no cycle lanes required.	1	Reduced level of parking along the footway - On-street quiet route, no cycle lanes required.	1	Reduced level of parking along the footway - On-street quiet route, no cycle lanes required.	1	Reduced level of parking along the footway - On-street quiet route, no cycle lanes required.
		Wherever possible routes should include "evasion room" (such as grass wriges) and avoid any unnecessary physical hazards such as guardrait, 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.	2	No features within the carriageway.	2	No features within the carriageway.	1	Proposed buildouts in the carraigeway.	2	No features within the carriageway.
		Density of defects including non cycle friendly ironworks, raised/sunken covers/gullies, potholes, poor quality carriageway paint (e.g. 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	1	CKD but defects in road surface	1	CKD but defects in road surface	1	CKD but defects in road surface	2	CKD and micro-resurfacing
Comfort	Surface quality	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 - e.g. Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.	1	Concrete with frequent joints	1	Concrete with frequent joints	1	Concrete with frequent joints	2	Micro-resurfacing
	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).		the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	of the route includes cycle provision with widths which are no more than 25% below desirable minimum	maintained throughout whole route	2	Meets criteria for quiet street	2	Meets criteria for quiet street	2	Meets criteria for quiet street	2	Meets criteria for quiet street
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20.Signing 21.Lighting		Route signing is poor with signs missing at key decision points. Most or all of	Gaps identified in route signing which could be improved Short and infrequent	Route is well signed with signs located at all decision points and junctions	1	Not currently cycle route	2	Proposed additional signage and road marking	2	Proposed additional signage and road marking	2	Proposed additional signage and road marking
	Social safety and perceived vulnerability of	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are	21.Lighting  22.Isolation		route is unlit	unlit/poorly lit sections Route is mainly	highway standards throughout Route is	2	Route is well lit throughout.	2	Route is well lit throughout.	2	Route is well lit throughout.	2	Route is well lit throughout.
Attractiveness	user Impact on	more attractive and therefore more likely to be used.  Introduction of dedicated on-road cycle provision can enable	23.lmpact on pedestrians			overlooked and is not far from activity throughout its length No impact on	overlooked throughout its length	2	Route overlooked by schools and residential property	2	Route overlooked by schools and residential property	2	Route overlooked by schools and residential property	2	Route overlooked by schools and residential property
	pedestrians, including people with disabilities	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.	Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 4.7)		negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	pedestrian provision or Pedestrian Comfort Level remains at B or above.	provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A	1	Existing	2	Scheme proposes widened 3m footways.	2	Scheme proposes widened 3m footways.	2	Scheme proposes widened 3m footways.
	Minimise street clutter	Signing required to support scheme layout	24.Street Clutter Signs are 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.	wayfinding purposes only and not causing additional obstruction.	1	School warning and stopping restriction signs, excessive use of wooden bollards	2	Reduced street clutter and improved public realm	2	Reduced street clutter and improved public realm	2	Reduced street clutter and improved public realm
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on street	25. Cycle parking Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure none overlooked areas	Some secure cycle parking provided but not enough to meet demand		33	No cycling parking	0	No proposed cycle parking	1 38	No proposed cycle parking, opportunity to include as part of parklet?	1 41	No proposed cycle parking, opportunity to include as part of parklet?
						Pass/F Any	Max possible score Audit % score Fail (70% threshold) Critical Fails? (Y/N) nber of Critical Fails	50 66% Fail No 0		50 76% Pass No 0		50 76% Pass No		50 82% Pass No 0	

Nu	mber of Critical Fails	0		0		0		0	
Criteria	Max Score	Sub- criteria Existing	% score Existing	Sub- criteria Proposed	% score Proposed	Sub- criteria Existing	% score Proposed	Sub-criteria Proposed	% score Proposed
Coherence	6	4	67%	4	67%	4	67%	4	67%
Directness	10	7	70%	5	50%	5	50%	5	50%
Safety	16	11	69%	15	94%	14	88%	15	94%
Comfort	8	5	63%	6	75%	6	75%	8	100%
Attractiveness	10	6	60%	8	80%	9	90%	9	90%
	50								