

Figure 2.3 Cycling Level of Service assessment matrix (part 1)

Factor	Indicator	Critical	Basic CLoS (score=0)	Good CLoS (score=1, or 3 for critical indicators)	Highest CLoS (score=2, or 6 for critical indicators)	Max score
Safety						
Collision risk	Left/right hook at junctions	Heavy streams of turning traffic cut across main cycling stream	Side road junctions frequent and/or untreated. Conflicting movements at major junctions not separated	Fewer side road junctions. Use of entry treatments. Conflicting movements on cycle routes are separated at major junctions	Side roads closed or footway is continuous. All conflicting streams separated at major junction	6
	Collision alongside or from behind	Nearside lane in pinch point range 3.2 to 3.9m	Cyclists in wide (4m+) nearside traffic lanes or cycle lanes less than 2m wide	Cyclists in cycle lanes at least 2m wide	Cyclists with a high degree of separation from motorised traffic	6
	Kerbside activity or risk of collision with door	Narrow cycle lanes <1.5m alongside parking/loading / no buffer	Frequent kerbside activity on nearside of cyclists / cycle lanes giving effective width of 1.5m	Less frequent kerbside activity on nearside of cyclists / cycle lanes giving effective width of 2m	No kerbside activity / Parking and loading on outside of cycling facility	6
	Other vehicle fails to give way or disobeys signals		Reasonable visibility, route continuity across junctions and priority not necessarily clear	Clear route continuity through junctions, good visibility, priority clear for all users, visual priority for cyclists across side roads	Cycle priority at signalised junctions; visual priority for cyclists across side roads	2
Feeling of safety	Separation from heavy traffic		Cycle lanes 1.5-2m wide / ASLs at junctions	Cycle lanes at least 2m wide / some form of separation	Cyclists physically separated from other traffic at junctions and on links	2
	Speed of traffic (where cyclists are not separated)	85th percentile greater than 30mph	85th percentile greater than 25mph	85th percentile 20-25mph	85th percentile less than 20mph	6
	Volume of traffic (where cyclists are not separated)	>1,000 vehicles / hour at peak	500 -1,000 vehicles / hour at peak < 5 per cent HGV or critical	200 - 500 vehicles / hour at peak, <2 per cent HGV	<200 vehicles / hour at peak	6
	Interaction with HGVs	Frequent, close interaction	Some interaction	Occasional interaction	No interaction	6
Social safety	Risk/fear of crime		Risk is managed: no 'ambush spots', reasonable level of street maintenance	Low risk: area is open, and well designed and maintained	No fear of crime: high quality streetscene and pleasant interaction	2
	Lighting		Some stretches of darkness	Few stretches of darkness	Route lit thoroughly	2
	Isolation		Route generally close to activity, for most of the day	Route close to activity, for all of the day	Route always overlooked	2
	Impact of highway design on behaviour		Seeks to controls behaviour in parts	Controls behaviour throughout	Encourages civilised behaviour: negotiation and forgiveness	2
Directness						
Journey time	Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle/cycle ahead	Cyclists can usually pass traffic and other cyclists	Cyclists choose their own speed (within reason)	2
	Delay to cyclists at junctions		Journey time slightly longer than motor vehicles	Journey time around the same as motor vehicles	Journey time less than motor vehicles (eg cyclists can bypass signals)	2
Value of time	For cyclists compared to private car use (normal weather conditions)		VOT only slightly greater than private car use value due to some site-specific factors	VOT equivalent to private car use value: similar delay-inducing factors and convenience	VOT less than private car use value due to attractive nature of route	2
Directness	Deviation of route (against straight line)		Deviation factor 35-50 per cent	Deviation factor 20-35 per cent	Deviation factor <20 per cent	2
Coherence						
Connections	Ability to join/leave route safely and easily		Cyclists do not have to dismount to connect to other routes	Cyclists can connect to other routes relatively easily	Cyclists provided with have dedicated connections to other routes	2
	Density of other routes		Network density mesh width >400m	Network density mesh width 250 - 400m	Network density mesh width <250m	2
Way-finding	Signing		Basic road markings provided	Some signs and road markings, making it hard to get lost	Consistent signing of range of routes and destinations at decision points	2

Figure 2.3 Cycling Level of Service assessment matrix (part 2)

Factor	Indicator	Critical	Basic CLoS (score=0)	Good CLoS (score=1, or 3 for critical indicators)	Highest CLoS (score=2, or 6 for critical indicators)	Max score
Comfort						
Surface quality	Defects: non cycle friendly ironworks, raised/ sunken covers/gullies	Major defects	Some localised defects but generally acceptable	Minor defects only	Smooth high grip surface	6
Surface material	Construction: asphalt concrete, HRA or blocks/bricks/sets		Hand laid asphalt; no unstable blocks/sets	Machine laid asphalt concrete or HRA; smooth blocks	Machine laid asphalt concrete; smooth and firm blocks undisturbed by turning vehicles	2
Effective width without conflict	Allocated riding zone range. Lane allocation each direction	<1.5m Superhighway <1.2m elsewhere	1.5-2.0m Superhighway 1.2-1.5m elsewhere (or 3-3.2m shared bus/cycle lane)	2.0-2.5m Superhighway 1.5-2.0m elsewhere (or 4.0m+ bus lane)	>2.5m Superhighway >2m elsewhere	6
Gradient	Uphill gradient over 100m		>5 per cent	3-5 per cent	<3 per cent	2
Deflections	Pinch points caused by horizontal deflections		(Remaining) lane width <3.2m	(Remaining) lane width >4.0m	Traffic is calmed so no need for horizontal deflections	2
Undulations	Vertical deflections		Round top humps	Sinusoidal humps	No vertical deflections	2
Attractiveness						
Impact on walking	Highway layout, function and road markings adjusted to minimise impact on pedestrians		Largely achieves Pedestrian Comfort Level (PCL) B but C in some high activity locations	No impact on pedestrian provision / PCL never lower than B	Pedestrian provision enhanced by cycling provision / PCL A	2
Greening	Green infrastructure or sustainable materials incorporated into design		No greening element	Some greening elements	Full integration of greening elements	2
Air quality	PM10 & NOX values referenced from concentration maps		Medium to High	Low to Medium	Low	2
Noise pollution	Noise level from recommended riding range		>78DB	65-78DB	<65DB	2
Minimise street clutter	Signage and road markings required to support scheme layout		Little signage in excess of regulatory requirements	Moderate amount of signage, particularly around junctions	Minimal signage, eg. for wayfinding purposes only	2
Secure cycle parking	Ease of access to secure cycle parking within businesses and on street		Minimum levels of cycle parking provided (ie to London Plan standards)	Some cycle parking provided above minimum, to meet current demand, and attention to quality and security	Cycle parking is provided to meet future demand and is of good quality, securely located	2
Adaptability						
Public transport integration	Smooth transition between modes or route continuity maintained through interchanges		No additional consideration for cyclists within interchange area	Cycle route continuity maintained through interchange and some cycle parking available	Cycle route continuity maintained and secure cycle parking provided. Transport of cycles available.	2
Flexibility	Facility can be expanded or layouts adopted within area constraints		No adjustments are possible within constraints. Road works may require some closure	Links can be adjusted to meet demand but junctions are constrained by vehicle capacity limitations. Road works will not require closure; cycling will be maintained although route quality may be compromised to some extent	Layout can be adapted freely without constrain to meet demand or collision risk. Adjustments can be made to maintain full route quality when roadworks are present	2
Growth enabled	Route matches predicted usage and has exceedence built into the design		Provision copes with current levels of demand	Provision is matched to predicted demand flows	Provision has spare capacity for large increases in predicted cycle use	2
TOTAL (max 100)						