APPENDIX 3 - Healthy Streets Assessment

Overview of the Healthy Streets Check for Designers

The objective

The Mayor of London is committed to taking the Healthy Streets Approach, which aims to put people and their health at the centre of decisions about how we design, manage and use public spaces. It aims to make our streets healthy, safe and welcoming for everyone. The Approach is based on the 10 Healthy Streets Indicators which focus on the experience of people using streets.

To support practitioners in delivering this Approach, guidance and tools are being produced by TfL. The Healthy Streets Check for Designers (the 'Check') is one of these tools. It has been developed to:
- Support designers be they in TfL, the London Boroughs or the private sector acting for developers in ensuring their proposed designs for new schemes that change the way streets are laid-out or used deliver improvements, in the round, against the ten Healthy Streets Indicators (compared with the existing conditions on that street).
- Inform the public how changes to the way streets are laid out and used are delivering improvements in line with Healthy Streets Approach.

The Check holds no formal status in guidance and decision making, but advises designers and decision makers on the fit of a project within Healthy Streets policy.

How the Check is applied

The Check is a technical tool that is primarily aimed at traffic engineers and urban designers who will have been trained by TfL to use it The Check can be applied to any scheme, but provides the greatest value when applied to schemes that expect to make a significant change to people's experience of the street environment.

The Check is an excel spreadsheet of 31 technical metrics against which, a street can be scored. A user manual is embedded within the spreadsheet for easy reference to more detailed guidance on its application. In general:
- The tool is applied to sections of street with uniform form and function.
- Routes, areas or networks will be divided into sections that have uniform form and function and the Check applied to each.
- The check is undertaken on the existing and proposed arrangements so that a comparison can be carried out.
- The street is assessed for its weakest point against each of the technical metrics. This may result in modest scores for some schemes but enables a consistent and fair evaluation, while ensuring that issues that cannot be designed out are identified.
- Once a street has been rated for the metrics in the Check these are converted into a score against each of the 10 Healthy Streets Indicators in a radar plot. This makes it easy to see at a glance the Healthy Street Indicator improvements that the new design will deliver against the current situation on-street.

How to interpret the results

The Healthy Streets Check score does not show whether a street is healthy or not but indicates the strengths and weaknesses of a scheme/street. It is not possible to achieve an overall score of 100%. To score well against some metrics, compromise will be needed with other metrics. This reflects the compromises inherent in any street. Should the assessment reveal one or more metrics scoring '0' the design should be reviewed to consider whether the '0' score can be improved. In some cases this will not be possible, and if so, the reasons should be recorded in the spreadsheet.

The Healthy Streets Check is not a scientific assessment of how healthy a street is. It is not the case that a street with a 10% increase in Healthy Streets Check score confers 10% greater health benefit to people who use it. It is also not the case that a 10% increase in Healthy Streets Check score will deliver a 10% uplift in active travel.

The metrics included in the Healthy Streets Check are the best available quantifiable and evidence based standards that are within the gift of the traffic engineer or urban designer to influence through the design of the street. The numbers must therefore not be given any undue weight in the interpretation of the results. The objective is to optimise the score for a given project, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated, where possible.

In a complex street environment a balanced approach must be taken; freeing up space for cycling or extending crossing times for pedestrians may produce delays for buses. Likewise removing a pinch point for cycles or buses may mean removing an island refuge for pedestrians or from the reverse perspective installing an island refuge may introduce a pinch point for buses and cycles. To be transparent and promote the best possible outcome in the round, recognising the difficult decisions designers must weigh up, the Check aims to identify and highlight these decisions so that stakeholders are informed as to what compromises have been made.

Welcome to the Healthy Streets Check for Designers

Please fill in the information below:

Name of scheme:	Southfields Underground Station
Scheme owner:	X
Design stage:	X
Design iteration:	X

How many segments will be assessed? 3

	Link (street)	**from** (side street)	**to** (side street)
Segment 1:	Wimbledon Park Road	Crowthorne Close	Gartmoor Gardens
Segment 2:	Augustus Road	Sutherland Grove	Wimbledon Park Road
Segment 3:	Replingham Road	Wimbledon Park Road	Clonmore Street
Segment 4:			
Segment 5:			

Who should use this?

This Check tool is for people involved in the design of street environments, primarily traffic engineers and urban designers. It is a technical tool that requires a good understanding of street engineering and traffic management to use it. With training and experience the Check results for a given street should not vary significantly from practitioner to practitioner.

The Guide to the Healthy Streets Indicators is a more accessible and general guide for a wider audience to qualitatively assess a street against the 10 Indicators of a Healthy Street.

When should the Check be applied?

The Healthy Streets Check can be applied to existing streets and to designs of proposed street layouts. At the earliest stages of street design we recommend reading the Guide to the Healthy Streets Indicators for a rounded understanding of the broad range of issues to consider in design. TfL Streetscape Guidance and other design guidance in the TfL Streets Toolkit should be used in the design process to meet best practice standards.

The Check does not hold formal status in guidance and decision making, but advises designers and decision makers on the fit of a project with the Healthy Streets Approach. It does not replace any standard audit procedures and should be considered as having the status of supplementary guidance. The optimum time to consider using the Check is during option assessment where the benefits of individual options can be compared against the existing conditions.

Where should you use the Healthy Streets Check?

The Healthy Streets Check is suitable for application to a segment of street that has a uniform character and at least one junction.

Defining the study area

Start by splitting the street into segments that are similar in form and function, this can be partly informed by the Street Type which indicates the movement and place functions of the street.

Each segment should include at least one junction.

For large schemes affecting a long stretch of street or several streets, the Healthy Streets Check should be applied to a series of segments.

When assessing a segment, if it is a minor road you assess the minor road junctions on it, you do not assess any junctions with major roads. If there is a junction between a minor road and a major road, the junction should be assessed as part of the major road's segment.

Collecting the data

To complete the Healthy Streets Check you will need the following data/material:

- Highway layout drawings which can be printed to scale or with dimensions on them.
- Urban design layout with material choice.
- Classified traffic counts, including turning movements.
- Pedestrian data to estimate pedestrian level of service and pedestrian desire crossing lines.
- Traffic speed with 85th percentile.
- Traffic lights stages and timing.
- NO2 concentrations derived from TfL's air quality model.

It is imperative to be able to accurately measure some elements of the street's design (through CAD drawings or with scale ruler). New kerb lines should always be shown clearly on drawings and text boxes should always indicate any change to the existing condition.

Every effort should be made to gather the data/drawings listed above prior completing the Check. However, if not available, the assessor should make estimates based on the best information available.

It is strongly advised to carry-out on-site visits as some elements of the Check cannot be completed by looking at a drawing or other data (e.g. defects on the walking/cycling surface, spacing between tree canopies).

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Segment 1: Wimbledon Park Road from Crowthorne Close to Gartmoor Gardens

	Metrics (Click on ⓘ for more guidance on scoring or open the '*Scoring guidance tab* ')	Scoring system 3	2	1	0	Enter score here: Existing layout	Proposed layout	Notes	How each metric contributes to the Healthy Streets Indicators' scores: Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean Air
1	**Total volume of two way motorised traffic**	There are fewer than 500 vehicles per hour at peak.	There are 500 to 1000 vehicles per hour at peak.	There are more than 1000 vehicles per hour at peak, where people cycling are separated from motorised traffic.	There are more than 1000 vehicles per hour at peak, where people cycling are mixed with motorised traffic.	2	2		✓	✓	–	–	–	✓	✓	–	✓	–
2	**Interaction between large vehicles and people cycling**	There will be no large vehicles using the street, or cycle traffic is separated from motorised traffic.	The proportion of large vehicles is less than 2% of motorised traffic, 7am to 7pm.	The proportion of large vehicles is 2% to 5% of motorised traffic, 7am to 7pm. **or** The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane at least 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next	The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane less than 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next general traffic lane is less than 4.5m.	0	0	Circa 15% two-way HGV flow.	✓	–	–	–	–	✓	✓	–	✓	–
3	**Speed of motorised traffic**	85th percentile speed is less than 20mph. **or** Existing 85th percentile speed is 20 to 25 mph, but there are some proposals to reduce speed further. **or** Existing 85th percentile speed is over 25 mph but a complete redesign of the street environment should reduce this to below 20mph.	85th percentile speed is 20 to 25mph. **or** Existing 85th percentile speed is 25 to 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is 25 to 30mph. **or** Existing 85th percentile speed is greater than 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is greater than 30mph. **or** Existing 85th percentile speed is greater than 30 mph, and there are no proposals to reduce this speed.	2	2	Data from ATC survey, circa 22.5 mph.	✓	✓	–	–	–	✓	✓	–	✓	–
4	**Traffic noise based on peak hour motorised traffic volumes**	There are fewer than 55 vehicles per hour (c. <58 DB).	There are 55 to 450 vehicles per hour (c. 58-70 DB).	There are more than 450 vehicles per hour (c. >70 DB).	–	1	1		✓	–	–	–	✓	✓	–	–	✓	–
5	**Noise from large vehicles**	The proportion of large vehicles is less than 5% (c. +0 to +3DB).	The proportion of large vehicles is 5 to 10% (c. +3 to +5 DB).	The proportion of large vehicles is greater than 10% (c. +5 DB and over).	–	1	1	Circa 15% two-way HGV flow.	✓	–	–	–	✓	✓	–	–	✓	–
6	**NO2 concentration** (from London Atmospheric Emission Inventory)	**If assessing existing:** The NO2 concentration is less than 32µg/m3. **If assessing proposal:** The existing NO2 concentration is less than 32µg/m3 **or** the existing concentration is 32 to 40µg/m3 with local traffic volume reduction measures proposed.	**If assessing existing:** The NO2 concentration is 32 to 40µg/m3. **If assessing proposal:** The existing NO2 concentration is 32 to 40µg/m3 with no proposal to reduce local traffic volume **or** the existing NO2 concentration is greater than 40µg/m3 with local traffic volume reduction	**If assessing existing:** The NO2 concentration is greater than 40µg/m3 (legal limit value). **If assessing proposal:** The existing NO2 concentration is greater than 40µg/m3 with no proposal to reduce local traffic volume.	–	1	1	Check with client if information is available. Assumed worst case.	✓	–	–	–	–	✓	–	–	–	✓
7	**Reducing private car use**	There is no through-movement for motorised traffic, with access limited to local residents, deliveries and public service vehicles.	There are some time or movement restrictions for motorised traffic.	There are no access restrictions for motorised traffic.	–	1	1		✓	✓	–	–	✓	✓	✓	–	✓	✓
8	**Comfort of crossing side roads for people walking**	Side roads are closed to motor traffic. **or** Side roads are one-way out for motor vehicles and have features to encourage drivers to turn cautiously.	Side roads are two-way or one-way in for motor vehicles, and have features to encourage drivers to turn cautiously.	Side roads have dropped kerbs only.	Side roads have no dropped kerbs.	1	2	Proposed improvement to Pirbright Road and Crowthorn Close.	✓	✓	–	–	–	✓	✓	–	✓	–
9	**Mid-link crossings, to meet desire lines**	Main desire lines across links are met by crossings suitable for all users at all times.	Main desire lines across links are met by crossings that are suitable some of the time but that do not meet demand all of the time.	Main desire lines across links are not met by pedestrian crossings.	–	2	2		✓	✓	–	–	–	✓	✓	–	✓	–
10	**Opportunity to cross the street away from junctions**	Crossing is uncontrolled, with conflicting traffic volume less than 200 vehicles per hour. **or** A zebra or parallel crossing is provided. **or** Crossing is signalised so that people crossing the main carriageway have priority, while traffic on the main carriageway has on-demand green.	Crossing is uncontrolled, with conflicting traffic volume between 200 and 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is less than 15m or greater than 15m in a 20mph speed limit. **or** Crossing is signalised and staggered where the distance to cross is greater than 15m in a 30mph+ speed limit.	Crossing is uncontrolled, with conflicting traffic volume greater than 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is greater than 15m in a 30mph+ speed limit.	–	2	2		✓	✓	–	–	–	✓	✓	–	✓	–
11	**Technology to optimise efficiency of movement** (pedestrians, cyclists, buses and general motor traffic)	All appropriate detection and optimisation technology has been applied to traffic signals.	Some detection and optimisation technology has been applied to traffic signals.	No detection and optimisation technology applied to traffic signals.		1	1	Confirm detection. Consider upgrades to better detection & pcat.	✓	✓	–	–	–	✓	✓	–	–	–
12	**Level of support for people using controlled crossings**	Many measures are in place to support controlled crossing.	Some measures are in place to support controlled crossing.	No measures are in place to support controlled crossing.	–	2	2	Confirm detection. Consider upgrades to better detection & pcat.	✓	✓	–	–	–	✓	✓	–	✓	–
13	**Width of clear continuous walking space**	There is 2.5m or more clear width for walking in busy locations. **or** There is 2m or more in moderately busy locations. **or** There is 1.5m or more in quiet locations.	There is 2m to 2.5m clear width for walking in busy locations. **or** There is 1.5m to 2m width in moderately busy locations.	There is 1.5m to 2m clear width for walking in busy locations.	There is less than 1.5m clear width for walking.	1	2	Proposals intorduce slight increase in footway width.	✓	–	–	✓	–	✓	✓	–	✓	–

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14	**Sharing of footway with people cycling**	No part of the footway is designated as shared use for walking and cycling.	Part or all of a footway wider than 3m with fewer than 200 pedestrians per hour is designated as shared use.	Part or all of a footway used by more than 200 pedestrians per hour is designated as shared use **or** Part or all of a footway less than 3m wide is designated as shared use.	–	**3**	**3**		✓	✓	–	–	–	✓	✓	–	✓	–
15	**Collision risk between people cycling and turning motor vehicles**	Side roads are closed to motorised traffic, or turning movements by motor vehicles are minimised **and** At signal-controlled junctions, all conflicting movements between cycle traffic and turning motor traffic are separated.	Some measures are in place to reduce turning movements by motor vehicles at priority junctions. **and** At signal-controlled junctions, cycle movements are not separated and fewer than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place.	There are no restrictions on turning movements by motor vehicles at side roads and other uncontrolled accesses. **and** At signal-controlled junctions, cycle movements are not separated and more than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place	At signal-controlled junctions, cycle movements are not separated, more than 5% of turning vehicle movements are made by larger vehicles and there are no mitigation measures in place.	**1**	**1**		✓	–	–	–	–	✓	✓	–	✓	–
16	**Effective width for cycling**	**Where cycles are separated from other traffic,** the width of the lane or track is 2.2m or more (one-way) or 3.5m or more (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is 4.5m or more.	**Where cycles are separated from other traffic,** the width of the lane or track is 1.5m to 2.2m (one-way) or 2.5m to 3.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 4m and 4.5m.	**Where cycles are separated from other traffic,** the width of the lane or track is less than 1.5m (one-way) or less than 2.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is less than 3.2m.	Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 3.2m and 3.9m.	**0**	**1**	Proposed changes include a reduction in current lane width to less than 3.2m.	✓	–	–	–	–	✓	✓	–	✓	–
17	**Impact of parking and loading on cycling**	There is no kerbside activity. **or** People cycling are physically separated from parking or loading facilities.	There is occasional kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	There is frequent or continuous kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	People cycling cannot maintain at least 1.0m clearance from vehicles parked or loading.	**0**	**1**	Scoring based on northern section.	✓	–	–	–	–	✓	✓	–	✓	–
18	**Quality of cycling surface**	The surface for cycling is even and smooth, with sufficient skid resistance. **or** There are defects but resurfacing of the whole cycling surface is proposed.	There are a few minor defects in the surface for cycling.	There are many minor defects in the surface for cycling.	There are major defects in the surface for cycling.	**2**	**3**	Proposed carriageway surfacing.	✓	–	–	–	–	✓	✓	–	✓	–
19	**Quality of walking surface**	There is an even and smooth surface for walking. **or** There are defects but resurfacing of the whole walking surface is proposed.	There are a few minor defects in the surface for walking.	There are many minor defects in the surface for walking.	There are major defects in the surface for walking.	**1**	**3**	Proposed footway surface improvements.	✓	✓	–	–	–	✓	✓	–	✓	–
20	**Surveillance of public spaces**	There is constant surveillance – because mixed use buildings overlook the street or space, or because there are many people using the space or walking through.	There is intermittent surveillance – because surrounding buildings are single-use or do not completely overlook the street, or because there are few people using the space or walking through.	There is poor surveillance – because few buildings overlook the street or space, there is little activity.	–	**3**	**3**		✓	–	–	✓	–	✓	✓	–	✓	–
21	**Lighting**	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201. **and** Lighting of off-carriageway facilities for walking or cycling meets the same standards.	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201 but lighting of off-carriageway spaces for walking or cycling does not.	Street lighting does not meet the British Standard 5489:2003 and the European Standard CEN/TR 13201.	–	**2**	**3**	Please note that the BS lighting standard stated in the report has been superseded by BS 5489-1-2013 and the proposed street lighting shall conform to the same.	✓	–	–	–	–	✓	✓	–	✓	–
22	**Provision of cycle parking**	Cycle parking exceeds existing demand and is accessible by all.	Cycle parking meets existing demand but is not accessible by all.	Cycle parking does not meet existing demand.	–	**1**	**3**	Cycles attached to guardrails in existing environment. Guardrails to be removed and cycle stands to increase.	✓	–	–	–	–	✓	✓	–	✓	–
23	**Street trees**	**If assessing existing:** There are multiple trees, with canopies spaced less than 15m apart on average. **If assessing proposal:** The street is already tree-lined with less than 15m between tree canopies and there are no proposed changes. **or** All existing trees are to be retained, with substantial planting of new trees.	**If assessing existing:** There are multiple trees, with canopies spaced more than 15m apart on average. **If assessing proposal:** Most existing trees are to be retained, with the overall number of trees maintained or increased.	**If assessing existing:** There are no trees, or only one tree. **If assessing proposal:** There are no trees. **or** The number of trees has been reduced.	–	**1**	**3**	Proposals include tree planting.	✓	–	✓	✓	✓	✓	✓	✓	✓	✓
24	**Planting at footway-level** (excluding trees)	**If assessing existing:** There is substantial planting in good condition designed to create or improve social space and/or act as a connection between other green spaces (eg pocket park, rain garden, community garden area). **If assessing proposal:** Existing greenery is to be retained or enhanced and new greenery is proposed.	**If assessing existing:** There is some planting, eg shrubs, verges, hedges, ornamental flower beds, or adaptation for some animal species. **If assessing proposal:** Existing standalone greenery is to be retained or enhanced.	**If assessing existing:** There is no planting. **If assessing proposal:** No green infrastructure is proposed, or the size of existing greenery is to be reduced.	–	**1**	**1**		✓	–	–	✓	✓	✓	✓	✓	✓	✓
25	**Walking distance between resting points** (benches and other informal seating)	There is less than 50m between resting points.	There is between 50m and 150m between resting points.	There is more than 150m between resting points.	–	**2**	**3**	Proposals include introduction of benches.	✓	–	–	✓	–	✓	–	✓	✓	–
26	**Walking distance between sheltered areas protecting from rain.** Including fixed awning or other shelter provided by buildings/infrastructure	There is less than 50m between sheltered areas.	There is between 50m and 150m between sheltered areas.	There is more than 150m between sheltered areas.	–	**2**	**3**	Proposals include tree planting.	✓	–	✓	–	–	✓	–	✓	✓	–

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27	**Factors influencing bus passenger journey time**	There are positive influences on bus journey time, eg bus lane, exemptions for buses from movement bans for general traffic.	Buses are mixed with traffic but not significantly delayed.	There are negative influences on bus journey time, eg unclear markings, narrow lane width, parking/loading issues, short cage length, mixing with congested traffic.	_	1	2	Proposals include incorporating loading bay into inset parking on Wimbledon Road South.	✓	_	_	_	_	✓	_	_	✓	_
28	**Bus stop accessibility**	Bus stop is wheelchair accessible, there is clear space for boarding and alighting and there is a clearway in place at the bus stop.	Bus stop is wheelchair accessible but either there is limited clear space around the bus stop for boarding and alighting or, for borough roads, there is no clearway in place.	Bus stop is not wheelchair accessible, ie the kerb height is less than 100mm.	_	2	2		✓	_	_	_	_	✓	✓	_	✓	_
	Are there any rail/underground/bus station accessible from this street? (Y/N) **If not, do not complete metrics 31-33**					Y	Y	<<< please select Y or N	<<<<Please enter Y or N for both existing and proposed.										
29	**Bus stop connectivity with other public transport services**	The bus stop is within sight of another service – less than 50m away.	The bus stop is between 50m and 150m away from another service.	The bus stop is more than 150m away from another service.	_	2	2		✓	_	_	_	_	✓	_	✓	✓	_
30	**Street-to-station step-free access**	All entry points to the station are step-free.	The main entry point to the station is not step-free but step-free alternatives are provided.	There is no step-free access to the station.	_	3	3		✓	_	_	_	_	✓	_	✓	✓	_
31	**Support for interchange between cycling and underground/rail**	Secure cycle parking is provided close to station access points, and exceeding existing demand.	Cycle parking is available close to station access points that meets existing demand.	There is insufficient cycle parking to meet demand, or cycle parking is poorly located for station access points.	_	1	2	Exact number of cycle parking facilities to be confirmed.	✓	_	_	_	_	✓	_	_	✓	_
									31	10	2	5	5	31	22	6	29	4

Healthy Streets Indicators' scores (%)

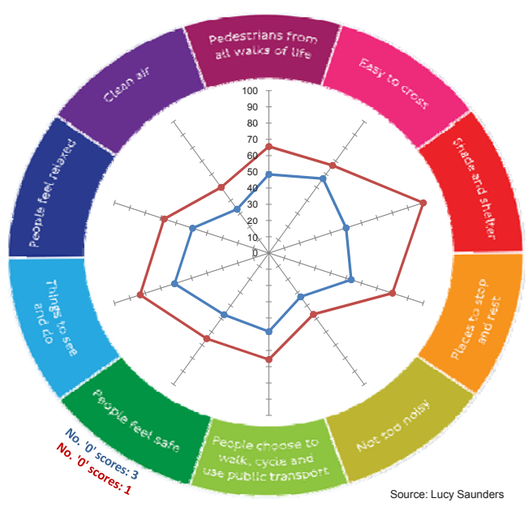
(Results will only display once all metrics have been scored)

The Healthy Streets Check score does not show whether a street is healthy or not but indicates the strengths and weaknesses of a scheme/street.

It is not possible to achieve an overall score of 100%. To score well against some metrics, compromise will be needed with other metrics. This reflects the compromises inherent in any street.

Should the assessment reveal one or more '0' scores the design should be reviewed to consider whether the score can be improved. In some cases this will not be possible, if so justify your

Healthy Streets Check scores



Source: Lucy Saunders

	Existing layout	Proposed layout
Pedestrians from all walks of life	48	66
Easy to cross	57	67
Shade and shelter	50	100
Places to stop and rest	53	80
Not too noisy	33	47
People choose to walk, cycle and use public transport	48	66
People feel safe	47	65
Things to see and do	61	83
People feel relaxed	49	68
Clean Air	33	50
Overall Healthy Streets Check score	49	67
Number of '0' scores	3	1

If '0' scores are unavoidable, please explain why here:

-Vehicle volume surveys indicate the proportion of large vehciles exceed 5% of the total volume.

How to interpret the results

The Check will produce a percentage score against each of the 10 Healthy Streets Indicators. These percentage scores give a general picture of how a design, in the round, is delivering against the 10 Healthy Streets Indicators. Designers should seek to incease the Healthy Streets Indicators scores.

An overall percentage score is also presented. This is not an average of the scores for each Indicator as each metrics contribute to multiple Indicators scores.

It is not possible to score a perfect 100% in any one design because compromises and trade-offs inevitably need to be made. The overall percentage score is less important than eliminating critical issues and delivering a rounded design.

The objective therefore is to get as high a score as possible, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated. A proposed scheme should also aim to deliver a score increase from baseline for all Healthy Streets Indicators' scores.

If any metrics have scored '0' these will be flagged up in the summary graph above and if they cannot be reconciled a justification for the decision to leave them in the design should be written in the text box below the scoring table.

There is no threshold score for a Healthy Street. Streets are not either 'healthy' or 'unhealthy' - some designs will perform better than others against the 10 Healthy Streets Indicators which may reflect physical, financial or political constraints on the project.

What the numbers mean

The Healthy Streets Check is not a scientific assessment of how healthy a street is. It is not the case that a street with a 10% increase in Healthy Streets Check score confers 10% greater health benefit to people who use it. It is also not the case that a 10% increase in Healthy Streets Check score will deliver a 10% uplift in active travel.

The metrics included in the Healthy Streets Check are the best available quantifiable and evidence based standards that are within the gift of the traffic engineer or urban designer to influence through the design of the street. As a result some of the Healthy Streets Indicators are linked to only a few metrics e.g. shade & shelter while others are linked to all 31 metrics e.g. pedestrians from all walks of life, because all the metrics contribute to the whole environment in the round and therefore affect the Indicator.

The numbers must therefore not be given any undue weight in the interpretation of the results. The objective is to get as high a score as possible for a given project, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated.

What '0' scores mean

Ten of the metrics can be scored '0'. All of these metrics are known high risk road danger issues. TfL is pursuing a Vision Zero target of zero deaths and serious injuries on the streets by 2050 which means that close consideration must be paid to ensure every opportunity to redesign our streets seeks to eliminate these known hazards.

Metrics scored '0' will be flagged in the final results if they have not been addressed . It is not always possible to improve '0' scores but it is important that these are identified through applying the Check and every effort has been made to find a design solution that can remove them.

Why you cannot get a perfect score

In a complex street environment a balanced approach must be taken; freeing up space for cycling or extending crossing times for pedestrians may produce delays for buses. Likewise removing a pinch point for cyclists or buses may mean removing an island refuge for pedestrians or from the reverse perspective installing an island refuge may introduce a pinch point for buses and cyclists. To be transparent and promote the best possible outcome in the round, recognising the difficult decisions designers must weigh up the Check aims to highlight these decisions so that stakeholders are informed as to what compromises have been made.

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Segment 2: Augustus Road from Sutherland Grove to Wimbledon Park Road

	Metrics (Click on ⓘ for more guidance on scoring or open the '*Scoring guidance tab* ')	Scoring system 3	2	1	0	Enter score here: Existing layout	Proposed layout	Notes	How each metric contributes to the Healthy Streets Indicators' scores: Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean Air
1	**Total volume of two way motorised traffic** ⓘ	There are fewer than 500 vehicles per hour at peak.	There are 500 to 1000 vehicles per hour at peak.	There are more than 1000 vehicles per hour at peak, where people cycling are separated from motorised traffic.	There are more than 1000 vehicles per hour at peak, where people cycling are mixed with motorised traffic.	2	2	Volume circa 500 per hour.	✓	✓	–	–	–	✓	✓	–	✓	–
2	**Interaction between large vehicles and people cycling** ⓘ	There will be no large vehicles using the street, or cycle traffic is separated from motorised traffic.	The proportion of large vehicles is less than 2% of motorised traffic, 7am to 7pm.	The proportion of large vehicles is 2% to 5% of motorised traffic, 7am to 7pm. **or** The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane at least 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next	The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane less than 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next general traffic lane is less than 4.5m.	0	0	Circa 12% two-way HGV flow.	✓	–	–	–	–	✓	✓	–	✓	–
3	**Speed of motorised traffic** ⓘ	85th percentile speed is less than 20mph. **or** Existing 85th percentile speed is 20 to 25 mph, but there are some proposals to reduce speed further. **or** Existing 85th percentile speed is over 25 mph but a complete redesign of the street environment should reduce this to below 20mph.	85th percentile speed is 20 to 25mph. **or** Existing 85th percentile speed is 25 to 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is 25 to 30mph. **or** Existing 85th percentile speed is greater than 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is greater than 30mph. **or** Existing 85th percentile speed is greater than 30 mph, and there are no proposals to reduce this speed.	2	2	Data from ATC survey, circa 24 mph	✓	✓	–	–	–	✓	✓	–	✓	–
4	**Traffic noise based on peak hour motorised traffic volumes** ⓘ	There are fewer than 55 vehicles per hour (c. <58 DB).	There are 55 to 450 vehicles per hour (c. 58-70 DB).	There are more than 450 vehicles per hour (c. >70 DB).	–	1	1		✓	–	–	–	✓	✓	–	–	✓	–
5	**Noise from large vehicles** ⓘ	The proportion of large vehicles is less than 5% (c. +0 to +3DB).	The proportion of large vehicles is 5 to 10% (c. +3 to +5 DB).	The proportion of large vehicles is greater than 10% (c. +5 DB and over).	–	1	1	Circa 12% two-way HGV flow.	✓	–	–	–	✓	✓	–	–	✓	–
6	**NO2 concentration** (from London Atmospheric Emission Inventory) ⓘ	**If assessing existing:** The NO2 concentration is less than 32µg/m3. **If assessing proposal:** The existing NO2 concentration is less than 32µg/m3 **or** the existing concentration is 32 to 40µg/m3 with local traffic volume reduction measures proposed.	**If assessing existing:** The NO2 concentration is 32 to 40µg/m3. **If assessing proposal:** The existing NO2 concentration is 32 to 40µg/m3 with no proposal to reduce local traffic volume **or** the existing NO2 concentration is greater than 40µg/m3 with local traffic volume reduction	**If assessing existing:** The NO2 concentration is greater than 40µg/m3 (legal limit value). **If assessing proposal:** The existing NO2 concentration is greater than 40µg/m3 with no proposal to reduce local traffic volume.	–	1	1	Check with client if information is available. Assumed worst case.	✓	–	–	–	–	✓	–	–	–	✓
7	**Reducing private car use** ⓘ	There is no through-movement for motorised traffic, with access limited to local residents, deliveries and public service vehicles.	There are some time or movement restrictions for motorised traffic.	There are no access restrictions for motorised traffic.	–	1	1		✓	✓	–	–	✓	✓	✓	–	✓	✓
8	**Comfort of crossing side roads for people walking** ⓘ	Side roads are closed to motor traffic. **or** Side roads are one-way out for motor vehicles and have features to encourage drivers to turn cautiously.	Side roads are two-way or one-way in for motor vehicles, and have features to encourage drivers to turn cautiously.	Side roads have dropped kerbs only.	Side roads have no dropped kerbs.	1	1		✓	✓	–	–	–	✓	✓	–	✓	–
9	**Mid-link crossings, to meet desire lines** ⓘ	Main desire lines across links are met by crossings suitable for all users at all times.	Main desire lines across links are met by crossings that are suitable some of the time but that do not meet demand all of the time.	Main desire lines across links are not met by pedestrian crossings.	–	2	2		✓	✓	–	–	–	✓	✓	–	✓	–
10	**Opportunity to cross the street away from junctions** ⓘ	Crossing is uncontrolled, with conflicting traffic volume less than 200 vehicles per hour. **or** A zebra or parallel crossing is provided. **or** Crossing is signalised so that people crossing the main carriageway have priority, while traffic on the main carriageway has on-demand green.	Crossing is uncontrolled, with conflicting traffic volume between 200 and 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is less than 15m or greater than 15m in a 20mph speed limit. **or** Crossing is signalised and staggered where the distance to cross is greater than 15m in a 30mph+ speed limit.	Crossing is uncontrolled, with conflicting traffic volume greater than 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is greater than 15m in a 30mph+ speed limit.	–	2	2	Volume circa 500 per hour.	✓	✓	–	–	–	✓	✓	–	✓	–
11	**Technology to optimise efficiency of movement** (pedestrians, cyclists, buses and general motor traffic) ⓘ	All appropriate detection and optimisation technology has been applied to traffic signals.	Some detection and optimisation technology has been applied to traffic signals.	No detection and optimisation technology applied to traffic signals.		1	1	Confirm detection. Consider upgrades to better detection & pcat.	✓	✓	–	–	–	✓	✓	–	–	–
12	**Level of support for people using controlled crossings** ⓘ	Many measures are in place to support controlled crossing.	Some measures are in place to support controlled crossing.	No measures are in place to support controlled crossing.	–	2	2	Confirm detection. Consider upgrades to better detection & pcat.	✓	✓	–	–	–	✓	✓	–	✓	–
13	**Width of clear continuous walking space** ⓘ	There is 2.5m or more clear width for walking in busy locations. **or** There is 2m or more in moderately busy locations. **or** There is 1.5m or more in quiet locations.	There is 2m to 2.5m clear width for walking in busy locations. **or** There is 1.5m to 2m width in moderately busy locations.	There is 1.5m to 2m clear width for walking in busy locations.	There is less than 1.5m clear width for walking.	1	1		✓	–	–	✓	–	✓	✓	–	✓	–

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14	**Sharing of footway with people cycling** ⓘ	No part of the footway is designated as shared use for walking and cycling.	Part or all of a footway wider than 3m with fewer than 200 pedestrians per hour is designated as shared use.	Part or all of a footway used by more than 200 pedestrians per hour is designated as shared use **or** Part or all of a footway less than 3m wide is designated as shared use.	–	**3**	**3**		✓	✓	–	–	–	✓	✓	–	✓	–
15	**Collision risk between people cycling and turning motor vehicles** ⓘ	Side roads are closed to motorised traffic, or turning movements by motor vehicles are minimised **and** At signal-controlled junctions, all conflicting movements between cycle traffic and turning motor traffic are separated.	Some measures are in place to reduce turning movements by motor vehicles at priority junctions. **and** At signal-controlled junctions, cycle movements are not separated and fewer than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place.	There are no restrictions on turning movements by motor vehicles at side roads and other uncontrolled accesses. **and** At signal-controlled junctions, cycle movements are not separated and more than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place	At signal-controlled junctions, cycle movements are not separated, more than 5% of turning vehicle movements are made by larger vehicles and there are no mitigation measures in place.	**1**	**1**		✓	–	–	–	–	✓	✓	–	✓	–
16	**Effective width for cycling** ⓘ	**Where cycles are separated from other traffic,** the width of the lane or track is 2.2m or more (one-way) or 3.5m or more (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is 4.5m or more.	**Where cycles are separated from other traffic,** the width of the lane or track is 1.5m to 2.2m (one-way) or 2.5m to 3.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 4m and 4.5m.	**Where cycles are separated from other traffic,** the width of the lane or track is less than 1.5m (one-way) or less than 2.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is less than 3.2m.	Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 3.2m and 3.9m.	**0**	**0**	Current lane widths are within banding. No changes proposed.	✓	–	–	–	–	✓	✓	–	✓	–
17	**Impact of parking and loading on cycling** ⓘ	There is no kerbside activity. **or** People cycling are physically separated from parking or loading facilities.	There is occasional kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	There is frequent or continuous kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	People cycling cannot maintain at least 1.0m clearance from vehicles parked or loading.	**2**	**2**		✓	–	–	–	–	✓	✓	–	✓	–
18	**Quality of cycling surface** ⓘ	The surface for cycling is even and smooth, with sufficient skid resistance. **or** There are defects but resurfacing of the whole cycling surface is proposed.	There are a few minor defects in the surface for cycling.	There are many minor defects in the surface for cycling.	There are major defects in the surface for cycling.	**2**	**3**	Proposed carriageway surfacing.	✓	–	–	–	–	✓	✓	–	✓	–
19	**Quality of walking surface** ⓘ	There is an even and smooth surface for walking. **or** There are defects but resurfacing of the whole walking surface is proposed.	There are a few minor defects in the surface for walking.	There are many minor defects in the surface for walking.	There are major defects in the surface for walking.	**1**	**3**	Proposed footway surface improvements.	✓	✓	–	–	–	✓	✓	–	✓	–
20	**Surveillance of public spaces** ⓘ	There is constant surveillance – because mixed use buildings overlook the street or space, or because there are many people using the space or walking through.	There is intermittent surveillance – because surrounding buildings are single-use or do not completely overlook the street, or because there are few people using the space or walking through.	There is poor surveillance – because few buildings overlook the street or space, there is little activity.	–	**3**	**3**		✓	–	–	✓	–	✓	✓	–	✓	–
21	**Lighting** ⓘ	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201. **and** Lighting of off-carriageway facilities for walking or cycling meets the same standards.	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201 but lighting of off-carriageway spaces for walking or cycling does not.	Street lighting does not meet the British Standard 5489:2003 and the European Standard CEN/TR 13201.	–	**2**	**3**	Please note that the BS lighting standard stated in the report has been superseded by BS 5489-1-2013 and the proposed street lighting shall conform to the same.	✓	–	–	–	–	✓	✓	–	✓	–
22	**Provision of cycle parking** ⓘ	Cycle parking exceeds existing demand and is accessible by all.	Cycle parking meets existing demand but is not accessible by all.	Cycle parking does not meet existing demand.	–	**1**	**3**	Cycles attached to guardrails in existing environment. Guardrails to be removed and cycle stands to increase.	✓	–	–	–	–	✓	✓	–	✓	–
23	**Street trees** ⓘ	**If assessing existing:** There are multiple trees, with canopies spaced less than 15m apart on average. **If assessing proposal:** The street is already tree-lined with less than 15m between tree canopies and there are no proposed changes. **or** All existing trees are to be retained, with substantial planting of new trees.	**If assessing existing:** There are multiple trees, with canopies spaced more than 15m apart on average. **If assessing proposal:** Most existing trees are to be retained, with the overall number of trees maintained or increased.	**If assessing existing:** There are no trees, or only one tree. **If assessing proposal:** There are no trees. **or** The number of trees has been reduced.	–	**1**	**1**		✓	–	✓	✓	✓	✓	✓	✓	✓	✓
24	**Planting at footway-level** (excluding trees) ⓘ	**If assessing existing:** There is substantial planting in good condition designed to create or improve social space and/or act as a connection between other green spaces (eg pocket park, rain garden, community garden area). **If assessing proposal:** Existing greenery is to be retained or enhanced and new greenery is proposed.	**If assessing existing:** There is some planting, eg shrubs, verges, hedges, ornamental flower beds, or adaptation for some animal species. **If assessing proposal:** Existing standalone greenery is to be retained or enhanced.	**If assessing existing:** There is no planting. **If assessing proposal:** No green infrastructure is proposed, or the size of existing greenery is to be reduced.	–	**1**	**1**		✓	–	–	✓	✓	✓	✓	✓	✓	✓
25	**Walking distance between resting points** (benches and other informal seating) ⓘ	There is less than 50m between resting points.	There is between 50m and 150m between resting points.	There is more than 150m between resting points.	–	**2**	**2**	Low level wall's adjacent to footways.	✓	–	–	✓	–	✓	–	✓	✓	–
26	**Walking distance between sheltered areas protecting from rain.** Including fixed awning or other shelter provided by buildings/infrastructure ⓘ	There is less than 50m between sheltered areas.	There is between 50m and 150m between sheltered areas.	There is more than 150m between sheltered areas.	–	**1**	**1**		✓	–	✓	–	–	✓	–	✓	✓	–

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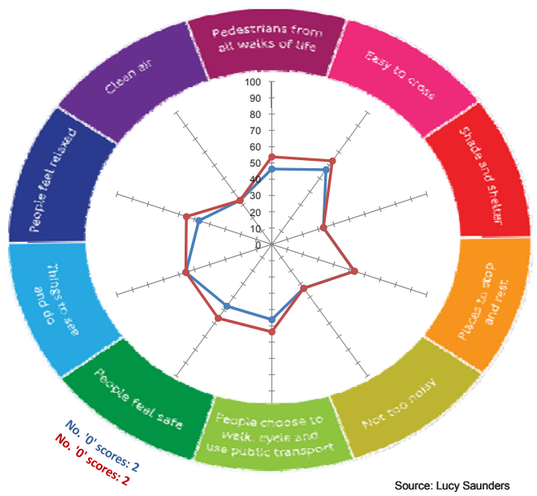
						Are there any bus services running on this street? (Y/N) If not, do not complete metrics 29-30	N	N	<<< please select Y or N	<<<<Please enter Y or N for both existing and										
27	**Factors influencing bus passenger journey time**	There are positive influences on bus journey time, eg bus lane, exemptions for buses from movement bans for general traffic.	Buses are mixed with traffic but not significantly delayed.	There are negative influences on bus journey time, eg unclear markings, narrow lane width, parking/loading issues, short cage length, mixing with congested traffic	–			Not completed due to no bus stops within section.	✓	–	–	–	–	✓	–	–	✓	–		
28	**Bus stop accessibility**	Bus stop is wheelchair accessible, there is clear space for boarding and alighting and there is a clearway in place at the bus stop.	Bus stop is wheelchair accessible but either there is limited clear space around the bus stop for boarding and alighting or, for borough roads, there is no clearway in place.	Bus stop is not wheelchair accessible, ie the kerb height is less than 100mm.	–				✓	–	–	–	–	✓	✓	–	✓	–		
						Are there any rail/underground/bus station accessible from this street? (Y/N) If not, do not complete metrics 31-33	Y	Y	<<< please select Y or N	<<<<Please enter Y or N for both existing and										
29	**Bus stop connectivity with other public transport services**	The bus stop is within sight of another service – less than 50m away.	The bus stop is between 50m and 150m away from another service.	The bus stop is more than 150m away from another service.	–	2	2		✓	–	–	–	–	✓	–	✓	✓	–		
30	**Street-to-station step-free access**	All entry points to the station are step-free.	The main entry point to the station is not step-free but step-free alternatives are provided.	There is no step-free access to the station.	–	3	3		✓	–	–	–	–	✓	–	✓	✓	–		
31	**Support for interchange between cycling and underground/rail**	Secure cycle parking is provided close to station access points, and exceeding existing demand.	Cycle parking is available close to station access points that meets existing demand.	There is insufficient cycle parking to meet demand, or cycle parking is poorly located for station access points.	–	1	2	Exact number of cycle parking facilities to be confirmed.	✓	–	–	–	–	✓	–	–	✓	–		
									31	10	2	5	5	31	22	6	29	4		

The Healthy Streets Check score does not show whether a street is healthy or not but indicates the strengths and weaknesses of a scheme/street.

It is not possible to achieve an overall score of 100%. To score well against some metrics, compromise will be needed with other metrics. This reflects the compromises inherent in any street.

Should the assessment reveal one or more '0' scores the design should be reviewed to consider whether the score can be improved. In some cases this will

Healthy Streets Check scores



Source: Lucy Saunders

Healthy Streets Indicators' scores (%)

(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	46	54
Easy to cross	57	63
Shade and shelter	33	33
Places to stop and rest	53	53
Not too noisy	33	33
People choose to walk, cycle and use public transport	46	54
People feel safe	47	56
Things to see and do	56	56
People feel relaxed	47	55
Clean Air	33	33
Overall Healthy Streets Check score	47	54
Number of '0' scores	2	2

If '0' scores are unavoidable, please explain why here:

-Vehicle volume surveys indicate the proportion of large vehciles exceed 5% of the total volume.

-Exisiting lane widths between 3.2m and 3.9m. No changes to lane width proposed.

How to interpret the results

The Check will produce a percentage score against each of the 10 Healthy Streets Indicators. These percentage scores give a general picture of how a design, in the round, is delivering against the 10 Healthy Streets Indicators. Designers should seek to incease the Healthy Streets Indicators scores.

An overall percentage score is also presented. This is not an average of the scores for each Indicator as each metrics contribute to multiple Indicators scores.

It is not possible to score a perfect 100% in any one design because compromises and trade-offs inevitably need to be made. The overall percentage score is less important than eliminating critical issues and delivering a rounded design.

The objective therefore is to get as high a score as possible, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated. A proposed scheme should also aim to deliver a score increase from baseline for all Healthy Streets Indicators' scores.

If any metrics have scored '0' these will be flagged up in the summary graph above and if they cannot be reconciled a justification for the decision to leave them in the design should be written in the text box below the scoring table.

There is no threshold score for a Healthy Street. Streets are not either 'healthy' or 'unhealthy' - some designs will perform better than others against the 10 Healthy Streets Indicators which may reflect physical, financial or political constraints on the project.

What the numbers mean

The Healthy Streets Check is not a scientific assessment of how healthy a street is. It is not the case that a street with a 10% increase in Healthy Streets Check score confers 10% greater health benefit to people who use it. It is also not the case that a 10% increase in Healthy Streets Check score will deliver a 10% uplift in active travel.

The metrics included in the Healthy Streets Check are the best available quantifiable and evidence based standards that are within the gift of the traffic engineer or urban designer to influence through the design of the street. As a result some of the Healthy Streets Indicators are linked to only a few metrics e.g. shade & shelter while others are linked to all 31 metrics e.g. pedestrians from all walks of life, because all the metrics contribute to the whole environment in the round and therefore affect the Indicator.

The numbers must therefore not be given any undue weight in the interpretation of the results. The objective is to get as high a score as possible for a given project, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated.

What '0' scores mean

Ten of the metrics can be scored '0'. All of these metrics are known high risk road danger issues. TfL is pursuing a Vision Zero target of zero deaths and serious injuries on the streets by 2050 which means that close consideration must be paid to ensure every opportunity to redesign our streets seeks to eliminate these known hazards.

Metrics scored '0' will be flagged in the final results if they have not been addressed . It is not always possible to improve '0' scores but it is important that these are identified through applying the Check and every effort has been made to find a design solution that can remove them.

Why you cannot get a perfect score

In a complex street environment a balanced approach must be taken; freeing up space for cycling or extending crossing times for pedestrians may produce delays for buses. Likewise removing a pinch point for cyclists or buses may mean removing an island refuge for pedestrians or from the reverse perspective installing an island refuge may introduce a pinch point for buses and cyclists. To be transparent and promote the best possible outcome in the round, recognising the difficult decisions designers must weigh up the Check aims to highlight these decisions so that stakeholders are informed as to what compromises have been made.

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Segment 3: Replingham Road from Wimbledon Park Road to Clonmore Street

	Metrics (Click on ⓘ for more guidance on scoring or open the '*Scoring guidance tab* ')	Scoring system 3	2	1	0	Enter score here: Existing layout	Proposed layout	Notes	How each metric contributes to the Healthy Streets Indicators' scores: Pedestrians from all walks of life	Easy to cross	Shade and shelter	Places to stop and rest	Not too noisy	People choose to walk, cycle and use PT	People feel safe	Things to see and do	People feel relaxed	Clean Air
1	**Total volume of two way motorised traffic** ⓘ	There are fewer than 500 vehicles per hour at peak.	There are 500 to 1000 vehicles per hour at peak.	There are more than 1000 vehicles per hour at peak, where people cycling are separated from motorised traffic.	There are more than 1000 vehicles per hour at peak, where people cycling are mixed with motorised traffic.	2	2	Volume circa 500 per hour.	✓	✓	_	_	_	✓	✓	_	✓	_
2	**Interaction between large vehicles and people cycling** ⓘ	There will be no large vehicles using the street, or cycle traffic is separated from motorised traffic.	The proportion of large vehicles is less than 2% of motorised traffic, 7am to 7pm.	The proportion of large vehicles is 2% to 5% of motorised traffic, 7am to 7pm. **or** The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane at least 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next general traffic lane is at least 4.5m.	The proportion of large vehicles is greater than 5% of motorised traffic, 7am to 7pm, and people are cycling either: - in a nearside general traffic lane or bus lane less than 4.5m wide, or - in a cycle lane where the combined width of the cycle lane and the next general traffic lane is less than 4.5m.	0	0	Circa 12% two-way HGV flow.	✓	_	_	_	_	✓	✓	_	✓	_
3	**Speed of motorised traffic** ⓘ	85th percentile speed is less than 20mph. **or** Existing 85th percentile speed is 20 to 25 mph, but there are some proposals to reduce speed further. **or** Existing 85th percentile speed is over 25 mph but a complete redesign of the street environment should reduce this to below 20mph.	85th percentile speed is 20 to 25mph. **or** Existing 85th percentile speed is 25 to 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is 25 to 30mph. **or** Existing 85th percentile speed is greater than 30 mph, but there are some proposals to reduce speed further.	85th percentile speed is greater than 30mph. **or** Existing 85th percentile speed is greater than 30 mph, and there are no proposals to reduce this speed.	2	2	Data from ATC survey, circa 24 mph.	✓	✓	_	_	_	✓	✓	_	✓	_
4	**Traffic noise based on peak hour motorised traffic volumes** ⓘ	There are fewer than 55 vehicles per hour (c. <58 DB).	There are 55 to 450 vehicles per hour (c. 58-70 DB).	There are more than 450 vehicles per hour (c. >70 DB).	_	1	1		✓	_	_	_	✓	✓	_	_	✓	_
5	**Noise from large vehicles** ⓘ	The proportion of large vehicles is less than 5% (c. +0 to +3DB).	The proportion of large vehicles is 5 to 10% (c. +3 to +5 DB).	The proportion of large vehicles is greater than 10% (c. +5 DB and over).	_	1	1	Circa 12% two-way HGV flow	✓	_	_	_	✓	✓	_	_	✓	_
6	**NO2 concentration** (from London Atmospheric Emission Inventory) ⓘ	**If assessing existing:** The NO2 concentration is less than 32µg/m3. **If assessing proposal:** The existing NO2 concentration is less than 32µg/m3 **or** the existing concentration is 32 to 40µg/m3 with local traffic volume reduction measures proposed.	**If assessing existing:** The NO2 concentration is 32 to 40µg/m3. **If assessing proposal:** The existing NO2 concentration is 32 to 40µg/m3 with no proposal to reduce local traffic volume **or** the existing NO2 concentration is greater than 40µg/m3 with local traffic volume reduction	**If assessing existing:** The NO2 concentration is greater than 40µg/m3 (legal limit value). **If assessing proposal:** The existing NO2 concentration is greater than 40µg/m3 with no proposal to reduce local traffic volume.	_	1	1	Check with client if information is available. Assumed worst case.	✓	_	_	_	_	✓	_	_	_	✓
7	**Reducing private car use** ⓘ	There is no through-movement for motorised traffic, with access limited to local residents, deliveries and public service vehicles.	There are some time or movement restrictions for motorised traffic.	There are no access restrictions for motorised traffic.	_	2	2	Movement restrictions on Elsenham Street and Heythorp Street.	✓	✓	_	_	✓	✓	✓	_	✓	✓
8	**Comfort of crossing side roads for people walking** ⓘ	Side roads are closed to motor traffic. **or** Side roads are one-way out for motor vehicles and have features to encourage drivers to turn cautiously.	Side roads are two-way or one-way in for motor vehicles, and have features to encourage drivers to turn cautiously.	Side roads have dropped kerbs only.	Side roads have no dropped kerbs.	1	2	Proposed improvments to Elsenham Street, Heythorp Street and Clonmore Street.	✓	✓	_	_	_	✓	✓	_	✓	_
9	**Mid-link crossings, to meet desire lines** ⓘ	Main desire lines across links are met by crossings suitable for all users at all times.	Main desire lines across links are met by crossings that are suitable some of the time but that do not meet demand all of the time.	Main desire lines across links are not met by pedestrian crossings.	_	2	2		✓	✓	_	_	_	✓	✓	_	✓	_
10	**Opportunity to cross the street away from junctions** ⓘ	Crossing is uncontrolled, with conflicting traffic volume less than 200 vehicles per hour. **or** A zebra or parallel crossing is provided. **or** Crossing is signalised so that people crossing the main carriageway have priority, while traffic on the main carriageway has on-demand green.	Crossing is uncontrolled, with conflicting traffic volume between 200 and 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is less than 15m or greater than 15m in a 20mph speed limit. **or** Crossing is signalised and staggered where the distance to cross is greater than 15m in a 30mph+ speed limit.	Crossing is uncontrolled, with conflicting traffic volume greater than 1000 vehicles per hour. **or** Crossing is signalised and straight-across where the distance to cross is greater than 15m in a 30mph+ speed limit.	_	2	2	Volume circa 500 per hour.	✓	✓	_	_	_	✓	✓	_	✓	_
11	**Technology to optimise efficiency of movement** (pedestrians, cyclists, buses and general motor traffic) ⓘ	All appropriate detection and optimisation technology has been applied to traffic signals.	Some detection and optimisation technology has been applied to traffic signals.	No detection and optimisation technology applied to traffic signals.		1	1	Confirm detection. Consider upgrades to better detection & pcat.	✓	✓	_	_	_	✓	✓	_	_	_
12	**Level of support for people using controlled crossings** ⓘ	Many measures are in place to support controlled crossing.	Some measures are in place to support controlled crossing.	No measures are in place to support controlled crossing.	_	2	2	Confirm detection. Consider upgrades to better detection & pcat.	✓	✓	_	_	_	✓	✓	_	✓	_
13	**Width of clear continuous walking space** ⓘ	There is 2.5m or more clear width for walking in busy locations. **or** There is 2m or more in moderately busy locations. **or** There is 1.5m or more in quiet locations.	There is 2m to 2.5m clear width for walking in busy locations. **or** There is 1.5m to 2m width in moderately busy locations.	There is 1.5m to 2m clear width for walking in busy locations.	There is less than 1.5m clear width for walking.	1	1		✓	_	_	✓	_	✓	✓	_	✓	_

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14	**Sharing of footway with people cycling** ⓘ	No part of the footway is designated as shared use for walking and cycling.	Part or all of a footway wider than 3m with fewer than 200 pedestrians per hour is designated as shared use.	Part or all of a footway used by more than 200 pedestrians per hour is designated as shared use **or** Part or all of a footway less than 3m wide is designated as shared use.	–	**3**	**3**		✓	✓	–	–	–	✓	✓	–	✓	–
15	**Collision risk between people cycling and turning motor vehicles** ⓘ	Side roads are closed to motorised traffic, or turning movements by motor vehicles are minimised **and** At signal-controlled junctions, all conflicting movements between cycle traffic and turning motor traffic are separated.	Some measures are in place to reduce turning movements by motor vehicles at priority junctions. **and** At signal-controlled junctions, cycle movements are not separated and fewer than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place.	There are no restrictions on turning movements by motor vehicles at side roads and other uncontrolled accesses. **and** At signal-controlled junctions, cycle movements are not separated and more than 5% of turning vehicle movements are made by larger vehicles but mitigation measures are in place	At signal-controlled junctions, cycle movements are not separated, more than 5% of turning vehicle movements are made by larger vehicles and there are no mitigation measures in place.	**1**	**1**	Some turning movement restrictions into side road however cyclists are not seperated at junction and high HGV volume.	✓	–	–	–	–	✓	✓	–	✓	–
16	**Effective width for cycling** ⓘ	**Where cycles are separated from other traffic,** the width of the lane or track is 2.2m or more (one-way) or 3.5m or more (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is 4.5m or more.	**Where cycles are separated from other traffic,** the width of the lane or track is 1.5m to 2.2m (one-way) or 2.5m to 3.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 4m and 4.5m.	**Where cycles are separated from other traffic,** the width of the lane or track is less than 1.5m (one-way) or less than 2.5m (two-way). **Otherwise:** Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is less than 3.2m.	Width of the nearside general traffic lane (where there is no cycle lane) or width of the cycle lane plus adjacent general traffic lane is between 3.2m and 3.9m.	**0**	**0**	Current lane widths are within banding. No changes proposed.	✓	–	–	–	–	✓	✓	–	✓	–
17	**Impact of parking and loading on cycling** ⓘ	There is no kerbside activity. **or** People cycling are physically separated from parking or loading facilities.	There is occasional kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	There is frequent or continuous kerbside activity, and people cycling can keep at least 1.0m clearance to vehicles parked or loading.	People cycling cannot maintain at least 1.0m clearance from vehicles parked or loading.	**1**	**1**	Kerbside activity along northen kerbline.	✓	–	–	–	–	✓	✓	–	✓	–
18	**Quality of cycling surface** ⓘ	The surface for cycling is even and smooth, with sufficient skid resistance. **or** There are defects but resurfacing of the whole cycling surface is proposed.	There are a few minor defects in the surface for cycling.	There are many minor defects in the surface for cycling.	There are major defects in the surface for cycling.	**2**	**3**	Proposed carriageway surfacing.	✓	–	–	–	–	✓	✓	–	✓	–
19	**Quality of walking surface** ⓘ	There is an even and smooth surface for walking. **or** There are defects but resurfacing of the whole walking surface is proposed.	There are a few minor defects in the surface for walking.	There are many minor defects in the surface for walking.	There are major defects in the surface for walking.	**1**	**3**	Proposed footway surface improvements.	✓	✓	–	–	–	✓	✓	–	✓	–
20	**Surveillance of public spaces** ⓘ	There is constant surveillance – because mixed use buildings overlook the street or space, or because there are many people using the space or walking through.	There is intermittent surveillance – because surrounding buildings are single-use or do not completely overlook the street, or because there are few people using the space or walking through.	There is poor surveillance – because few buildings overlook the street or space, there is little activity.	–	**3**	**3**		✓	–	–	✓	–	✓	✓	–	✓	–
21	**Lighting** ⓘ	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201. **and** Lighting of off-carriageway facilities for walking or cycling meets the same standards.	Street lighting meets the British Standard 5489:2003 and the European Standard CEN/TR 13201 but lighting of off-carriageway spaces for walking or cycling does not.	Street lighting does not meet the British Standard 5489:2003 and the European Standard CEN/TR 13201.	–	**2**	**3**	Please note that the BS lighting standard stated in the report has been superseded by BS 5489-1-2013 and the proposed street lighting shall conform to the same. .	✓	–	–	–	–	✓	✓	–	✓	–
22	**Provision of cycle parking** ⓘ	Cycle parking exceeds existing demand and is accessible by all.	Cycle parking meets existing demand but is not accessible by all.	Cycle parking does not meet existing demand.	–	**1**	**3**	Cycles attached to guardrails in existing environment. Guardrails to be removed and cycle stands to increase.	✓	–	–	–	–	✓	✓	–	✓	–
23	**Street trees** ⓘ	**If assessing existing:** There are multiple trees, with canopies spaced less than 15m apart on average. **If assessing proposal:** **The street is already tree-lined with less** than 15m between tree canopies and there are no proposed changes. **or** All existing trees are to be retained, with substantial planting of new trees.	**If assessing existing:** There are multiple trees, with canopies spaced more than 15m apart on average. **If assessing proposal:** Most existing trees are to be retained, with the overall number of trees maintained or increased.	**If assessing existing:** There are no trees, or only one tree. **If assessing proposal:** **There are no trees.** **or** The number of trees has been reduced.	–	**1**	**2**	Proposed tree planting.	✓	–	✓	✓	✓	✓	✓	✓	✓	✓
24	**Planting at footway-level** (excluding trees) ⓘ	**If assessing existing:** There is substantial planting in good condition designed to create or improve social space and/or act as a connection between other green spaces (eg pocket park, rain garden, community garden area). **If assessing proposal:** Existing greenery is to be retained or enhanced and new greenery is proposed.	**If assessing existing:** There is some planting, eg shrubs, verges, hedges, ornamental flower beds, or adaptation for some animal species. **If assessing proposal:** Existing standalone greenery is to be retained or enhanced.	**If assessing existing:** There is no planting. **If assessing proposal:** No green infrastructure is proposed, or the size of existing greenery is to be reduced.	–	**1**	**1**		✓	–	–	✓	✓	✓	✓	✓	✓	✓
25	**Walking distance between resting points** (benches and other informal seating) ⓘ	There is less than 50m between resting points.	There is between 50m and 150m between resting points.	There is more than 150m between resting points.	–	**2**	**3**	Benches are proposed to be introduced.	✓	–	–	✓	–	✓	–	✓	✓	–
26	**Walking distance between sheltered areas protecting from rain.** Including fixed awning or other shelter provided by buildings/infrastructure ⓘ	There is less than 50m between sheltered areas.	There is between 50m and 150m between sheltered areas.	There is more than 150m between sheltered areas.	–	**1**	**2**	Proposed tree planting.	✓	–	✓	–	–	✓	–	✓	✓	–
				Are there any bus services running on this street? (Y/N) **If not, do not complete metrics 29-30**		**N**	**N**	**<<< please select Y or N**	**<<<<Please enter Y or N for both existing and proposed.**									

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27	**Factors influencing bus passenger journey time**	There are positive influences on bus journey time, eg bus lane, exemptions for buses from movement bans for general traffic.	Buses are mixed with traffic but not significantly delayed.	There are negative influences on bus journey time, eg unclear markings, narrow lane width, parking/loading issues, short cage length, mixing with congested traffic.	_			Not completed due to no bus stops within section.	✓	_	_	_	_	✓	_	_	✓	_
28	**Bus stop accessibility**	Bus stop is wheelchair accessible, there is clear space for boarding and alighting and there is a clearway in place at the bus stop.	Bus stop is wheelchair accessible but either there is limited clear space around the bus stop for boarding and alighting or, for borough roads, there is no clearway in place.	Bus stop is not wheelchair accessible, ie the kerb height is less than 100mm.	_				✓	_	_	_	_	✓	✓	_	✓	_
	Are there any rail/underground/bus station accessible from this street? (Y/N) If not, do not complete metrics 31-33					**Y**	**Y**	**<<< please select Y or N**	**<<<<Please enter Y or N for both existing and proposed.**									
29	**Bus stop connectivity with other public transport services**	The bus stop is within sight of another service – less than 50m away.	The bus stop is between 50m and 150m away from another service.	The bus stop is more than 150m away from another service.	_	**1**	**1**	No bus stops on Replingham Road	✓	_	_	_	_	✓	_	✓	✓	_
30	**Street-to-station step-free access**	All entry points to the station are step-free.	The main entry point to the station is not step-free but step-free alternatives are provided.	There is no step-free access to the station.	_	**3**	**3**		✓	_	_	_	_	✓	_	✓	✓	_
31	**Support for interchange between cycling and underground/rail**	Secure cycle parking is provided close to station access points, and exceeding existing demand.	Cycle parking is available close to station access points that meets existing demand.	There is insufficient cycle parking to meet demand, or cycle parking is poorly located for station access points.	_	**1**	**2**	Exact number of cycle parking facilities to be confirmed.	✓	_	_	_	_	✓	_	_	✓	_
									31	10	2	5	5	31	22	6	29	4

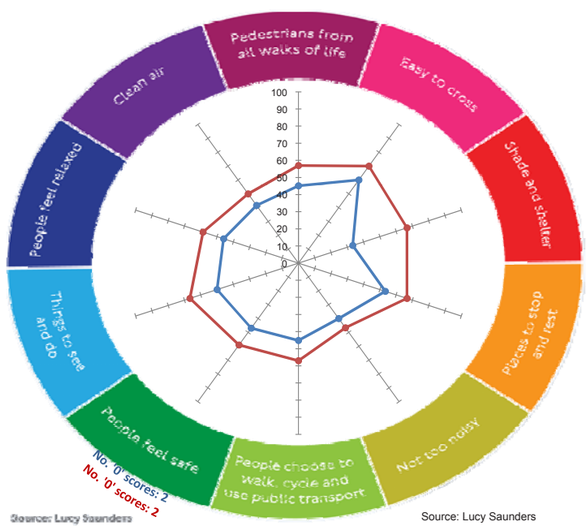
ⓘ

The Healthy Streets Check score does not show whether a street is healthy or not but indicates the strengths and weaknesses of a scheme/street.

It is not possible to achieve an overall score of 100%. To score well against some metrics, compromise will be needed with other metrics. This reflects the compromises inherent in any street.

Should the assessment reveal one or more '0' scores the design should be reviewed to consider whether the score can be improved. In some cases this will

Healthy Streets Check scores



Source: Lucy Saunders

Healthy Streets Indicators' scores (%)

(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	45	57
Easy to cross	60	70
Shade and shelter	33	67
Places to stop and rest	53	67
Not too noisy	40	47
People choose to walk, cycle and use public transport	45	57
People feel safe	47	59
Things to see and do	50	67
People feel relaxed	46	59
Clean Air	42	50
Overall Healthy Streets Check score	47	59
Number of '0' scores	2	2

If '0' scores are unavoidable, please explain why here:

-Vehicle volume surveys indicate the proportion of large vehciles exceed 5% of the total volume.
-Exisiting lane widths between 3.2m and 3.9m. No changes to lane width proposed.

How to interpret the results

The Check will produce a percentage score against each of the 10 Healthy Streets Indicators. These percentage scores give a general picture of how a design, in the round, is delivering against the 10 Healthy Streets Indicators. Designers should seek to incease the Healthy Streets Indicators scores.

An overall percentage score is also presented. This is not an average of the scores for each Indicator as each metrics contribute to multiple Indicators scores.

It is not possible to score a perfect 100% in any one design because compromises and trade-offs inevitably need to be made. The overall percentage score is less important than eliminating critical issues and delivering a rounded design.

The objective therefore is to get as high a score as possible, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated. A proposed scheme should also aim to deliver a score increase from baseline for all Healthy Streets Indicators' scores.

If any metrics have scored '0' these will be flagged up in the summary graph above and if they cannot be reconciled a justification for the decision to leave them in the design should be written in the text box below the scoring table.

There is no threshold score for a Healthy Street. Streets are not either 'healthy' or 'unhealthy' - some designs will perform better than others against the 10 Healthy Streets Indicators which may reflect physical, financial or political constraints on the project.

What the numbers mean

The Healthy Streets Check is not a scientific assessment of how healthy a street is. It is not the case that a street with a 10% increase in Healthy Streets Check score confers 10% greater health benefit to people who use it. It is also not the case that a 10% increase in Healthy Streets Check score will deliver a 10% uplift in active travel.

The metrics included in the Healthy Streets Check are the best available quantifiable and evidence based standards that are within the gift of the traffic engineer or urban designer to influence through the design of the street. As a result some of the Healthy Streets Indicators are linked to only a few metrics e.g. shade & shelter while others are linked to all 31 metrics e.g. pedestrians from all walks of life, because all the metrics contribute to the whole environment in the round and therefore affect the Indicator.

The numbers must therefore not be given any undue weight in the interpretation of the results. The objective is to get as high a score as possible for a given project, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated.

What '0' scores mean

Ten of the metrics can be scored '0'. All of these metrics are known high risk road danger issues. TfL is pursuing a Vision Zero target of zero deaths and serious injuries on the streets by 2050 which means that close consideration must be paid to ensure every opportunity to redesign our streets seeks to eliminate these known hazards.

Metrics scored '0' will be flagged in the final results if they have not been addressed . It is not always possible to improve '0' scores but it is important that these are identified through applying the Check and every effort has been made to find a design solution that can remove them.

Why you cannot get a perfect score

In a complex street environment a balanced approach must be taken; freeing up space for cycling or extending crossing times for pedestrians may produce delays for buses. Likewise removing a pinch point for cyclists or buses may mean removing an island refuge for pedestrians or from the reverse perspective installing an island refuge may introduce a pinch point for buses and cyclists. To be transparent and promote the best possible outcome in the round, recognising the difficult decisions designers must weigh up the Check aims to highlight these decisions so that stakeholders are informed as to what compromises have been made.

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Key scoring rules		
A	**How does the scoring work?**	Each metric is to be scored 1, 2 or 3, where 3 is the highest (best) score. These points will be allocated to the relevant Healthy Streets Indicators that the metric affects. Ten of these metrics can also be scored 0 (lowest score). These are metrics related to known road danger issues affecting people walking, cycling and accessing public transport. A 0 score does not contribute any points to the Healthy Streets Indicators but will be flagged in the end results and the assessor will be required to justify why the scheme has these scores (in the text box at the bottom of the scoring tab).
B	**Can I choose what part of street to score?**	Always score each metric against the weakest point in your study area. For example if most of the link you are assessing has a footway width of more than 2 metres but there is one small section where the footway width is 1.2 metres wide, then metric 13 (width of clear continuous walking space) should be scored 0. Similarly, if the area being assessed includes several junctions, always score the weakest junction, or weakest arm of the weakest junction. In some cases, where the key focus of the scheme is to improve one junction but where other smaller junctions are also affected by the scheme (eg gyratory replacement), it may be preferable to divide the area being affected by the scheme in such a way that the main junction will be the only junction in its segment. This will ensure that the benefits of the scheme are fairly represented. However, additional HS Checks will need to be done on the other junctions to make sure the weakest points of the scheme are also represented.
C	**What if some metrics are not applicable to my scheme?**	For the majority of schemes all metrics will be applicable. However, in some situations, a metric may appear non-applicable. In such an event, the metric will be given the highest or lowest score, depending on the reason it is not applicable. For example, if a street is fully pedestrianised with no access to motorised traffic, most metrics related to junctions and crossings will score 3 because reducing motorised traffic flows is in line with the Healthy Streets Approach and encourages more people to walk and cycle. However, if people are not permitted to cycle on that street, then all metrics related to cycling should be scored 1 (or 0, as appropriate) as this works against the objective of encouraging more people to cycle. When people are banned from cycling, it is recommended to do an additional Healthy Streets Check on the nearest route available to people cycling. If metrics are non-applicable for other reasons, score them 0 or 1, as appropriate, and explain why they are non-applicable in the text box for that metric
D	**What if I don't have the information/data required to score a metric?**	If you are scoring a proposal at an early design stage, you may not have all the data or information required to score some metrics (eg location of street furniture, staging of traffic signals). In such cases, score these metrics 0 or 1, as appropriate, and make a note in the text box for that metric. If your scheme is relatively small and you do not have all the required traffic data, score to the best of your knowledge and make a note of such metrics in the text box for that metric.
E	**Why should I do if my scheme does not have any public transport services?**	There are two prompt questions in the scoring tab (before metric 27 and before metric 29) where you are asked if the area you are assessing is served by buses or has a public transport interchange or station. Answer these questions by 'Y' (yes) or 'N' in the relevant cell for the existing and propose layout. The final score calculation will be based on your responses.
F	**The graph and table at the bottom of the spreadsheet does not show the results.**	Make sure you have scored every metric (except metrics 27 to 31 if you have answered 'N' to the prompt questions). Results will not display until the HS Check is complete.

Metric		Scoring guidance
1	**Total volume of bidirectional motorised traffic**	**Why is this important?** The volume of motorised traffic, regardless of the speed it is travelling at, affects how safe and relaxing the street feels and contributes to the severance effect of the street. **How do I measure it?** Use traffic counts data for peak hours. If no traffic counts are available, then the assessor can estimate these using factored observations, ie scaling up a 15-minute count. **Things to look out for:** Weekend counts may be higher in the vicinity of some locations (eg shopping centres or tourist attractions) and the highest peak hour flow must be used.
2	**Interaction between large vehicles and people cycling**	**Why is this important?** Large vehicles are intimidating to cycle alongside as well as presenting a perceived and actual danger, so the number and proximity of large vehicles affects the attractiveness of a street for cycling. **How do I measure it?** Interaction between people cycling and large vehicles is measured by a combination of large vehicle volume (taken from the classified traffic counts) and the degree of separation between people cycling and motor vehicles. The definition of 'large vehicles' is taken from the standard vehicle classification used in traffic counts – it includes OGV1, OGV2 and Public Service Vehicles (buses and coaches). **Things to look out for:** Risk is not necessarily highest at the times of highest motor vehicle or cycle flow. Many large vehicles may be travelling off-peak – hence the use of 7am to 7pm traffic data rather than peak counts.
3	**Speed of motorised traffic**	**Why is this important?** The speed of motorised traffic has a direct impact on safety and ease of crossing the street, particularly for children, older people and disabled people. It also strongly affects the safety and comfort of people cycling. **How do I measure it?** The 85th percentile is to be used for this metric as the mean speed would not reflect the road danger posed by the fastest vehicles. When assessing an existing street, speed surveys should be used for peak periods. As 85th percentile speed data for a proposed change to the street will not be available, the scoring system for a proposed design is based on existing 85th percentile speed data and whether the scheme includes measures to reduce motorised traffic speed. These may include reducing the speed limit, changes to streetscape, introducing crossings, decluttering, raised tables, raised side road entry treatments, introducing cycle-friendly humps, removing the centreline, introducing cycle lanes that narrow general traffic lanes. See London Cycling Design Standards (LCDS) chapter 3 for speed reduction measures. **Things to look out for:** Speed should be measured at the fastest point of the link and not near constrictions. A scheme where the proposed speed limit is 40mph should be scored 0
4	**Traffic noise based on peak hour motorised traffic volumes**	**Why is this important?** Traffic noise impacts on health in many ways and makes streets less appealing for walking, cycling, using public transport or for dwelling in. The scoring system for this metric is based on traffic noise only because this is the main source of noise that can be influenced through design and is more predictable than other sources, such as construction noise or noise related to specific land use (eg industrial land or night-time economy venues). The Design Manual for Roads and Bridges (Volume 11, section 3, Part 7, Annex 6) assesses the nuisance caused by traffic noise over an 18 hour period (LA10, 18h). Less than 10% of people exposed to traffic noise under 58dB are bothered by traffic noise. Between 10-50% of people are bothered by noise levels between 58dB and 70dB and the majority or people would be bothered by traffic noise levels above 70dB. 70dB is the equivalent of the noise generated by a vacuum cleaner and can have detrimental impacts on one's health when exposure is sustained. 60dB is the equivalent of the noise generated by a conversation and is half as loud as 70dB (the decibel scale is logarithmic). **How do I measure it?** The scoring for this metric is based on traffic volumes only. It uses the methodology from the Calculation of Road Traffic Noise report (DfT, 1988) with corrections to reflect London's urban forms and traffic conditions. Peak hour traffic data should be used to score this metric. **Things to look out for:** New surfacing can have a significant impact on noise levels. Slower speeds and a street layout that encourages courteous driving with limited acceleration and braking also helps
5	**Noise from large vehicles**	**Why is this important?** Metric 4 (Traffic noise based on peak hour traffic volume) does not take into consideration noise from large vehicles, so this separate metric is necessary. **How do I measure it?** The scoring for this metric is based on large vehicles as a proportion of all traffic. It uses the methodology from the Calculation of Road Traffic Noise report (DfT, 1988). Peak hour traffic data from classified traffic counts should be used to score this metric. The definition of 'large vehicles' is taken from the standard vehicle classification used in traffic counts – it includes OGV1, OGV2 and Public Service Vehicles (buses and coaches).
6	**NO2 concentrations**	**Why is this important?** Poor air quality affects the health of every Londoner but disproportionately affects some of the most vulnerable people, including children. Transport contributes to over 60% of emissions in London. Air pollution causes cancers, cardiovascular and respiratory disease and contributes to premature deaths. So improving air quality will deliver benefits for everyone while also contributing to a reduction in health inequalities. While there are limitations to the influence of a single street design to overall air quality, measures that reduce the number of motor vehicles using a street have the most impact in reducing air pollution locally. **How do I measure it?** Use the modelled annual mean from the London Atmospheric Emission Inventory (https://www.londonair.org.uk/london/asp/annualmaps.asp). Enter the relevant postcode and make sure nitrogen dioxide (NO2) is selected in the 'select species' dropdown menu. As you will not have NO2 emission data for a proposed change to the street, the scoring system for a proposed design is based on existing NO2 emission data and whether the scheme includes local motorised traffic reduction measures. **Things to look out for:** The strongest evidence for the health impacts of air pollution is based on continued exposure over many years. Street designs that will, over the long term, reduce the volume of
7	**Reducing private car use**	**Why is this important?** The draft Mayor's Transport Strategy states that the success of London's future transport system relies upon reducing Londoners' dependency on cars in favour of increased walking, cycling and public transport use. Currently many trips are driven or ridden on motorcycles that could be walked, cycled or made by public transport. This is harmful to the health of the people driving, because it limits their physical activity, and it is harmful to everyone else because it discourages people from walking, cycling and using public transport and because it generates congestion, road danger, air pollution and noise. This metric captures measures that designers can take to encourage local trips by modes other than motor vehicles. **How do I measure it?** Time/movement restrictions includes banned turns, bus/cycle only turns, resident only access, timed street closures (eg weekends or mid-week inter-peaks), and other motorised traffic capacity reduction measures in the proposed scheme (eg road space re-allocation to walking, cycling and public transport, cycle parking, planting, seating). See LCDS chapter 3 for more detail on methods of reducing the dominance of streets by motorised traffic. To achieve the best score (2) the presence of motorised traffic other than delivery and refuse vehicles, public transport and local residents must be prohibited at all times
8	**Comfort of crossing side roads for people walking**	**Why is this important?** A motor vehicle turning across the path of a person walking can cause injury, it is intimidating and discourages people from walking, particularly older people and children. A range of interventions can be used to eliminate or mitigate this risk depending on the scenario. **How do I measure it?** For the existing situation, classified turning counts should be used. For proposed schemes, forecast volumes should be used. The level of exposure of people walking from turning motorised traffic and whether this exposure has been mitigated is the key consideration. **Things to look out for:** Wide entry/exit splays and junctions with large radii are often associated with turning collisions. Comfort for people walking can be improved and risks reduced by reducing the crossing width and introducing measures such as raised entry treatments and continuous footways. Separating people walking from turning motor traffic in time and/or space or eliminating motor vehicle movements altogether will improve the scoring. See LCDS chapter 3 and chapter 5 for more detail on methods of slowing turning movements and reducing the dominance of streets by motorised traffic.
9	**Mid-link crossings to meet desire lines**	**Why is this important?** Walking requires effort, so to get more people walking it is important that their route is direct. Crossing-points need to be aligned to desire lines to encourage more people to walk more often and to make it as pleasant and convenient for those who do. Not providing safe crossing opportunities at frequent intervals and along pedestrian desire lines can lead to people crossing in dangerous situations and increases collision risk. **How do I measure it?** This metric requires the assessor to identify whether mid-link crossings satisfy pedestrian demand to cross. Evidence that desire lines are not being met can come from site observations. Pedestrian movements during peak times can be plotted or collision analysis can reveal patterns of conflicts involving pedestrians when crossing the link. Mapping destinations for pedestrian movement can also help to identify desire lines. **Things to look out for:** This metric does not consider the type of crossing (see metric 10), just whether a crossing facility is provided.
10	**Opportunity to cross the street away from junctions**	**Why is this important?** Long waiting times can result in frustration for people walking and cycling and they are more likely to attempt a risky manoeuvre. It can also deter people from walking or cycling. Long wait times can also result in footways becoming crowded if people are unable to cross. **How do I measure it?** This is considered differently depending on the type of street, type of crossing and volume of vehicular traffic conflicting with the crossing movement. Uncontrolled crossings where people cross during gaps in general traffic flows are categorised in 3 ranges of motorised traffic flows (less than 200, 200 to 1000 and over 1000 vehicles per hour). Zebra and parallel crossings score highly as they provide priority for those crossing. However they are not suitable on wide streets or streets with high speed or volumes of general traffic. The highest scoring signal-controlled crossing gives priority for those crossing, operating 'on-demand' for general traffic, though these are likely to be suitable only in exceptional situations where crossing demand substantially outweighs general traffic. Signal-controlled facilities where crossings can be made in a single movement are preferred by people walking and cycling while staggered crossings become more appropriate as roads become wider and motorised traffic speeds become higher. Staggered signal-controlled crossings can offer shorter overall crossing times but this should be weighed against the inconvenience and discomfort of using a staggered facility, especially for the least able
11	**Technology to optimise efficiency of movement**	**Why is this important?** Detection and optimisation techniques canhelp reduce delays for pedestrians, cyclists and buses and potentially improving comfort for those cycling on carriageway by reducing motor traffic congestion. Improving the efficiency of the transport network is a core aim of the draft Mayor's Transport Strategy. Note that movement refers to people walking, cycling, using buses and all other motorised vehicles. The most efficient modes of transport are foot, cycle and bus. **How do I measure it?** The assessor needs to establish what technology is in place and what is proposed. This information will be available from the designers or from TfL Outcomes Delivery. **Things to look out for:** A core measure is Split Cycle Offset Optimisation Technique (SCOOT) which can be used for people walking, cycling, using buses and general motor traffic. SCOOT has proven to reduce delays by up to 12 per cent, and three quarters of junctions across the GLA area will be fitted with it by 2018. SCOOT is especially beneficial in busy and complex junctions such as those in central London. At other locations, simpler detection and prioritisation techniques at signals may be appropriate. It should be noted that pedestrian countdown (PCaTS) is not an optimisation technique and is included in metric 12.
12	**Level of support for people using controlled crossings**	**Why is this important?** This metric builds on metrics 9 and 10 (which consider the general provision of crossings) by exploring in more detail the design of the crossing provided. It concerns controlled crossings only – these could be crossings at signal-controlled junctions, signal-controlled mid-link crossings, zebra crossings or 'parallel crossings' (ie a 'zebra-like' pedestrian crossing next to a cycle crossing). Even where controlled crossings have been provided, the level of service they offer to people walking and cycling can vary considerably. Making crossings accessible to all, and ensuring that they support a design ethos of more people-friendly streets is important for ensuring people from all walks of life are encouraged to use the street. People should also feel they have time to cross the street, free from intimidation from vehicles. **How do I measure it?** For each controlled crossing, the assessor should note the following features: • appropriate type of crossing for the context • raised table, raised entry treatment or continuous footway at junctions, or crossing on a road hump mid-link • correct use of blister tactile paving (ie conforming to TfL Streetscape Guidance or equivalent, with appropriate tonal contrast, and with tactile tail) • PCaTS (pedestrian countdown at traffic signals) at signal-controlled facilities Indicatively, if the worst location within the study area has none of these, then score a 1. If it has only 1 or 2, then score a 2. If it has most or all, then score a 3. Some element of judgement is required here – particularly in determining whether the most appropriate crossing type has been used. The key question is: has the designer done everything they can to make this crossing accessible, and as comfortable as possible for all users? **Things to look out for:** If any arms of a signal-controlled junction lack a crossing facility, then the score should be 1. Likewise, lack of step-free access – ie a hump, raised table, entry treatment or dropped kerb – at a crossing triggers a score of 1. Confusing tactile paving layouts should also be noted and marked down accordingly (eg where tactile tails meet). Zebra and parallel crossings can be good facilities, because the person crossing gets as much time as the road – in theory – but can generate risks if there are multiple lanes in one or more direction on the carriageway

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13	**Width of clear, continuous walking space**	**Why is this important?** Maintaining a clear continuous walking space on footway is important for ensuring walking is comfortable and direct. A clear continuous walking space at least 1.5 metres wide is particularly important for wheelchair users who otherwise would not be able to cross the path of someone walking on the footway (see DfT, Inclusive Mobility). Clear continuous walking space less than 1.5 metres wide is commonly encountered but can often be rectified by decluttering. The appropriate amount of footway space also depends on likely pedestrian flow, and the Healthy Streets Check takes this into account, at a basic level. Note that this metric is intended to be a quick estimate of pedestrian comfort, and does not substitute for a more thorough analysis of pedestrian comfort levels. See TfL, Pedestrian Comfort Guidance for London. https://tfl.gov.uk/corporate/about-tfl/what-we-do/walking **How do I measure it?** Measure the narrowest point between obstructions such as the building line and signal controllers or bus stops. The categories 'busy', 'moderately busy' and 'quiet' relate to peak pedestrian flow, but can be indicatively. If flows are known, then they can be compared with the peak flow categories in the London Cycling Design Standards, chapter 4, page 66. 'Busy' can be taken to mean 'high' or 'very high' by this measure, ie peak pedestrian flow above 450 per hour. 'Moderately busy' refers to the 'medium' flow category, ie 200-450 pedestrians per hour. A peak flow below 200 pedestrians per hour is 'quiet'. **Things to look out for:** When doing an on-street audit, moveable items such as A-boards and litter bins should be taken into account when assessing the narrowest width on the segment, as well as more permanent objects, such as telephone boxes and lamp columns. Where there are cycle stands perpendicular to the kerb line, the measurement of distance should assume the cycle stand is in use – ie measure
14	**Sharing of footway with people cycling**	**Why is this important?** Shared use footway for people walking and cycling may be the only option in some locations but is generally best avoided, ie cycles should have a dedicated facility or be on the carriageway. Older and disabled people and young children can feel particularly vulnerable when people cycle on the footway. This can deter them from walking so the choice and the design must be carefully considered. Where any part of the footway is legally designated as shared use then it is likely to to have least impact on the comfort and feeling of safety of all users where there is more width available. **How do I measure it?** If there is no shared use footway in the segment being assessed, score a 3. If there is shared use footway, then a 2 may be scored if the location is 'quiet' (ie peak pedestrian flow less than 200 per hour) and if 3 metres or more of clear width is available. Otherwise, shared use footway scores a 1. As with metric 11, the pedestrian flow may be estimated if no data is available. If, through on-site observation, people are seen cycling on a footway illegally (ie where it is not legally designated as shared use), apparently to avoid hostile on-carriageway traffic conditions, then this is grounds for scoring a 1. **Things to look out for:** Blue 'diagram 956' signs indicate a footway is designated legally as shared use. This often applies either side of crossing that can be used by cycles (eg a toucan or parallel crossing). Any
15	**Collision risk between people cycling and turning motor vehicles**	**Why is this important?** A vehicle crossing the path of someone cycling is one of the most common causes of injury as well as being intimidating and discouraging people from cycling. Addressing it through design is a high priority for creating streets where people from all walks of life can choose to cycle. The issues around exposure to risk at signal-controlled and priority junctions are distinct, and are therefore dealt with differently in the metric. While the level of exposure of people cycling to turning motor traffic (ie the number of vehicles turning) is significant, risk also depends on the types of vehicle being encountered, on speed, and on visibility between road users. Determining this risk can be complex, even if all the data is available. This metric therefore focuses mostly on the high-level question of whether exposure to risk has been mitigated for in the design. **How do I measure it?** For any priority junction in the segment to be assessed, the score depends on what has been done to minimise turning movements. If priority junctions are all closed to or access-only for motor vehicles, then a score of 3 is likely to be appropriate (noting that a judgement needs to made about 'access-only' scenarios as to how many vehicles may need to turn at that location in order to gain access). To score 2 where side roads are open to through-traffic, ways to minimiseg turning movements by motor vehicles could include one-way out, banned turns in, or modal filters on the side road. For this metric, physical measures to reduce speed on turning (such as raised entry treatments and tight corner radii) should be disregarded because thesy are considered in metric 3. All other priority junction scenarios score a 1. For any signal-controlled junction in the segment to be assessed, counts are needed to give a breakdown of turning movements by vehicle type. The average % over a weekday is the most appropriate measure. To score a 3, all cycle movements at each arm of the junction should be able to be made separately, in time, from any conflicting movement by motor traffic. This generally includes right-turning cycles. Exceptions can be made where there is no or very low demand for a given cycle movement, ie where cycle movement in one direction is 'protected' but where movement in other directions is not. Where there are movements in conflict (eg motor vehicles turning while cycles are proceeding ahead), then providing mitigation measures can increase the score. This means measures to reduce speed on turning, such as junction tables, raised entry treatments and tight corner radii (indicatively less than 3 metres – from LCDS chapter 5, page 4). The other factor is the proportion of large vehicles making a given turning movement. Across all arms of all junctions in the segment being assessed, the assessor needs to score the movement with the highest proportion of larger vehicles turning. Larger vehicles means anything larger than an LGV, ie OGV1, OGV2 and PSVs. The overall score for this metric is the lower of the two scores for the lowest-performing priority junction and signal-controlled junction. **Things to look out for:** LCDS chapter 5 shows common approaches to signal controlled junctions to help separate cycle movements from turning movements by motorised traffic. These include 'hold the left',
16	**Effective width for cycling**	**Why is this important?** The width of the cycling space determines how closely other vehicles may come to people cycling when they overtake. Close passes can cause collisions and are a major reason people feeling unsafe when cycling. An important consideration is the cycling position – primary or secondary, which is explained in more detail in LCDS chapter 3, page 10. If the designer chooses for people to cycle in the primary position, the lane should be narrow enough to prevent motor vehicles from overtaking or wide enough to allow safe overtaking. When the traffic lane is between 3.2 and 3.9 metres wide, people driving are likely to attempt overtaking people cycling despite not being able to give enough clearance. In a lane less than 3.2 metres wide, drivers cannot overtake people cycling without moving out into in an adjacent lane. A lane that is 4 metres or more in width should allow motorists to overtake people cycling with sufficient clearance without having to move out of the lane. Where cycles have dedicated space, ie where there is a cycle track, then the comfort of using the track depends on the width available – again, ability to overtake or be overtaken without generating unnecessary risks is key. Meeting recommended widths from the LCDS is the best way to ensure that there is space for overtaking within the cycle track. See LCDS chapter 3, page 9 and chapter 4, page 52 for more details. **How do I measure it?** For off-carriageway cycling, ie cycle tracks, measure the width of the narrowest point of the track in the segment being assessed. If the track is bounded by objects higher than a standard kerb (ie higher than 125mm) then allow for some extra clearance to that object, as described in LCDS chapter 3. Deduct 250mm from the width for intermittent objects like sign posts and lamp columns and 500mm for continuous features like walls, railings and hoardings. This width metric simplifies the recommendation in LCDS for cycle tracks by generally removing the need to take into account cycle flow. However, where the cycle demand is expected to be high, as defined in LCDS, chapter 4, page 54 – ie over 800 per hour on a one-way track or over 1,000 per hour on a two-way track – then the assessor may exercise a judgement to mark down a facility that does not meet the recommended minimum widths in LCDS. In other words, they may score a 0 for tracks less than 1.5m wide (one-way) or 2.5m wide (two-way), a 1 for tracks between 1.5 and 2.2 metres wide (one-way) or between 2.5 and 3.5 metres wide (two-way). For on-carriageway cycling, measure the width of the traffic lanes used by people cycling. If there is a cycle lane, use the combined width of the cycle lane and the nearside traffic lane. If there is no cycle lane, use the width of the nearside lane. The narrowest part of the lane(s) should be used in the Check. **Things to look out for:** Both on- and off-carriageway, look out for pinch points caused by upstands and other horizontal deflections. A common cause of injuries and near misses for people cycling is when they
17	**Impact of parking and loading on cycling**	**Why is this important?** Kerbside activity is a common cause of injuries and near-misses for people cycling. People cycling can feel pressurised to ride close to stopped motor vehicles and this can lead to collision with opening doors or with moving traffic from behind. Collision with opening doors is the second most common cause of serious or fatal injuries to people cycling in London – after right turn across the path of a cyclist. Streets should therefore be designed so that people cycling can ride with sufficient clearance to parked vehicles, or vehicles loading, while staying in the lane. At least 1 metre clearance is recommended. **How do I measure it?** Determine the likely position for people cycling, referring to the consideration under metric 16 about primary and secondary riding positions, and measure the width between that position and any location where motor vehicles are likely to stop. This includes loading bays, both long- and short-stay parking, school drop-off areas, taxi ranks and bus stops. Where vehicles can legally park within a general traffic lane or bus lane, even if only off-peak, determine in this case where people cycling will reasonably need to position themselves while staying in their lane. If people cycling cannot reasonably give 1 metre or more clearance to stopped motor vehicles, then score a 0. The difference between scores of 1 and 2 is in the frequency of kerbside activity – the assessor must make a judgement about this. 3 can be scored where there is no kerbside activity likely under normal circumstances. **Things to look out for:** The start of a bay, or of a section where parking is permitted, is a particularly sensitive location as this is where someone cycling is likely to need to move out towards moving traffic in order to give themselves the required clearance. Wherever possible, take note of where vehicles actually park or load, rather than simply the extents of a marked bay – particularly for inset bays and bays half-on / half-off bays the footway. Bays can sometimes be too narrow to accommodate larger vehicles, meaning the vehicle protrudes into the cycle lane or nearside general traffic lane. Where a design requires motor vehicles to cross a cycle lane or track, and there are likely to be many such movements in a given day, then look for some mitigation of the risk generated by this. For example, cycle symbols or surface colour may be used to highlight to motorists that they are crossing a cycle facility. On quieter residential streets with parking on one or both sides, it can be assumed that people will cycle as far from either side as possible – ie in the centre of the carriageway where there is parking on both

18	**Quality of cycling surface**	**Why is this important?** Surface defects and uneven surfaces (eg unmade or cobbled) generate potential risks for people cycling who might become unstable and fall, or might deviate into the path of motorised traffic to avoid a defect. The cycling surface should be safe and comfortable to encourage more people to cycle. Some people cycling are particularly sensitive to uneven surfaces. This includes many people using cycles as mobility aids. It is important therefore that poor surface quality does not deter these people and that the choice to cycle is available to people from all walks of life. **How do I measure it?** Cycling surface refers to the surface of a cycle lane or track or, if there is no dedicated cycle facility, the surface quality of the traffic lane(s) used by people cycling. The frequency and potential severity of defects should be assessed. Major defects are defined as any defect that could destabilise a person cycling. On carriageway, poorly aligned gullies or sunken covers/gullies below 20mm should be viewed as major defects. If the scheme includes the resurfacing of the whole cycling surface, score 3. If the scheme includes the resurfacing of only part of the cycling surface, score the remaining existing surface. **Things to look out for:** Defects include non cycle-friendly ironwork and raised or sunken covers and gullies. Longitudinal cracks and defects are potentially more severe than horizontal ones and should be considered major if on the path of people cycling. See London Cycling Design Standards, chapter 7 for more detail on construction and maintenance issues that affect the quality of surface for cycling
19	**Quality of walking surface**	**Why is this important?** People walking require a higher standard of surface maintenance than motor vehicles: relatively small defects can cause trip hazards that could result in injuries. This is particularly important for disabled and older people. One of the greatest barriers to some people leaving their homes on foot is fear of tripping and falling on the footway. Barriers for some people can be inadvertently built in as part of the design of the footway or public space. These include small level differences that are difficult to detect, particularly for visually impaired people, and larger ones that create barriers for wheelchair users, among others. **How do I measure it?** Major defects are defined as any defect which could destabilise a person walking. On footways, badly cracked paving and non-flush dropped kerbs should be regarded as major defects. If the scheme includes the resurfacing of the whole walking surface, score 3. If the scheme includes the resurfacing of only part of the walking surface, score the remaining existing surface. A clear, level surface for walking should score a 3. If there are level differences of 20mm or more (excluding kerbs of 60mm or more and steps delineated by corduroy paving) without any tonal contrast to delineate and highlight them, then score a 0. In the absence of any other defects, an 'undelineated' level difference of 10-20mm scores 1 and a difference of less than 10mm scores 2. **Things to look out for:** Crossing points are particularly sensitive locations, given this is where the majority of people have to walk. Look out for cracked paving slabs (including tactile paving), non-flush tables and raised entry treatments and crossfalls greater than 2.5%. There may be changes in materials and/or colour at thresholds between parts of the footway or public space managed by the highway authority and parts in private ownership
20	**Surveillance of public spaces**	**Why is this important?** Streets must feel like pleasant places to be, an important part of this is feeling safe and being reassured that you are not vulnerable to crime or anti-social behaviour. Places that feel safe and reassuring tend to be those with life and activity, where people from all walks of life are made to feel welcome. In contrast, streets and public spaces that feel isolated and neglected, without that sense that there are any active uses, discourage people from staying around. Surveillance is an important component of that feeling of safety. This refers mainly to the existence and use of buildings that open out onto or overlook the street or space. It also arises from active use of the space, ie a street where people are encouraged to dwell will have better surveillance. This does, however, need to be considered for all times of the day and week. Some spaces may be busy and well overlooked for parts of the day but quiet and potentially quite isolated at other times. This is often the case where there is a single, dominant land use, such as office buildings, rather than a mix of uses. Feeling of safety and surveillance are particularly important to consider where the designer has chosen to locate seating, pocket parks and cycle parking. For the latter, fear of cycle theft is a key barrier to people cycling more and experience of cycle theft is often cited as a reason people stopped cycling. So it is important that cycle parking is well located and ideally enjoys good natural surveillance. **How do I measure it?** A street or space with good surveillance would be one where there are doors opening directly onto the space, and windows directly overlooking it, and where the buildings host a mix of uses, ensuring that there is activity at most times of the day. The assessor should consider both the land uses and the way the space is bounded. A street or space with a continuous frontage, well enclosed, without leftover spaces, is one that is likely to enjoy better surveillance. When undertaking an on-street assessment, the presence of pedestrians – both walking through and dwelling in the space – is a good indicator of an active, well used space. However, consideration needs to be given to how the space will feel at other parts of the day. **Things to look out for:** Consider how places feel where people may have to visit for relatively short periods of time and may feel vulnerable, such as bus stops and cycle parking. Look out for signs of neglect – a build-up of litter or fly tipping, for example – and for long, blank facades as an indicator that a space is likely to feel isolated and not very safe.
21	**Lighting**	**How do I measure it?** Street lighting should be compliant with existing British and European Standards. If in doubt, a qualified Lighting Engineer should be consulted. **Why is this important?** Street lighting is important for ensuring that people walking and cycling can see their way and can feel safe from antisocial behaviour. The ambience of the lighting also affects how relaxed they feel. **Things to look out for:** TLRN roads already meet British and European standards. New schemes affecting street lights will by default be compliant with standards. This metric is especially important when scoring an existing layout to highlight opportunities for improvements. Footway and cycling provision off carriageway also need to be assessed, not only lighting of the carriageway.
22	**Provision of cycle parking**	**Why is this important?** Provision of cycle parking and its security are essential for supporting more people to cycle more often. An inclusive approach to cycle parking is needed to cater for people who use 'non-standard' models of cycle, including those who use cycles as mobility aids. LCDS Chapter 8 details many of these principles. **How do I measure it?** Cycle parking 'accessible by all' is defined as step-free access (ie parking facility is on the carriageway or step-free access is possible from the carriageway to the cycle parking location) and with provision for larger cycles such as child carriers and hand cycles. The score is also based on assessing existing demand. 'Fly-parking' (cycles locked to street furniture) is an indicator of cycle parking not meeting the demand. **Things to look out for:** Cycle parking provision may appear sufficient if not full. However, in some case it can be due to the facility being too far from trip generators or not having appropriate surveillance (ie prone to bike theft). It is also important to ensure that the spread of demand across the day is considered, in conjunction with planning for provision that is appropriate for trip purpose and length of stay. Spare capacity at cycle parking provision combined with 'fly-parking' may be an indicator of cycle parking being in the wrong location.
23	**Street trees**	**Why is this important?** Trees can contribute to making streets feel more relaxing and more attractive places to walk, cycle and use public transport. Tree cover contributes to shade from sunshine and protection from rain. In some cases trees can also help remove some pollutants from the air and improve the perception of noise. The wider benefits of trees in mitigating the impacts of climate change through CO2 capture also means that we should make every effort to retain our mature trees and plant new ones. Part E of TfL Streetscape Guidance and TfL's SuDS in London guidance provide further details on the role of trees in the Street Environment. **How do I measure it?** When assessing an existing street, the distance between tree canopies should be measured, not the distance between tree trunks. This will ensure that a street with mature trees, which provide better shade and cover, gets a higher score than a street with young trees only. When assessing a proposal, it is the removal and planting of trees that is assessed, as well as the spacing of canopies. **Things to look out for:** When assessing existing streets, trees located on privately managed land but with canopies overhanging the public domain can be included when estimating the spacing between canopies. It is not possible to get the highest score if one or more existing trees are proposed to be removed. If some trees are removed but replaced or if the overall number of trees is increased, the proposal will be scored 2.
24	**Planting at footway level** (excluding trees)	**Why is this important?** Almost all streets could add more footway-level greening and this can be more flexible to adapt to restricted sites than planting new trees. The benefits of footway greening contribute to almost all Healthy Streets Indicators. Part E of TfL Streetscape Guidance and TfL's SuDS in London guidance provide further details on the role of footway-level planting and green infrastructure generally. **How do I measure it?** When assessing an existing street, this metric is scored based on the presence and function of footway-level planting and grassed areas. The highest score is triggered by well-maintained planting or grassed areas that are designed to enhance the street's social space or connect to surrounding greenery. When assessing a proposal, it is the removal of existing greenery and new planting that influence the scoring. **Things to look out for:** The condition of planting and/or its location should also be considered in existing and proposed layouts. If planting is not well maintained, or in areas that are detrimental to people movement, this should be reflected in the scoring.

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25	**Walking distance between resting points** (benches and other informal seating)	**Why is this important?** Streets need to be comfortable places to dwell for everyone; enabling people to sit contributes to this as well as to natural surveillance and ensuring street environments are inclusive for people who cannot walk long distances without a rest. The recommended spacing between resting points is driven by the needs of the least mobile users. Research based on a follow-up study to the London Area Travel Survey found that of all the people with a disability who were able to walk at all, approximately 30 per cent could manage no more than 50 metres without stopping or experiencing severe discomfort, and a further 20 per cent could only manage between 50 and 200 metres. TfL's Streetscape Guidance 2016 (P228) recommends maximum spacing interval of 50 metres for seating on high streets, city places and steep inclines. This is consistent with the Department for Transport's guidance on inclusive mobility, which recommends maximum distances without rest for various user groups. **How do I measure it?** Take a linear measure between resting points on the same side of the road. The longest spacing between points should be used for the score. If there is a resting point on only one side o the road, and there is a crossing conveniently located for this (or the carriageway is so quiet that it can easily be crossed at any point) then that resting point can be considered as serving both sides. Informal seating may include seats at bus shelters, low walls and planting borders that are at similar height to benches, although ideally seating should have a back support and arm rest. Grassed areas cannot be counted as informal seating as some people may not be able to get up from ground level (eg older people with reduced mobility). **Things to look out for:** Resting points should be available to the general public during all hours. Seating provided by businesses (cafes, shops) may not be available outside of trading hours and should not be included in the scoring. Resting points should have adequate lighting, should not impair pedestrian flow and should allow a safe distance from passing motorised traffic.
26	**Walking distance between sheltered areas protected from the rain** including fixed awning or other shelter provided by buildings/infrastructure	**Why is this important?** Providing shade and shelter from high winds, heavy rain and direct sun enables everybody to use our streets, whatever the weather. This is particularly important for older people, small children and people with certain illnesses and disabilities. Mature trees with established canopies, colonnades, fixed awnings, bus shelters and any other shelter provided by buildings can be considered as sheltered areas. **How do I measure it?** Take a linear measure between sheltered areas on the same side of the road. The longest spacing between points should be used for the score. If there is a sheltered area on only one side of the road, and there is a crossing conveniently located for this (or the carriageway is so quiet that it can easily be crossed at any point) then that point can be considered as serving both sides. **Things to look out for:** Only permanent sheltered areas that are accessible at all times of day should be considered in this assessment. Awnings on shops should not be included.
27	**Factors influencing bus passenger journey time**	**Why is this important?** TfL research shows that service reliability is the key driver for bus user satisfaction (Exploring the Bus CSS metrics report). Reliability is comprised of journey time and the time spent waiting to catch the bus. **How do I measure it?** This metric is scored based on the impact of the street layout and general traffic on bus journey time and reliability. Score 3 if bus priority measures are in place, or are proposed, to mitigate bus delays. Score 2 if there are no bus priority measures but general traffic does not significantly affect buses (ie there is little or no congestion). Score 1 if buses are delayed by general traffic or street layout and nothing is in place or proposed to mitigate it. **Things to look out for:** Bus journey times may not be available. Assess the layout and streetscape to consider if bus progression is affected by geometry or amenities.
28	**Bus stop accessibility**	**Why is this important?** There are many different user groups who have different needs with regards to bus stop design. The street and bus service's inclusivity relies on the bus stop being accessible for those users who may use wheelchairs, crutches, walking sticks, guide dogs, shopping trolleys, buggies and mobility scooters. **How do I measure it?** To be fully compliant as an accessible bus stop, a bus stop must meet the following three criteria: 1. It must have a Clearway in place. On borough roads a clearway is denoted by a thick solid yellow line (Traffic Signs Regulations and General Directions (TSRGD) diagram 1025.1). Each bus stop should have one of these along the length of the bus stop cage. Also required, for the enforcement of no stopping restrictions is an upright sign meeting the description in TSRGD schedule 7, part 6, clause 1 ("an upright sign which includes a stopping prohibited symbol and indicates that stopping by vehicles other than buses or local buses is prohibited, or prohibited during the period indicated"). For the Transport for London Road Network (TLRN), the requirement for timeplates has now been removed because the double red line at the bus stop denotes no stopping. 2. The kerb height must be greater than 100mm. For a bus to deploy its ramp safely the ideal range is 125 to 140mm. 3. Access to the bus stop must be free of impediments. A visual check of the area around the bus stop, including the surrounding pavement, must be undertaken to ensure that the bus will be able to deploy its ramp and that wheelchair users and people with prams can access the ramp. This is important in preventing visually impaired people walking into obstacles when boarding and alighting the bus.
29	**Bus stop connectivity with other public transport services**	**Why is this important?** Conveniently locating bus stops as near as possible to other services will deliver a shorter transition time for public transport users. This helps encourage people to use public transport instead of private cars for longer journeys and ensures the distance is walkable by the least mobile users. It can also mean the other service is within sight of the bus stop, making public transport use more legible. **How do I measure it?** Measure the walking distance between the bus stop and the other public transport service that users may wish to transfer on to – this includes, for example, another bus stop, a London Underground station or a National Rail station. **Things to look out for:** Where a bus stop cannot be located within sight of other public transport services that people may wish to connect with, appropriate wayfinding must be in place.
30	**Street-to-station step-free access**	**Why is this important?** To be more accessible to people (including, wheelchair users, older people and parents with prams or buggies), step-free access from the street to the station must be provided. **How do I measure it?** This metric is about step-free access from the street to the station (ie not step-free access to platform). A station access point must be within the extents of the study area. **Things to look out for:** The Healthy Streets Check only assesses street design elements. Therefore this metric does not consider access to services (step-free access to platform). Although not covered in this tool because not easily measurable, many other elements such as colour contrasts and tactile information determines the accessibility of services for some people.
31	**Support for interchange between cycling and underground/rail**	**Why is this important?** Improving the cycling facilities near stations will encourage public transport users to consider cycling part of their journey. It also extends the catchment area of stations by providing users with an alternative to long walking distances or driving to access the station. This metric concerns facilities for people who need to leave a cycle at an interchange in order to connect with public transport services – it does not therefore include consideration for cycle hire or folding cycles. **How do I measure it?** Review cycle parking based on location, type and amount. Ensure that all station accesses are identified. The highest score is achieved for cycle parking that is close to station access points (ideally within 50 metres, and no more than 150 metres away), offers secure facilities such as access controls as appropriate (in a location with good natural surveillance, this may not be needed) and that exceeds existing demand. In some cases, it may be possible to request data on predicted future demand, and this should be used if available. When undertaking site visits, assessors should determine if provision meets existing demand, ie where there are no or few empty spaces. **Things to look out for:** Underused cycle parking does not always mean that there is no demand for cycle parking. Underused cycle parking, combined with examples of fly-parking (eg cycles chained to railings) usually means that the cycle parking is poorly located. Poorly located cycle parking includes facilities that are spaces with poor natural surveillance. Assessors should also note whether the facilities align with locations where people cycling are likely to arrive. If cycle parking has to be located out of sight, eg in a basement, then this should be regarded as poorly located unless it is well signposted.

How to interpret the results

The Check will produce a percentage score against each of the 10 Healthy Streets Indicators. These percentage scores give a general picture of how a design, in the round, is delivering against the 10 Healthy Streets Indicators. Designers should seek to incease the Healthy Streets Indicators scores.

An overall percentage score is also presented. This is not an average of the scores for each Indicator as each metrics contribute to multiple Indicators scores.

It is not possible to score a perfect 100% in any one design because compromises and trade-offs inevitably need to be made. The overall percentage score is less important than eliminating critical issues and delivering a rounded design.

The objective therefore is to get as high a score as possible, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated. A proposed scheme should also aim to deliver a score increase from baseline for all Healthy Streets Indicators' scores.

If any metrics have scored '0' these will be flagged up in the summary graph above and if they cannot be reconciled a justification for the decision to leave them in the design should be written in the text box below the scoring table.

There is no threshold score for a Healthy Street. Streets are not either 'healthy' or 'unhealthy' - some designs will perform better than others against the 10 Healthy Streets Indicators which may reflect physical, financial or political constraints on the project.

What the numbers mean

The Healthy Streets Check is not a scientific assessment of how healthy a street is. It is not the case that a street with a 10% increase in Healthy Streets Check score confers 10% greater health benefit to people who use it. It is also not the case that a 10% increase in Healthy Streets Check score will deliver a 10% uplift in active travel.

The metrics included in the Healthy Streets Check are the best available quantifiable and evidence based standards that are within the gift of the traffic engineer or urban designer to influence through the design of the street. As a result some of the Healthy Streets Indicators are linked to only a few metrics e.g. shade & shelter while others are linked to all 31 metrics e.g. pedestrians from all walks of life, because all the metrics contribute to the whole environment in the round and therefore affect the Indicator.

The numbers must therefore not be given any undue weight in the interpretation of the results. The objective is to get as high a score as possible for a given project, for this to be as evenly distributed across the 10 Indicators as possible and for '0' scores to be eliminated.

What '0' scores mean

Ten of the metrics can be scored '0'. All of these metrics are known high risk road danger issues. TfL is pursuing a Vision Zero target of zero deaths and serious injuries on the streets by 2050 which means that close consideration must be paid to ensure every opportunity to redesign our streets seeks to eliminate these known hazards.

Metrics scored '0' will be flagged in the final results if they have not been addressed . It is not always possible to improve '0' scores but it is important that these are identified through applying the Check and every effort has been made to find a design solution that can remove them.

Why you cannot get a perfect score

In a complex street environment a balanced approach must be taken; freeing up space for cycling or extending crossing times for pedestrians may produce delays for buses. Likewise removing a pinch point for cyclists or buses may mean removing an island refuge for pedestrians or from the reverse perspective installing an island refuge may introduce a pinch point for buses and cyclists. To be transparent and promote the best possible outcome in the round, recognising the difficult decisions designers

APPENDIX 4 - CLoS Assessment (Wimbledon Park Road)

http://lcc.org.uk/pages/clos

**For highlighted critical indicators,*

Factor	Indicator	Critical * (fail)	Basic CLoS (score=0)	Good CLoS (score=1)	Highest CLoS (score=2)	Current Score		Proposed Scheme Score
Safety	**(max possible = 48)**							
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 junctions	0	x3	3
	Collision alongside or from behind	Nearside lane in range 3.2m to 4.0m	Cyclists in wide (4m+) nearside traffic lanes or cycle lanes less than 2m wide	Cyclists in dedicated cycle lanes at least 2m wide	Cyclists separated from motorised traffic	FAIL	x3	FAIL
	Kerbside activity or risk of collision with door	Cycle lanes <1.5m alongside parking / loading with no buffer	Frequent kerbside activity / effective width for cyclists of 1.5m	Less frequent kerbside activity / effective width for cyclists of 2m	No kerbside activity / No interaction with vehicles parking or loading	0	x3	0
	Other vehicle fails to give way or disobeys signals		Poor visibility, no route continuity across junctions and unclear priority	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	0		0
Feeling of safety	Separation from heavy traffic		Cyclists in general traffic lanes or cycle lanes less than 2m	Cycle lanes at least 2m wide	Cyclists physically separated from other traffic at junctions and on links, or no heavy freight	0		0
	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	3	x3	3
	Total volume of traffic (where cyclists are not separated)	>1,000 vehicles/ hour at peak	500 - 1,000 vehicles / hour at peak (but becomes 'critical' if 5 per cent or more are HGVs)	200 - 500 vehicles / hour at peak (but becomes 'basic' if 2 per cent or more are HGVs)	<200 vehicles / hour at peak	0	x3	0
	Interaction with HGVs	Frequent, close interaction	Frequent interaction	Occasional interaction	No interaction	3	x3	3
Social safety	Risk/fear of crime		High risk: 'ambush spots', loitering, poor maintenance	Low risk: area is open, well designed and maintained	No fear of crime: high quality streetscene and pleasant interaction	1		1
	Lighting		Long stretches of darkness	Short stretches of darkness	Route lit thoroughly	1		2
	Isolation		Route passes far from other activity, for most of the day	Route close to activity, for all of the day	Route always overlooked	1		1
	Impact of highway design on behaviour		Layout encourages aggressive behaviour	Layout controls behaviour throughout	Layout encourages civilised behaviour: negotiation and forgiveness	1		1
Directness	**(max possible = 8)**							
Journey time	Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle ahead (including other cyclists)	Cyclists can usually pass other vehicles (including cyclists)	Cyclists can always pass other vehicles	1		1
	Delay to cyclists at junctions		Journey time longer than motor vehicles	Journey time around the same as motor vehicles	Journey time less than motor vehicles	1		1

APPENDIX 4 - CLoS Assessment (Wimbledon Park Road)

Value of time	For cyclists compared to private car use (normal weather conditions)		VOT 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	1		1
Directness	Deviation of route (against straight line or nearest main road alternative)		Deviation factor greater than 40 per cent	Deviation factor 20-40 per cent	Deviation factor less than 20 per cent	2		2
						5		5
Coherence	**(max possible = 6)**							
Connections	Ability to join/leave route safely and easily		Cyclists cannot connect to other routes without dismounting	Cyclists share connections with motor traffic	Cyclists have dedicated connections to other routes	1		1
	Density of other routes		Network density mesh width >400m	Network density mesh width 250-400m	Network density mesh width <250m	0		0
Way-finding	Signing		Basic direction signing (cyclists follow road signs and markings)	Some cycle-specific direction signing	Consistent signing of range of routes and destinations at decision points	1		1
						2		2
Comfort	**(max possible = 20)**							
Surface quality	Defects: non cycle friendly ironworks, raised/ sunken covers/gullies	Major defects	Many minor defects	Few minor defects	Smooth, high-grip surface	3	x3	3
Surface material	Construction		Hand-laid asphalt or unstable blocks/sets	Machine laid asphalt concrete or HRA; smooth blocks	Machine laid asphalt concrete; smooth and firm blocks undisturbed by turning vehicles	2		2
Effective width without conflict	Clear nearside space in secondary position or motor vehicle speed/ volume in primary position	Secondary: <1.5m Primary: high motor vehicle flow	Secondary: 1.5m Primary: medium motor vehicle flow	Secondary: 1.5-2.0m Primary: low motor vehicle flow	Secondary: >2.0m Primary: no overtaking by motor vehicles	0	x3	0
Gradient	Uphill gradient over 100m		>5 per cent	3-5 per cent	<3 per cent	2		2
Deflections	Pinch points caused by horizontal deflections		(Remaining) lane width <3.2m	(Remaining) lane width >4.0m or <3.0m (low motor vehicle flow)	Traffic is calmed so no need for horizontal deflections	0		0
Undulations	Vertical deflections		Round top humps	Sinusoidal humps	No vertical deflections	2		2
						9		9
Attractiveness	**(max possible = 12)**							
Impact on walking	Pedestrian Comfort Level (PCL)		Reduction in PCL to C, D or E	No impact on pedestrian provision or PCL never lower than B	Pedestrian provision enhanced by cycling provision or PCL A	1		1
Greening	Green infrastructure or sustainable materials incorporated into design		No greening element	Some greening elements	Full integration of greening elements	0		0
Air quality	PM10 & NOX values referenced from concentration maps		Medium to High	Low to Medium	Low	0		0
Noise pollution	Noise level from recommended riding range		>78DB	65-78DB	<65DB	0		0
Minimise street clutter	Signing required to support scheme layout		Large amounts of regulatory signing to conform with complex layout	Moderate amount of signing, particularly around junctions	Minimal signing, eg for wayfinding purposes only	1		2

APPENDIX 4 - CLoS Assessment (Wimbledon Park Road)

Secure cycle parking	Ease of access to secure cycle parking on- and off-street		No additional secure cycle parking	Minimum levels of cycle parking provided (ie to London Plan standards)	Cycle parking is provided to meet future demand and is of good quality and securely located	1		2
						3		5
Adaptability	**(max possible = 6)**							
Public transport integration	Smooth transition between modes or route continuity maintained through interchanges		No 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.	1		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	1		1
Growth enabled	Route matches predicted usage and has exceedence built into the design		Provision does not match current levels of demand	Provision is matched to predicted demand flows	Provision has spare capacity for large increases in predicted cycle use	1		1
						3		4
TOTAL (max 100)						**32**		**39**

For highlighted critical indicators, score is multiplied by 3 (basic = 0, good = 3, highest = 6)

APPENDIX 4 - CLoS Assessment (Replingham Road)

http://lcc.org.uk/pages/

**For highlighted critical indicators,*

Factor	Indicator	Critical * (fail)	Basic CLoS (score=0)	Good CLoS (score=1)	Highest CLoS (score=2)	Current Score		Proposed Scheme Score
Safety	**(max possible = 48)**							
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 junctions	0	x3	3
	Collision alongside or from behind	Nearside lane in range 3.2m to 4.0m	Cyclists in wide (4m+) nearside traffic lanes or cycle lanes less than 2m wide	Cyclists in dedicated cycle lanes at least 2m wide	Cyclists separated from motorised traffic	FAIL	x3	FAIL
	Kerbside activity or risk of collision with door	Cycle lanes <1.5m alongside parking / loading with no buffer	Frequent kerbside activity / effective width for cyclists of 1.5m	Less frequent kerbside activity / effective width for cyclists of 2m	No kerbside activity / No interaction with vehicles parking or loading	0	x3	3
	Other vehicle fails to give way or disobeys signals		Poor visibility, no route continuity across junctions and unclear priority	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	0		0
Feeling of safety	Separation from heavy traffic		Cyclists in general traffic lanes or cycle lanes less than 2m	Cycle lanes at least 2m wide	Cyclists physically separated from other traffic at junctions and on links, or no heavy freight	0		0
	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	3	x3	3
	Total volume of traffic (where cyclists are not separated)	>1,000 vehicles/ hour at peak	500 - 1,000 vehicles / hour at peak (but becomes 'critical' if 5 per cent or more are HGVs)	200 - 500 vehicles / hour at peak (but becomes 'basic' if 2 per cent or more are HGVs)	<200 vehicles / hour at peak	0	x3	0
	Interaction with HGVs	Frequent, close interaction	Frequent interaction	Occasional interaction	No interaction	3	x3	3
Social safety	Risk/fear of crime		High risk: 'ambush spots', loitering, poor maintenance	Low risk: area is open, well designed and maintained	No fear of crime: high quality streetscene and pleasant interaction	1		1
	Lighting		Long stretches of darkness	Short stretches of darkness	Route lit thoroughly	2		2
	Isolation		Route passes far from other activity, for most of the day	Route close to activity, for all of the day	Route always overlooked	1		1
	Impact of highway design on behaviour		Layout encourages aggressive behaviour	Layout controls behaviour throughout	Layout encourages civilised behaviour: negotiation and forgiveness	1		1
						11		17
Directness	**(max possible = 8)**							
Journey time	Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle ahead (including other cyclists)	Cyclists can usually pass other vehicles (including cyclists)	Cyclists can always pass other vehicles	1		1
	Delay to cyclists at junctions		Journey time longer than motor vehicles	Journey time around the same as motor vehicles	Journey time less than motor vehicles	1		1
Value of time	For cyclists compared to private car use (normal weather conditions)		VOT 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	1		1

APPENDIX 4 - CLoS Assessment (Replingham Road)

Directness	Deviation of route (against straight line or nearest main road alternative)		Deviation factor greater than 40 per cent	Deviation factor 20-40 per cent	Deviation factor less than 20 per cent	2		2
						5		5
Coherence	**(max possible = 6)**							
Connections	Ability to join/leave route safely and easily		Cyclists cannot connect to other routes without dismounting	Cyclists share connections with motor traffic	Cyclists have dedicated connections to other routes	1		1
	Density of other routes		Network density mesh width >400m	Network density mesh width 250-400m	Network density mesh width <250m	0		0
Way-finding	Signing		Basic direction signing (cyclists follow road signs and markings)	Some cycle-specific direction signing	Consistent signing of range of routes and destinations at decision points	0		2
						1		3
Comfort	**(max possible = 20)**							
Surface quality	Defects: non cycle friendly ironworks, raised/ sunken covers/gullies	Major defects	Many minor defects	Few minor defects	Smooth, high-grip surface	3	x3	3
Surface material	Construction		Hand-laid asphalt or unstable blocks/sets	Machine laid asphalt concrete or HRA; smooth blocks	Machine laid asphalt concrete; smooth and firm blocks undisturbed by turning vehicles	2		2
Effective width without conflict	Clear nearside space in secondary position or motor vehicle speed/ volume in primary position	Secondary: <1.5m Primary: high motor vehicle flow	Secondary: 1.5m Primary: medium motor vehicle flow	Secondary: 1.5-2.0m Primary: low motor vehicle flow	Secondary: >2.0m Primary: no overtaking by motor vehicles	0	x3	0
Gradient	Uphill gradient over 100m		>5 per cent	3-5 per cent	<3 per cent	1		1
Deflections	Pinch points caused by horizontal deflections		(Remaining) lane width <3.2m	(Remaining) lane width >4.0m or <3.0m (low motor vehicle flow)	Traffic is calmed so no need for horizontal deflections	0		0
Undulations	Vertical deflections		Round top humps	Sinusoidal humps	No vertical deflections	2		1
						8		7
Attractiveness	**(max possible = 12)**							
Impact on walking	Pedestrian Comfort Level (PCL)		Reduction in PCL to C, D or E	No impact on pedestrian provision or PCL never lower than B	Pedestrian provision enhanced by cycling provision or PCL A	1		1
Greening	Green infrastructure or sustainable materials incorporated into design		No greening element	Some greening elements	Full integration of greening elements	0		0
Air quality	PM10 & NOX values referenced from concentration maps		Medium to High	Low to Medium	Low	0		0
Noise pollution	Noise level from recommended riding range		>78DB	65-78DB	<65DB	0		0
Minimise street clutter	Signing required to support scheme layout		Large amounts of regulatory signing to conform with complex layout	Moderate amount of signing, particularly around junctions	Minimal signing, eg for wayfinding purposes only	1		2
Secure cycle parking	Ease of access to secure cycle parking on- and off-street		No additional secure cycle parking	Minimum levels of cycle parking provided (ie to London Plan standards)	Cycle parking is provided to meet future demand and is of good quality and securely located	1		2

APPENDIX 4 - CLoS Assessment (Replingham Road)

Adaptability	**(max possible = 6)**							
Public transport integration	Smooth transition between modes or route continuity maintained through interchanges		No 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.	1		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	1		1
Growth enabled	Route matches predicted usage and has exceedence built into the design		Provision does not match current levels of demand	Provision is matched to predicted demand flows	Provision has spare capacity for large increases in predicted cycle use	1		1
						3		4
TOTAL (max 100)						**31**		**41**

For highlighted critical indicators, score is multiplied by 3 (basic = 0, good = 3, highest = 6)

APPENDIX 4 - CLoS Assessment (Augustus Road)

http://lcc.org.uk/pages/clos

**For highlighted critical indicators, score is multiplied by 3 (basic = 0, good = 3, highest = 6)*

Factor	Indicator	Critical * (fail)	Basic CLoS (score=0)	Good CLoS (score=1)	Highest CLoS (score=2)	Current Score		Proposed Scheme Score
Safety	**(max possible = 48)**							
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 junctions	0	x3	0
	Collision alongside or from behind	Nearside lane in range 3.2m to 4.0m	Cyclists in wide (4m+) nearside traffic lanes or cycle lanes less than 2m wide	Cyclists in dedicated cycle lanes at least 2m wide	Cyclists separated from motorised traffic	FAIL	x3	FAIL
	Kerbside activity or risk of collision with door	Cycle lanes <1.5m alongside parking / loading with no buffer	Frequent kerbside activity / effective width for cyclists of 1.5m	Less frequent kerbside activity / effective width for cyclists of 2m	No kerbside activity / No interaction with vehicles parking or loading	3	x3	3
	Other vehicle fails to give way or disobeys signals		Poor visibility, no route continuity across junctions and unclear priority	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	0		0
Feeling of safety	Separation from heavy traffic		Cyclists in general traffic lanes or cycle lanes less than 2m	Cycle lanes at least 2m wide	Cyclists physically separated from other traffic at junctions and on links, or no heavy freight	0		0
	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	3	x3	3
	Total volume of traffic (where cyclists are not separated)	>1,000 vehicles/ hour at peak	500 - 1,000 vehicles / hour at peak (but becomes 'critical' if 5 per cent or more are HGVs)	200 - 500 vehicles / hour at peak (but becomes 'basic' if 2 per cent or more are HGVs)	<200 vehicles / hour at peak	0	x3	0
	Interaction with HGVs	Frequent, close interaction	Frequent interaction	Occasional interaction	No interaction	3	x3	3
Social safety	Risk/fear of crime		High risk: 'ambush spots', loitering, poor maintenance	Low risk: area is open, well designed and maintained	No fear of crime: high quality streetscene and pleasant interaction	1		1
	Lighting		Long stretches of darkness	Short stretches of darkness	Route lit thoroughly	1		1
	Isolation		Route passes far from other activity, for most of the day	Route close to activity, for all of the day	Route always overlooked	1		1
	Impact of highway design on behaviour		Layout encourages aggressive behaviour	Layout controls behaviour throughout	Layout encourages civilised behaviour: negotiation and forgiveness	1		1
						13		13
Directness	**(max possible = 8)**							
Journey time	Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle ahead (including other cyclists)	Cyclists can usually pass other vehicles (including cyclists)	Cyclists can always pass other vehicles	1		1
	Delay to cyclists at junctions		Journey time longer than motor vehicles	Journey time around the same as motor vehicles	Journey time less than motor vehicles	1		1

APPENDIX 4 - CLoS Assessment (Augustus Road)

Value of time	For cyclists compared to private car use (normal weather conditions)		VOT 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	1		1
Directness	Deviation of route (against straight line or nearest main road alternative)		Deviation factor greater than 40 per cent	Deviation factor 20-40 per cent	Deviation factor less than 20 per cent	2		2
						5		5
Coherence	**(max possible = 6)**							
Connections	Ability to join/leave route safely and easily		Cyclists cannot connect to other routes without dismounting	Cyclists share connections with motor traffic	Cyclists have dedicated connections to other routes	1		1
	Density of other routes		Network density mesh width >400m	Network density mesh width 250-400m	Network density mesh width <250m	0		0
Way-finding	Signing		Basic direction signing (cyclists follow road signs and markings)	Some cycle-specific direction signing	Consistent signing of range of routes and destinations at decision points	1		2
						2		3
Comfort	**(max possible = 20)**							
Surface quality	Defects: non cycle friendly ironworks, raised/ sunken covers/gullies	Major defects	Many minor defects	Few minor defects	Smooth, high-grip surface	3	x3	3
Surface material	Construction		Hand-laid asphalt or unstable blocks/sets	Machine laid asphalt concrete or HRA; smooth blocks	Machine laid asphalt concrete; smooth and firm blocks undisturbed by turning vehicles	2		2
Effective width without conflict	Clear nearside space in secondary position or motor vehicle speed/ volume in primary position	Secondary: <1.5m Primary: high motor vehicle flow	Secondary: 1.5m Primary: medium motor vehicle flow	Secondary: 1.5-2.0m Primary: low motor vehicle flow	Secondary: >2.0m Primary: no overtaking by motor vehicles	0	x3	0
Gradient	Uphill gradient over 100m		>5 per cent	3-5 per cent	<3 per cent	2		2
Deflections	Pinch points caused by horizontal deflections		(Remaining) lane width <3.2m	(Remaining) lane width >4.0m or <3.0m (low motor vehicle flow)	Traffic is calmed so no need for horizontal deflections	0		0
Undulations	Vertical deflections		Round top humps	Sinusoidal humps	No vertical deflections	2		2
						9		9
Attractiveness	**(max possible = 12)**							
Impact on walking	Pedestrian Comfort Level (PCL)		Reduction in PCL to C, D or E	No impact on pedestrian provision or PCL never lower than B	Pedestrian provision enhanced by cycling provision or PCL A	1		1
Greening	Green infrastructure or sustainable materials incorporated into design		No greening element	Some greening elements	Full integration of greening elements	0		0
Air quality	PM10 & NOX values referenced from concentration maps		Medium to High	Low to Medium	Low	0		0
Noise pollution	Noise level from recommended riding range		>78DB	65-78DB	<65DB	0		0
Minimise street clutter	Signing required to support scheme layout		Large amounts of regulatory signing to conform with complex layout	Moderate amount of signing, particularly around junctions	Minimal signing, eg for wayfinding purposes only	1		2

APPENDIX 4 - CLoS Assessment (Augustus Road)

Secure cycle parking	Ease of access to secure cycle parking on- and off-street		No additional secure cycle parking	Minimum levels of cycle parking provided (ie to London Plan standards)	Cycle parking is provided to meet future demand and is of good quality and securely located	1		2
						3		5
Adaptability	**(max possible = 6)**							
Public transport integration	Smooth transition between modes or route continuity maintained through interchanges		No 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.	1		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	1		1
Growth enabled	Route matches predicted usage and has exceedence built into the design		Provision does not match current levels of demand	Provision is matched to predicted demand flows	Provision has spare capacity for large increases in predicted cycle use	1		1
						3		4
TOTAL (max 100)						**35**		**39**

For highlighted critical indicators, score is multiplied by 3 (basic = 0, good = 3, highest = 6)