



A4 Knightsbridge junction with Brompton Road Safer Junctions programme

Brief

August 2018

A4 Knightsbridge junction with Brompton Road

Brief

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1. Background

Strategic context

Transport for London, as the highway authority, has responsibility for maintaining, operating and improving the Transport for London Road Network in London. This network comprises around five per cent of all roads in London, but carries over one third of all traffic.

The transport network plays a vital role in supporting economic growth, by linking people to jobs, delivering products to markets and supporting domestic and international trade. Transport also promotes social cohesion, by providing access to key services, such as health and education services, shops and leisure facilities.

The Mayor's Transport Strategy sets out a clear commitment to the Vision Zero approach to eliminating road deaths and serious injuries on London's roads. Vision Zero includes a number of programmes designed to tackle road danger reduction, including Safer Junctions.

Safety improvements at specific junctions will be critical to achieving the Mayor's Vision Zero ambition in reducing road danger and following the analysis of the road casualty data, the Safer Junctions list was published in April 2017 and identified 73 junctions on the TLRN with the highest Vulnerable Road User (VRU) collision rate. The list includes:

- 21 junctions which have been upgraded in the last three years,
- 33 at which TfL were already investigating improvements, and
- 19 where investigations would begin.

Over the period 2013 – 2015, 1819 KSIs (all modes) were recorded at all junctions in London. This data was used to identify the sites to be prioritised for study. 46 KSIs were recorded at the 19 new locations which are being investigated as part of the Safer Junctions programme.

It should be noted that the junctions in the Safer Junction programme are also major locations of social interaction and in many cases perform an important 'place' function. Hence design proposals should seek to make these locations more appealing to pedestrians and cyclists, with the aim of reducing road danger throughout the Safer Junction scheme area. This holistic approach will not only drive down collisions, but improve the urban realm, encourage modal shift to walking and cycling, and contribute to wider regeneration objectives.

Examples of interventions that should be considered for all Safer Junctions include:

- New and/or improved pedestrian crossings
- Innovative facilities to separate cyclists from traffic in time and space, and improve existing cycle facilities where they exist
- Wider pedestrian footways, and decluttering of existing footways
- 'Floating' bus stops
- Opportunities to introduce Sustainable Urban Drainage

- Opportunities to introduce pocket parks, improved hard and soft landscaping, and new cycle parking
- A review of street lighting throughout the scheme area, to identify any sub-standard locations
- Measures to reduce traffic speeds (including consideration of 20mph), and ensure those speed reductions are self-enforcing (e.g. through raised pedestrian crossings)
- Measures to bring about traffic reduction through the junction (e.g. traffic lane removal, where practicable and without significant adverse impacts on buses; making roads accessible to pedestrians, cyclists and buses only)
- Opportunities for increased bus priority

In June 2018, the TfL Healthy Streets Portfolio Board approved the Safer Junctions programme budget of £0.5m in 2018/19 to continue work on the 19 junctions where collision investigations began in 2017/18.

Local context

The junction of Knightsbridge and Brompton Road on the border of the Royal Borough of Kensington and Chelsea and the City of Westminster is situated along the A4 corridor. The A4 is a strategic arterial corridor that runs from the City west towards the GLA boundary, connecting with the M4. Within RB Kensington and Chelsea, the A4 is complex, with sections of single and dual carriageway bi-directional, two lane road (with stretches of bus lanes in some sections).

The junction is a key intersection within central London and is sensitive to any traffic signal alterations. There are lots of nearby developments, including the Chelsfield development (K1), which will need to be considered within the proposals to be taken forward. Generally, the junction is dominated by vehicular traffic, including taxi and private hire vehicles. Constrained footways, infrequent crossing points, and high levels of both general traffic and pedestrian flows create an environment that not only is unpleasant, but also potentially unsafe.

A high level of correspondence has been received which questions the absence of a controlled crossing across Sloane Street. This has been investigated previously but never progressed due to the potential impact on the surrounding network outlined in initial modelling results.

There is a 'Vision for Sloane Street' which was developed by Cadogan Estates and presented to RBK&C. RBK&C have previously been in touch with our Network Performance teams to discuss improvements to relieve congestion at the junction. It is congestion that remains the number one concern for the local residents.

It is worth noting that Will Norman, Walking and Cycling Commissioner for London has requested that the proposals be delivered before May 2020.

Collision Issues

48 personal injury collisions occurred in the 36 month period ending 31st October 2016, of which five resulted in serious injuries (11.6%). This is slightly below the comparative rate of 12.6% for ATS junctions on the TLRN in Inner London Boroughs.

Key collision issues at the junction of A4 Knightsbridge junction with Brompton Road / Sloane Street include:

- 19 collisions (44.2%) involved a pedestrians
- 16 collisions (37.2%) occurred in dark conditions
- 14 collisions (32.6%) involved a pedal cyclist
- 9 collisions (20.9%) involved a bus or coach
- 9 collisions (20.9%) involved a goods vehicle
- 2 collisions (4.7%) involved a u-turning vehicle

Table 3 - Comparative Collision Rates

Factor	Collisions		Expected Rate (%) ²
	Number	% ¹	
Total	43	100.0%	-
Total per year	14.3	-	-
Total per km year	-	-	xx.xx / xx.xx
Priority Score	0	-	-
Injury			
Fatal and Serious	5	11.6%	12.6%
Slight	38	88.4%	87.4%
Modal			
Pedestrian	19	44.2%	21.6%
Pedal Cycle	14	32.6%	25.3%
Powered Two Wheeler	8	18.6%	25.4%
Bus or Coach	9	20.9%	11.2%
Goods Vehicle	9	20.9%	14.5%
Manoeuvre			
Overtaking	4	9.3%	9.4%
Right turning	5	11.6%	21.0%
Left turning	3	7.0%	10.1%
U-turning	2	4.7%	2.1%
Cond			
Non-dry	5	11.6%	17.1%
Dark	16	37.2%	34.8%

¹ Shading indicates where a collision rate is higher than the comparative average

² Comparative rate is derived from Collision Levels in Greater London Issue 14: 2011 to 2013, comparison table: ATS (Inner Borough)

2. Commission

To appoint Traffic Design Engineering (TDE) to carry out feasibility and concept design. TDE will act as the Principal Designer and carry out all the duties under the CDM Regulations 2015.

The scope of this commission is for TDE to consider the content of the A4 Knightsbridge junction with Brompton Road / Sloane Street collision study report (as supplied Appendix A) together with the comments and recommendations provided by key internal stakeholders at the site meeting (as supplied in Appendix B) and further develop these to:

- Provide feasibility design options based on the potential interventions to reduce road danger, including exploring opportunities to improve cycle facilities, encourage pedestrian priority, reduce traffic dominance and vehicle speeds and where possible introduce urban realm improvements and / or green infrastructure (See also, 'Strategic Context');
- Provide concept design of the preferred option;
- Utilise the results from the base Healthy Streets surveys undertaken by TDE to inform the design;
- Assist the Sponsor to assess the impact of proposals using the TfL's City Planner strategic assessment framework tool;
- Provide designs to TfL Network Performance in order for them to undertake traffic modelling of recommended solutions for the design of all options and to assess local impacts. TfL Network Performance will be commissioned separately by the TfL Sponsor;
- Provide technical input to the Sponsor for the Business Case and other required paperwork in preparation for associated programme and portfolio boards;
- Calculate potential collision savings and other quantifiable benefits which may be derived, such as more walking and cycling; and,
- Provide a detailed Microsoft project programme and cost estimate for TDE tasks related to carrying out the feasibility and concept designs.

In order to adhere to the required timescale, it is recommended that certain surveys required by the LoHAC design team for detailed design may be required to be procured during the concept design stage. All additional surveys required to carry out the design, will require prior authorisation from the Sponsor. TDE to provide specification and quotations to the Sponsor so that separate survey commissions can be agreed.

The design has to be produced and comply with all the relevant design standards and TfL specific requirements.

Figure 1 overleaf shows the geographic scope of the study with the local context.

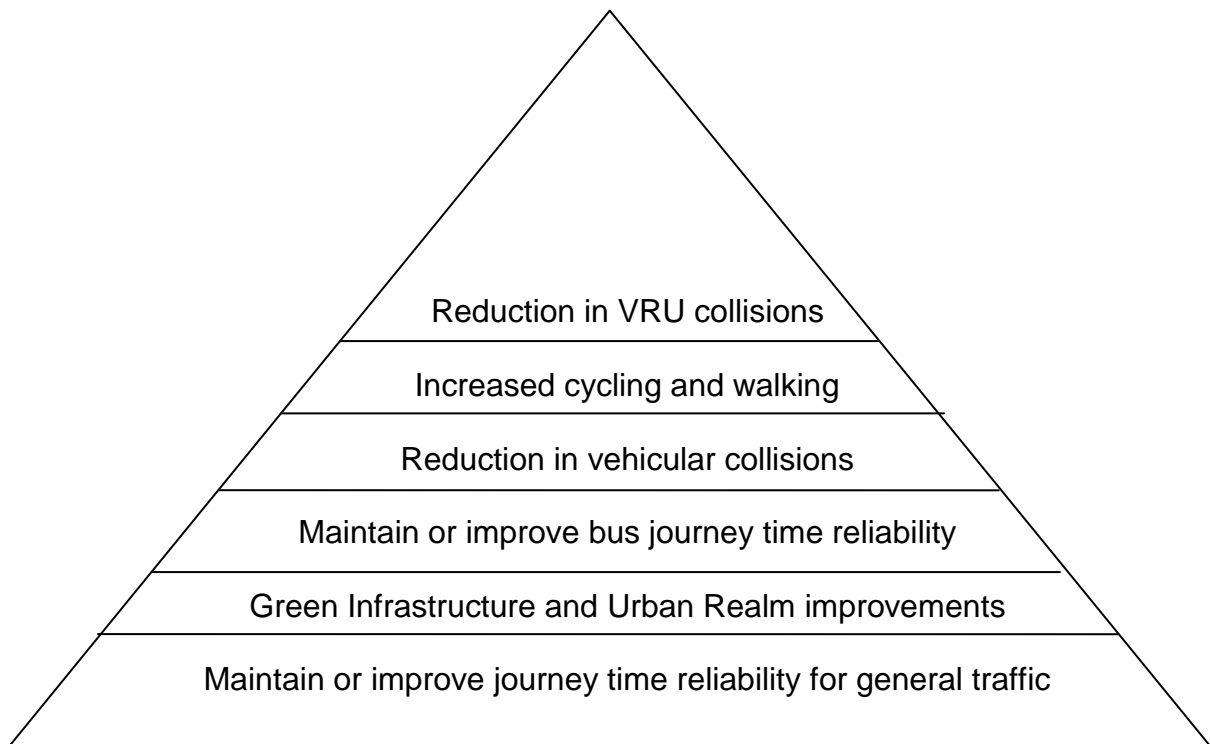


Figure 1 - Network in scope for intervention

Considerations – Safer Junctions Programme Wide

- Traffic re-timings of signals and the large impact of changes to traffic across several lanes, but this could impact negatively on the bus network
- Pedestrian behaviour (with no historical record of personal injury collisions) of crossing injudiciously or informally across junctions could be resolved by an all-round pedestrian signal stage
- The delay of improvements to a location because of other planned changes or factors

It is accepted that in order to provide a holistic approach to reducing road danger, some design considerations may be in direct contradiction with each other. To assist in the prioritisation of proposed measures, this hierarchy of needs is to be followed:



There are several elements to the Design Strategy for the Safer Junctions programme which should be considered.

Design Strategy - Overarching Principles

- **Highways Infrastructure** – To see significant improvements in addressing collision patterns and reducing road danger for vulnerable road users, meaningful changes and improvements are needed to the highways infrastructure. The provision of direct crossings and raised tables can highlight pedestrian priority and reduce the dominance of vehicular traffic.

For cyclists, direct cycle lanes, tracks and early release traffic signals should be investigated, especially where there is future cycle demand. ASLs and advisory cycle lanes are not considered sufficiently transformational for Safer Junctions.

The use of public transport for longer trips should be encouraged by bus priority measures including bus lane extensions and bus gates should also be considered. Wherever possible, impacts to the bus network should be mitigated.

- **Street Makeover** - By encouraging more pedestrians to spend time in the area through enhancing the place function of the site, vehicle dominance in the area will be reduced.

Streetscape and urban realm improvements can design out conflict points while enabling pedestrians to safely follow desire lines. This can include, but is not limited to removal of clutter, introducing pocket parks and green infrastructure (eg. sustainable urban drainage), wider, better quality pavements and cycle parking. This also helps support a number of Healthy Streets indicators including shade and shelter, places to stop, people feel relaxed and clean air, which would not routinely be addressed through traditional highway infrastructure improvements.

Removal of through traffic from selected residential streets can remove key dangerous manoeuvres and provide opportunities for streetscape improvements.

An Urban Designer has been appointed to the Safer Junctions programme to provide technical input and strategic guidance to facilitate the incorporation of Streetscape and urban realm improvements into the designs for this Safer Junction.

- **Safety and Security** – Reduced speed limits, especially 20mph, are known to reduce the severity of collisions and encourage more active forms of transport. A high quality urban environment will in turn result in more passive surveillance to reduce crime and encourage more active forms of transport.
- **Future Proofed** – The pressures on the street are ever-changing and so the design needs to be adaptable to change: flexible on a daily basis and resilient over the long-term. The Safer Junctions programme will need to

respond to any known intensifying role as a focal point for pedestrian, cyclist or motorcyclist activity.

- Innovative – The deliverables need not rely solely on tried and tested measures. Where appropriate, efforts should be made to trial innovative and creative solutions in order to reduce road danger.
- Safer Streets for All – A dimension of the design strategy is to increase motorist awareness of all vulnerable road users. The design should support the provision of alternative modes such as walking and cycling, in particular focussed on shorter trips to local main attractors where there is most scope for increased use, such as nearby town centres and public transport interchanges.

Where appropriate, having a distinct change in the character of the junction may be appropriate to encourage motorists to slow down, especially where cyclists travel and where pedestrians cross frequently.

Whilst additional motorised trips should not be encouraged within the Safer Junctions programme, the safety of motorcyclists should be protected through the design of the individual projects.

- Parking and Loading - Special consideration should also be given to loading and parking along the route and maintaining or improving servicing arrangements. Loading pads which allow for footways to open up during the busiest periods is one approach that could provide for different users at different times of the day.
- Behaviour Change Initiatives – Where possible, if a location is identified which may also benefit from softer road safety interventions, this should be highlighted to the Sponsor to bring to the attention of colleagues in Customer Communication and Technology (CCT).

Safer Junctions Template

Examples of measures which could be included in a Safer Junctions design

Traffic reduction measures:

- Removal of through traffic from selected streets, such as residential zones

Highways infrastructure:

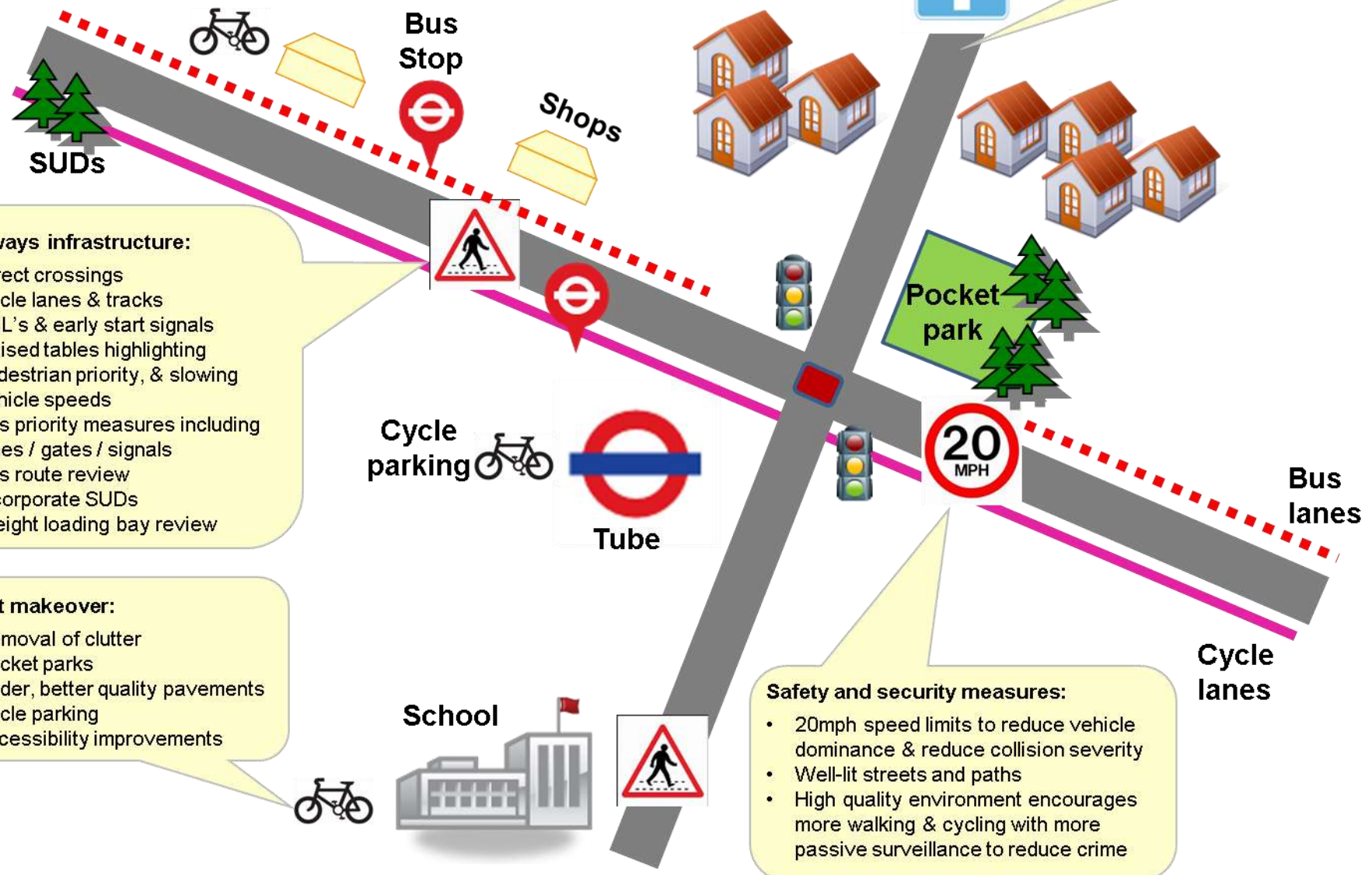
- Direct crossings
- Cycle lanes & tracks
- ASL's & early start signals
- Raised tables highlighting pedestrian priority, & slowing vehicle speeds
- Bus priority measures including lanes / gates / signals
- Bus route review
- Incorporate SUDs
- Freight loading bay review

Street makeover:

- Removal of clutter
- Pocket parks
- Wider, better quality pavements
- Cycle parking
- Accessibility improvements

Safety and security measures:

- 20mph speed limits to reduce vehicle dominance & reduce collision severity
- Well-lit streets and paths
- High quality environment encourages more walking & cycling with more passive surveillance to reduce crime



Other Relevant Investigations

Currently Strategy and Network Development (S&ND) is not aware of any other ongoing investigations or projects at the junction of the A4 Knightsbridge junction with Brompton Road / Sloane Street which TDE should also be aware of.

However, other investigations in the wider local area being undertaken which are of relevance to this study are: -

- K1 permanent changes to the highway on Brompton Road and at the Knightsbridge / Brompton Road junction. As part of the K1 development, the access to the underground station is changing from the west side of Sloane Street onto Brompton Road. The developers also put forward plans to widen the footway on Sloane Street and change the crossing on Brompton Road from a two stage to a straight across. The latest plans should be available from City Planning (Alexander Rajnarine).

Proposed Measures for Feasibility and Concept Design under this Commission

These proposals are based on the recommendations made in the Collision Study prepared by TDE, comments made at the site meeting of 10th May 2018 and at the post-site meeting involving key internal stakeholders held at the TfL offices at Palestra on 21st May 2018.

TDE are instructed to investigate and provide feasibility and concept designs, which could include a combination of the following proposals:

Location: Knightsbridge Road, A315 Westbound

1. Increase ASL to 7.5m and provide early release

Summary: Investigate left turn hook and available space for cyclists between vehicles changing lane within the junction, as the road splits.

Proposal and potential impact: Early release will allow cyclist, waiting at the stop line, to proceed, and also help position cyclists at the internal stop line heading west and southwest

2. Lead in lane to ASL

Summary: Assess the existing lane widths and investigate reallocating lane widths to provide a leading lane. Existing stagger crossing island could possibly be reduced in size and the road space reallocated to provide feed in lane

Proposal and potential impact: Topographical surveys would be required to obtain existing lane widths.

3. Investigate if countdown facilities could be provided to assist pedestrians crossing the road

Summary: Pedestrians may be hesitant to cross the road or cross at the end of the stage during the blackout period when the green man has ended

Proposal and potential impact: Installation of louvers will need to be investigated by TI to take this forward.

4. Reallocated road space and provision a straight across crossing facility.

Summary: Investigate straight across crossing to reduce delays to pedestrians

Proposal and potential impact: A straight across crossing may lead to an all red phase at the junction as an alternative method of control is not considered possible. This would lead to an increased cycle time and could result in longer pedestrian wait time as well as lost time to cyclists.

5. Reallocation of road space to provide a larger footway and improve the level change from footway to carriageway

Summary: Outside Harvey Nichols the footway falls quite steeply towards the carriageway.

Proposal and potential impact: Topographical surveys would be required to understand available space.

Location: Sloane Street, A3216

6. Increase ASL to 7.5m and provide early release

Summary: Investigate potential for left turn hook. Current room may be tight for cyclists between left and right turning vehicles/merging vehicles on the exit arms of the junction

Proposal and potential impact: Early release will allow cyclists, at the stop line, to proceed past the possible left hook area and also help position cyclists ahead of general traffic

7. Assess the existing lane widths and reallocation of lane widths to provide a leading lane

Summary: Currently no lead in lane to ASL

Proposal and potential impact: Early release will allow cyclists, at the stop line, to proceed past the possible left hook area and also help position cyclists ahead of general traffic. Road markings could be amended to make near side left turn only and offside lane right turn only.

8. Investigate reducing Sloane Street (northbound) to one lane and incorporate a staggered crossing facility.

Summary: A staggered crossing facility would allow for a more flexible method of control. Investigate straight across crossing facility, removal of the existing island and build out of footway space.

Proposal and potential impact: Extensive modelling would be required to assess the impact. Topographical surveys would be required to gain existing lane widths.

9. Provide a crossing facility on Sloane Street, at the junction of Basil Street.

Summary: No formal signalised crossing facility is currently provided at this location. This may help with managing pedestrians exiting the underground station

Proposal and potential impact: Providing the crossing facility would require banning the right turn movement out of Basil Street, with possible benefits for north bound buses

Location: Brompton Road, A4

9. Change operation of Brompton road to two lanes.

Summary: Footway widths could be increased to improve pedestrian comfort levels

Proposal and potential impact: Layout is dependant on what the developers plans are for reinstatement and requirements of underground exiting)

10. Assess existing lane widths for provision of a leading lane, using carriageway space on westbound Brompton Road

Summary: No lead in lane to ASL

Proposal and potential impact: Topographical surveys would be required to obtain existing lane widths.

11. Increase ASL to 7.5m and provide early release

Summary: Potential for left turn hook. Cyclists constrained between left and right turning vehicles/ merging vehicles on the exit arms of the junction

Proposal and potential impact: Early release will allow cyclists, at the stop line, to proceed past the possible left hook area and also help position cyclists ahead of general traffic. Road markings could be amended to make near side left turn only and offside lane right turn only.

Location: Knightsbridge Road, A315 eastbound

12. Relocate gully away from crossing area

Summary: Gully in the crossing area is too close to the drop kerb and is a possible slip hazard

Proposal and potential impact: Topographical surveys would be required to get existing lane widths.

13. Review method of control to see if green man could appear in stages where there is no conflict

Summary: Long wait times at junction

Proposal and potential impact: Need confirmation if pedestrian stage can appear in more than the current stages

14. Assess the existing lane widths and investigate reallocating lane widths to provide a leading lane. Increase ASL to 7.5m and provide early release

Summary: No lead in lane to ASL, cyclists cannot easily use the ASL

Proposal and potential impact: Early release will allow for cyclists to place themselves within the junction

3. Methodology

Identifying potential interventions

TDE is required to produce feasibility designs for each site identified as a Safer Junction site. These may vary in cost for delivery; PPD Commercial should lead on all cost estimating for emerging designs, in collaboration with the Designer. The final interventions are expected to remain within an overall budget of circa £5m (including all design development, project management, sponsorship, communications, and miscellaneous delivery costs).

Early Contractor Involvement will be considered by PPD, in order to inform the cost estimates, and help the designer address risks at any early stage (e.g. in relation to statutory undertakers and procuring necessary surveys).

S&ND will make available any relevant completed studies, which describe issues and suggest solutions. TDE should not rely on collating existing ideas, and will be expected to develop design recommendations independently.

Innovative and creative solutions may be proposed, but non-standard or unapproved techniques will need to be agreed by the Sponsor before significant work is undertaken in developing these options.

The design should address the following issues:

- Improve road safety, focussing on, but not limited to vulnerable road user collisions;
- Facilitating public realm improvements to encourage more people to spend time in the area and maximise the junction's potential against TfL's Healthy Streets indicators;
- Improving local ambience through increasing TfL's green estate. This will also mitigate the exposure of pedestrians (especially children), cyclists and motorcyclists to fumes from stationary traffic and maximising opportunities for carbon capture and sequestration, addressing environmental impacts;
- Improving accessibility and severance issues for pedestrians and cyclists, including cycle parking provisions;
- Journey time reliability should be maintained or improved for buses where feasible;

- In acceptance of the role of Principal Designer, all CDM Regulation 2015 requirements will apply including managing, co-ordinating and programming the feasibility and concept design to include all aspects for delivering the design (i.e. Engineering and Technical Services, Traffic Infrastructure, Network Impact Management, WCAP, Highways Technical Approval Authority, external including contractors for surveys and London Borough of Kensington and Chelsea / City of Westminster etc.). The S&ND Principal Sponsor will send a letter formally appointing TDE as Principal Designer and provide the initial PCI separately.

Feasibility designs

TDE is expected to undertake 2D geometric designs of intervention measures for identified locations. CAD based designs should include/ identify:

- General highway layout (existing and proposed), showing the highway boundary;
- Geometric alterations to the highway;
- Land take requirements, if required;
- Lane definition; and,
- Statutory plant, and furniture affected by the proposals and the implications for the design.

Where unavailable, topographical surveys may be required for the purpose of providing suitable feasibility designs however this should be agreed with the Sponsor prior to commissioning.

Where required, TDE to assist the Sponsor in presentation of the proposals to the Streetscape Design Review Group (SDRG).

TDE, in conjunction with the Sponsor, is to provide PPD with the draft feasibility designs to facilitate construction cost estimates for the project.

Concept design of the preferred option is then to be progressed.

Concept design

The final concept design package is to include:

- General Arrangement drawings showing proposed dimensions;
- Site Clearance drawings;
- Signs and Road Marking drawings; and,
- (where appropriate) Outline Urban Realm improvement designs (in conjunction with the nominated Urban Designer).

A Risk workshop with stakeholders will be arranged by PPD during the concept design stage, and output to be included within ARM. TDE will be required to provide their technical input. The output of this meeting will be a detailed Risk Register and Issues Register to be maintained by PPD using ARM.

TDE, in conjunction with the Sponsor, is to provide PPD with the draft concept design to facilitate construction cost estimates for the project.

Assess impact of proposals using strategic assessment framework

TDE will be provided with a Fingerprint output from TfL's City Planner strategic assessment framework tool for each junction. The attributes of the framework include the following Transport Outcomes:

- Safety – Road casualties and crime levels
- Active – Active travel, current and potential cycling and walking levels
- Green – Air quality
- Space efficient – Freight flow levels and car dependency
- Connected public transport – Improved connectivity
- Accessible public transport – Access inequality
- Quality public transport – Bus performance, demand and provision
- Sustainable, active travel developments – Car dependency and poor connectivity
- Unlocking development – Forecast population and employment growth

Once feasibility designs are defined, TDE should assist the Sponsor in completion of a high-level evaluation of all options based on this assessment framework.

Local Modelling of options

Local modelling will be required in order to undertake the assessment of network performance/engineering feasibility. Separate briefs to Network Performance and Traffic Infrastructure will be issued by the Sponsor.

Public Consultation

As a result of the limited timeframe for delivery, public consultation will only take place where there is a statutory requirement. Where no formal public engagement is required, extensive pre-engagement via TfL CCT will take place

throughout the design period to maximise the potential for local stakeholder buy-in.

Where formal public consultation is to take place, TDE is to assist with the preparation of material for the consultation.

Key Study Stages and Deliverables

Stage 1

- Project initiation meeting
- Brief note outlining TDE's understanding of study objectives and strategic and local objectives

Stage 2

Following confirmation of the above with S&ND, the following is expected:

- Design of interventions to feasibility and concept level as specified
- Assess impact of each proposal on a local level for all road users utilising the assessment framework
- Periodic spend profile to end of concept design
- Detailed Microsoft Project plan to end of concept design
- Designer's Response to the Stage 1 Road Safety Audit and TfL Highways Approval Document (HAD) for the Technical Approval process
- Technical input to the TfL Engineering Scheme Impact Report (SIR)

Deliverables

In addition to the common deliverables noted in the next section, the following items should also be provided:

Option drawings

Any option drawings should be produced in line with recommendations made by key internal stakeholders in attendance at the Safer Junctions site meetings and / or wash up sessions.

The Sponsor will select the optimum design option which captures the design objectives within the scope of this commission, based on the hierarchy of needs established earlier in this Commissioning Brief.

Utility Surveys

Utility surveys, e.g. C2's shall be undertaken and subsurface utilities are to be determined with the project area. This shall be undertaken during the course of this task order. During the feasibility and concept design stages, the LoHAC designer is to be available for early engagement activities in order to understand the rationale behind design decisions and to ensure that any surveys necessary to undertake the detailed design are procured in good time to meet the agreed timescales. TDE are to assist in the procurement and commissioning of these surveys.

Road Safety Audit

On completion of the concept design, the Sponsor will arrange for a Stage 1 Safety Audit to be undertaken by TfL's in-house Road Safety Team. The Safety Audit reports shall be received by TDE who shall consider and provide a designer's response in respect of any remedial works or additional features considered necessary.

Construction and Design Management

CDM Regulations 2015 should be considered as part of assessing viability of any design. The S&ND Principal Sponsor will send a formal letter of appointment to TDE and provide the Pre-Construction Information (PCI) documentation.

DELIVERABLES

Common Deliverables	Required?
Project Plan that sets out time and cost details, including project milestones and deliverables.	<input checked="" type="checkbox"/>
Periodic reports to coincide with TfL 4-weekly accounting periods detailing time worked, money spent, and percentage complete.	<input checked="" type="checkbox"/>
Report on work undertaken and implementation recommendations (no report without a recommendation). The Report will include a single page Executive Summary as a forward outlining the Commission objectives and conclusions, and a single page Design Statement outlining the key design parameters and decisions.	<input checked="" type="checkbox"/>

The following will be included in the Report or produced as separate documents:

Common Deliverables	Required?
Appropriate plans (AutoCAD and PDF format)	<input checked="" type="checkbox"/>
Traffic counts – To be discussed and confirmed with Sponsor	<input checked="" type="checkbox"/>
Appropriate Traffic Models giving:	
Base	<input type="checkbox"/>
Options	<input type="checkbox"/>
Preferred option	<input type="checkbox"/>
Signed off TSSR	<input type="checkbox"/>
Topographical survey - To be discussed and confirmed with Sponsor	<input checked="" type="checkbox"/>
Stage 1 Road Safety Audit – To be completed by TfL's in-house Road Safety Audit team	<input checked="" type="checkbox"/>
Stage 1/2 Road Safety Audit combined	<input type="checkbox"/>
Road Safety Audit Designer's Response	<input checked="" type="checkbox"/>
Location of Statutory Undertakers plant and potential implications to design.	<input checked="" type="checkbox"/>
Streetscape Design Review Group (SDRG) approval, where required	<input checked="" type="checkbox"/>
Highways Technical Approval at the end of each stage	<input checked="" type="checkbox"/>
Network Performance (NP) approval	<input checked="" type="checkbox"/>
Consultation documentation (plan, text etc.)	<input checked="" type="checkbox"/>
Summary results of consultation exercise(s)	<input checked="" type="checkbox"/>
Cost estimate for construction	<input type="checkbox"/>
CDM documentation	<input checked="" type="checkbox"/>
Public consultation drawings (where required)	<input checked="" type="checkbox"/>
TMO drawings and schedules	<input checked="" type="checkbox"/>
Environmental Checklist	<input checked="" type="checkbox"/>
Healthy Streets Check (with Sponsor)	<input checked="" type="checkbox"/>
Guardrail Assessment	<input type="checkbox"/>
Design change log	<input checked="" type="checkbox"/>

4. Governance

The S&ND Portfolio Sponsor for Road Safety is accountable for the commissioning of this work and the requirements set out in this brief. A PPD Project Manager has been appointed for early involvement of this project, prior to handover at the detailed design stage. The PPD Project Manager is accountable or responsible for all Health and Safety and Project Management activities as set out in the Pathway RACI matrix.

The S&ND Principal Sponsor (based in the appropriate Network Sponsorship Area Team) will be responsible for stakeholder engagement, decision making, and project governance during design development. They will provide appropriate scrutiny and challenge to the Project Manager, who will oversee the design schedule and cost estimates.

TDE should provide a weekly progress report.

A project Progress Meeting will also take place on a monthly basis. TDE should be available for this and may be invited to attend for part of the meeting. There may be other meetings between the Sponsor and TDE however this will be confirmed / requested over the course of the commission period. Please find attached the governance structure in Appendix C.

5. Timescales

TfL has committed to Will Norman, the Walking and Cycling Commissioner for London, to complete detailed design and Gate 4 approval at this location by April 2020.

In order to meet this deadline, TDE are requested to complete the feasibility and concept design with public consultation as outlined in this brief by 31 December 2018.

Indicative milestones for the final design are:

By end August 2019	Feasibility, concept design and public consultation complete (12 months)
<i>Mid August 2018</i>	<i>TDE to respond with understanding of brief, output delivery programme and fee estimate (one week)</i> <i>S&ND to confirm commission (one week)</i>
<i>End December 2019</i>	<i>Feasibility design to be completed with amendments incorporated including Highways TAA submission</i>
<i>End January 2019</i>	<i>Gate 2 sign-off by S&ND</i>
<i>Spring 2019</i>	<i>Public consultation to run concurrently to the concept design with one month to collate consultation report.</i>
<i>End July 2018</i>	<i>Concept design to be completed with amendments incorporated including Stage 1 Road Safety Audit and Highways TAA submission</i>
<i>End August 2019</i>	<i>Gate 3 sign off by RSM-S</i>
By end of April 2020	Detailed design complete (5 months)
By end of February 2021	Construction complete (10 months)

6. Appendices

Appendix A – A4 Knightsbridge junction with Brompton Road / Sloane Street Safer Junctions collision study

Appendix B – Summary of site visit / meetings with key internal stakeholders

Appendix C – Strategic Assessment Framework ‘Fingerprint’

Appendix D – ‘Before’ Healthy Streets check

Appendix E - Safer Junctions Governance Structure

Appendix A – A4 Knightsbridge junction with Brompton Road / Sloane Street Safer Junctions collision study



Knightsbridge
Brompton Road - Vers

Appendix B – Summary of site visit / meetings with key internal stakeholders



Knightsbridge
Brompton Road Safer

Appendix C – Strategic Assessment Framework 'Fingerprint'

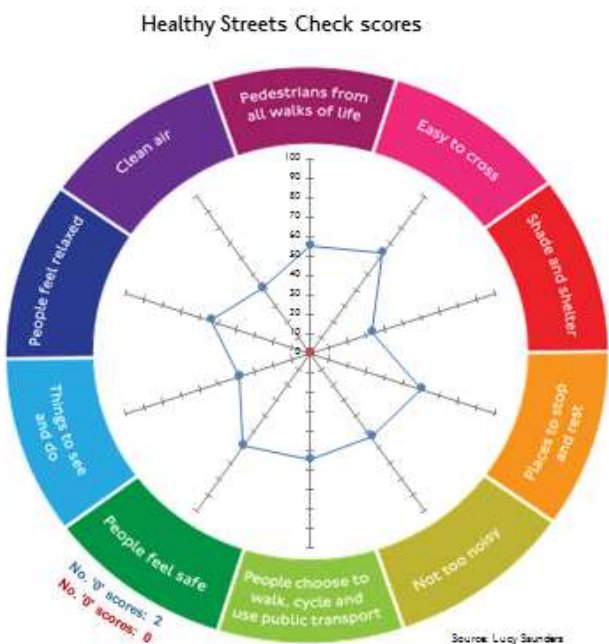
Table A:
Strategic
Network
Check

STRATEGIC CHECK	Existing/Committed Cycle Network	Yes	
	Strategic Cycle Analysis - Priority	No	
	Strategic Movement & Freight Network	Yes	
	Bus Network	Yes	
	Bus Priority Corridor	No	
	Low Emission Bus Corridor	No	
	High Patronage Bus Corridor	Yes	
	Existing Major PT Interchange	No	
	Growth & Opportunity Area	No	

Table B1:
Outcome
Scoring (short
version)

AREA OUTCOME SCORING	Transport Outcomes		Score	Importance Description	V Low	Low	Medium	High	V High
	Active	Current & potential cycling & walking levels	4V High	Highest ped & cycling demand & potential					
	Safe	VI and crime levels	4 Medium	Average accident and/or crime incidence					
	Green	Air quality issues	4V High	Lowest air quality					
	Space Efficient	Vehicle flow levels & car dependency	4 High	High vehicle flows and local car ownership					
	Connected PT	Existing PT connectivity	4V Low	Highest PT accessibility index					
	Reliable Service	Current & forecast bus demand & bus performance	4 High	High patronage & poor bus performance					
	Quality Service	Current & forecast bus demand & bus performance	4V High	Highest crowding & lowest comfort					
	Inclusive PT	Accessibility level	4V High	Poor accessibility					
	Growth	Existing & forecast pop. and employment levels	4 Medium	Average population & employment density					

Appendix D – Base Healthy Streets Check



Healthy Streets Indicators' scores (%)
(Results will only display once all metrics have been scored)

	Existing layout	Proposed layout
Pedestrians from all walks of life	55	#####
Easy to cross	63	#####
Shade and shelter	33	#####
Places to stop and rest	60	#####
Not too noisy	53	#####
People choose to walk, cycle and use	55	#####
People feel safe	59	#####
Things to see and do	39	#####
People feel relaxed	54	#####
Clean Air	42	#####
Overall Healthy Streets Check score	55	0
Number of '0' scores	2	0

Appendix E - Safer Junctions Governance Structure

*Please note that members of the Design and Modelling team listed overleaf shown in italics are subject to Transformation and consequently the individuals involved may be subject to change.

Safer Junctions Governance

