



**A13 East India Dock Road junction with Canton
Street / Birchfield Street
Safer Junctions programme**

Brief

August 2018

A13 East India Dock Road junction with Canton Street / Birchfield Street

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 East India Dock Road and Canton Street within the London Borough of Tower Hamlets is situated along the A13 corridor. The A13 is a strategic arterial corridor that runs from Whitechapel in east London easterly towards the GLA boundary. Within LB Tower Hamlets, the A13 is generally a bi-directional, two lane road (with stretches of bus lanes in most sections)

CFR5 shows an indicative alignment close by, crossing the A13 at Burdett Road. The CFR alignment will need to be considered.

The A13 is managed under the A13 DBFO contract, and as such the A13 DBFO team must be consulted on proposals.

The location is predominantly residential, with a nearby green space and cycle hire docking station at the junction. Generally, the junction is dominated by vehicular traffic. However, there is also a steady movement of pedestrians and cyclists. There is a popular turning manoeuvre from Canton Street across to Birchfield Street, possibly to avoid the busy junction with the A1261 .

Collision Issues

18 personal injury collisions occurred in the 36 month period ending 31st October 2016, of which one resulted in serious injuries (5.6%). This is below the comparative rate of 12.6% for ATS junctions on the TLRN in Inner London Boroughs.

Key collision issues at the junction of A13 East India Dock Road junction with Canton Street / Birchfield Street include:

- 11 collisions (61.1%) involved a powered two wheeled vehicle (P2W)
- 9 collisions (50.0%) occurred in dark conditions

- 7 collisions (38.9%) involved a vehicle turning right
- 7 collisions (38.9%) occurred in non-dry conditions
- 6 collisions (33.3%) involved a pedestrian
- 2 collisions (11.1%) involved a bus or coach

Table 3 - Comparative Collision Rates

Factor	Collisions		Expected Rate (%) ²
	Number	% ¹	
Total	18	100.0%	-
Total per year	6.0	-	-
Total per km year	-	-	xx.xx / xx.xx
Priority Score	0	-	-
Injury	Fatal and Serious	1	5.6%
	Slight	17	94.4%
Modal	Pedestrian	6	33.3%
	Pedal Cycle	1	5.6%
	Powered Two Wheeler	11	61.1%
	Bus or Coach	2	11.1%
	Goods Vehicle	1	5.6%
Manoeuvre	Overtaking	0	0.0%
	Right turning	7	38.9%
	Left turning	1	5.6%
	U-turning	0	0.0%
Cond.	Non-dry	7	38.9%
	Dark	9	50.0%

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: All Sites (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 A13 East India Dock Road junction with Canton Street / Birchfield 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.

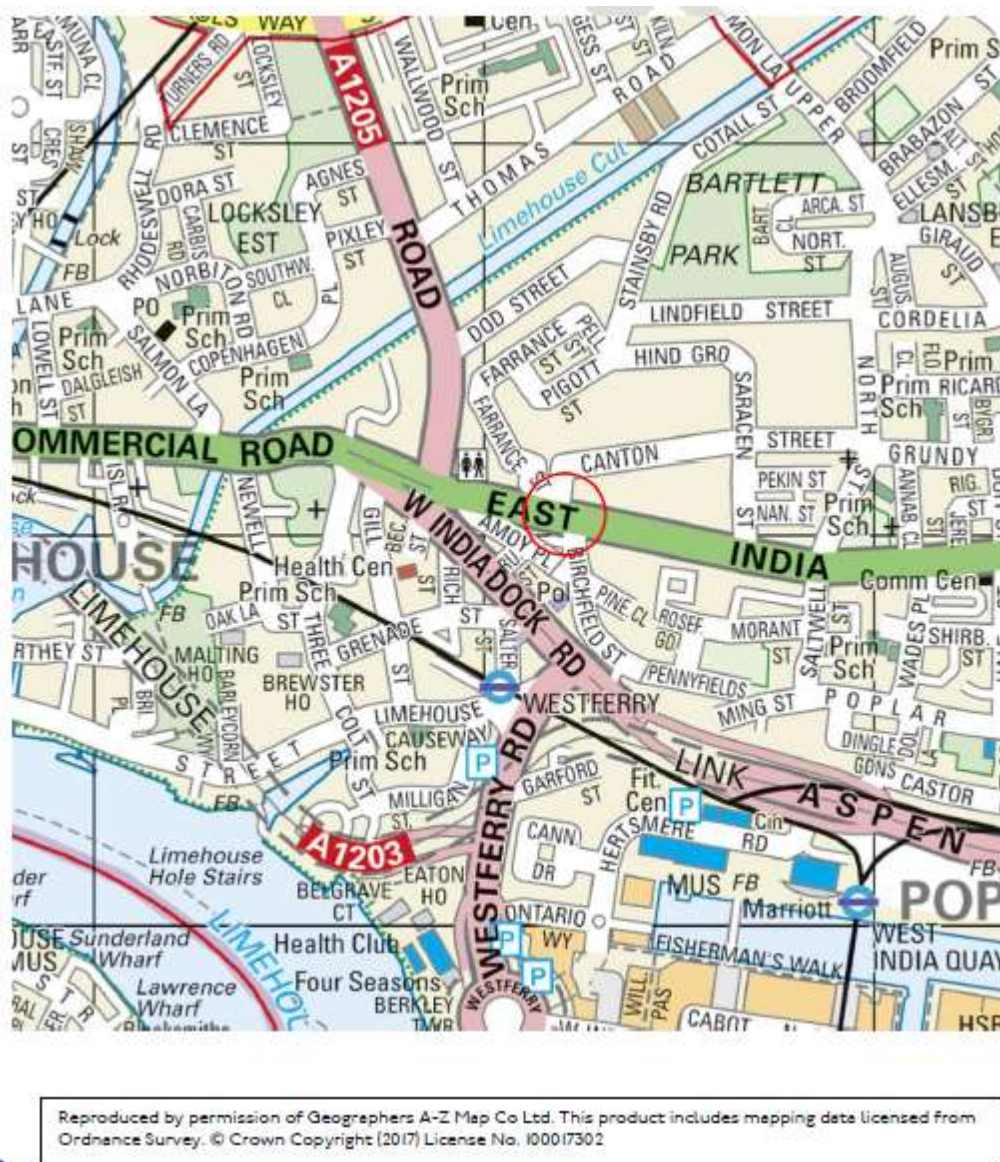


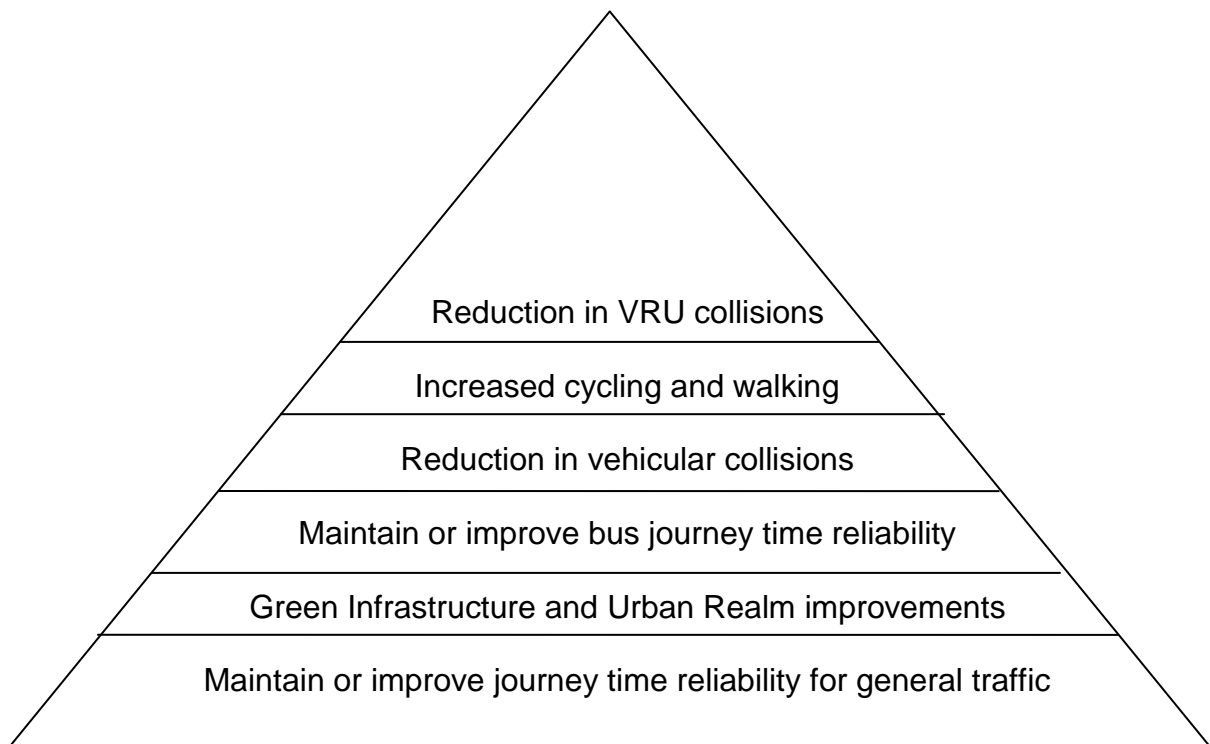
Figure 1 - Network in scope for intervention

Considerations – Safer Junctions Programme Wide

Initial findings from the first collision studies into new locations indicate that the challenges highlighted at some Safer Junction locations may include the need to make trade offs. For example:

- 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
- Side road closures resulting in more stakeholder agreement being needed
- 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, two-stage right turns, left-turn on footway, 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:

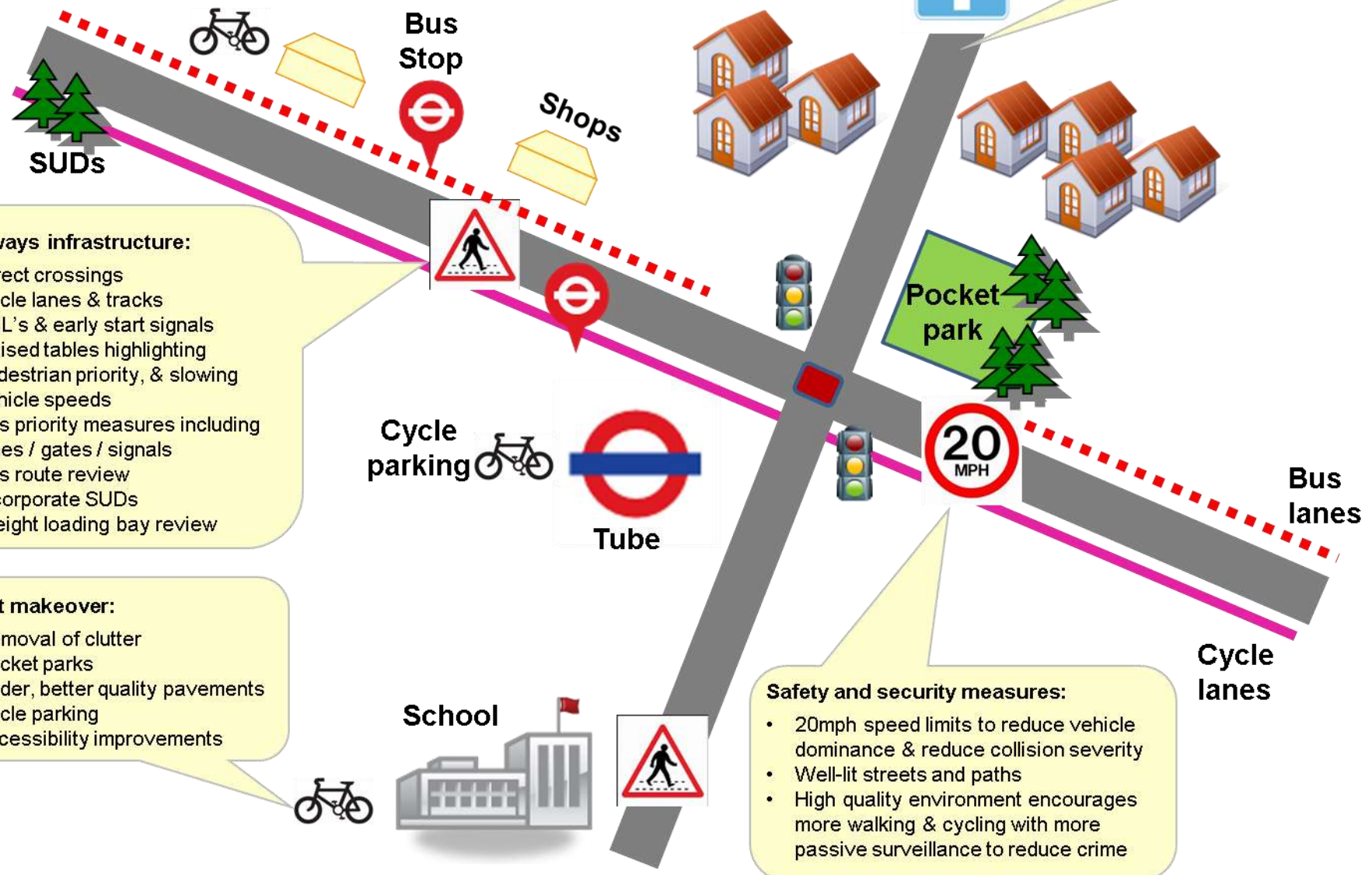
- Direct crossings
- Cycle lanes & tracks
- ASL's & early start signals
- Raised tables highlighting pedestrian priority, & slowing vehicle speeds
- Bus priority measures including lanes / gates / signals
- Bus route review
- Incorporate SUDs
- Freight loading bay review

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 A13 East India Dock Road junction with Canton Street / Birchfield 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:

- Nearby Cycle Future Route work, for the CFR5 (Hackney to Poplar) route. This junction is not included in the current CFR5 alignment, but should be considered in planning junction interventions.

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 31st May 2018 and at the post-site meeting involving key internal stakeholders held at the TfL offices at Palestra on 18th July 2018.

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

1. Pedestrian desire line over East India Dock Road between Canton Street and Birchfield Street is not catered for by a formal signal controlled pedestrian crossing

Summary: There is a strong pedestrian desire line over East India Dock Road between the staggered junctions of Canton Street and Birchfield Street, towards the Westferry DLR station. There is an existing pelican crossing, with flashing amber / green man aspects to the east of the junction. However, site observations showed that most pedestrians crossed away from the crossing, entered the carriageway where the existing guardrail terminated, and crossed in the vicinity of the right turn pocket. This is a dangerous manoeuvre, with pedestrians at risk of being struck by passing and turning vehicles.

Proposals: Investigate options to improve pedestrian crossing facilities on East India Dock Road. 1. Provide a new crossing directly on the pedestrian desire line. 2. Extend the crossing area of the existing pelican crossing to the west to better accommodate the pedestrian desire line. 3. Signalise the Canton Street and Birchfield Street junction and provide an all-red pedestrian stage.

Potential impacts: Full signalisation of the junction is likely to impact on junction capacity and journey times, including buses and cyclists. Potential impact to traffic will be determined by traffic modelling, which will be carried out by Network Performance (NP).

Consideration has been given to extending the pedestrian guardrail at this location to discourage pedestrians from crossing away from the existing crossing, but pedestrians are likely to continue to walk around the guardrail.

2. Cluttered signing on the Canton Street (north arm) approach

Summary: It was noted that the existing signing for drivers exiting Canton Street is very cluttered, with some signs blocking visibility of others. This is especially true a mandatory right turn sign being obscured from view by a controlled zone sign. Drivers may fail to react to all of the information required at this location.

In addition, in some instances the signing is confusing, such as the requirement to turn right over a busy carriageway, but the safer left turn movement may be prohibited.

Proposal: Review the requirements for traffic signs at this location and investigate if any consolidation or removal can take place. Also, investigate the rationale for this exit operating a right turn only movement.

3. Electrical cabinets situated in the centre of the footway obstruct pedestrian movement and present a hazard to visually impaired pedestrians

Summary: On the north-eastern side of Canton Street (north arm), there are several large electrical cabinets situated in the centre of the footway which obstruct pedestrian movement and present a hazard, especially for visually impaired pedestrians.

This area of footway is relatively large and could offer an opportunity for improved urban design / streetscape proposals. It was noted that the majority of pedestrians chose to walk through the nearby public gardens to access this section of East India Dock Road.

Proposal: Investigate relocating the electrical cabinets to the rear of the footway. Should this be feasible, provide designs for improvements to the streetscene at this location. Designs could include providing additional green infrastructure and opportunities for shade, shelter and seating.

Potential impacts: Relocating the cabinets could be prohibitively expensive.

4. Bollards located close to the tactile paving provision limit the available width of the pedestrian crossing over Canton Street

Summary: It was noted that bollards have been placed on Canton Street, either side of the tactile paving arrangements, despite their being an opportunity to widen the crossing point. This limits the available width of the crossing point and can restrict movement of pedestrians, especially those using buggies and wheelchairs.

Proposal: Investigate why the bollards are located at this location and ascertain if they can be removed. If feasible, the crossing widening the crossing point should be investigated.

5. **Pedestrian guardrail provide around the junction restricts intervisibility, pedestrian movement and could present a hazard to cyclists if in collision with turning vehicles**

Summary: Pedestrian guardrail is provided extensively around the junction and beyond on the A13 in both directions. This guardrail restricts intervisibility between drivers and pedestrians, especially those in wheelchairs or of short stature. Depending on the angle through which the guardrail is viewed, this can fully obscure approaching vehicles. Furthermore, the presence of guardrail at the corners of the junction can entrap a cyclist should they be in collision with a turning vehicle, potentially increasing the severity of their injuries.

In addition, since the guardrail is provided in both directions along the footways of the A13, this enhances the 'tunnel like' environment of the road and could potentially encourage increased speeds.

Proposal: Ascertain whether or not a guardrail review has been undertaken at this location. If not, undertake an assessment of the provision with a view to having it removed.

6. **Drivers wishing to turn left into Canton Street must do so at the last moment due to the length of the bus lane on the approach**

Summary: Site observations showed that drivers wishing to turn left into Canton Street (west to north) must do so at the last moment, as the bus lane markings on this approach continue up to the junction mouth. This may result in late turning manoeuvres which could result in shunt type collisions. Furthermore, should a cyclist be in the bus lane, motorists wishing to turn left may feel pressurised by following vehicles and turn left across the cyclist's path at a risk of collision.

Proposal: Reduce the length of the bus lane by 10-15m to allow drivers wishing to turn left into Canton Street to move into the nearside lane and decelerate accordingly, before making the manoeuvre.

Potential impacts: Cyclists may still be at risk of 'left-hook' type collisions.

7. **CCTV column situated in the centre of the footway restricts pedestrian movement**

Summary: It was noted that there is a CCTV pole situated in the centre of the northern footway on East India Dock Road, east of the junction with Canton Street. This can restrict pedestrian movement, especially for those using buggies and wheelchairs, and may present a hazard to visually impaired pedestrians. This is exacerbated by the provision of other items of street furniture to the front and rear of the footway in close proximity.

Proposal: Relocate the CCTV pole and other items of street furniture to the rear of the footway.

Potential impacts: Relocating the CCTV pole may be prohibitively expensive.

8. **Drivers turning right into Birchfield Street may fail to appreciate the presence of eastbound buses, cyclists, taxis and P2Ws to the nearside**

Summary: Site observations showed that eastbound traffic queues back from the Burdett Road junction over the Birchfield Street junction. However, the presence of a nearside bus lane means that buses, taxis, cyclists and P2Ws are able to travel at a higher speed. Vulnerable cyclists and P2W riders especially may be obscured from the view of drivers turning right by queuing traffic. There is an increased risk of right turning collisions as a result. Analysis of the collision history identified four collisions involving a P2W (presumably in the bus lane) struck by a vehicle turning right into Birchfield Street.

Proposal: Prohibit the right turn movement into Birchfield Street. This may include extending the central island of the pedestrian crossing point over the junction to physically prevent the manoeuvre and better serve the pedestrian desire line at this location.

Potential impacts: Drivers wishing to turn into Birchfield Street may continue past the pedestrian central island and perform a u-turn manoeuvre before turning left into the side road. This could result in an increase in u-turning type collisions.

Prohibiting the right turn into Birchfield Street may be opposed by local residents and businesses.

9. **Existing 'Keep Clear' and zig-zag markings are not compliant with current regulations**

Summary: It was noted that the Keep Clear markings over Birchfield Street eastbound carriageway are not compliant with current regulations as they are provided within the zig-zag controlled area of the pelican crossing. It is prescribed that no other signs or markings are provided within the controlled area to ensure that driver attention is focused on crossing pedestrians.

Proposal: Notwithstanding the recommendation in item 8 above, shorten the zig-zag markings to enable the Keep Clear marking to be extended over the junction with Birchfield Street correctly.

10. **Flare length for right turning vehicles at the junction of East India Dock Road and Burdett Road appears to exceed the capacity required**

Summary: Site observations showed that the right turn flare for vehicles turning into Burdett Road, further west on East India Dock Road appears to

be excessively long for the volume of right turning vehicles observed turning at this location. A right turn pocket into Canton Street would assist drivers from feeling pressurised by following vehicles to turn right across two lanes of eastbound traffic.

Proposal: Assess the number of right turning vehicles from East India Dock Road into Burdett Road to ascertain if it can be reduced in length to facilitate a right turn pocket can be provided at the junction with Canton Street (east to north).

Please note that the site visit took place during the half term holiday and so traffic levels may not be as expected.

PPD Elements to deliver in advance of the TDE design

Certain issues have been observed on site and can be delivered in advance of TDE designing the project. These are to be passed to TfL Projects and Programme Directorate (PPD) to rectify.

11. Existing road markings are fading

Summary: Site observations showed that the road markings around the junction are fading.

Proposal: Review the maintenance regime for repainting the markings and renew them accordingly.

12. Existing prohibited movement signing is incorrect on Birchfield Street

Summary: It was noted that there are mandatory left turn signs on Birchfield Street for northbound drivers approaching the junction with East India Dock Road. Given the single carriageway nature of East India Dock Road at this point, the signs should instead prohibit the right turn movement.

Proposal: Review the regulatory signing on this approach and replace the mandatory left turn signs with 'banned right turn' signs.

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 Tower Hamlets 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 checked="" 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 – A13 East India Dock Road junction with Canton Street / Birchfield 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 – A13 East India Dock Road junction with Canton Street / Birchfield Street Collision Study



East India Dock Road
Canton Street - Versi

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



Site Meeting.pdf

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	Yes	

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	+ V High	Highest ped & cycling demand & potential					
	Safe	CR and crime levels	+ Medium	Average accident and/or crime incidence					
	Green	Air quality issues	+ V High	Lowest air quality					
	Space Efficient	Vehicle flow (levels & car dependency)	+ High	High vehicle flows and/or local car ownership					
	Connected PT	Existing PT connectivity	+ V Low	Highest PT accessibility index					
	Reliable Service	Current & forecast bus demand & bus performance	+ V High	Highest patronage & punctual bus performance					
	Quality Service	Current & forecast bus demand & bus performance	+ Medium	Average crowding & comfort					
	Inclusive PT	Accessibility level	+ High	Poor accessibility					
	Growth	Existing & forecast pop. and employment levels	+ V High	Highest 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	49	####
Easy to cross	53	####
Shade and shelter	50	####
Places to stop and rest	47	####
Not too noisy	53	####
People choose to walk, cycle and use public	49	####
People feel safe	56	####
Things to see and do	33	####
People feel relaxed	49	####
Clean Air	50	####
Overall Healthy Streets Check score	50	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

