

Liveable Neighbourhoods Bid Pro forma

(To be used from July 2017)

Answer all questions in the application form. If the question does not apply to your project enter 'Not applicable' or 'N/a'.

By submitting this application you are confirming the following:

- (a) The information supplied on this form is correct and complete at the time of the bid.
- (b) The borough accepts the requirements set out in the Guidance for the submission of Liveable Neighbourhoods applications (July 2017) projects or any subsequent editions/updates

Broadly the bid document (excluding appendices) should be a maximum of 20 pages.

The information provided in this pro forma should provide sufficient detail so as to give a complete overview of the project. It should contain enough qualitative and quantitative information to justify the need for investment, inform objective decision making by TfL and help boroughs and TfL to prioritise potential schemes.

The blue text in this pro forma provides guidance on what information is sought in each section. This text can be deleted when completing the form.

General Information

Table 1

Organisation name(s):	London Borough of Redbridge (Lead), London Borough of Waltham Forest
Project manager responsible for delivering the LN proposal and their contact details	<p>██████████ Team Manager – Transportation Strategy Civic Pride London Borough of Redbridge 12th Floor Rear, Lynton House, 255-259 High Road, Ilford, IG1 1NY Tel: ██████████ Mobile: ██████████ Email: ██████████@redbridge.gov.uk</p>
Person completing the submission and their contact details:	As above
Project Title:	Church End Triangle
What Financial Year is this application to be considered for?	Financial Year 2018/19
Is the Borough submitting any other Liveable Neighbourhoods applications?	No
Has this project been submitted before as a bid to TfL?	No

Executive Summary

Church End Triangle is bounded by the A406 North Circular (south), the A104 Woodford New Road (west) and the A1199 High Road / Woodford Green (east). The borough boundary with the L.B. Waltham Forest runs down Woodford New Road. It fits the Liveable Neighbourhoods Scenario A: Residential area / local centre. When the A406 North Circular Road was constructed in a cutting many years ago it physically divided Woodford and South Woodford. Chelmsford Road and to a lesser extent Derby Road, Fuller's Road and Empress Avenue became convenient alternative routes for through traffic in the area to gain access to the regional road network (M11) and the George Lane District Shopping Centre. At the top end of the triangle vehicle traffic dropping-off / collecting pupils at St. Aubyn's School, a co-educational independent school for 500 children aged 3 to 13, adversely impact on Bunces Lane, Woodford New Road and the housing estate immediately to the north of the school. Parts of the triangle are included within both the South Woodford and Woodford Green conservations areas.

There is a long history of rat-running, accidents, congestion and parking complaints and the Council and local Ward Councillors have made numerous unsuccessful attempts over the years to try to resolve them via conventional traffic management techniques. We believe that the mood is right to introduce a more radical approach through the introduction of a Liveable Neighbourhood.

The Mayor of London will shortly launch a consultation on expanding the Ultra-Low Emission Zone (ULEZ) up to North & South Circular in 2021 which will border on Church End Triangle. Therefore the area will suffer poorer air quality than its adjacent neighbours within the boundary zone which will be compounded by increased pollution from those non-compliant vehicles whose drivers are deterred from travelling into London, who either turn-around, choose routes to divert around the charging zone boundary, or circulate in the area attempting to find a parking space to enable them to continue their journey into London on another mode of transport.

To mitigate these historic and future issues and to meet the aims of the new Mayor's Transport Strategy, Healthy Streets agenda and "Vision Zero" approach, a programme of works is proposed comprising highways engineering and behaviour change measures. These will include;

- Traffic and parking management to reduce the impact of both residents' and through vehicular traffic
- Reclaiming the streets for children's and adults play areas by reallocating carriageway to recreational use
- Accident reduction schemes to further improve road safety
- New and upgraded crossings to improve walking and cycling access to open spaces, local facilities and wider networks including into LBWF
- Smarter travel measures to increase levels of walking and cycling
- Improved public realm through the provision of parklets, on-street cycle parking, upgraded LED lighting and planting in lieu of parking spaces.
- Improved safety and security

We believe the implementation of this mix of complementary measures will reduce traffic dominance and promote active and social streets. This scheme is supported by both Boroughs and in consultation with the local residents and community groups will ensure that Church End Triangle becomes a successful Liveable Neighbourhood.

Strategic Case

Context

(a) Alignment to draft Mayor's Transport Strategy Priorities and Outcomes

The below table sets out how the Church End Triangle proposal contributes to the delivery of the draft Mayor's Transport Strategy vision for 80% of Londoners' trips to be on foot, by cycle and by public transport by 2041.

Mayor's Transport Strategy Outcomes		Liveable Neighbourhood Objective	Measure of Success
Healthy Streets and Healthy People	Active London's Streets will be healthy and more Londoners will travel actively	Use behaviour change initiatives to prompt people to walk, cycle and use public transport	Improve St. Aubyn's School travel plan grading from Bronze to silver / gold
		Increase the number of trips made by walking, cycling and public transport	Increase walking, cycling and public transport trips
		Reduce barriers to walking, cycling and accessing public transport. Install on-street cycle infrastructure in parking spaces	1) No. of individual interventions 2) Volume of walking, cycling and public transport trips
	Safe London's Transport System will be safe and secure	Creating safer neighbourhood environments for people to travel to and from	Ease of access to local amenities and district centre
		Reduce road danger, fear of road danger and the number of killed and seriously injured (KSIs)	1) Zero KSI post implementation 2) 50% reduction in "slights" 3) Clear vegetation
		Improve personal security and reduce the fear of crime for the travelling public	Lighting improvements and increase in passive surveillance
	Efficient London's streets will be used more efficiently and have less traffic	Less car journeys which create opportunities for neighbourhood public realm improvements and play streets	Area (M ²) of carriageway reallocated to public use
		Use of timed closures and modal filtering to reduce motor traffic dominance and increase the active	1) Reduce through traffic 2) Use of public play areas

		use of streets and public spaces	
		Improve the efficiency and safety of freight movement	1) Freight, delivery and servicing survey 2) Collision data
	Green London's Streets will be clean and green	Reducing pollution to create more attractive neighbourhoods for people	NOx and PM monitoring
		Improve the quality and resilience of public realm	Healthy Streets survey – before, during and after
A good public transport experience	Connected More people will travel on an expanded public transport network	Ensuring neighbourhoods have good connections to public transport	Ensure all local bus stops are BSA compliant
	Quality Journeys by public transport will be pleasant, fast and reliable	Neighbourhoods should support the provision of good quality public transport	Ensure implemented measures improve bus speeds

(b) Alignment to other Mayoral Strategies TBC

Mayoral Strategies

The Liveable neighbourhoods bid will align with the following New Mayor's strategies;

- London Plan, the draft plan being prepared for consultation this Autumn
- Transport Strategy, currently being consulted upon - <https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/the-mayors-transport-strategy>
- Economic Development strategy, currently being prepared for consultation
- London Environment Strategy – consultation draft - https://www.london.gov.uk/sites/default/files/london_environment_strategy- draft_for_public_consultation.pdf
- Culture Strategy, currently being prepared for consultation
- “Better Health for all Londoners”, currently under consultation - https://www.london.gov.uk/sites/default/files/draft_health_inequalities_strategy_2017.pdf

TfL Strategies

The Liveable neighbourhoods bid will align with the following TfL strategies;

- Freight Strategy documents (miscellaneous) - <https://tfl.gov.uk/corporate/publications-and-reports/freight>
- “Vision Zero” approach

(c) Alignment to Borough Strategies and Policies

The Church End Triangle Liveable Neighbourhoods bid significantly contributes towards the following Borough Strategies and Policies;

- LIP3, currently being prepared for consultation
- Our Streets strategy - <https://www.redbridge.gov.uk/about-the-council/our-streets-strategy/>
- Cycle Strategy, not available on the internet
- Walking Strategy, not available on the internet
- Sustainable Modes of Travel strategy - <https://www.redbridge.gov.uk/media/1352/sustainable-modes-of-travel-strategy.pdf>
- Parking Strategy - <https://www.redbridge.gov.uk/media/3596/ced105-redbridge-parking-strategy-2015-2020.pdf>
- Core Strategy, just finished examination in public - https://www.redbridge.gov.uk/media/2268/final-web-pdf_redbridge-local-plan_reduced.pdf
- Barking, Havering and Redbridge Joint Strategic Needs Assessment (JSNA) - <https://www.redbridge.gov.uk/health-and-wellbeing/public-health-strategies-and-policies/>
- Obesity Strategy - <https://www.redbridge.gov.uk/media/3705/obesity-strategy.pdf>
- Borough of Culture bid 2017 to GLA, currently being prepared

Opportunity

Existing Situation

Following the construction of the A406 North Circular Road, the neighbourhoods of South Woodford and Woodford have suffered severance and car dependency has increased as a result. Chelmsford Road and to a lesser extent Derby Road, Fuller's Road and Empress Avenue became convenient alternative routes for through traffic in the area to gain access to the regional road network (M11) and the George Lane District Shopping Centre.

A 'No Entry Except for Access' signing scheme was first introduced in 1981 to try and prevent the through traffic. However it proved difficult to enforce by the police and a number of prosecutions failed. There have been many calls for action and this came to head a few years ago when the council were given powers to enforce the signs by CCTV. This has been looked into in some detail but our legal advisors and CCTV providers have concluded that whilst it is feasible to have cameras at each end to see a vehicle driving the whole length without stopping, there would be too many opportunities for drivers to challenge the reason for driving through the roads. The sheer number of challenges would become exhaustive and cost more to process than is acceptable.

They key issues are;

- The Triangle contains about 1500 residential properties.
- Large amount of non-residential through traffic rat-running along the parallel roads, especially Chelmsford Road.
- The parallel roads provide important walking/cycling links between Woodford New Road and High Road which in turn provide access to Epping Forest, local schools, health centre, library, bus stops, local and South Woodford district centres.
- The area contains a large private school which has a wide catchment area with high levels of private car trips that cause local congestion and accidents that impact upon local residents.
- There is also a large state school nearby (Churchfields Infant and Junior) attended by many children from Church End Triangle. The schools generate a large volume of vehicle and walking trips. We intend to ban vehicles from the road outside the school as part of a complementary scheme.
- At the Chelmsford Road / Churchfields junction with High Road there is an accident problem causing issues for the large number of pedestrians, including school children that cross at the location.
- L.B. Waltham Forest is concerned about safety improvements at Fullers Road junction with Woodford New Road. There is also an accident issue at Woodford New Road Junction with Chelmsford Road which is in L.B. Waltham Forest where there are poor crossing facilities for pedestrians and cyclists wanting to gain safe access to Epping Forest.

- Poor air quality because of the through traffic/congestion and proximity to the North Circular, which is envisaged to become worse following the proposed extension to the ULEZ boundary in 2021.
- Poor “Healthy Streets” scoring.
- Strong Community support for measures to be introduced
- Political support for change. At a recent Local Forum in the area, following representations from the audience the Leader was keen to improve matters. The Local MP, Iain Duncan Smith, is also involved and asking for action.

In the past numerous options to resolve the various issues have been put forward, but they have not found favour with the majority of the residents living in the area.

The triangle had previously been populated by established working professionals, but in recent years’ population turnover is estimated at around 10% per annum. With buy-to-let, there has been a demographic change, with younger residents, who have different expectations and have created an appetite for change in the area.

An area-wide approach through the Liveable Neighbourhood “Scenario A: Residential area / local centre” initiative will enable a co-ordinated implementation of a number of positive improvements that can address local concerns in a sustainable manner that would suit this community.

Potential Scope

The proposed interventions are set out in the table below.

Feature	Intervention	Location	Priority
Air Quality	Junction closure	Modal filtering to close Chelmsford Road/Woodford New Road junction	2
	Road Closure	Fullers Road, North of car park entrance / exit	1
	Traffic control	Make Empress Avenue one-way eastbound	2
	Remove speed humps	Chelmsford Road and Fullers Road	2
	Parking review	All roads	1
	Air Quality Modelling	All roads	1
Culture	Play Streets	Install Play Street areas on Stanley Road 1) North of Chelmsford Road junction, and 2) South of Fullers Road junction	1
	Alternate street closures	All roads between Chelmsford Road and Grove Road	1
	Parklets, some combined with cycle storage	Locations to be identified throughout area	1
	Place setting – bring redundant areas back into use	Wide footways at edge of car parks to be converted into parklets with cycle hub amenity	1
	Behaviour change initiatives	Work with local community to support walking / cycling initiatives, maintain parklets and engage with local people of all ages	1
Cycling	Cycle parking	Replace parking with on-street cycle parking and parklets in play street and throughout area	1
	Improve access to Waterworks Roundabout	Review cycle routing	1
	Improve access to South Woodford (1) across North Circular	Review cycle routing	1
	Improve access to South Woodford (2) shops/Underground	Review cycle routing	1
	Improve access to/from LCN 11	Install Chelmsford Road / Churchfields toucan crossing	1
	Link to Green Corridor 1, Woodford to Hainault	Woodford Green / Broomhill Walk Junction treatment	1
	Link with Waltham Forest quiet cycle route (Oak Hill)	Install roundabout at Oak Hill/Woodford New Road/Fullers Road junction, including signals, remove existing crossing point	1

Lighting	Upgrade street columns to LED lighting	All streets	1
	Enhanced lighting in play street and parklets	All locations	1
Planting	Street planting	In play street	1
Road Safety	Accident reduction scheme	Chelmsford Road/Woodford New Road junction	2
	Accident reduction scheme	Oak Hill/Woodford New Road/Fullers Road junction	2
St. Aubyn's School	Work with school to improve existing Bronze accreditation for school travel plan		1
	Install pavement on Bunces Lane		2
	Ban right turn into Bunces Lane from Woodford New Road		1
	Review kerb-side markings on Woodford New Road from Woodford Green to Empress Avenue		1
Other schools in the locality	Work with schools to improve existing accreditation levels for school travel plans	Woodford County High School for Girls, Churchfields Infant and Junior schools	1
Electric Vehicle Car Club Bays	Install electric vehicle car club bays to assist with reduction in private car usage	Locations within triangle to be confirmed.	2
Air Cleansing street furniture	Install air cleansing street furniture in pollution hot spots e.g. bus stops on North Circular	Bus stops on A406 North Circular Road in cutting	2

Constraints and Dependencies

Constraints

As with any project the available resource, financial and staff are the key issues. The list of interventions has been prioritised, but the final programme will only be confirmed once funding discussions have been completed with TfL. LBR is currently undergoing a restructure, but that will have been completed prior to any Liveable Neighbourhoods funding becoming available.

As the project scope crosses the Borough border with LBWF, agreement between both parties will be required on the intervention designs and completion of the works. This is not envisaged to be a significant issue as the Boroughs have a good working relationship and have agreed in principle to the scope of the works.

Borough elections will take place on 3 May 2018. Design and consultation will commence after the results of the Borough elections are known. The current administration is Labour, whilst the ward councillors are Conservative (1) and Lib-Dem (1). This funding bid has cross-party support, so should the Borough's administration change it should not affect delivery of the scheme.

Dependencies

As a bi-borough application there will be a greater number of dependencies within the project which the Boroughs are used to managing through our borough boundary maintenance agreement. Regular communication and meetings between the Boroughs and the contractor will ensure that issues are well managed and do not adversely impact on project delivery.

Economic Case

To illustrate the potential value for money of the Church End Triangle Liveable Neighbourhoods scheme the overall value to the council and NHS should be greater than the cost of the scheme. This Borough trial of the Healthy Streets initiative will be used when planning future Neighbourhoods and Corridors programme. Therefore the following points require consideration;

NHS savings through better health through walking, cycling and better air quality

The value of reduced car usage and pollution

Savings through fewer collisions reducing police, NHS and insurance costs and improving lives

New cycle links form part of the wider cycle network providing access to jobs and amenities

The value of increased patronage of local shops

The value of trees and planting to the economy and the wellbeing of residents

Cost of crime savings from a safer neighbourhood

Explanation of Costs

Table 3 Costs

Financial Impact (Outturn £k)	2018/19	2019/20	2020/21	2021/22	2022/23	Future years	Future years	Future years	TOTAL
Project Management & fees	30	85	80						195
Feasibility Design	50								50
Concept Design	100								100
Detailed Design	100								100
Sub-total – Design & Fees	280	85	80						445
Construction		421	409						830
Other: - Utility Costs									
Other– 3 rd party e.g. Traffic signals		32	32						64
Other – e.g. Traffic Orders, CPO		6	6						12
Behaviour change Initiatives		25	25						50
Sub-total – Implementation	0	484	472						956

Monitoring – data collection ‘before data’	20								20
Monitoring – data collection ‘after’ data, Year 1									
Monitoring – data collection ‘after’ data, Year 2									
Monitoring – data collection ‘after’ data, Year 3			20						20
Sub-Total – Monitoring	20		20						40
Estimated Base cost	300	569	572						1,441
Contingency	0	281	273						554
Estimated Final Cost	300	850	845						1,995

Cost assumptions

- Fees = 10%
- Monitoring = 2%
- Behaviour Change = £50K
- Final monitoring to be undertaken in 2021/2022

Risk

Table 4 below gives a brief overview of risk provision including the main or notable risks that are likely to have the highest impact on successful delivery of the project and its outcomes.

Table 4

Risk	Likelihood	Impact
Access controls not implemented.	Medium	Does not resolve fundamental issues and deters residents from making use of the improved public realm.
On-street cycle parking not installed.	Low	Reduces passive surveillance.
Play street area(s) not implemented.	Low	Deters residents from making use of the improved public realm, reduces passive surveillance.
Accident reduction schemes not implemented.	Low	KSI figures remain unacceptably high.
Lighting not upgraded to LED.	Low	Lower levels of road and public safety.
Planting not implemented	Low	Low level of public realm, loss of opportunity to assist with pollution reduction.
Pollution cleaning infrastructure e.g. bus stops not installed.	Medium	Poor waiting environment for bus passengers on TLRN.
Change of Ward Members having local knowledge following boundary review and 2018 Borough elections.	High	Low as bid has cross-party support.
Funding awarded is less than that requested.	High	Outputs will be discussed and agreed with TfL prior to commencement.
Cross-borough boundary issues.	Low	Councils have a history of working together, both historically and at the present.
Selection of contractor to implement measures.	High	Discussions will take place between Boroughs to ensure the best solution.

Management Case

Table 6

Milestone	Start date	End date	Duration (months)	Comments where applicable
Feasibility Design	01/04/18	30/06/18	3	
Concept design	01/07/18	31/12/18	6	
Detailed Design	01/01/19	31/03/19	3	
Construction	01/04/19	31/03/21	24	
Project Completion	-	31/03/21	0	
Post Implementation Monitoring	01/04/21	31/03/22	12	Final monitoring to be undertaken in 2021/2022

Measures of Success / Benefit Realisation

Table 7

Liveable Neighbourhood Objective	Measure of Success	Measure / Baseline / Expected Value
Promoting more people in neighbourhoods to walk, cycle and use public transport	Improve St. Aubyn's School travel plan grading from Bronze to silver / gold	STARS data
Increase the number of trips made by walking, cycling and public transport	Increase walking, cycling and public transport trips	Pedestrian / cycling surveys Bus usage data
Reduce barriers to walking, cycling and accessing public transport	3) No. of individual interventions 4) Volume of walking, cycling and public transport trips	1) As per programme agreed with TfL 2) Pedestrian / cycling surveys, bus usage data
Creating safer neighbourhood environments for people to travel to and from	Ease of access to local amenities and town centre	Monitor walking/cycling at SE and SW corners of triangle, before, during and after the project
Reduce road danger, fear of road danger and the number of killed and seriously injured (KSIs)	Zero KSI post implementation	Collision data from 12/2016 baseline
Improve personal security and reduce the fear of crime for the travelling public	Lighting improvements and increase in passive surveillance	Healthy streets audit
Less car journeys which create opportunities for neighbourhood public realm improvements	Area (M ²) of carriageway reallocated to public use	Measure when interventions are completed
Reduce motor traffic dominance and increase the active use of streets and public spaces	3) Reduce through traffic 4) Use of public play areas	1) Vehicle surveys 2) Usage counts
Improve the efficiency and safety of freight movement	3) Freight, delivery and servicing survey 4) Collision data	Baseline – 2018/9. Monitoring in future years
Reducing pollution to create more attractive neighbourhoods for people	NOx and PM monitoring	Baseline – 2018/9. Monitoring in future years
Improve the quality and resilience of public realm	Healthy Streets survey	Undertaken on completion
Ensuring neighbourhoods have good connections to public transport	Ensure all local bus stops are BSA compliant	Bus stop survey. Baseline – 2018/9. Monitoring in future years
Neighbourhoods should support the provision of good quality public transport	Ensure implemented measures improve bus speeds	Bus operations data. Baseline – 2018/9. Monitoring in future years

Engagement

The project is supported by both London Boroughs - Redbridge and Waltham Forest.

The project has support from the Cabinet Member for Environment and Sustainability (Labour), Ward Councillors (Conservative and Liberal Democrat), Directors and Senior Managers at Redbridge.

Letters of support are provided in Appendix 6.

As indicated in the Executive Summary this project is addressing long term difficult and sensitive issues for the community living in Church End Triangle. The residents are articulate and engaged as demonstrated by numerous groups that have campaigned over the years. Ward Members are contacted on a regular basis with concerns about traffic and transport issues. Consultation will involve all residents and residents' organisations, to ensure that the implemented measures are balanced and beneficial to all.

Businesses on the A1199 High Road / Woodford Green will be involved in the consultation so that their servicing and customer concerns are reflected in the solutions developed to maintain their viability.

L.B. Redbridge Smarter Travel team has engaged with St. Aubyn's school to enable their travel plan to become accredited to Bronze standard. This engagement will continue towards Silver and Gold accreditation, linking into the wider behaviour change initiatives as part of the scheme. Residents in the small estate by the school will also be consulted on the proposals.

Summarise any engagement activity that has been undertaken as part of the development of the bid

- Statutory
 - London Borough of Redbridge – Elected Members and Officers - Highways, Transportation, Public Health, Culture and Leisure
 - London Borough of Waltham Forest - Neighbourhood and Commercial
 - TfL Stakeholders – Bus Operations; Bus Infrastructure; Bus Strategy; BPP – East; and Crime Reduction & Operational Security.
- External
 - The views of local residents, businesses and community groups have been obtained via the local Ward Councillors.

Other Information

Table 8

Any other initiatives TfL, GLA, or other that are likely to be active in the area of the project:	Access to Green Corridor 1 LIP cycleway, funded in corridor programme 2017 – 2020. Anticipated expansion of the ULEZ in 2021.
Is the scheme on or does it affect the Strategic Road Network (SRN) or the Transport for London Road Network (TLRN)?	The A104 Woodford New Road and the A1199 High Road / Woodford Green will have junction treatments and new / improved signals. Church End Triangle is adversely affected by the A406 North Circular Road which is part of the TLRN. This scheme will mitigate these effects.
Does the scheme impact TfL services, infrastructure or assets:	TfL bus operations have advised no current issues. Bus stop E (St. Aubyn's School) on Woodford New Road will be reviewed as part of the scheme to improve bus stop accessibility. Walking / cycling access to South Woodford underground station will be improved. New and improved signals will be installed. TfL Signals design will minimise any impacts on bus running times.
Identify any 3 rd party statutory approvals that are required	None identified to date.

Road Danger Reduction Statement

Scheme name: Church End Triangle

Collision data: The latest 36 months data to 31 December 2016 shows that there have been a total of 40 collisions within and on the boundary of the proposed Liveable Neighbourhood scheme. These collisions involved the following:

Table 9

12 month period	All	KSI	Pedestrians	Pedal cycles	P2W	Right turn	Dark	Wet
2014	14	1	2	1	0	4	2	3
2015	13	1	1	1	0	6	5	3
2016	13	1	1	1	2	0	2	2
Total*	40	3	4	3	2	10	9	8

* Note: There will be double counting of collisions if for instance a pedestrian was involved in a collision with a pedal cyclist.

Road Danger reduction statement for bid

The collision plot is provided in Appendix 5. During the years analysed, the three years to 31 December 2016, there was one fatal collision between a car and a cycle. There were two serious collisions, both between a car and a pedestrian, and both at junctions on Grove Road. The number of collisions, where a person was killed or seriously injured has remained unchanged at one per annum over this three year period. All other collisions were considered slight.

There has only been one other collision within the triangle, a two vehicle collision at the junction of Chelmsford Road and Stanley Road.

On Woodford New Road there were a total of twelve collisions, two in 2014, four in 2015 and six in 2016. Four of these took place at Node 714, the junction of Woodford New Road/Fuller's Road/Oak Hill, one involving a cyclist. A further four took place at the junction of Woodford New Road and Chelmsford Road. Of the remaining four, two involved rear-ending, one involved a right turn and one collision cause is unknown. One took place at the junction with Bunces Lane, although it does not appear to involve a right turn and didn't occur at school pick-up/drop-off times.

There have been twenty-five collisions on High Road, of which fourteen were at the numerous junctions along the road. The individual totals were Queen Mary Avenue – 1; Chelmsford Road / Churchfields – 4; Derby Road – 4; Fuller’s Avenue and Empress Avenue – 1 apiece; Forest Approach – 2, including the fatality; and Broomhill Walk – 1. Seven of the twenty-five accidents involved a right turn, with two each involving pedestrians, cyclists and P2Ws. Five accidents were during the hours of darkness and five were in the wet or which two were at night.

A full options appraisal will be required to ascertain the best solution at each collision site due to the transport geography of the scheme area. This is to secure a holistic “Liveable Neighbourhoods” solution rather than focusing on each individual site and negating the knock-on effects of piecemeal solutions. Better pedestrian crossing facilities are required at the Woodford New Road / Chelmsford Road junction to encourage walkers and cyclists to access the Epping Forest Open Space. Junction reviews are required at a number of locations on both Woodford New Road and High Road. All these should include cycling issues, but especially at the junctions with the London Cycle Network and Green Corridor 1 junction at Broomhill Walk.

All lighting will be reviewed as part of the existing borough-wide programme to upgrade to LED lighting.

Key outcomes of the design process are to address collision patterns / issues in order to reduce casualties in line with the Mayor’s Vision Zero and draft Transport Strategy; encouraging increased levels of walking/cycling; and minimising any adverse impacts on bus journey times. A key target is the elimination of KSI’s and a reduction of slight injuries by 50%.

Crime and Security Statement

Scheme name: Church End Triangle

Crime and Security Statement

This Crime and Security Statement has been produced following discussions with the TfL Crime Reduction & Operational Security team about Crime Prevention Through Environmental Design (CPTED) methods and the Church End Ward Safer Neighbourhood team. All the measures proposed meet with the Redbridge Community Safety Partnership Plan priorities for 2017 – 2021, specifically (i) reducing drug and alcohol related crime and anti-social behaviour, (ii) Encouraging Civic Pride, and (iii) Enforcing Civic Pride.

The major driver of crime in the locality is its close proximity to the sub-regional transport links of the A406 North Circular and the M11 motorway. These roads provide easy access and quick escape routes for criminals. It means that the area is close to a number of drug markets-Essex, Kent, Suffolk (and the internal London markets), and gang members are not monitored to anywhere near the same degree as they would be in an inner London borough. The Safer Neighbourhoods team also believe that there is cross-border dimension to the locality, with crimes being committed by people resident in Waltham Forest being attracted to the area.

Given the above the Safer Neighbourhood team are focusing on three particular crimes – 1) Theft/taking of motor vehicles, 2) Theft from motor vehicles and Burglary. Statistics for the last three years show increasing levels - Theft of motor vehicles rising from 3 in 2014 to an estimated 31 in 2017; Theft from motor vehicles rising from 5 in 2014 to an estimated 67 in 2017 and Residential burglaries from 9 in 2014 to an estimated 73 in 2017.

Other particular local crime issues are;

- 1) Drugs being sold from, and coming into the area via the layby for Bus Stop P – Waterworks Corner on Southend Road. With a lack of passive surveillance within the triangle, dealers' cars are parked up awaiting a call for a transaction. With the growth of buy-to-let a cannabis factory has been found in the triangle.
- 2) Theft of motor fuel from the petrol stations in Woodford New Road takes place on a regular basis with false number plates being discarded within the triangle.
- 3) Derby Road Car Park has suffered from fly tipping as recycling facilities have been removed.
- 4) Anti-social behaviour (ASB) has been managed out over the past few years e.g. at the bench in Grove Road. Recent graffiti exists on the Waterworks Roundabout underpasses.

5) Rough sleeping and the associated detritus is more of an issue to the south of the North Circular Road, but recently a rough sleeper has been moved on from the triangle, having pitched their tent on a patch of grass opposite a number of residential properties. Residents have advised that they will take a longer walking route to reach the district centre to avoid known areas of rough sleeping.

6) Vans have been noted by residents cruising the triangle and adjacent localities.

From the above it is clear that this is an area where opportunities for crime exist. CPTED is a multi-disciplinary approach to deterring criminal behaviour. Its principles will be applicable to all the potential interventions. Therefore, all aspects of the management and implementation of the project will require input from the TfL Crime Reduction and Operational Security team and the MPS Safer Neighbourhoods team to maximise the benefits of this investment.

As stated above, the issue underpinning transport and crime issues is managing access to/from and within the area. This requires consideration of the triangle in a holistic way to ensure that issues are resolved and not just moved on to another location. It is clear that use of ANPR would assist with traffic management, crime reduction and fly tipping. Consultation with residents and appropriate enforcement will ensure that this measure is seen in a positive light.

Whilst some crime has been managed an increase in passive surveillance through increased walking / cycling, the installation of “play streets” and public realm improvements that encourage residents onto the streets would change the dynamic in the area for the good and disrupt existing patterns of crime. The public realm interventions would be designed to minimise any opportunities for ASB.

Improvements to walking and cycling infrastructure and vegetation management in the south-west corner of the triangle by Waterworks roundabout would improve active travel infrastructure and provide greater passive surveillance as a deterrent to the drugs related crime in that location.

Upgrading to LED street lighting will reduce the opportunities for criminals to hide, providing a deterrent to their operations in the area. On-street cycle parking and Parklets etc. will be located in well-lit areas.

The combination of these interventions and the resultant behaviour change will improve local community relations and civic pride, increase passive surveillance and create a more empowered community that will deter crime and ASB.

Submission Checklist

Use the following checklist to confirm that the required documents have been provided as part of this bid			
#	Item	Included (Y/N)	Comment
1	Completed Liveable Neighbourhoods Pro forma	Y	
2	Healthy Streets Check	N	To be completed if the bid is successful as advised by Julie Clark on 16/10/17.
3	Plan showing location and boundaries of scheme	Y	Appendix 2
4	Plans(s) highlighting the proposed interventions	Y	Appendix 3
5	Site audit	Y	Appendix 4
6	Road danger reduction statement and collision plot	Y	Road Danger Reduction Statement included in pro forma Collision Plot – Appendix 5
7	Crime reduction statement	Y	Crime Reduction Statement included in pro forma
8	Statement of support from the Borough	Y	Appendix 6
9	Summary of behaviour change initiatives	Y	Appendix 7