Cycle Enfield - A1010 South

LB Enfield

A1010 South Modelling Assessment

2 | A

22 November 2016

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1. Introduction

1.1 Purpose of report

1.1.1 This technical note describes some of the background to the Cycle Enfield proposals, analyses existing data on traffic on the A1010 South and reports on modelling of the changes proposed by the Cycle Enfield project at the junctions along the corridor.

1.1.2 The base and proposed traffic models used have been audited and approved by TfL.

1.1.3 An increase in cycling is expected to support delivering the following benefits, as specified in TfL's summary report on 'Delivery of the benefits of cycling in outer London'[1]:

- Improved air quality;
- Reduced childhood obesity;
- Improved quality of life;
- Tackling health inequalities;
- Strengthened local economies by boosting local journeys;
- Address the climate change agenda;
- Create liveable streets;
- Reduced requirement for car parking spaces, freeing up valuable land.

1.1.4 The Cycle Enfield project aims to:

- Make places cycle-friendly and provide better streets and places for everyone;
- Make cycling a safe & enjoyable choice for local travel;
- Create better, healthier communities;
- Provide better travel choices for the 34% of Enfield households who have no access to a car and an alternative travel choice for the 66% that do;
- Transform cycling in Enfield;
- Encourage more people to cycle;
- Enable people to make short journeys by bike instead of by car.

1.2 Background to the Cycle Enfield proposals

1.2.1 Cycling is a core part of the TfL's proposals for transport and is one of the measures aimed at dealing with the huge growth in population and employment expected in London. There has been a growth of some 5m daily trips on London's transport networks since 1993. There is a recognition that the solution to this expected growth in travel and congestion is to offer better and more sustainable transport choices – cycling is a key element in this.

1.2.2 The investment in London over the last decade into better public transport, walking and cycling is changing travel behaviour - car travel is down 1m trips per day in a decade, even with a 20% population growth - people are shifting to public transport, walking and cycling. Last year was the first year when use of public transport, walking and cycling exceeded car use.

[1] http://content.tfl.gov.uk/benefits-of-cycling-summary.pdf

1.2.3 TfL's research into the potential for cycling estimated that a total of 4.3 million additional trips each day are potentially cycleable, with nearly two thirds of these currently made by car, with the remainder largely made by bus. Four in ten of these trips are made for shopping and leisure purposes and just under a quarter for work purposes -the greatest unmet potential for growth is within outer London, which has an estimated 54 per cent of these potentially cycleable trips.

1.2.4 Consequently the Mayor's Cycling Vision was developed, and various measures were proposed, with the aim of reaching a target of 5% of London journeys by bike by 2026. There is strong evidence that this level of investment leads to changes in travel behaviour:

- Cycle hire – now has some 10m trips a year;
- Cycling to work in London has doubled in the last 10 years;
- Cycle Superhighways had a 47-83% increase in cycle use;
- The number of cyclists entering central London in the morning peak has increased by 177 per cent since 2001 on TLRN roads.
- In Central London, traffic has been dropping while cycling has been increasing, for example on the Embankment traffic is down 24%, on Farringdon Street it is down 44%.
- In the morning peak (2012) cycles accounted for 26 per cent of all vehicular traffic crossing the central London cordon inbound to central London and for 22 per cent of vehicular traffic heading out of central London in the evening peak – some roads had an even higher proportion of cyclists. While these increases are in central London, and lower changes are expected in outer London, they show the huge attraction of and potential for cycling in London.

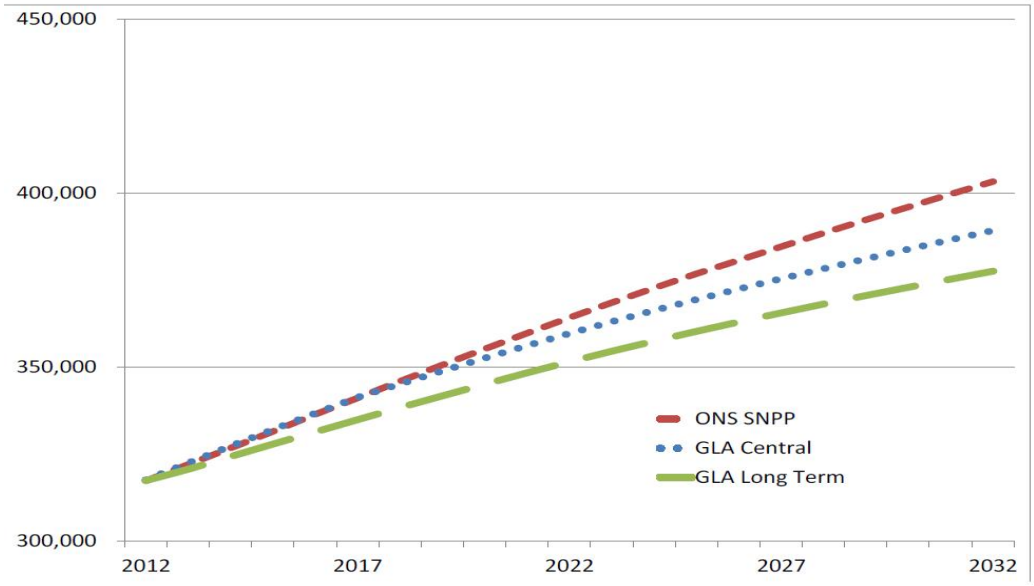
1.3 Travel demand in Enfield and on the A1010 South

1.3.1 The Consultation on a New Plan for Enfield 2017-2032[2] report refers to growth figures developed by the Greater London Authority (GLA) and Office for National Statistics (ONS), these projections *"indicate that population growth in Enfield over the next 15 years could exceed 400,000, an increase of 29% from 2011".*

1.3.2 Figure 1 taken from the Consultation Report shows the GLA and ONS Population Projections 2012 - 2032.

[2] https://new.enfield.gov.uk/services/planning/planning-policy/local-plan/#1

Figure 1:GLA and ONS Population Projections 2012 -2032



1.3.3 The consultation report also states that *"A corresponding growth in households means there would be an additional 25,000 to 35,000 households during the plan period (which would equate to up to 1,700 extra homes per ward)".*

1.3.4 It is important to note in the context of this growth that the whole of Enfield is an Air Quality Management Area. In 2011 the Greater London Authority (GLA) identified ten Air Quality Focus Areas within LB Enfield, including Green Lanes at Palmers Green and Enfield Town. These were selected by the GLA as areas where there is the most potential for improvements in air quality within the Capital.

1.3.5 Despite recent increases in population and employment in the borough, daily traffic volumes along the A1010 have fallen over the past 15 years. This trend is broadly in line with traffic volume trends evident across London as summarised in TfL's latest annual Travel in London report, published in 2014[3]. However, the report indicates that there are "*signs that traffic in London is growing again after a decade of falls, this being reflected in indicators of road network performance (delay and journey time reliability)*". The report goes on to state that "*both 2012 and 2013 saw growth in [traffic in] outer London*" and that "*indications for 2014 are that traffic volumes have grown across London as a whole, as the economy recovers from recession and population continues to grow rapidly. It is possible that London is now seeing a movement away from a long period of stability on the road network in terms of performance indicators such as delay and journey time reliability – this will become clearer over the coming year*".

1.3.6 The recent Roads Task Force estimated that delay per kilometre would increase Outer London congestion by 15% by 2031, and in the Enfield area by 10%.

1.3.7 Despite the reduction in daily traffic volumes since 2000 described above, the A1010 South corridor currently operates close to capacity during peak times. This is potentially due to a lower level of reduction in peak hour traffic when compared to daily trends, suggesting that the daily traffic profile along the corridor has become more peaked in recent years. Local junction modelling using current traffic flow data indicates that the A1010 South junctions with Croyland Road/Bounces Road, Galliard Road/Nightingale Road and Bury Street/Rosemary Avenue all operate in excess of 95% of available capacity during peak times.

[3] http://content.tfl.gov.uk/travel-in-london-report-7.pdf

1.3.8 Any forecast growth in traffic volumes would therefore result in a significant increase in congestion and delays and a corresponding reduction in air quality along the A1010 South corridor, accompanied by a likely increase in rat-running along neighbourhood roads in the vicinity in the do-nothing scenario. In the context of the potential increases in traffic in outer London summarised above, it is therefore important that measures are implemented to reduce dependency on the car for people making journeys along this corridor.

1.3.9 The north London Sub-Regional Transport Plan (SRTP) summarises the public transport enhancements that will support a shift away from car use to some degree across the four boroughs in the sub-region (for example, London Overground capacity increases, rail enhancements in the Upper Lea Valley and the completion of the Thameslink Programme). However, these programmes are strategic in nature and are not focussed on the area around the A1010 South corridor, as illustrated in the 2014 SRTP update summary of proposals[4].

1.3.10 In addition, the DfT traffic count data suggests that goods vehicle traffic constitutes a relatively low level of overall volumes along the corridor. The latest data from 2014 indicates that goods vehicles made up 16% of all motorised vehicular traffic south of the A406 on the A1010 reducing to 12% south of Nightingale Road. The proportion of goods vehicles is important since these vehicles are typically making delivery or servicing trips and are therefore much more difficult to transfer to other modes than car or motorcycle trips.

1.3.11 The data described above suggests that cycling has significant potential to help address the issue of traffic congestion and delays on the A1010 South. TfL's Analysis of Cycling Potential report, published in December 2010, indicated that 94% of cycling trips are less than 8km in length[5]. The report also identified that "*the greatest unmet potential for growth can be found within outer London – 54% of potentially cycleable trips – and only 5% of the 'total potential' in outer London is actually cycled*". Within the outer London North sub-region, only 4% of all identified potential cycle trips were actually being cycled.

[4] http://content.tfl.gov.uk/north-srtp-poster-2014-update.pdf

2. Preliminary Junction Modelling Results

2.1 Methodology

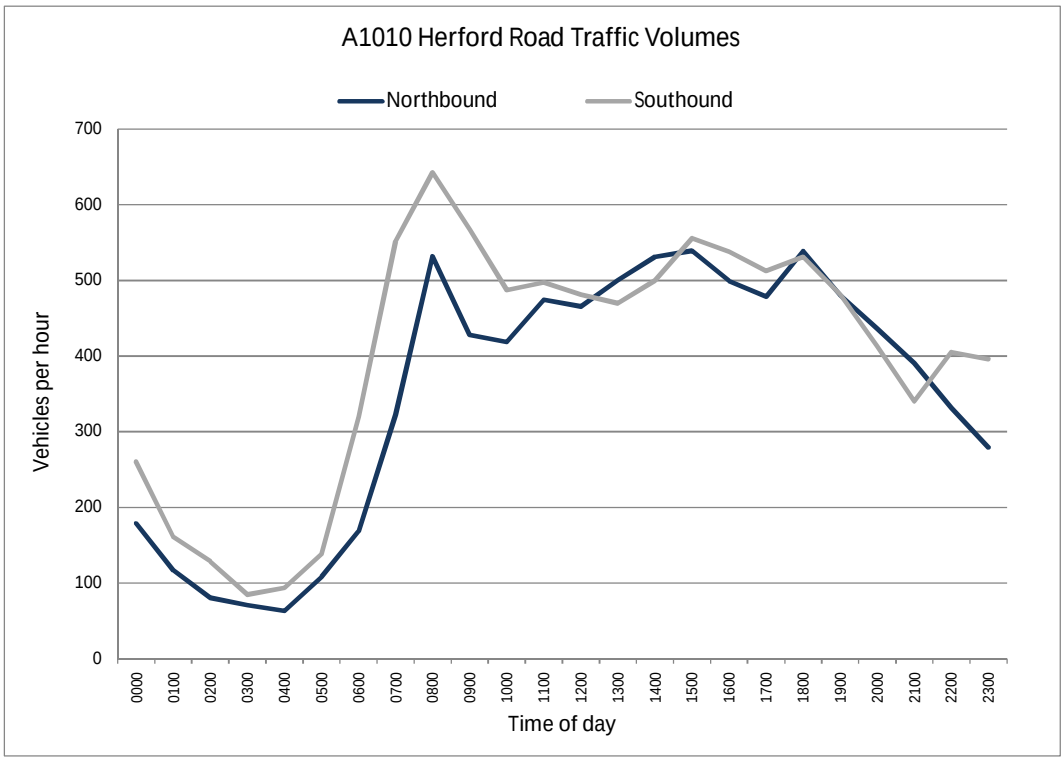
2.1.1 This section of the report summarises the results of the preliminary traffic modelling on the A1010 South. It is based on junction traffic models (ARCADY, PICADY and LINSIG) for each of the junctions where major changes are proposed as a result of the Cycle Enfield proposals.

2.1.2 The modelling has been assessed with no reduction in traffic volumes in the proposed scenario, as a result of the mode shift to cycling. Therefore, the modelling can be considered a worst case scenario, with any mode shift to cycling reducing the levels of capacity, delay and queues reported below.

2.2 Daily Variation in Traffic Flow

2.2.1 Investigations have been undertaken for the morning and evening peak hours, which as shown in Figure 2, are the busiest periods of the day. Outside of these periods traffic volumes decrease, therefore the modelling is regarded as a conservative estimate and delays should be lower at most other times of the day.

Figure 2: A1010 Herford Road Daily Traffic Volumes (opposite to the Tramway Avenue Junction)



Note: Surveys undertaken at Tramway Avenue/Hertford Road junction in February 2015.

2.3 Junction Arrangements at the Proposed Signalised Junctions

2.3.1 There are five junctions where significant changes are proposed, which will be signal-controlled with provision for cyclists to safely progress through the junction and pedestrians wherever practical.

- Junction of The Broadway with Smythe Close
- Junction of Church Street with The Green/The Broadway/Balham Road/Bus Station Exit
- Junction of Hertford Road with Bounces Road and Croyland Road
- Junction of Hertford Road with Bury Street and Rosemary Avenue

- Junction of Hertford Road with Galliard Road with Nightingale Road

2.3.2 The development of a proposed layout for the junction of the A406-North Circular Road with Fore Street, as part of the Cycle Enfield scheme, is being undertaken by TfL and will form part of a separate consultation along with the junction of Fore Street with Leeds Street and College Gardens.

2.3.3 The Junction of The Green/Hertford Road with the northern Bus Station Access is within the extent of the corridor but the layout is unaffected by the proposed scheme. However, the signal timings at the junction have been reviewed to reduce delay.

2.3.4 These junctions have been modelled using standard traffic engineering software packages, in accordance with TfL procedures, with base and proposed models approved by TfL.

2.3.5 The preliminary modelling results indicate that the changes to journey times at junctions for vehicular traffic are not expected to be significant in the peak hours.

2.3.6 Some junctions are envisaged to be improved with the proposals (for example the junction of Hertford Road with Bounces Road and Croyland Road and Hertford Road/The Green/Bus Station Access, where timings have been improved), while others show additional delays. The results are different by direction and by peak; in some cases a junction has additional small delays in one direction, in one peak, and some time savings in another.

2.3.7 It should be noted that at junctions where priority control, or a roundabout, is being replaced by signals (Church Street/The Green/The Broadway roundabout, Hertford Road/Bury Street roundabout) delays do increase (see section 2.5 for more details). These junctions have been signalised to provide safe passage for cyclists through the junction.

2.3.8 A more detailed summary of the junction modelling results can be found at Appendix A.

2.4 Degree of Junction Saturation

2.4.1 Table 1 on the following page shows the estimated degree of saturation (DoS) at the junctions – a DoS of over 100% indicates that a junction is overcapacity; a DoS of 90% is regarded as acceptable in congested urban locations.

2.4.2 The table shows that all junctions operate below 100% DoS in the proposed scenario, with the junction of Hertford Road/Bounces Road/Croyland Road operating at capacity in the existing PM Peak scenario. Where the junctions exceed 90% in the proposed scenario they also exceed 90% in the base situation, with a maximum increase of two percentage points and some reductions, notably at Hertford Road/Bounces Road/Croyland Road

2.4.3 Therefore, it can be concluded that under the proposed scenario, the capacity of the junctions within the scheme are not significantly affected.

Table 1: Estimates of Degree of Saturation at Signalised Junctions

Junction	Base		Proposed	
	AM	PM	AM	PM
The Broadway - Smythe Close	60%	77%	57%	73%
Church St - The Green - The Broadway	78%	82%	79%	76%
Fore St - Balham Road - Bus Station	61%	60%	73%	65%
Hertford Road - The Green - Bus Station	83%	87%	74%	72%
Hertford Road - Bounces Road - Croyland Rd	94%	101%	94%	89%
Hertford Road - Bury St - Rosemary Avenue	97%	86%	93%	83%
Hertford Road - Galliard Road - Nightingale Rd	96%	95%	98%	96%

2.5 Changes in Queue Lengths at Junctions

2.5.1 The modelling results for queues at each of the key junctions can be found in the junction results summary tables shown in Appendix A. Where junctions have been converted from priority control, or a roundabout, to a signalised junction it can be seen that queues do increase. The modelling for signalised junctions produce results for the Mean Maximum Queue (MMQ) which is the estimated mean number of PCUs which have added onto the back of the queue up to the time when the queue finally clears.

2.5.2 Notable increases in queues occur at the Hertford Street/Bury Street junction where an increase in queues on all approaches occurs, with a maximum increase of 17.6 PCUs, during AM.

3. Corridor Assessment

3.1 Bus Journey Time Impacts

3.1.1 Journey times along the corridor, for both general traffic and bus passengers will be affected by the introduction of the scheme. To minimise the impact on bus journey times, mitigation has been investigated outside the extent of the A1010 South corridor and this will be implemented in conjunction with the A1010 South corridor.

3.1.2 Table 2 summarises the impact on the bus journey times; these results have been reviewed and approved by TfL. This is based on the modelling that assumes no reduction in traffic as a result of the scheme. For routes W6 and W8, the impact on journey time as a result of the A105 scheme has also been included.

3.1.3 While the results indicate additional delays are expected on some routes, these are not regarded as significant in the context of the existing conditions on the corridor, and the significant improvements in cycling and the many improvements for pedestrians arising from the scheme. There are also routes, which see potential benefits, as a result of the proposed scheme. LB Enfield will continue to work with TfL to develop further mitigation on the key routes affected by the scheme.

Table 2: Estimated Impacts on Bus Journey Times

Bus Route		Proposed	
		AM	PM
102	Northbound	9 Sec to 69 Sec	-1 Sec to 59 Sec
	Southbound	-39 Sec to 21 Sec	-51 Sec to 9 Sec
144	Northbound	9 Sec to 69 Sec	-1 Sec to 59 Sec
	Southbound	-39 Sec to 21 Sec	-51 Sec to 9 Sec
149	Northbound	-21 Sec to 39 Sec	-31 Sec to 29 Sec
	Southbound	-70 Sec to -10 Sec	-82 Sec to -22 Sec
191	Northbound	-50 Sec to 10 Sec	-78 Sec to -18 Sec
	Southbound	9 Sec to 69 Sec	-102 Sec to -42 Sec
192	Northbound	-12 Sec to 48 Sec	-54 Sec to 6 Sec
	Southbound	19 Sec to 79 Sec	14 Sec to 74 Sec
259	Northbound	-21 Sec to 39 Sec	-31 Sec to 29 Sec
	Southbound	-70 Sec to -10 Sec	-82 Sec to -22 Sec
279	Northbound	-13 Sec to 47 Sec	-79 Sec to -19 Sec
	Southbound	-83 Sec to -23 Sec	-71 Sec to -11 Sec
349	Northbound	-13 Sec to 47 Sec	-79 Sec to -19 Sec
	Southbound	-83 Sec to -23 Sec	-71 Sec to -11 Sec
491	Northbound	56 Sec to 116 Sec	24 Sec to 84 Sec
	Southbound	26 Sec to 86 Sec	37 Sec to 97 Sec
W8*	Eastbound	-54 Sec to 6 Sec	-66 Sec to -6 Sec
	Westbound	49 Sec to 109 Sec	-23 Sec to 37 Sec
W6*	Eastbound	-29 Sec to 31 Sec	-11 Sec to 49 Sec
	Westbound	-2 Sec to 58 Sec	63 Sec to 123 Sec

3.2 General Traffic Journey Time Impacts

3.2.1 There are a number of interventions introduced as part of the scheme that may have a potential impact on vehicles journey times, as follows:

- Major changes to junction arrangements, as described above;
- Delay to traffic behind stopping/stationary buses;
- Removal of right turn 'pockets (at priority junctions);
- Reduced carriageway widths;
- Changes to pedestrian crossings.

3.2.2 An assessment has therefore been carried out on the cumulative effect of the interventions.

3.2.3 The recorded journey times for the corridor are approximately 11-15mins for the northbound and southbound movements, except the northbound PM peak, where journey times exceeding 20 mins were recorded

3.2.4 Based on the modelling assessment, with no reduction in traffic as a result of the scheme the estimated increases in average journey time along the corridor are as shown in Table 3. These journey times are based on the proposed junctions and bus stops, with the option with the higher delay values used for the Edmonton Green network, to reflect a worst case scenario.

3.2.5 While the results indicate additional delay is expected, these are not regarded as significant in the context of the existing conditions on the corridor, and the significant improvements in cycling and the improvements for pedestrians arising from the scheme.

Table 3: Estimated Impacts on General Traffic Journey Times

Additional average delay (seconds per mile)	Northbound	Southbound
AM peak	+73 to +133 secs	+18 to +78 secs
PM peak	+7 to +67 secs	+24 to +84 secs

Appendix A. : Junction Results Summary

32_018: Croyland Rd - Bounces Road												
	Existing						Proposed					
	AM			PM			AM			PM		
Approach	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)
Croyland Rd - All Movements	81.1%	88.7	4.7	35.1%	50.6	2.1	Exit Only					
Hertford Rd - Ahead and Left - SB	85.3%	44.1	12.8	73.1%	38.4	11.1	93.6%	45.3	28.5	85.6%	37.5	19.7
Hertford Rd - Ahead and Right - SB	55.7%	29.9	6.3	38.5%	29.8	4.9	Lane removed					
Bounces Rd - All Movements	83.2%	56.5	6	100.5%	132.6	19.2	92.1%	87.5	9	87.3%	60.4	10.9
Hertford Rd - All Movements - NB	94.0%	62.2	18.2	100.1%	100	31.9	67.2%	27.2	12.4	89.0%	43.6	20.1
SB Herford Road Cycle Crossing	N/A			N/A			55.8%	2.7	0.7	47.3%	2.2	0.5
NB Herford Road Cycle Crosing	N/A			N/A			39.7%	3.9	4.3	45.1%	4.2	5.3

32_021: Galliard Road - Nightingale Road												
	Existing						Proposed					
	AM			PM			AM			PM		
Approach	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)
Hertford Rd - Ahead and Left- SB	96.2%	60.5	23.6	75.5%	25.5	7.2	97.5%	73.2	29.8	83.1%	38.3	12.6
Hertford Rd - Ahead and Right - SB	88.8%	69.3	11.2	51.3%	32.3	4.2	93.8%	96.1	16.3	91.8%	98.1	11.4
Nightindale Rd - All Movements	96.4%	84.9	16.9	94.2%	71.4	14.4	98.1%	105	22.2	93.0%	78.8	18.3
Hertford Rd - All Movements - NB	80.5%	42.7	9.3	95.2%	78.5	13.2	94.5%	84.4	20.8	95.7%	92.9	20.9
Galliard Rd - Ahead and Right	80.3%	67.8	6.9	79.2%	74.6	4.8	95.9%	139.8	12	94.6%	155	9

32_230_A1010 Hertford Road/Bury Street/Rosemary Avenue (New Four Arm Signalised Junction)												
	Existing- (Mini- Roundabout)						Proposed					
	AM			PM			AM			PM		
Approach	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)
A1010 Hertford Road - All Movements - SB	97.0%	69.51	15.3	78.0%	18.57	3.5	92.2%	48.4	24.5	79.9%	30	13.1
A1010 Hertford Road - All Movements -NB	71.0%	12.42	2.4	86.0%	23.95	5.5	79.7%	31.9	17	83.2%	28.3	20.5
Bury Street - All Movements	65.0%	17.41	1.8	49.0%	12.41	1	93.1%	64.2	19.4	80.9%	51.9	11.2

New-Edmonton Green Network												
	Existing						Proposed					
	AM			PM			AM			PM		
Approach	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)	DoS (%)	Delay (Sec/PCU)	MMQ (PCU)
Edmonton Turbo Roundabout												
							Stream 3 (South Stream)					
The Broadway - NB	44.2%	2.3	1.7	45.7%	2.5	4.3	64.1%	15.7	11.9	76.0%	27.5	12.3
Circulating-WB A1010	N/A			N/A			68.5%	14.1	8.6	53.5%	22.1	7.6
Exit-SB A1010	N/A			N/A			75.0%	15.6	11.6	68.3%	12	10
	N/A			N/A			Stream 1 - West Stream					
Church Street	77.7%	13.9	9.2	81.6%	16.2	9.9	72.0%	13.4	7.6	76.3%	16.4	7.4
Circulating - NB A1010	N/A			N/A			72.7%	17.7	6.7	74.5%	16.1	7.2
Exit - WB Church St	N/A			N/A			48.1%	3.8	3.1	46.8%	4.4	2.4
	N/A			N/A			Stream 2 (North Stream)					
The Green - SB - Nearside	59.5%	5.4	4.4	53.2%	5.6	4.5	59.6%	14.5	4.6	53.9%	15.4	4.4
The Green - SB - Offside	47.8%	4.2	4.8	40.5%	4.8	4.3	51.9%	12.1	5.1	44.3%	12.9	4.6
Circulating - SB A1010	N/A			N/A			78.7%	31.8	9	75.0%	29	8.7
Exit - NB A1010	N/A			N/A			63.4%	10.1	7.4	69.1%	13.9	8.1
32_111/196 - The Green - Balham Rd												
The Green - Ahead and Left - NB	34.1%	3.3	2.9	46.9%	4.2	3.6	48.4%	5.6	1.6	59.4%	4.6	5
The Green - Ahead - NB	11.8%	3.1	1.1	10.7%	2.2	0.6	16.8%	2.9	0.3	14.0%	2.7	0.2
The Green - Ahead - SB	61.3%	3.6	2.2	59.5%	9.1	6.7	72.8%	8.6	13.9	64.9%	8.4	4.3
Bus Station Exit	18.0%	41.3	0.9	9.0%	17.3	0.4	22.5%	62.8	1.4	17.4%	58.3	1.2
Balham Road - Left	6.5%	3.3	0.1	7.4%	3.4	0	21.3%	60.8	1.3	20.6%	57.4	1.4
32_194/32_053 - Fore St - Smythe Close												
Fore Street - Ahead and Right - NB	59.60%	11.9	10.9	76.80%	37.1	15.4	57.1%	10.8	12.3	63.0%	20.2	14.5
Smythe Close Left	18.40%	41.2	0.9	48.30%	42.9	3	27.6%	68.8	1.4	67.6%	78.8	5
Smythe Close- Right	10.10%	39.4	0.5	52.40%	43.5	3.4	15.2%	64.9	0.8	73.4%	83.2	5.9
Fore Street - Left - SB	42.00%	10.1	5.4	55.40%	23.6	7.8	10.9%	8.9	1.7	22.8%	16.7	3
Fore Street - Ahead - SB	28.50%	12.7	5.5	38.50%	21.1	4.6	54.3%	8.7	12	52.3%	11.1	10.4
32_195 - Hertford Road - The Green - Bus Station												
The Green - Ahead - NB	55.8%	12.8	8.5	63.2%	15.5	12.3	55.8%	17.5	9.2	61.1%	21.2	13.2
The Green - Right - NB	19.9%	54.2	0.6	17.6%	45.1	0.6	41.8%	104.8	1.2	31.7%	81.9	1.5
Bus Station Exit	74.6%	56.9	5.7	69.7%	48.9	5.6	55.9%	53.1	6.6	56.0%	51	7
Hertford Road - Ahead and Left - SB	82.6%	24.2	17.6	86.8%	34.7	17.5	74.4%	21.9	21.1	71.9%	25.8	19.1

	Existing						Proposed					
32_053 - Ped Crossing By Bridge Road												
A1010 Fore St - Ahead - NB	75.5%	16.8	7.5	59.9%	9.7	5.2	53.7%	8.8	6.5	46.8%	6.1	4.9
A1010 Fore St - Ahead - SB	80.6%	25	12.7	62.6%	15.6	10.6	57.3%	5.1	8.2	48.9%	5.1	2.4
	Existing						Proposed					
32_061 - Church St Ped Crossing												
Church St EB	65.4%	9.4	6	62.2%	8.2	5.4	54.5%	6.1	5.6	52.7%	5.5	5.2
Church St WB	58.6%	8.2	7.9	52.3%	6.8	8.1	48.8%	3	2.4	44.4%	3.1	3.3
	Existing						Proposed					
32_148_148 - Ped Crossing By Sebastopol Road												
Fore Street (NB)-Ahead	42.0%	2.1	1.1	45.0%	2.4	1.6	44.0%	2.3	1.5	47.0%	2.7	2
Fore Street (SB)-Ahead	49.0%	2.4	1.6	43.0%	2.3	1.5	51.0%	2.7	2.1	44.0%	2.6	1.9
Fore Street (SB) Bus Lane	7.0%	1.4	0.1	7.0%	1.5	0.2	7.0%	1.5	0.2	7.0%	1.7	0.2
	Existing						Proposed					
32_078_079 - Ped Crossing by Park Road												
Fore Street (NB)-Ahead	50.0%	4.7	3.2	47.0%	2.7	2.1	40.0%	3.4	0.7	43.0%	3.6	0.8
Fore Street (SB)-Ahead	62.0%	5.9	4.9	51.0%	3.3	2.6	52.0%	4.4	0.9	47.0%	4	0.9
Fore Street (SB) Bus Lane	8.0%	2.9	0.3	7.0%	1.8	0.2						