Detailed journey time impacts

Traffic reassignment

It is important to note that our traffic reassignment modelling is only ever indicative; it is intended to give an idea of where the impacts of changes in journey choice are most likely to be felt. It assumes that drivers have perfect knowledge of the network and will always choose the quickest route available. The reassignment is a picture of what the network may look like if our proposals and driver behaviour has had a chance to bed in.

We would actively monitor and manage traffic conditions on the roads if the scheme is delivered, and we would aim to mitigate and manage traffic following implementation.

Incorporating other transformational schemes in the wider network on both ours and London Borough of Hackney roads our modelling indicates a reduction in future flow through the local network. The traffic is reassigning onto the wider area as a result of all of these changes.

General note on modelling

The Stoke Newington Gyratory removal proposals are a transformative scheme at the centre of an area that the Mayor of Hackney has identified as a priority area for improving conditions for cyclist and pedestrians. It aims to improve the public transport interchange, connectivity and safety for all.

This note explains the impacts we expect our proposals to have on journey times and is accompanied by a more detailed table of data. This table shows the predicted changes to journey times calculated from our traffic models, assuming the scheme is implemented in its current form and that the levels of reassignment predicted materialise.

We expect the proposals will result in changes, both positive and negative, to journey times for motorists and bus passengers once complete. We have used traffic modelling techniques to calculate the expected journey time changes through the area at the busiest hour in both the morning and evening peak. This table of data outlines the expected journey time impacts for pedestrians waiting to cross, buses and general traffic.

Pedestrian wait time

Pedestrian wait time modelling of the Stoke Newington Gyratory removal scheme has been undertaken using VISSIM modelling software.

The modelling work indicates that, when compared to the existing situation, the proposed scheme design adds to the pedestrian wait time for crossing Stoke Newington High Street and Rectory Road due to the amount of new signal time needed for cyclists and because junctions are slightly more complex in two-way operation. Overall the increase in wait time has to be balanced against the fact that most crossing can now be made in one stage and that there are more safe places to cross than before.

Cycling

With the proposed implementation of cycle facilities around the gyratory cyclists will be protected from traffic movements where possible. Cycle progression has been optimised through Stoke Newington High Street. Therefore cyclists should experience improvements in journey times, particularly southbound due to the shorter distance travelled.

Buses

Changes to the road layout proposed by the scheme will have an impact on the operation of the bus network and passenger journeys around Stoke Newington. The removal of the gyratory will likely result in reductions in journey times on some routes, due to shorter distances travelled. Whereas other routes will likely experience journey time increases due to the new layout, additional cycle facilities and signalising the junction of Rectory Road and Manse Road.

During the morning peak, the new southbound contraflow bus lane causes 76, 149 and 243 to have a predicted small journey time increase. Routes 393 and 476 southbound no longer have to use Rectory and Brooke Road due to the new southbound bus lane and this provides a significant time saving. Routes 67 and 276 experience predicted increases in delay due to increased congestion on Rectory Road. The evening peak is predicted to have better journey time than the morning as the southbound movement only has one route choice while in the evening; the dominant movement has two possible routes.

General traffic

The changes being proposed are likely to mean that journey times for general traffic can be expected to increase at certain times of day, whilst there will also be expected journey time savings. General traffic in the AM sees an increase in both directions due to more complex signal strategies to accommodate two way traffic and the southbound is significantly worse dues to issues on Rectory Road. This

issue persists in the PM peak while northbound improves due to the traffic reduction caused by better route choice.

Data tables

Pedestrian wait time

Location	Average Pedestrian Wait Times					
	AM Peak			PM Peak		
	Base	Proposed	Difference	Base	Proposed	Difference
J04/029 - A10 Stoke Newington High Street / Stoke Newington Church Street	61	107	46	95	107	12
J04/143 - A10 Stoke Newington High Street / Brooke Road	16	39	23	19	38	19
J04/145 - A10 Stoke Newington High Street / Northwold Road	20	48	28	20	54	34
J04/165 - A10 Stoke Newington High Street / A10 Evering Road	10	105	95	30	105	75
J04/042 - A10 Rectory Road / Evering Road	19	127	108	19	80	61
J04/043 - A10 Rectory Road / A10 Manse Road	N/A	104	N/A	N/A	65	N/A
J04/144 - A10 Rectory Road / Brooke Road	54	126	72	50	79	29

Bus journey times

AM Peak					
Route Description	Direction	JT Time Bands (mins)			Reasoning
		Base	Do Something	Difference	
67 Amhurst Rd to Stamford Hill Lib	North	5-10 mins	5-10 mins	2-3 mins	Longer route, assited other direction
67 Stamford Hill Lib to Amhurst Rd	South	5-10 mins	10-15 mins	3-5 mins	Less space, new signals
73 Stoke Newington Church St to Stoke Newington Cmn	West	3-5 mins	3-5 mins	0-30 secs	Brooke Road single cycling
73 Stoke Newington Cmn to Stoke Newington Church St	East	3-5 mins	3-5 mins	1-2 mins	Increased cycle time, method of control
76, 149, 243 Amhurst Rd to Stamford Hill Lib	North	5-10 mins	5-10 mins	1-2 mins	Less time at Manse Road
76, 149, 243 Stamford Hill Lib to Amhurst Road	South	10-15 mins	10-15 mins	0-30 secs	Queuing at junction with Rectory Rd
106 Northwold Rd to Manor Rd	West	5-10 mins	5-10 mins	1-2 mins	Brooke Road single cycling
106 Manor Rd to Northwold Rd	East	2-3 mins	3-5 mins	30-60 secs	Increased cycle time, method of control
276 Rectory Rd to Stoke Newington Cmn	North	3-5 mins	5-10 mins	30-60 secs	Less space, new signals
276 Stoke Newington Cmn to Rectory Rd	South	1-2 mins	3-5 mins	2-3 mins	Less space, new signals
393 Stoke Newington Church St to Cazenove Rd	East	2-3 mins	3-5 mins	1-2 mins	Increased cycle time, assisted in other dir
393 Cazenove Rd to Stoke Newington Church St	West	5-10 mins	3-5 mins	-(2-3) mins	Shorter route
476 Stoke Newington Church St to Stamford Hill Lib	North	5-10 mins	5-10 mins	1-2 mins	Increased cycle time, assisted in other dir
476 Stamford Hill Lib to Stoke Newington Church St	West	10-15 mins	5-10 mins	-(1-2) mins	Shorter route

PM Peak					
Route Description	Direction	JT Time Bands (mins)			Reasoning
		Base	Do Something	Difference	
67 Amhurst Rd to Stamford Hill Lib	North	5-10 mins	5-10 mins	-(0-30) secs	Assisted NB
67 Stamford Hill Lib to Amhurst Rd	South	10-15 mins	10-15 mins	1-2 mins	Less space, new signals
73 Stoke Newington Church St to Stoke Newington Cmn	West	3-5 mins	3-5 mins	-(0-30) secs	
73 Stoke Newington Cmn to Stoke Newington Church St	East	3-5 mins	3-5 mins	0-30 secs	
76, 149, 243 Amhurst Rd to Stamford Hill Lib	North	5-10 mins	5-10 mins	-(1-2) mins	Assisted northbound
76, 149, 243 Stamford Hill Lib to Amhurst Road	South	10-15 mins	5-10 mins	-(3-5) mins	New bus lane
106 Northwold Rd to Manor Rd	West	5-10 mins	5-10 mins	0-30 secs	
106 Manor Rd to Northwold Rd	East	2-3 mins	3-5 mins	30-60 secs	Increased queuing on Manor Road
276 Rectory Rd to Stoke Newington Cmn	North	5-10 mins	3-5 mins	-(1-2) mins	Lower cycle time in PM, assisted NB
276 Stoke Newington Cmn to Rectory Rd	South	1-2 mins	2-3 mins	1-2 mins	Less space, new signals
393 Stoke Newington Church St to Cazenove Rd	East	3-5 mins	3-5 mins	30-60 secs	Assisted northbound
393 Cazenove Rd to Stoke Newington Church St	West	5-10 mins	3-5 mins	-(3-5) mins	Shorter route
476 Stoke Newington Church St to Stamford Hill Lib	North	5-10 mins	5-10 mins	-(1-2) mins	Assisted northbound
476 Stamford Hill Lib to Stoke Newington Church St	West	10-15 mins	5-10 mins	-(2-3) mins	Shorter route

General traffic journey times

Route Description	Direction	AM Peak		
		Base	Proposed	Difference
Stoke Newington Rd / Palatine Rd to Stamford Hl / Lynmouth Rd	North	3-5 minutes	5-10 minutes	3-5 minutes
Stamford Hl / Lynmouth Rb to Stoke Newington Rd / Palatine Rd	South	5-10 minutes	10-15 minutes	5-10 minutes

Route Description	Direction	PM Peak		
		Base	Proposed	Difference
Stoke Newington Rd / Palatine Rd to Stamford Hl / Lynmouth Rd	North	10-15 minutes	5-10 minutes	3-5 minutes
Stamford Hl / Lynmouth Rb to Stoke Newington Rd / Palatine Rd	South	5-10 minutes	5-10 minutes	30-60 seconds