St Ann's Low Traffic Neighbourhood

High Level Transport Assessment

August 2021

Haringey LONDON
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NRP
NORMAN ROURKE PRYME

Introduction

- A Low Traffic Neighbourhood (LTN) is where traffic movements across an area are restricted for motor vehicles, because residential streets are being used as through routes instead of the main roads, which is often referred to as rat-running. Introducing a LTN helps to create safer, cleaner and more pleasant streets for people to walk, wheel, cycle and gather.
- This is done by introducing modal filters (road closed to motor vehicles) at strategic points in the LTN, along with a series of changes to permitted motor traffic movements e.g. one-way roads converted to two-way, or vice versa.
- Two options are being considered for the St Ann's LTN.
    - Option A - rat-running/through motor traffic has been eliminated from the area in both the north/south and east/west directions. This includes stopping through motor traffic between St Ann's Road and West Green Road that currently uses Black Boy Lane, Cornwall Road, Avenue Road and Woodlands Park Road, which carry the highest volumes of traffic in the area. Some roads such as Suffield Road and Harringay Road remain open as they are roads linking the strategic road network. Westerfield Road also remains open under the proposals to retain access to a car park.
    - Option B - east/west movements through the area have been restricted for motor traffic but the north/south through movements on the roads listed above have been retained.
- Access to all addresses for all vehicles is maintained in both options, but residents and visitors may have to drive further, or use a different road to access their address.
- Emergency vehicles will be permitted through all modal filters in both schemes except the proposed model filter on Clinton Road. The bus routes on Black Boy Lane will also be permitted through the modal filter in Option A, with the road remaining open to all traffic in Option B.

Introduction

- The LTN measures will be implemented as a trial so that detailed monitoring of the impacts can be assessed, once the scheme is in place and changes can be made in the first 12 months to make the area work better.
- The following slides provide an assessment of the potential impacts on motor traffic as a result of the implementation of Option A.
- Retaining the north/south movements in Option B will see little or no impact on the wider network but this will also reduce the benefits within the area.
- Through, or rat-running traffic is traffic passing through an area that does not have a start point (origin) or end point (destination) in the area, and is therefore simply passing through, because the route represents the quickest journey. These types of trips have increased over recent years with the use of mapping software such as Google Maps and Waze, directing traffic away from strategic roads and onto minor roads, which in some cases are not suitable for the volumes of motor traffic they are currently experiencing.
- Due to the COVID-19 pandemic it has not been possible to capture normal levels of traffic passing through the LTN area, using origin and destination surveys. Therefore, historic telematics data from 2019 (pre-COVID-19) has been used to undertake an assessment of rat-running routes through the LTN.
- The telematics data is taken from insurance companies that record driver travel behaviour. Approximately 7% of insured private car owners are monitored, and a significant proportion of that information is available. This data is then factored up based on other available traffic surveys to provide an estimate of the total number of rat-running traffic through an area.
- This data has been used to assess the potential impacts during the AM rush hour (8-9am) and PM rush hour (5-6pm) of Option A.

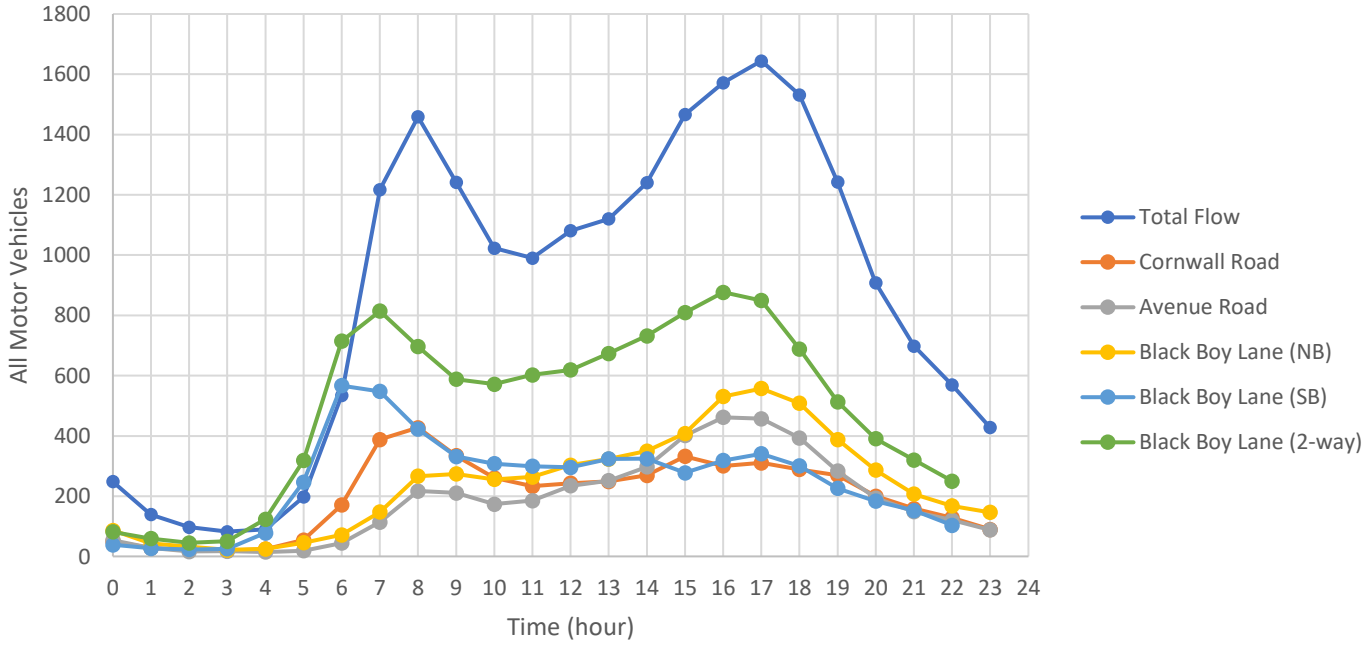
Introduction

- Using this limited data available, we anticipate that that by introducing Option A, we will be stopping approximately 20,000 motor vehicles in a 12-hour period (7am-7pm), (approximately 2,000 in the morning rush hour and 3,000 in the evening rush hour) from traveling through the LTN.
- This represents approximately 70-75% of motor traffic travelling between 7am and 7pm within the LTN area.
- If the Option A trial is introduced, we expect some of this motor traffic will divert to the main roads surrounding the LTN (boundary roads) and possibly beyond as they seek alternative routes. This is likely to lead to an increase in motor traffic on the main roads, at least until things settle down.
- Experience from other LTN's introduced in London in 2020 has shown that after a few months of 'settling in period', the overall traffic levels reduced. The evidence suggests that some drivers shift to other modes like walking, cycling or using public transport or travel at different times of the day or have stopped/reduced commuting (e.g. work from home).
- This assessment is only a prediction, the detailed monitoring surveys being carried out over a 6-12 month period, once the trial scheme is implemented, will provide an accurate understanding of the impacts of the scheme. This will be compared to baseline surveys that are being carried out in September 2021. The monitoring will include capturing data on traffic and pedestrian flows, bus journey times, emergency service response times and air quality.

Weekday Daily Flow Profiles

The graph below shows the traffic volumes throughout the day on the three main corridors – Black Boy Lane, Avenue Road, Cornwall Road. The following conclusions can be drawn from the graph.

- Black Boy Lane is the busiest corridor in the area.
- The weekday peak periods are 8am and 5pm, with the PM peak the busiest period of the day.
- Outside of the peak periods the traffic volumes reduce and therefore the impact of any traffic reassignment will be less.



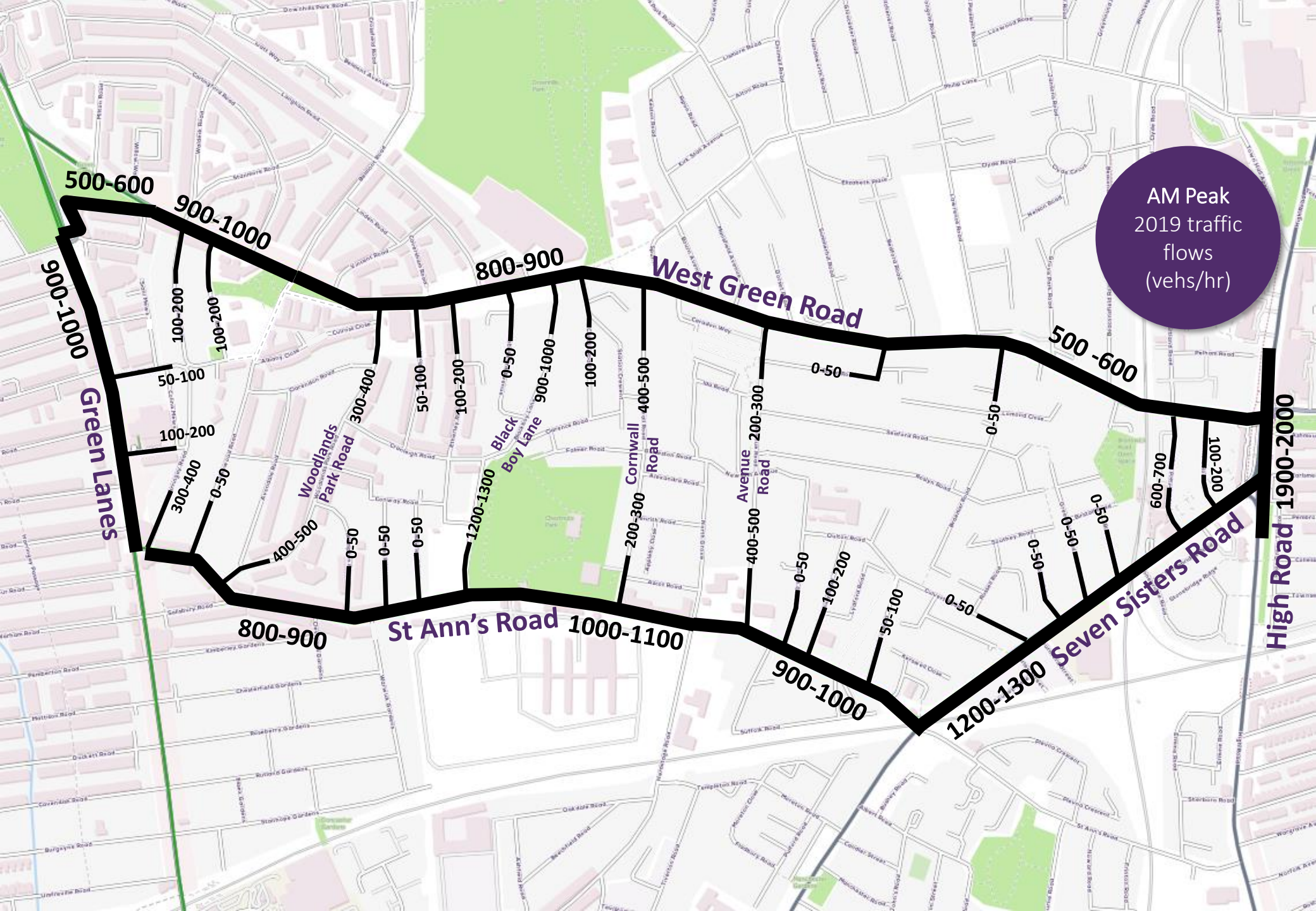
Reassignment assessment

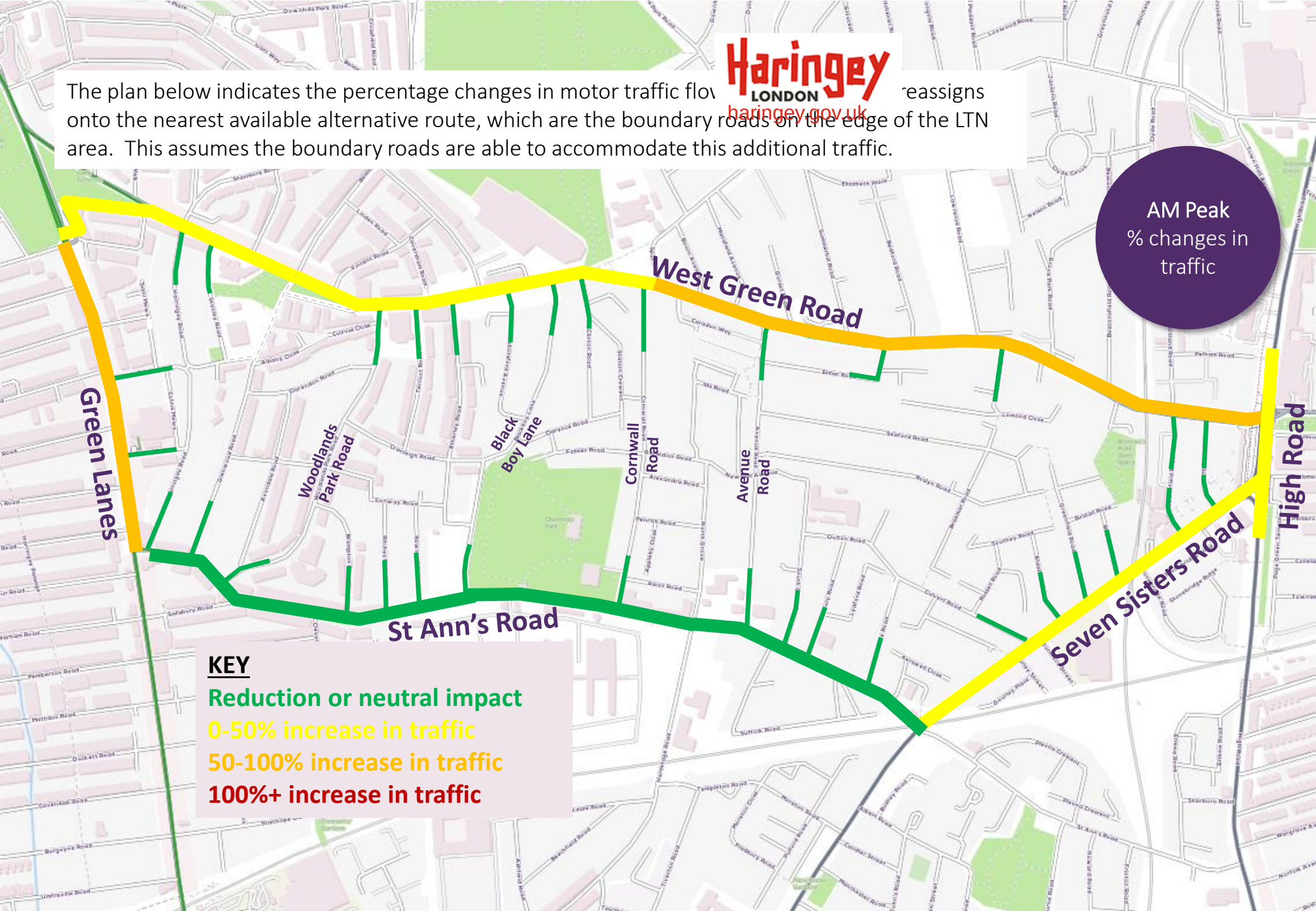
- For Option A, assumptions have been made on the alternative routes motor traffic will make, if the routes through the LTN are no longer permitted. From the available data, it is not possible to understand the start and end point of all journeys, the data just tells us the entry and exit points through the LTN.
- Therefore, assumptions have been made on alternative routes based on engineering judgement and using tools such as Google Maps to look at average journey times for alternative routes, with the motor traffic reassigned onto the nearest available route.
- For some reassigned routes, traffic will reduce on some sections of the boundary roads, whilst increasing on other roads.

- In some cases motor traffic has been split, with an example shown in the figure. In this example, motor traffic travelling northbound on Black Boy Lane that originated from Green Lanes may divert via Green Lanes and West Green Road, or via St Ann's Road and Seven Sisters Road, so the rerouted motor traffic has been split between these proposed routes.

Reassignment assessment

- For the purposes of this high level assessment a 'worst case scenario' has been assumed showing the impacts on the boundary roads if all motor traffic reassigns. However, evidence from other similar LTN schemes across London has shown an overall reduction in motor traffic in those areas, for the following reasons:
  - People choose to travel by different mode – bus, walk, cycle or not travel at all.
  - People link their trips, e.g. rather than going to the shops and back, or work and back, they will combine trips reducing the overall number of vehicles on the road.
  - People on longer trips choose other strategic routes outside the area.
  - People choose to travel at different times of the day.
- The boundary roads are already busy at peak times so can only take a limited amount of additional motor traffic and therefore additional motor traffic beyond that limit will disperse onto the wider network.
- Borough and London wide strategies will also support a mode shift away from the private car, such as the ULEZ extension, Haringey's Walking and Cycling Action Plan and Car Club/Shared Mobility and the Mayor of London's Transport Strategy.
- The COVID-19 pandemic is also likely to affect how people work and commute, with more home working for example, which may reduce traffic across the network.
- There is already a trend across the Borough that the proportion of residents choosing to own a car is falling and this is expected to continue.


AM Peak
2019 traffic flows (vehs/hr)
500-600
900-1000
800-900
West Green Road
500 -600
1900-2000
High Road
Seven Sisters Road
1200-1300
900-1000
1000-1100
St Ann's Road
800-900
Green Lanes
900-1000
100-200
100-200
50-100
100-200
300-400
0-50
400-500
Woodlands Park Road
300-400
0-50
0-50
0-50
1200-1300
Black Boy Lane
900-1000
100-200
0-50
Cornwall Road
400-500
200-300
Avenue Road
200-300
400-500
0-50
100-200
50-100
0-50
0-50
0-50
0-50
0-50
600-700
100-200


The plan below indicates the percentage changes in motor traffic flo reassigns onto the nearest available alternative route, which are the boundary roads on the edge of the LTN area. This assumes the boundary roads are able to accommodate this additional traffic.
Haringey
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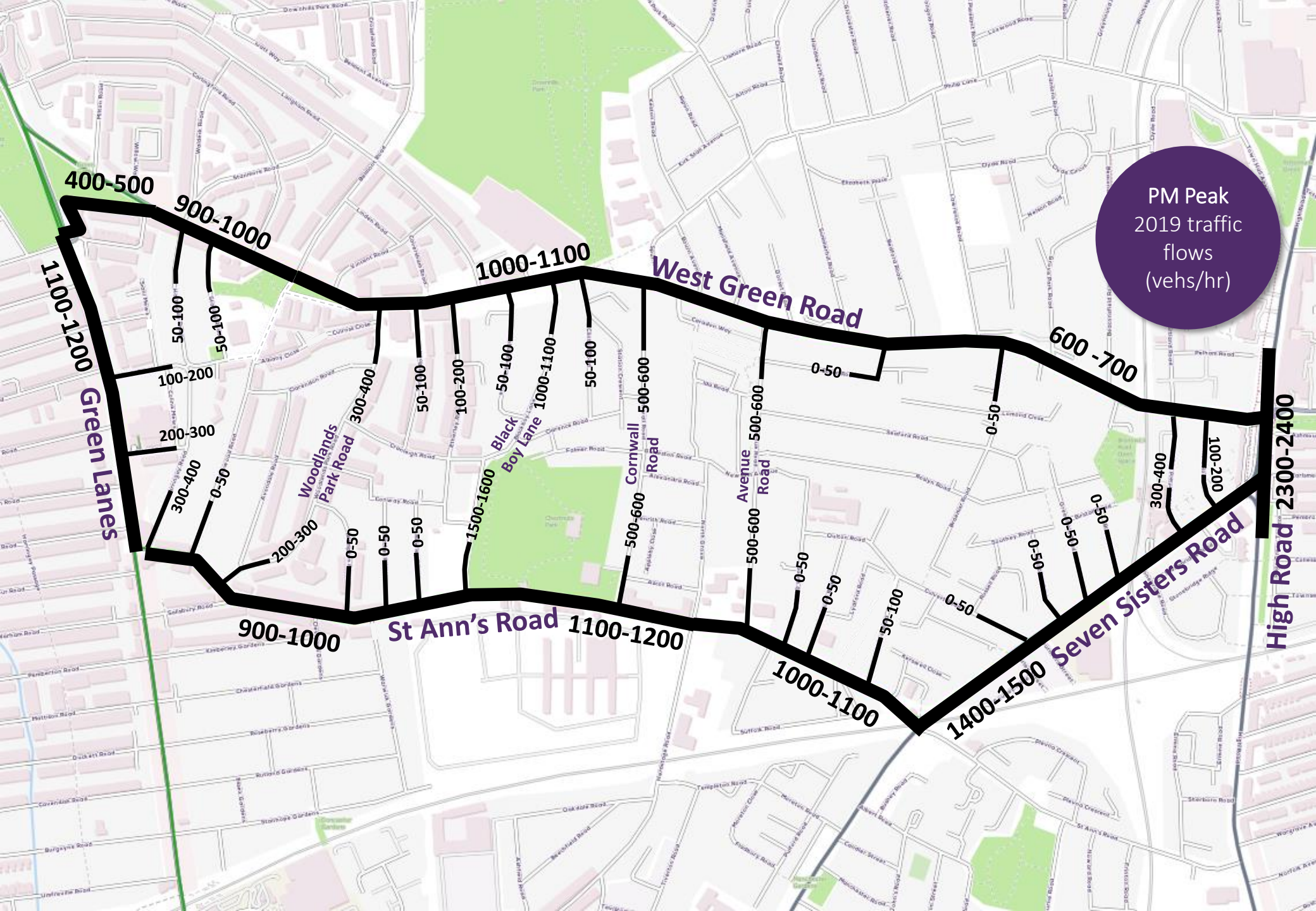
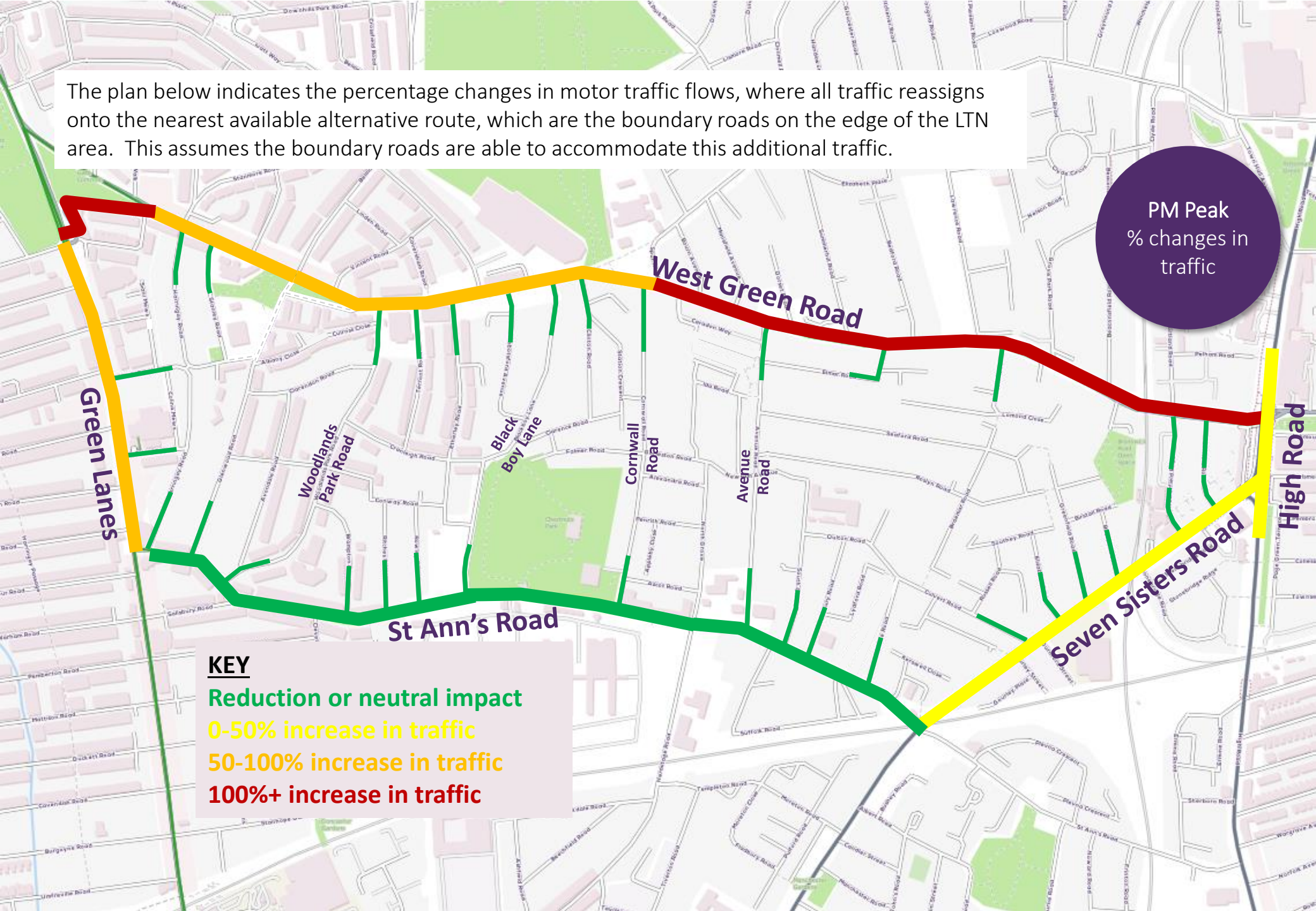
AM Peak
% changes in traffic
West Green Road
Green Lanes
Woodlands Park Road
Black Boy Lane
Cornwall Road
Avenue Road
High Road
Seven Sisters Road
St Ann's Road
KEY
Reduction or neutral impact
0-50% increase in traffic
50-100% increase in traffic
100%+ increase in traffic

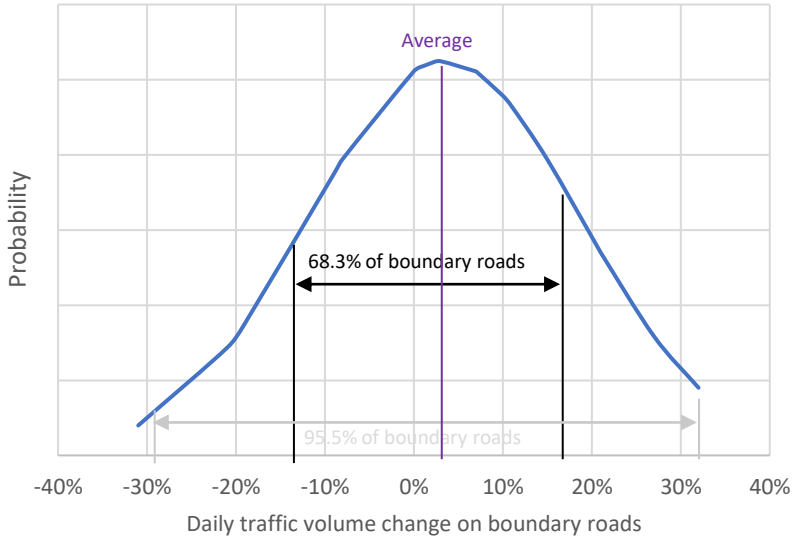

PM Peak
2019 traffic flows (vehs/hr)
400-500
900-1000
1000-1100
West Green Road
600 -700
1100-1200
Green Lanes
50-100
50-100
100-200
200-300
300-400
0-50
300-400
50-100
100-200
50-100
1000-1100
50-100
500-600
0-50
500-600
0-50
100-200
300-400
2300-2400
High Road
Woodlands Park Road
Black Boy Lane
Cornwall Road
Avenue Road
200-300
0-50
0-50
0-50
1500-1600
500-600
500-600
0-50
0-50
50-100
0-50
0-50
0-50
0-50
900-1000
St Ann's Road
1100-1200
1000-1100
1400-1500
Seven Sisters Road

The plan below indicates the percentage changes in motor traffic flows, where all traffic reassigns onto the nearest available alternative route, which are the boundary roads on the edge of the LTN area. This assumes the boundary roads are able to accommodate this additional traffic.



Potential impact on boundary roads

- The plans on the previous slides show that some boundary roads are likely to see decreases and some roads likely to see increases in traffic, with all the internal roads expected to see a reduction or neutral impact as a result of the scheme.
- Analysis undertaken by Sustrans on 6 LTN trials across London shows that, after 6 months, significant change in travel patterns takes place.
  - After 6 months, traffic volumes on boundary roads have been a mixed picture.
  - On average, daily traffic volumes on boundary roads increased by 3% compared to before the trial.
  - In the worst, case daily traffic flow on one boundary road increased by 32%.
  - In the best, case daily traffic flow on one boundary road saw a reduction of 31%.



N.B. Data based on 6 months monitoring reports across 6 trial schemes, for a total of 21 boundary roads. Data has been adjusted to account for underlying changes in traffic volumes due to COVID-19.
The 6 schemes are: Walthamstow Village, St Peter's, Canonbury East, Railton, Oval and Tulse Hill.

Graphic supplied by Sustrans.

Potential impact on boundary roads

- In the short-term, until conditions settle down, Green Lanes is likely to see the highest increase in traffic. In reality, Green Lanes and the other boundary roads may not accommodate all the potential additional motor traffic in the peak hours and this is where motor traffic may reassign onto the wider network, people choose to travel outside of the peak times, or via a different mode.
- Extensive monitoring will be undertaken on the local and wider area during the trial to monitor these roads. A separate study is being carried out in the wider area including Green Lanes, the Ladder Streets, Wightman Road to look at improvements in this area that will factor in any impacts of the LTN.

Impact of Bruce Grove LTN

- There is also a LTN for the Bruce Grove area that the Council is looking to implement at the same time.
- It is likely that if both schemes are implemented at the same time with Option A for St Ann's, the impacts on West Green Road may reduce, with motor traffic reassigning onto the wider network before it reaches the St Ann's area.