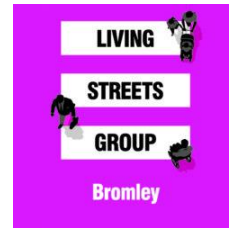


# SHAPE BETTER STREETS

Submission by Crystal Palace and South Norwood Shape Better Streets

Supported by



friends of the earth  
Croydon



Your voice for a  
cycling borough



## Who we are

Shape Better Streets is a resident campaign supporting the principle of a Low Traffic Neighbourhood in Crystal Palace and South Norwood. Our website address is: <https://crystalpalaceltn.org/> and our email address is CrystalPalaceLTN@gmail.com.

Bromley Cyclists forms part of the London Cycling Campaign - a group which campaigns for better cycling facilities and promotes cycling to all Londoners

Bromley Living Streets is a group of residents in the London Borough of Bromley, campaigning for safer, quieter, low-traffic neighbourhoods which encourage walking and cycling.

Cadence is a cycling hub open to every level of bike rider. We describe ourselves as being 'more than a bike shop and more than a club'.

Croydon Cycling Campaign is a group of Croydon locals who want to see Croydon transformed into a city that is welcoming to cyclists of all ages and abilities. We work with the council to encourage high quality provision for cycling, organise rides and socials and campaign tirelessly for a real cycling revolution.

Friends of the Earth Croydon is part of a national and international community dedicated to protecting the natural world and the wellbeing of everyone in it. We lead campaigns, provide resources and information and drive real solutions to the environmental problems facing us all.

Croydon Climate Action, founded in 2019, works in partnership with Croydon Friends of the Earth specifically to work on local campaigns relating to climate change. We are a group of passionate individuals who work with local councils, businesses, schools and communities to ensure the future of Croydon is climate-friendly.

Croydon Living Streets is a group of volunteers working to make everyday walking safer, easier and more enjoyable across our community.

Holmesdale Community Action Group is a community group bringing neighbours together who are dedicated to making our local area a safer, cleaner and better place to live.

Labour Cycles is a community of Labour members committed to ensuring active travel is the for the many, not the few.

London Cycling Campaign is a 11,500-strong membership charity, making sure that everyone who cycles, or wants to cycle, has a voice in Greater London.

Peddle My Wheels is a circular economy business that aims to make cycling accessible and affordable for everyone.

## Key points

- The climate crisis, national and local policy all call for a local approach based on reducing private vehicle use and the air quality, noise and traffic danger it creates, to make neighbourhoods safe and pleasant and encourage active travel.
- The LTN experiment should therefore only be abandoned if there is strong evidence that any harms significantly outweigh the benefits and cannot be mitigated by changes to the scheme.
- Over the last decade, traffic volumes on some streets in the neighbourhood have more than doubled – to 12,000 movements a day, based on January 2019 data – comparable or more than some nearby main roads. This is consistent with the increase in vehicle use seen in London over recent years, which has almost all taken place on streets which are not part of the main road network.
- The majority of people rat-running through the neighbourhood have been flouting the law by exceeding speed limits and other dangerous and anti-social behaviour.
- The increase in traffic has led to completely unacceptable consequences for air quality, noise, and danger, especially for active travel. It has degraded the neighbourhood as a place to live. The official London cycling route through the neighbourhood was experiencing levels of traffic far higher than TfL's standards for back street, "quiet" routes without formal cycling infrastructure.
- The experimental LTN has, in only three months from inception, led to at least a two thirds reduction in vehicle traffic, with accompanying reductions in air pollution, noise and traffic danger, and a tripling of walking and cycling.
- The main genuine problem which has emerged is some increase in traffic on adjoining streets in the borough of Bromley – though on nothing like the scale previously experienced in the streets where LTN measures have been installed. This has eased, as a result of Church Road reverting to normal working. If the scheme changes to allow resident access from Church Road further south, it should reduce further traffic on these streets. If there continued to be a problem, it could be addressed without allowing 10,000 or more vehicles a day back on to Auckland Road and other streets.
- There is a complete lack of objective evidence for other claimed disbenefits – emergency services access, social safety, increases in congestion and pollution on surrounding roads, and damage to the Triangle town centre economy. The improvement in local congestion following the removal of the restriction in place on Church Road from March to October shows clearly that the LTN has not had an unacceptable impact on local main road capacity. Main roads remain congested at times, and hostile environments for active travel, as they have been for decades. That can and should be tackled as an issue in its own right.
- The streets in the LTN can either be a pleasant, safe neighbourhood to live, and an a quiet, safe, attractive corridor for active travel away from main roads. Or they can be a congested, polluted, dangerous, bypass for the Triangle and the main roads. They cannot be both. There is no credible basis for the council choosing the latter.

## Policy context: Global, national, London

### *Climate Crisis*

The world is experiencing a climate crisis, with 2019 concluding a decade of exceptional global heat, retreating ice and record sea levels driven by greenhouse gases produced by human activities. To prevent warming beyond 1.5 °C (the recognised limit for land and sea to cope is 1.5-2 °C), we need to reduce emissions by 7.6 % every year from this year to 2030.<sup>1</sup>

The 2015 Paris Agreement was drawn up to limit global temperature rise to no more than 2° C above pre-industrial levels but also offered national pledges for countries to cut or curb their greenhouse gas emissions by 2030. The initial pledges are already insufficient to meet the target.<sup>2</sup>

### *Air Quality*

The World Health Organisation estimates that air pollution costs the UK economy approximately £54 billion a year. This accounts for 3.7 % of GDP in Britain.<sup>3</sup>

Up to 36,000 deaths every year are linked to air pollution in the UK (based on figures from 2010-2017) and over 35 % of local authorities (including more than 22 million people) had areas with unsafe levels of fine particulate matter (PM<sub>2.5</sub>) in 2018.

More locally, Transport for London (TfL) has undertaken research into the economic costs of the health impacts caused by air pollution in London. The research estimates an annual economic cost of up to £3.7 billion, made up of the cost of treatment, lost work hours and concern and inconvenience to family members.<sup>4</sup>

There is growing evidence of a link between poor air quality and vulnerability to COVID-19. A recent study estimated that about 14 % of deaths in the UK from COVID-19 – some 6,100 to date – could be attributed to long-term exposure to air pollution.<sup>5</sup>

### *Traffic and Travel*

Congestion cost the UK economy £6.9 billion in 2019 and on average, UK road users lost 115 hours and £894 a year to congestion<sup>5</sup>. In terms of the human cost, over three quarters of deaths due to injury in the age bracket of 10–18-year-olds are related to traffic incidents.<sup>6</sup>

2,324 people were killed or seriously injured (KSI) on London streets in road traffic collisions in 2013. There are an estimated 5,900 deaths per year in London due to long-term exposure to NO<sub>2</sub>, and 3,500 deaths due to long-term exposure to fine particulate matter (PM<sub>2.5</sub>).<sup>7</sup>

London's population is projected to increase by 24 % by 2041. With this expansion, rising public transport demand means that, without further action, the majority of morning peak travel on both National Rail and London Underground would be in crowded conditions.<sup>8</sup>

The Mayor of London's own transport strategy is very clear on what action needs to be taken:

*"At its heart is a bold aim for 80 % of all trips in London to be made on foot, by cycle or using public transport by 2041."*

Private vehicle use is certainly not the answer to the public transport crisis. Household car ownership in Greater London is significantly lower than the average in England. In addition, over one third of all the car trips made by London residents are less than 2 km and could be walked in up to 25 minutes. Habit strongly influences the choice of travel mode.<sup>9</sup>

#### *The Impact of COVID-19*

Following unprecedented levels of walking and cycling across the UK during the pandemic, the Department for Transport (DfT) published plans to help encourage more people to choose alternatives to public transport when they need to travel. This should make it easier to follow healthier habits, and make sure the road, bus and rail networks are ready to respond to future increases in demand.<sup>10</sup>

In May 2020 the Emergency Active Travel Fund was formally announced. It supports local authorities to develop cycling and walking facilities and projects such as Low Traffic Neighbourhood schemes (LTN schemes). The accompanying Department for Transport guidance, reaffirmed and updated in November 2020, urges highways authorities to implement measures to reduce rat-run traffic on minor roads:

*"Modal filters (also known as filtered permeability); closing roads to motor traffic, for example by using planters or large barriers. Often used in residential areas, when designed and delivered well, this can create low-traffic or traffic-free neighbourhoods leading to a more pleasant environment that encourages people to walk and cycle, and improving safety."*<sup>11</sup>

Survey results show clear support for these initiatives:

- Respondents overwhelmingly agreed that the government should act in local neighbourhoods to increase road safety (88 %), improve air quality (86 %), reduce traffic congestion (83 %) and reduce traffic noise (75 %).
- Three quarters of respondents supported the reduction of road traffic in towns and cities in England (77 %) and their local area / neighbourhood (78 %), and two thirds of respondents were supportive of reallocating road space to walking and cycling across towns and cities in England (66 %) and their local area / neighbourhood (65 %).<sup>12</sup>

In London particularly, where public transport use is usually high, the need was critical. TfL warned that due to social distancing, capacity on the Tube would be reduced to 15–20 % and 20–25 % on buses. If nothing was done, TfL's own modelling showed a doubling of car use in central London, assuming a third of pre-lockdown journeys returned and those who cannot get on to public transport shifted to cars.<sup>13</sup>

#### *Mini-Hollands – the evidence from schemes in place*

This national and London policy emphasis reflects evidence from pathfinder mini-Holland schemes. A study investigating the early impact of the mini-Holland schemes in Waltham Forest discovered that people in areas with active travel schemes were 24 % more likely to

have done any cycling in the previous week and walked or cycled for 41 minutes per week more than those where such improvements have not yet been made.<sup>14</sup>

More recent research has consistently found that living near interventions has led to a 40–45-minute weekly increase in active travel, providing confidence that even in more car-dependent, suburban areas, active travel infrastructure can spur take-up, and that such growth can provide high health economic benefits in relation to intervention costs. There is also a consistent trend towards people in the LTN area being less likely to own a car, with the largest decrease in car use always within the LTN group.<sup>15</sup>

### *Public Health*

It is estimated that more than 14 % of children age 11 are overweight and more than 23 % are obese. Countries with the highest levels of cycling and walking generally have the lowest obesity rates. People who cycle live two years longer on average than people who do not and take 15 % fewer days off work through illness.<sup>16</sup>

The total cost of obesity to wider society is estimated at £27 billion. The UK-wide NHS costs attributable to excessive weight and obesity are projected to reach £9.7 billion by 2050, with wider costs to society estimated to reach £49.9 billion per year.<sup>17</sup>

The Mayor of London's Childhood Obesity Taskforce has called for a rapid increase in the number of 'public realm improvements that reduce traffic and support children's health, well-being and mobility' as one of its 10 ambitions for tackling childhood obesity in the capital.<sup>18</sup>

### *Children and School Travel*

With the 'school run' a key contributor to rush hour traffic, this seems an easy target to reduce private car use, particularly given the potential benefits in health for the younger generation.

- 76 % of trips to school made by primary school children are under 2 miles, compared to 49 % of trips to school made by secondary school children. For secondary school children, trips to school are more likely to be between 2 and 5 miles (29 %).
- 88 % of children aged 7 to 10 were usually accompanied to school by an adult in 2013, this proportion drops to 31 % for children aged 11 to 13.
- 43 % of children are accompanied to school because of fear of road danger.<sup>19</sup>

If only a small fraction of these journeys were converted to active travel, it would have a huge positive impact on by reducing the volume of vehicular traffic on our roads.

## Policy context: Croydon

Local policy and strategies on climate, transport and public health all point clearly towards reducing motor vehicle use and encouraging active travel.

### *Climate*

In June 2019 Croydon Council declared a climate emergency, with an ambitious target of ensuring the borough is carbon neutral by 2030.<sup>20</sup> It has set up a Climate Crisis Commission, one of whose workstreams is on transport and energy.<sup>21</sup> A Citizen's Assembly sponsored by the council and operating in early 2020 said "we want to see fewer cars in total on the borough's roads with shorter journeys in particular being cut."<sup>22</sup>

### *Air Quality*

In Croydon alone, background concentrations of PM<sub>2.5</sub> have been measured as dangerous and in breach of World Health Organisation (WHO) limits. In 2018 an estimated 6.16 % of deaths in the borough were attributable to PM<sub>2.5</sub> air pollution which was equivalent to 151.5 deaths.<sup>23</sup> Croydon's Air Quality Management Plan includes a commitment to reprioritise road space to enable walking and cycling.<sup>24</sup>

### *Active travel*

Croydon has developed a strong policy commitment to active travel in recent years. The 2018-23 Cycling Strategy, published in 2017, set out an approach, including establishing an inclusive cycling culture and establishing safe routes. One of the routes earmarked for improvement was the long-standing London Cycle Network route along Lancaster and Auckland Roads.<sup>25</sup> The Croydon Cycling Campaign has been arguing for several years that it should be improved by cutting rat-run traffic.<sup>26</sup>

The controlling Labour Group's 2018 manifesto made strong commitments on active travel, with a particular focus on children and young people – to support initiatives "that encourage children to walk and cycle to school" and to put in place an approach to transport which "enable[s] people to get out of their cars... work[s] to achieve the principles of Vision Zero ...and makes Croydon... easy to get around and enjoy, especially for young people, older people and disabled residents."<sup>27</sup> These commitments are reflected in the council's current corporate plan.<sup>28</sup>

## How the policy context should shape a decision

The weight of national, London and local policy points overwhelmingly to the need to reduce motor vehicle use and encourage active travel. It also points to the importance of creating low-traffic environments in which the air and noise pollution associated with excessive traffic is removed, and in which active travel is encouraged.

That does not, of course, justify persisting with a particular scheme if it does not achieve these objectives, or results in significant unintended adverse consequences. But it does point strongly towards only abandoning a scheme if:

- there is clear evidence that the harm outweighs the benefits;

and

- any harm cannot be addressed by modifications to the scheme.

Our argument is:

- The scheme has resulted in very significant benefits.
- There are some harms, but many of the claims which have been made about adverse consequences are, at best, exaggerated, and in some cases are not supported at all by the evidence.
- Changes to the scheme could reduce the genuine harms significantly.



## About the Crystal Palace and South Norwood LTN

### *Geography*

The neighbourhood in which the LTN has been established is, in formal terms, the parts of Croydon's South Norwood, and Crystal Palace and Upper Norwood, wards bounded by: the A213 South Norwood High Street; the A215 South Norwood Hill; the A212 Church Road; the boundary with Bromley; and the railway line between Crystal Palace and Norwood Junction,

However, part of the boundary with Bromley does not follow any strong natural features, and a wider definition of the neighbourhood would extend to the A214 Anerley Hill and Anerley Road.

On this broader definition, the neighbourhood is about a mile and a half north to south, and around half a mile wide.

The neighbourhood occupies the eastern slopes of the southern end of the Norwood Ridge. Broadly, the difference in elevation between Church Road and South Norwood Hill on the western boundary of the neighbourhood, and the lower lying streets is greatest (around 50 m of elevation) towards the northern end, and less or negligible towards the south. A road, called successively Lancaster Road, Auckland Road and Hamlet Road, runs through the neighbourhood from south to north. Various streets run west from it to South Norwood Hill and Church Road. There are networks of streets east of it, to the south around Warminster Road, and to the north round Sylvan Road and Maberley Road. Travel (by any mode) to the east is completely blocked by the railway line, which can only be crossed on the main roads at the northern and southern ends of the neighbourhood. The Auckland Rise estate occupies a substantial area east of Church Road and south of Sylvan Hill, and there is a significant amount of social housing on the Bromley side, between Anerley Road and Belvedere Road.

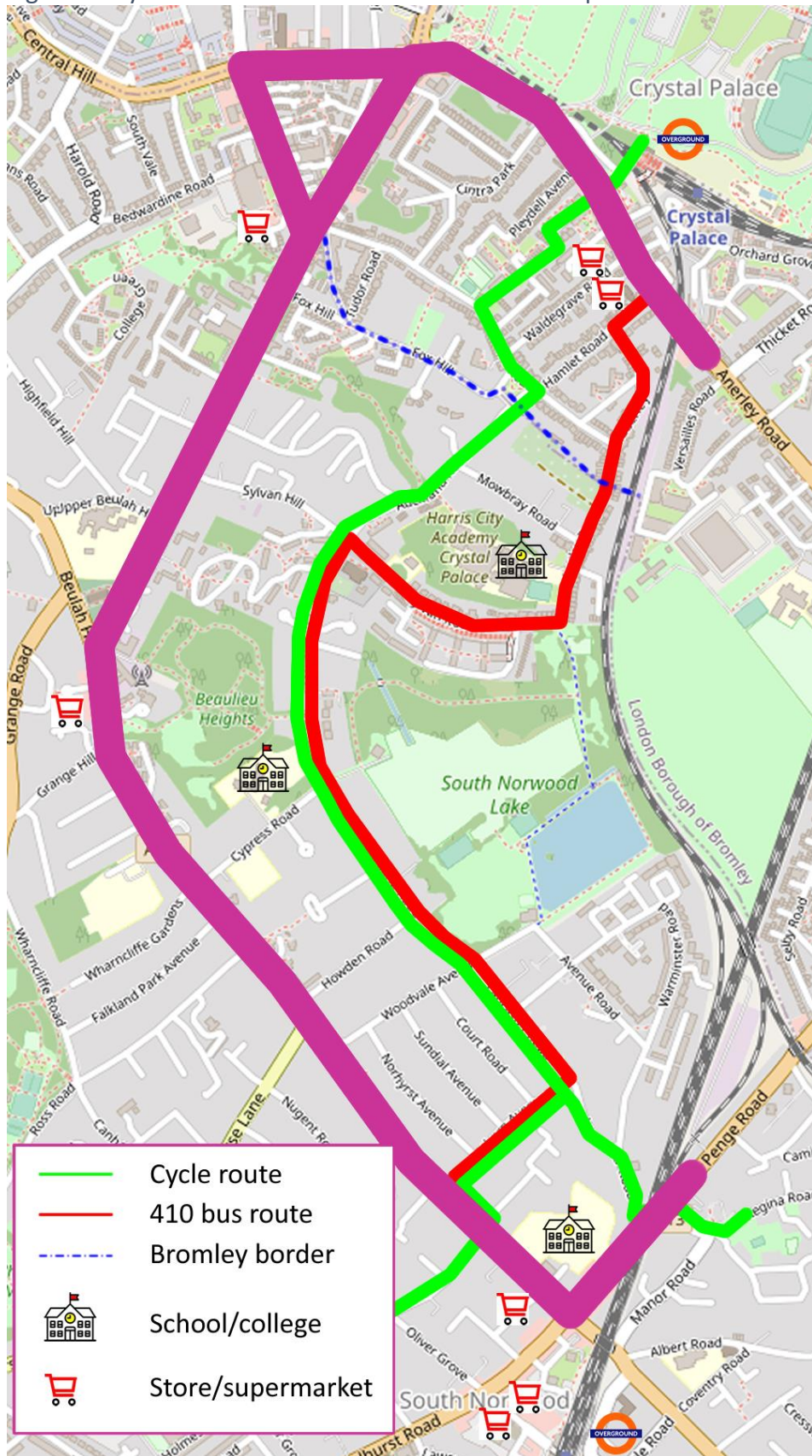
There are several areas of public open space in the neighbourhood, principally South Norwood Lake and Grounds, Beaulieu Heights and Stambourne Woodland.

There is one primary school in the neighbourhood (Pegasus Academy Cypress School), and two secondaries: Harris City Academy Crystal Palace towards the north, and Harris South Norwood on the South Norwood Hill boundary road at the southern end. There is a community centre (Waterside) adjacent to the South Norwood Lake.

There are railway stations (Norwood Junction and Crystal Palace) close to the northern and southern ends of the neighbourhood. Buses run along the main roads bounding the neighbourhood, and there is a service (410) running through the neighbourhood itself from south to north via Southern Avenue, Lancaster Road, Auckland Road, Sylvan Road, Maberley Road and Hamlet Road. A long-standing London Cycle Network route runs through the area along Lancaster Road, Auckland Road, Belvedere Road and Chipstead Close.

Figure 1 is a map of the area.

Figure 1: Crystal Palace and South Norwood LTN: Map



## Demography

Figure 2 shows key demographic information.<sup>29</sup> The population is around 7,400 (Croydon only) or 11,400 (including the Bromley streets). Over 40 % of the population is Black, Asian and Minority Ethnic (BAME). There are around 3,200 households in the Croydon section, a further 1,800 in the Bromley section. 43 % of households do not have access to a private vehicle. Taken as a whole, the neighbourhood is around the bottom of the middle third of the income distribution. The census districts within it range from two within the 30 % poorest in England to one around the middle of the income distribution. The neighbourhood is more affluent than some of the area to the south of it (the other side of South Norwood High Street), and less affluent than much of the area to the west (the other side of Church Road).

**Figure 2: Key demographic information**

Census LSOA	Income decile (lower number=poorer)	Population	% BAME	Households	No car	%no car
Croydon	008A	1272	57.8	568	243	42.8
	007D	1868	52.1	620	194	31.3
	007C	1638	44.7	773	310	40.1
(part)	001A	1052	37.6	438	173	39.5
	001B	1523	34.8	774	306	39.5
Bromley	005B	1917	30.1	842	480	57.0
	005E	2125	29.7	949	450	47.4
<b>Total (Croydon only)</b>	<b>3.5</b>	<b>7353</b>	<b>45.8</b>	<b>3173</b>	<b>1226</b>	<b>38.6</b>
<b>Total (including Bromley)</b>	<b>3.4</b>	<b>11395</b>	<b>40.1</b>	<b>4964</b>	<b>2156</b>	<b>43.4</b>

There is no data about the income status of households within the neighbourhood as opposed to the boundary roads. The two main areas of social housing both have some frontage on main roads, but most of the properties in them do not front main roads. There is no reason to believe that, taken as a whole, there is any difference in income levels between the boundary roads and the rest of the neighbourhood.

Summing up:

- The neighbourhood has a large population.
- It is diverse.
- It is not particularly well-off.

It is a long way from the “small, wealthy, white, enclave” scheme opponents have claimed.

## Traffic in the neighbourhood before the LTN

### Data

There are three sources of quantitative data about traffic in the neighbourhood before the LTN:<sup>30</sup>

1. Council data from January 2013 recording vehicle numbers and speeds westbound on Auckland Road at the junction with Stambourne Way. These record numbers of motor vehicles (only) and speeds in one direction only (west/south towards South Norwood. They do not record vehicle type (car, van, etc).
2. Data downloaded by the council in January 2019 from the speed display device in Auckland Road just east of the junction with Stambourne Way, containing the same information as 1, though distinguishing between speeds below 20 mph and between 20 mph and 30 mph. (There is also data for August 2019, but that was, of course, at a time of year without school traffic, and which generally tends to be less busy.)
3. Counts carried out manually by residents in June and July 2020 in Sylvan Hill and Auckland Road. These include pedestrians and cyclists as well as vehicles, recorded by type, but do not record speeds. These counts both took place after the LTN's first phase with planters in South Norwood and on Auckland Road; and before the conversion into a bus gate on Auckland Road and the installation of planters on Sylvan Hill. However, they were carried out in the earlier phases of the lifting of the spring lockdown, when traffic levels still had not recovered from their very low levels. In particular, the schools were only open to a minority of pupils.

### Rat-runs

Before the LTN was introduced, vehicles were able to make through journeys across the neighbourhood. The main rat-runs were:

1. Southern Avenue and Lancaster Road (and vice versa) as a route between South Norwood Hill and South Norwood High Street.
2. Hamlet Road, Auckland Road and Sylvan Hill, with some traffic also using Fox Hill and Stambourne Way, (and vice versa) as a route between Anerley Road and Church Road.
3. Hamlet Road, Auckland Road, Lancaster Road, and either Southern Avenue or the south end of Lancaster Road (and vice versa) as a route between Anerley Road and South Norwood.
4. As 3, but using Sylvan Hill, Stambourne Way and Fox Hill to travel to or from Church Road.

These routes (2 in particular) were indicated on navigation apps as preferable to the main roads even when traffic on the main roads was light.

### Traffic volumes

In just over 6 years, the daily one-way total had well over tripled – equivalent to traffic increasing by nearly 23 %, year after year. Assuming broadly equal numbers of vehicles going both ways in the course of a day, the 2019 total is equivalent to around 12,000 vehicles a day. Figure 3 below shows the 2013 and 2019 daily totals

Figure 3: Vehicle movements, Auckland Road, Westbound, January 2013 and January 2019  
Source: Croydon Council

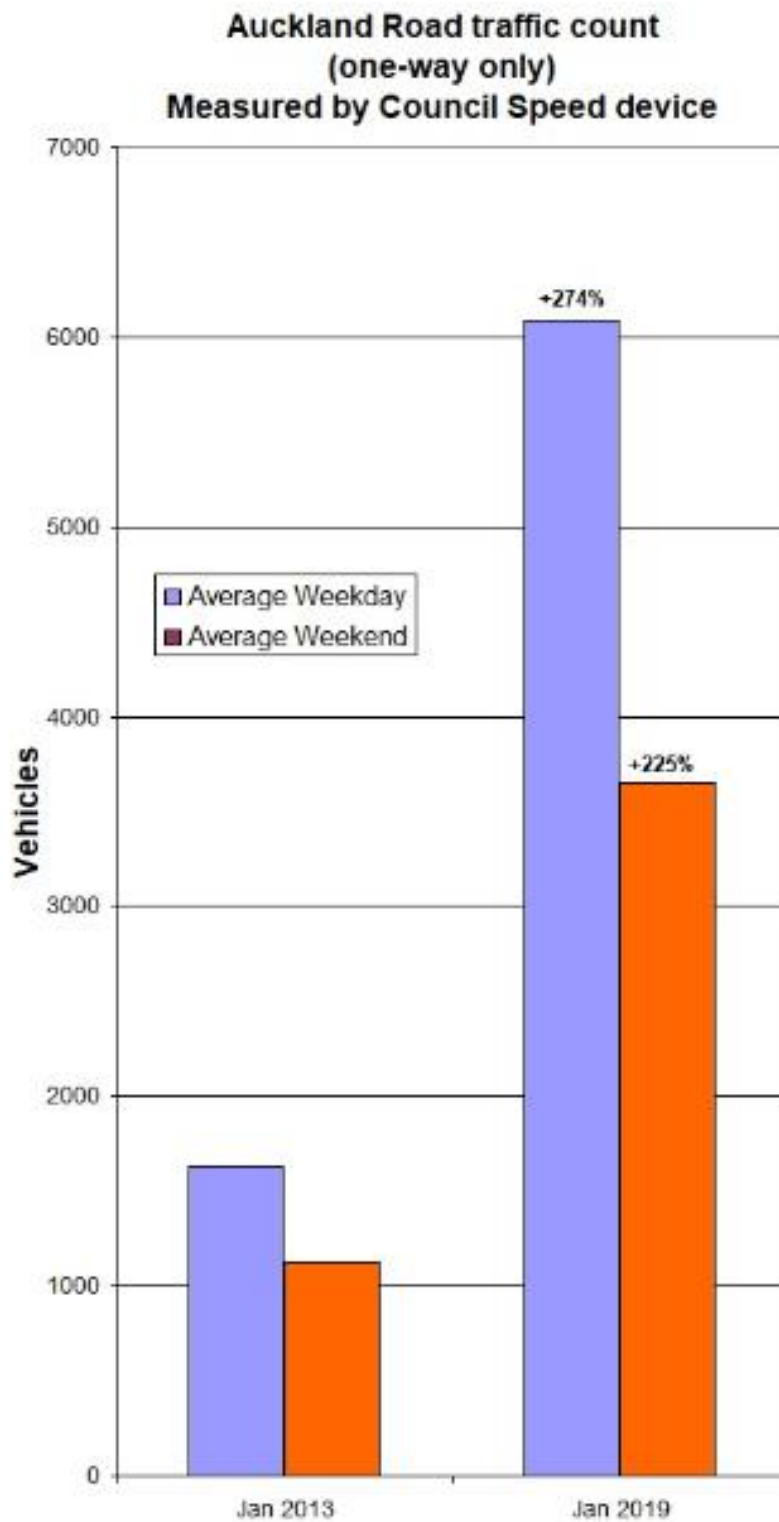
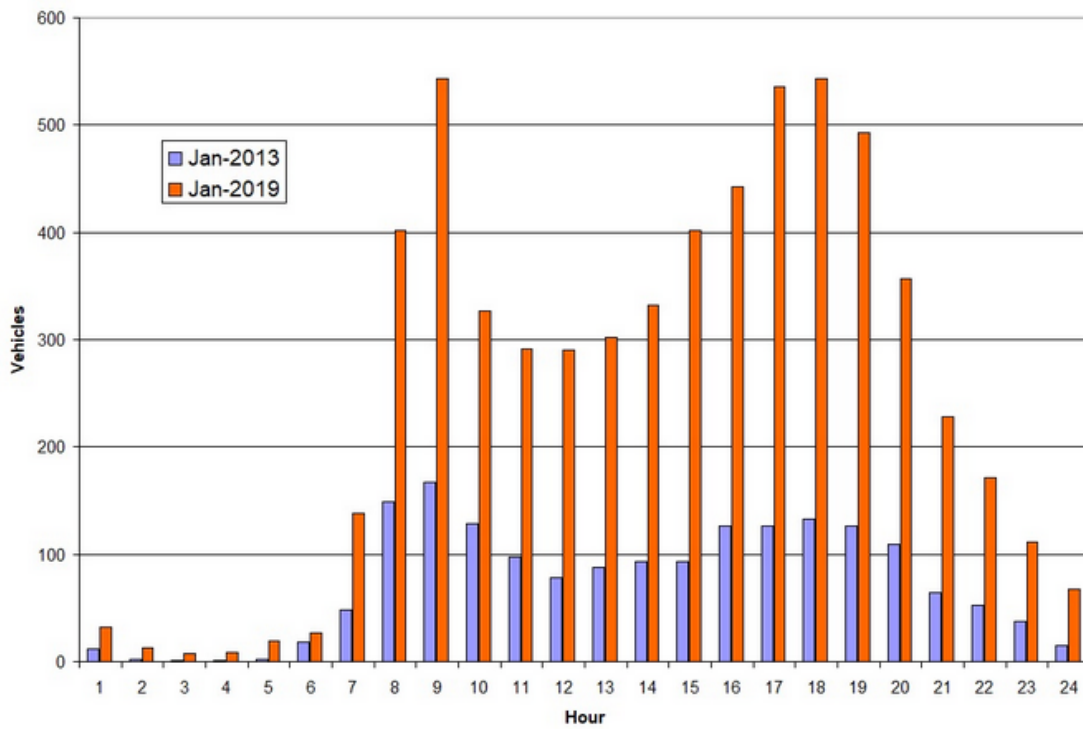


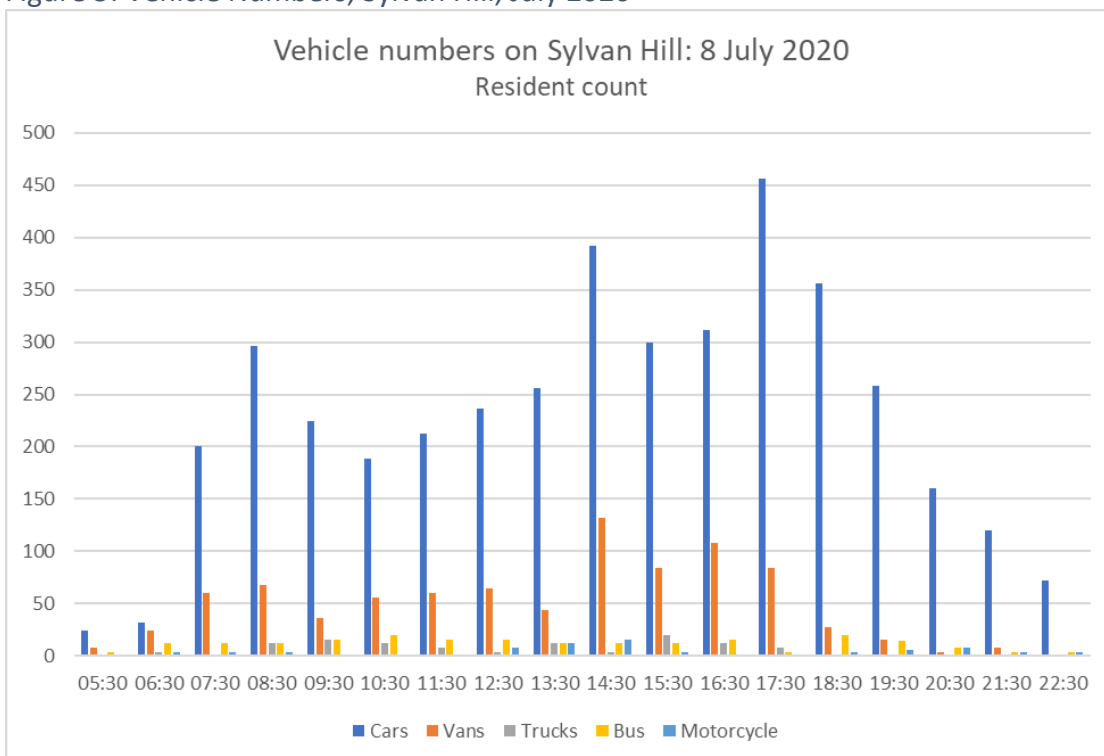
Figure 4 shows the hourly distribution in the two years. In 2013, one-way traffic only exceeded 100 vehicles per hour for 8 hours in the day. In 2019, high traffic was constant from early morning until well into the evening: over 290 vehicles an hour (one way) from 8 am to 9 pm.

Figure 4: Auckland Road traffic - 2013 and 2019: weekday hourly  
**Auckland Road hourly traffic count (one-way only)**  
**Measured by Council Speed device**



In June and July 2020, residents carried out weekday manual counts on Auckland Road and Sylvan Hill. The results of the July counts (the lower of the two) are shown in Figure 5 below.

Figure 5: Vehicle Numbers, Sylvan Hill, July 2020

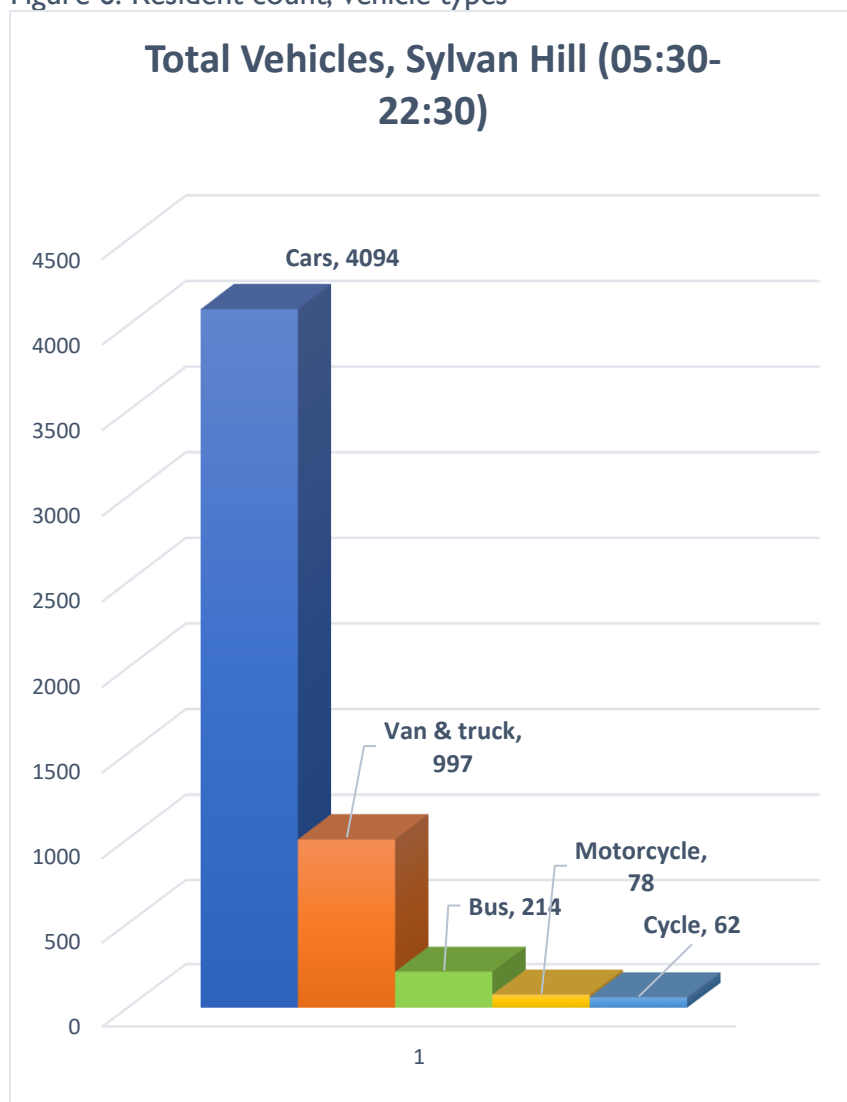


The daily total from this count, around, 5,400, is somewhat lower than the August 2019 council data, but still over 50 % higher than 2013. A number of factors may have been in play:

- In early July 2020, lockdown restrictions had not been fully lifted. In particular, schools were only operating for a limited number of pupils.
- Because, at that time, Auckland Road was closed to vehicles further south, Sylvan Hill was carrying traffic which would otherwise have been on Auckland Road. The 410 bus was using Sylvan Hill, but only accounts for at most 5 % of the vehicle movements recorded.

As Figure 6 shows, Light Commercial Vehicles, vans and smaller trucks, accounted for about 20 % of the total.

Figure 6: Resident count, vehicle types



These are extraordinarily high volumes for side streets not part of the main road network. They are higher than recent data for the nearby A214 Central Hill and not much less than Anerley Road and Church Road.<sup>31</sup> They are higher than the guideline figures suggested for

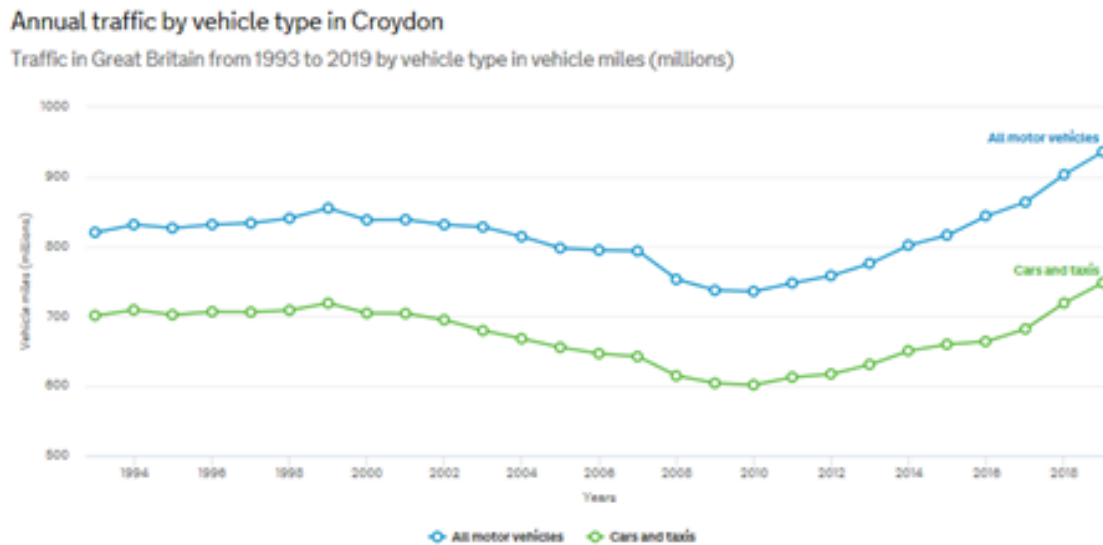


“Quietway” cycle routes in TfL guidance – critical since Lancaster Road and Auckland Road are designated as part of such a route.<sup>32</sup>

The extent to which, within the last decade, Auckland Road and other streets have become, in effect, main roads, reflects broader trends across the borough and London as a whole.

Figure 7 below shows that in Croydon, there has been a 200-million-mile increase in miles driven in Croydon over the last 25 years, an increase of nearly 20 %.

Figure 7: Annual traffic by vehicle type: Croydon  
Source: Department for Transport



But, as Figure 8 shows, the location of this increase has been very uneven. Across London as a whole, volumes on main roads have changed little. The entire increase has been on other streets, like Auckland Road and the other streets in the neighbourhood which have become rat-runs, and over the last 10 years or so. This increase is largely down to increased usage of satnav with traffic functionality, increased use of delivery services and lack of adequate cycling infrastructure.

Auckland Road and other now-busy streets in the neighbourhood are therefore the “canaries in the coal mine.” Their state, before the experimental LTN was introduced, was a consequence of an unsustainable growth in traffic volumes, and the diversion of that traffic off the main road network enabled by navigation apps.

### *Congestion*

Because of the volume of traffic using streets not managed as main roads, and in particular with unrestricted parking, there was frequent congestion at pinch points such as the junction of Southern Avenue and Lancaster Road, on Hamlet Road, and on Auckland Road near the doctors’ surgery. On Hamlet Road, eastbound traffic often backed up as much as 300 m from the junction with Anerley Road. This would cause severe delays to the 410 bus and occasionally caused emergency vehicles to become stuck. It was common for altercations to take place between angry and frustrated drivers, both physically and verbally.

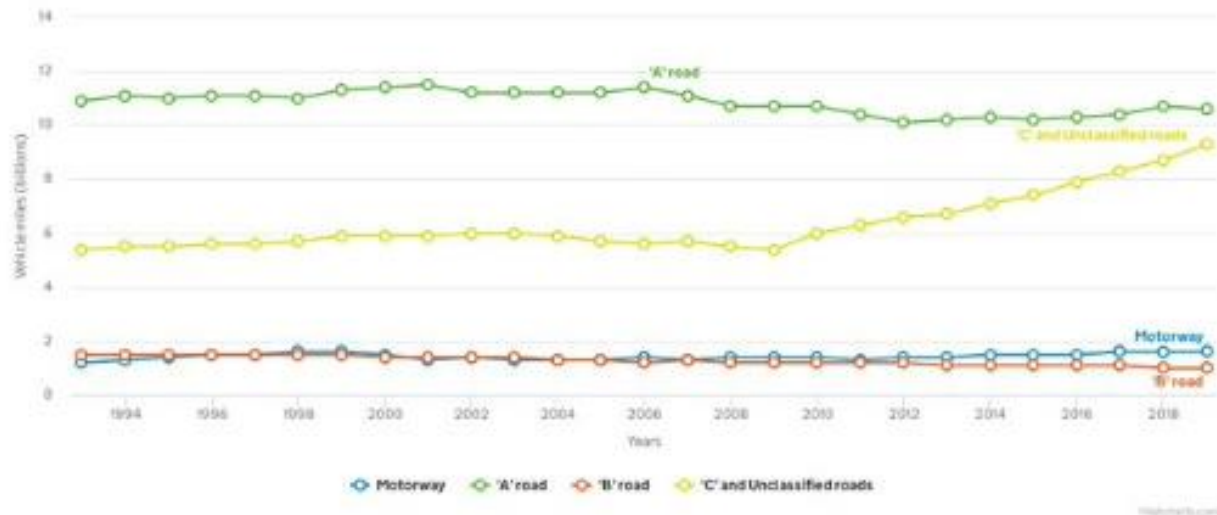


Figure 8: Traffic volumes: London and Croydon comparisons

Source: Department for Transport

**Annual traffic by road type in London**

Traffic in Great Britain from 1993 to 2019 by road type in vehicle miles (billions)

*Traffic danger*

The impact of traffic volumes was made worse by driver behaviour. On average, more than 80% of vehicles exceeded the posted 20mph limit. The median speed recorded on the road was 26.4mph – nearly a third above the speed limit. Half of all vehicles drove faster than this. The 85th percentile speed recorded was 33mph. That is, 15% of vehicles were being driven more than two thirds above the speed limit. The highest speed recorded was 70mph, at about 8:50pm in the evening. Most hours of the day, at least one vehicle was recorded at over 45mph.

This section of Auckland Road is used, and crossed, by large numbers of students walking to and from Harris City Academy Crystal Palace.

These streets have therefore recently been carrying volumes of traffic similar to main roads, with high levels of disregard for speed limits. But they are not managed or laid out with the features characteristic of main roads:

- Parking is much less restricted than is typical on main roads of similar width, and there are typically parked vehicles on both sides for significant stretches, leaving insufficient width for opposing vehicles to pass, and contributing to poor conditions for cycling when there are high volumes of traffic.
- Auckland Road contains a number of blind bends and crests. Combined with large numbers of parked vehicles, this means sight lines are poor in many places.
- There are no formal pedestrian crossings, only refuges at three locations along the whole length of Hamlet Road, Auckland Road and Lancaster Road, and no such features on any of the other roads. Sight lines are often blocked by parked vehicles.
- There are speed humps along the southern part of Auckland Road, and cushions further north on Auckland Road, Hamlet Road and on Sylvan Hill and Stambourne

Way. The cushions in particular do not appear to be effective in restraining speed, as the speed data summarised above shows.

- At the main junctions of streets in the neighbourhood with main roads – namely Hamlet Road/Anerley Road, Sylvan Hill/Church Road, Southern Avenue/South Norwood Hill and Lancaster Road/South Norwood Hill – there are no traffic signals or roundabouts.

Figure 9 is a photograph of Auckland Road, showing how the topography and high levels of on street parking make it unsuitable for high volumes of traffic.

Figure 9: Auckland Road: Typical look of street



As a result, the neighbourhood and its main road junctions have seen high volumes of traffic collisions. Junctions on Auckland Road within the neighbourhood also have a poor safety record (Figure 10).

There was a serious cycle injury on Sylvan Hill in July 2020, sadly illustrative of how large numbers of motor vehicles, many of them recklessly driven, created a dangerous environment, above all for people not in a motor vehicle. A driver overtook another travelling uphill, in the path of someone cycling downhill. The cyclist swerved off the road to avoid a head-on collision and hit a wall. The photograph below (Figure 11) shows a car that was involved in a collision on Southern Avenue last year. The car involved was driving fast enough for the car to mount the pavement on its roof. Luckily there were no pedestrians on the pavement at the time. There have been many other examples of speeding vehicles losing control on these residential roads.

Figure 10: Collision incidents in LTN and on junctions with main roads: 2000-2019<sup>33</sup>



Figure 11: Crashed vehicle in Southern Avenue



Subjective safety for pedestrians and cyclists was poor. Pedestrians, in particular older and less able people, found crossing the roads, especially at the junctions of the 'hill roads' (Sylvan Hill, Stambourne Way and Fox Hill) extremely intimidating because of the speed and careless manner in which drivers took the turns.

*"I felt like I was taking my life into my hands crossing Stambourne Way and Fox Hill at their junctions with Auckland Road. I was nearly hit several times and drivers frequently honked at me and verbally abused me."* (Woman, 60, walking impairment)

*"Before the LTN I would never have let my children walk or cycle to Cypress School alone. I used to have my heart in my mouth when my youngest (5) scooted off ahead of me."* (Parent)

Before the LTN was in place very few parents would allow their children to walk to Cypress School due to safety concerns. In addition to this many parents would drive their children to local schools, including Harris Crystal Palace and Harris South Norwood. This would create pinch points and increased congestion at Lancaster Road, Southern Avenue and Auckland Road, which in turn caused delays to the bus and made the environment less safe for any children and adults not in cars.

#### *Air quality*

There has been, so far as we are aware, no air quality monitoring within the LTN. However, with Auckland Road and other streets carrying volumes of traffic comparable to nearby main roads, it is reasonable to assume that parts of the LTN were experiencing comparably poor air quality.

### *Noise*

Likewise, there has not, so far as we are aware, been any monitoring of noise. Yet the volumes of traffic passing through some streets in the neighbourhood was clearly resulting in high levels of insidious noise pollution.

### *Impact on well-being*

A survey of residents carried out in summer 2020 found that large majorities were concerned about air quality, noise and vibration.<sup>34</sup>

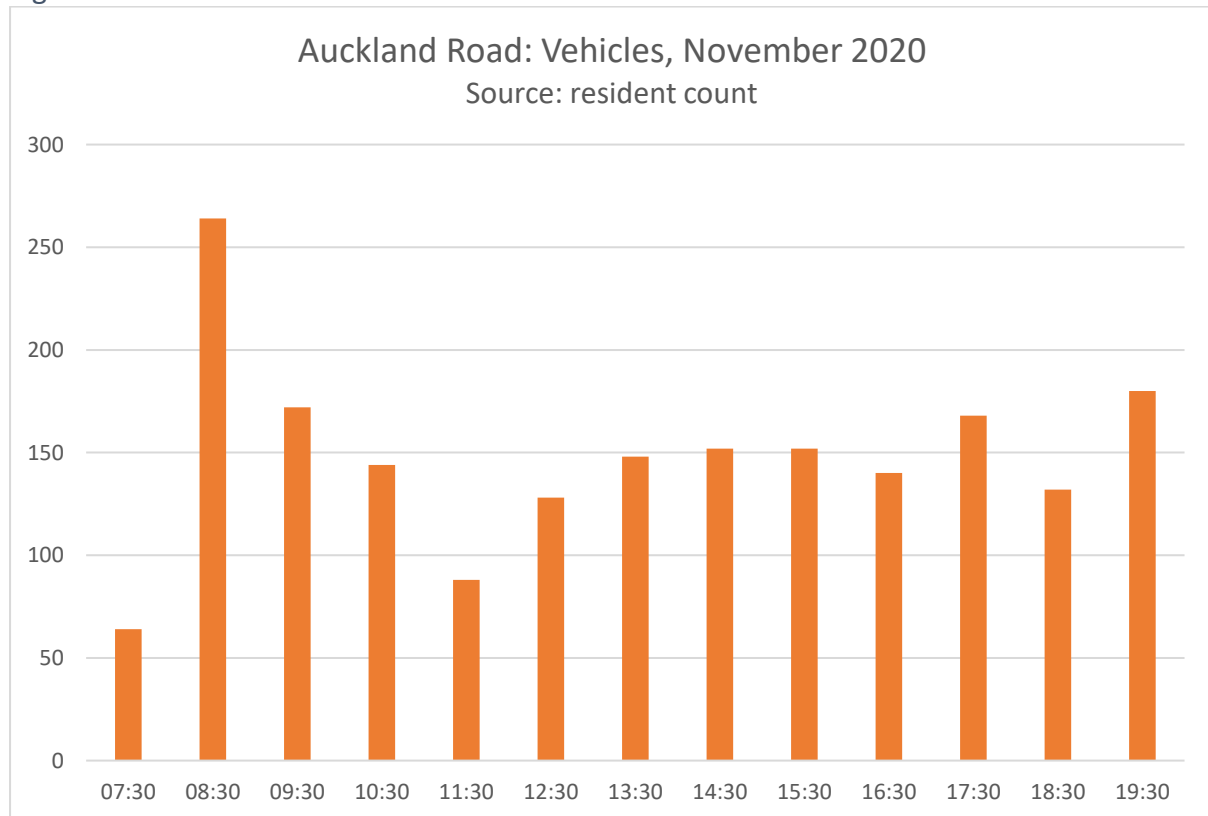
## Positive Impact of the LTN

The introduction of the LTN has resulted in a dramatic reduction in motor traffic volumes on the previously busy roads in the neighbourhood (see pages 10–19 above). It has also led to more people walking and cycling.

*Reduction in motor traffic movements, air and noise pollution, and traffic danger*

Resident traffic counts carried out in the weeks beginning 16 and 23 November 2020 suggest a fall in motor traffic movements along Auckland Road and Sylvan Hill to around 1,700 per day, a two thirds reduction compared with July 2020 and three quarters compared with August 2019 (Figure 12). Only between 8 and 9am did numbers exceed 100 per hour.

Figure 12: Auckland Road: vehicles - November 2020



This fall in motor vehicle movements has had three main consequences for the local environment:

- A dramatic fall in air pollution. While there are no before or after measurements of air pollution, it is completely reasonable to assume that a two-thirds fall in vehicle movements will have resulted in much lower air pollution, and the experience of residents is certainly that the air is fresher.
- Likewise, a drop in noise pollution, as experienced on streets and in homes.

- A significant improvement in road safety. While a minority of vehicle drivers unfortunately continue to disregard the speed limit, and drive dangerously in other ways, the total volume of traffic has fallen so much that the incidence of dangerous driving and speeding is much less. The safety benefits are not just in the interior of the LTN. The intersections of the streets connecting the neighbourhood to the main roads (see pages 16–17 above) are also much safer for pedestrians and drivers because of the significant reduction in turning movements.

### *Travel to school*

As well as the general reduction in traffic, the school run now has much less impact on the neighbourhood. Supported by positive communication from Harris City Academy Crystal Palace (HCACP), those parents who continue to drive their children to school are now dropping them or picking them up beyond the filters in Stambourne Way and Sylvan Hill. This means the street outside the main school entrance is now much quieter at the beginning and the end of the school day. This creates a safer environment for students and staff, supports social distancing, and reduces nuisance to local residents.

With the additional school street restriction further reducing motor access to Cypress Road, the great majority of home-school journeys to Cypress School are now by walking or cycling.

*“Two girls from my class [Cypress School] now cycle to school regularly because the streets are now safe and school had a “Ride to School Week”. (Resident, 9)*

*“My son now cycles to school every day, on his own, as the roads are safe enough. He is really enjoying the freedom and getting fit.” (Parent)*

### *Active travel*

Figure 13 shows hourly estimates\* of the numbers of people walking (in both directions) between 7 am and 7 pm in July and November.

The comparison is not like-for-like in an important respect. In July, there were few if any students of Harris City Academy Crystal Palace attending, whereas the school is currently functioning fully. Students account for a large proportion of the distinct peaks seen in the graph in the early morning and mid-afternoon, since Sylvan Hill is one of the main walking routes to the school. However, even removing 500–600 Harris student movements from the total, there has still been around a threefold increase in walking.

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\*Based on 15 minute counts at the half hour.



Figure 13: Sylvan Hill: Pedestrians

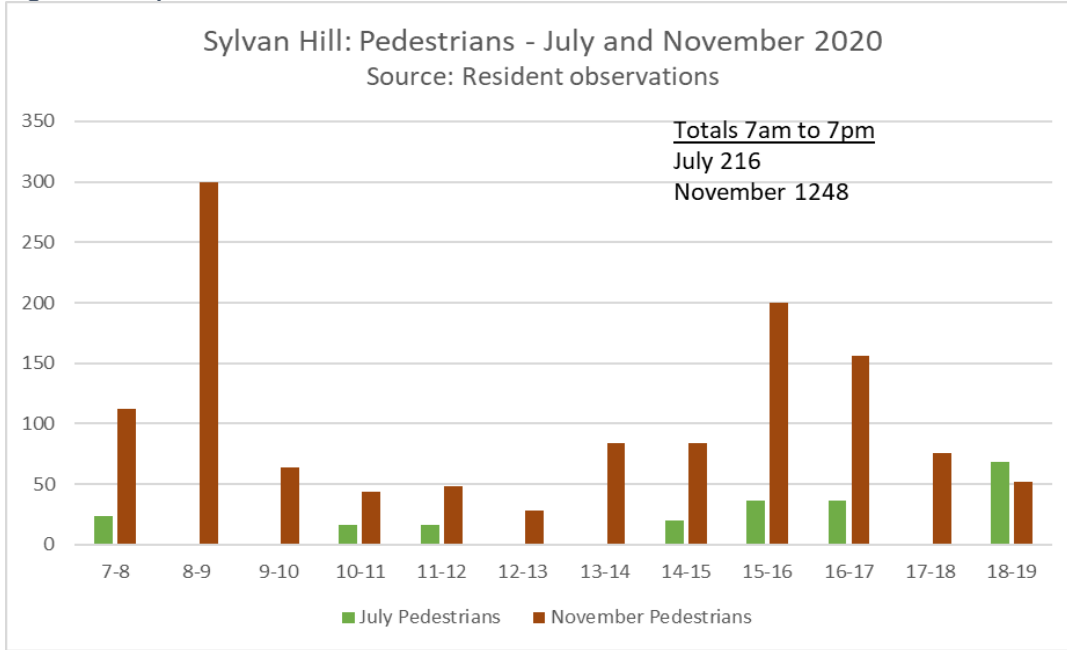


Figure 14 (below) shows hourly estimates of the numbers of people cycling (in both directions) between 7 am and 7 pm in July and November.

Total numbers have nearly tripled since the summer. During the morning commuting phase (7–9 am), there were approximately 60 cycle movements. While not counted separately, a considerable proportion of these were parents with children (on child seats or in cargo bikes or trailers). (Respect to these parents who are tackling the hill!)

Figure 14: Sylvan Hill: cycles

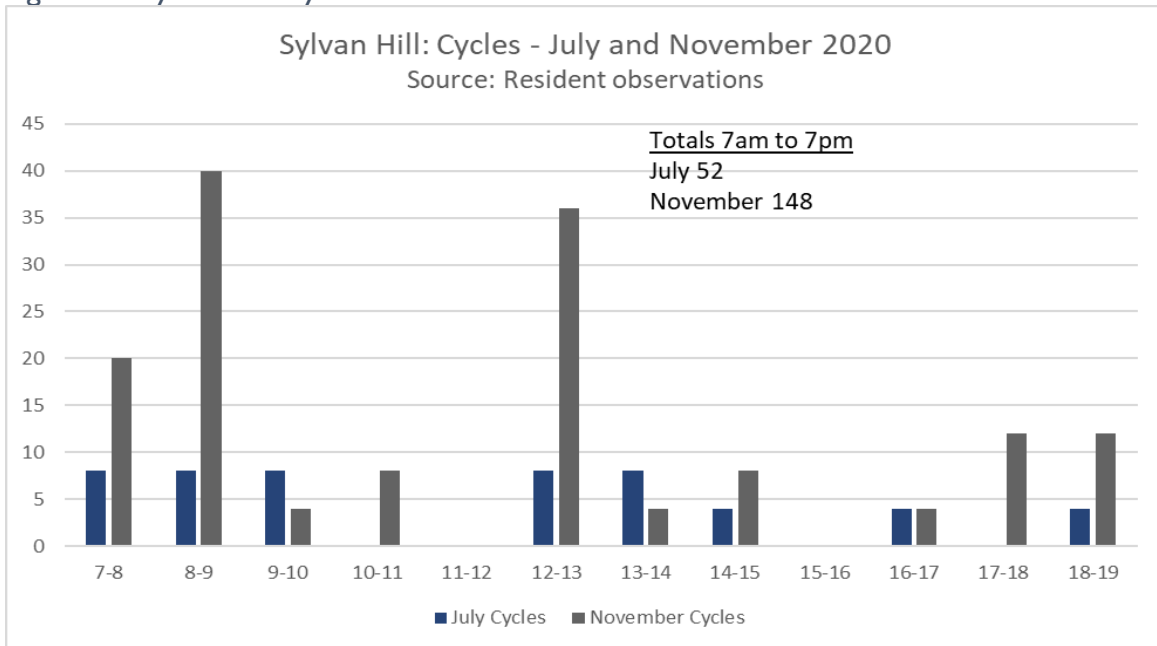


Figure 15 below shows the results of a pedestrian and cycle count at the Sylvan Hill/Auckland Road crossroads. There is no July data, but the results are nonetheless



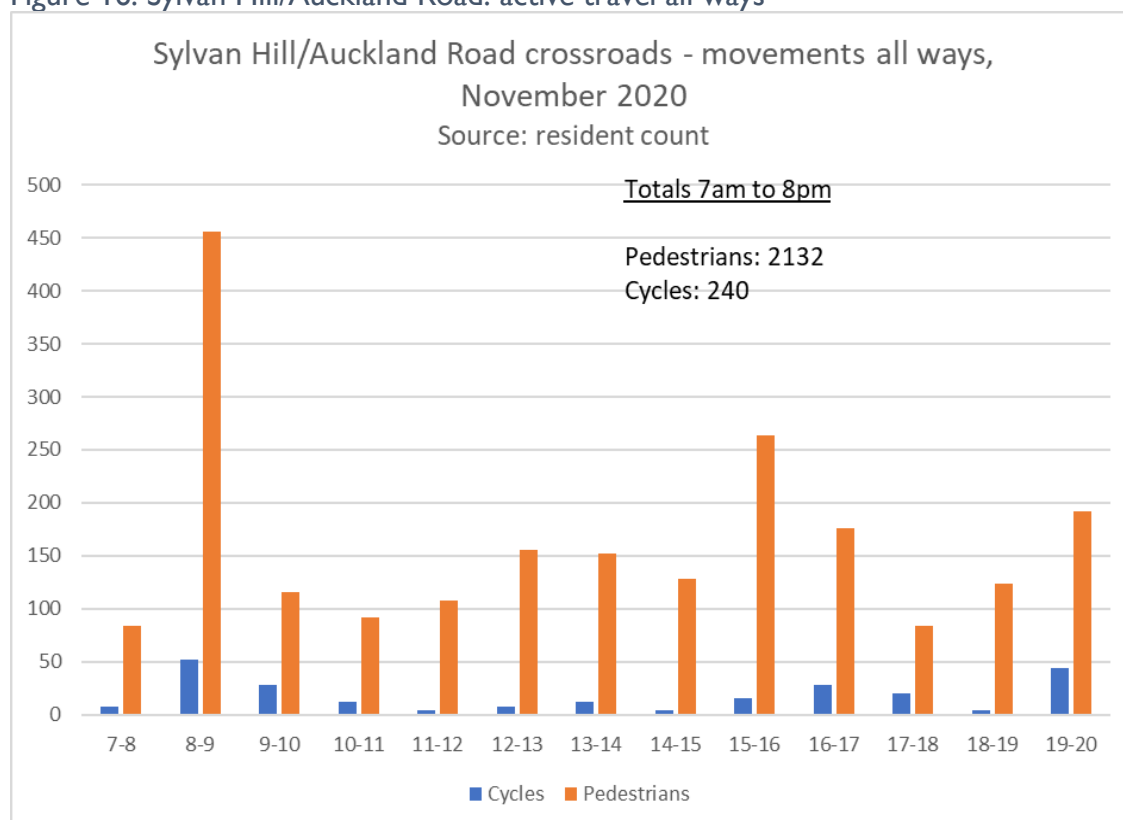
informative: some 240 cyclists passing through the junction during the course of the day, or around one every three minutes; and over 2100 pedestrians passing through the junction. As with the Sylvan Hill count, several hundred of these movements are of Harris students, but there is an enormous amount of general footfall at this location too.

The figures show the importance of Sylvan Hill and Sylvan Road as the main pedestrian access for HCACP students. Sylvan Hill is now a much safer environment for these high volumes of young pedestrians. It is possible to maintain social distancing because stepping in the road (with care) is now possible when it was impossible when the road was carrying several hundred vehicles an hour at peak times. Another important walking route to the school — from Anerley Road, via Hamlet Road and Maberley Road — is likewise much safer, since there is much less traffic using Hamlet Road.

The usefulness and safety of the designated cycle route through the neighbourhood (see pages 5 and 7 above) is much improved. This is reflected in the higher cycle numbers in the November traffic counts. A number of residents in middle or later years have commented that they have been able to cycle more, or resume cycling after having been frightened into stopping, and are consequently using bikes for local journeys which they would previously have made by car.

*“I am back on a bike after over three years of being scared off by dangerous traffic. With other filtered streets in South Norwood and Woodside, it is now possible to ride most of the way into Croydon on a regular trip for which I used to drive. I am also now doing my weekly supermarket shop by bike, rather than car. I enjoy my rides and feel fitter.”* (Resident, 50s)

Figure 16: Sylvan Hill/Auckland Road: active travel all ways



### *Public Transport*

The 410 bus was previously affected adversely by congestion in Hamlet Road and Southern Avenue and had to negotiate stretches of road narrowed by parked cars with high volumes of opposing traffic. It can now pass through the neighbourhood with a minimum of conflict and delay and does not have to queue to join the main roads.

### *Active travel for disabled people*

Much commentary on LTNs seems to rest on an assumption that the only way people with limited mobility can get around is by motor vehicle. In fact, people with limited mobility travel less by car than the rest of the population, both as drivers and passengers.<sup>35</sup> At least as much as everyone else in society, disabled people get around by a variety of means other than motor vehicles. Contrary to the stereotypes, many people with limited mobility can and do walk, often using aids like walking sticks and rollators, often with limitations on how far and fast they can go. People who cannot walk much, or at all, can likewise travel by a variety of means: manual or powered wheelchairs, or mobility scooters, most obviously. Contrary to much received wisdom, many disabled people can and do cycle, either on conventional bikes or a variety of adapted manual or e-assist bikes.<sup>36</sup> Like everyone else, most people with limited mobility use a variety of means of transport, depending on the length and nature of their journey and personal preference.

None of the non-car options are, of course, adversely affected by a Low Traffic Neighbourhood. Indeed, they are likely to be safer and more pleasant than in other neighbourhoods with high volumes of rat-running traffic. Tasks like crossing roads when there is a lot of traffic are much more difficult for disabled people walking or using mobility devices, because they usually cannot move as quickly as other people. They are more likely, as a consequence, to have to extend their journey to find a safe place to cross. In many ways, moving around on streets in residential neighbourhoods with high volumes of traffic may be more difficult than on main roads, which are engineered with features like pedestrian crossings and refuges. These real difficulties aside, like other non-motor users of streets, disabled people's experiences of walking, cycling or travelling by chair or scooter in Low Traffic Neighbourhoods are likely to be healthier and more pleasant because of the much lower levels of fumes, noise and aggressive behaviour from drivers.<sup>37</sup>

### *Well-being benefits*

There are well-evidenced associations between low noise, good air quality and regular moderate exercise, and physical and mental health (see pages 2-4 above). While it is very early days, it is reasonable to assume that, if the LTN continues, its direct impacts will over time translate into substantial well-being benefits.

Enabling children to walk or cycle to school is hugely beneficial for children's mental and physical well-being.<sup>38</sup> Multiple studies have shown the benefit active travel can have on children's academic attainment and behaviour for learning, as well as allowing them to build in physical activity to the daily routine. Furthermore, setting up healthy travel habits in childhood and adolescence leads to healthier adult travel habits.<sup>39</sup>

Women are more likely to be responsible for educational escort trips and are less likely to feel confident cycling on busier roads, especially when travelling with children.<sup>40</sup> Families with lower incomes are more likely to be dependent on walking and our most deprived communities are also up to six times more likely to see their children killed walking or cycling to school than our least deprived.<sup>41</sup>

Another reported benefit is sociability. In the quieter and less stressed streets, it is now possible to stop on the street and have a conversation with acquaintances or strangers. So long as socialising indoors remains restricted, this will be particularly important for maintaining social contact and hence well-being.<sup>42</sup>

The impact of the LTN is most noticeable on the roads which were previously busiest – the Hamlet Road, Auckland Road and Lancaster Road north-south route, and the streets connecting it to the main roads. However, the benefits are also experienced by people not living on those streets:

- The other streets, estates and cul-de-sacs in the neighbourhood. Their residents use what were the busier roads to enter and leave the neighbourhood. Nearly half of them do not have access to a motor vehicle so will normally either be walking, cycling or using the 410 bus. They are enjoying greater safety and convenience.
- People living outside the LTN but who travel through it. As mentioned above, large numbers of HCACP students and staff travel to and from the school through the LTN. People living outside the LTN walk or cycle through it to access amenities including the public open spaces, doctors' surgery, and places of worship.

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## Negative impacts of the LTN

A variety of negative impacts have been observed or claimed. They are:

- Longer journeys and inconvenience for residents who need to drive, including disabled people.
- A reduction in social safety for pedestrians in the neighbourhood.
- Obstruction and delays to emergency vehicles.
- Diversion of traffic on to the Bromley side streets adjacent to the northern boundary of the LTN.
- Diversion of traffic on to the surrounding main roads, with consequent adverse impacts on air quality, footfall and economic vitality in the 'Triangle' town centre of Crystal Palace.
- Diversion of traffic through other side streets, west of Church Road and South Norwood Hill.

In this section we review each in turn.

### *Longer journeys and inconvenience for residents who need to drive*

As implemented up to August 2020, it is indisputable that some driving trips have become longer. For example, a driving journey from Auckland Road just north of the Cypress Road junction to the Crystal Palace Triangle has increased from 0.8 miles to 1.4 miles. A journey from the same location to Croydon town centre has increased from about 3.5 miles to 5 miles. Especially at busy times, this may add appreciably to journey times. While the longer journey time might encourage some people to switch from private car to other modes, in line with the intention of the LTN approach, there is likely to be some genuine delay and inconvenience for, for example, key workers who need to drive for their work, and disabled people for whom a vehicle is the only feasible means of transport.

However, the option suggested in the consultation of allowing resident access controlled by ANPR would mitigate this adverse impact in many cases. The consultation is also proposing to move the bus gate on Auckland Road to a location which will allow motor access to the doctor's surgery from both directions.

Disabled people who need to drive for some or all journeys will have experienced some adverse impact because some trips within, in or out of the neighbourhood are somewhat longer than they were previously. However, all properties in the neighbourhood can still be accessed by vehicle. Any increased journey lengths for disabled people using vehicles need to be weighed up against the benefits of safer streets for disabled people travelling by other modes (see pages 24-5 above). If the current filters are replaced by ANPR-controlled access, there will be no adverse impact on disabled residents who use vehicles.

### *Social safety*

Claims have been made on social media that the reduction in motor traffic has resulted in the streets becoming unsafe for pedestrians, in terms of vulnerability to street crime. In our view, this is implausible. Government street design guidance suggests that high traffic tends to be associated with higher fear of crime by pedestrians, while pedestrians generally feel safe where their route is overlooked by buildings, and other people are using the street.<sup>43</sup>

Most or all of any walking trips along streets in the neighbourhood are continuously overlooked by buildings, and, as set out above, there have been dramatic increases in walking and cycling in the neighbourhood since the LTN measures were installed.

At the risk of stating the obvious, the greater risk to pedestrians, being hit by a motor vehicle, is now much reduced.

The LTN has not been in place long enough for any reliable before-and-after conclusions. But we observe that recorded crime in the square mile including the LTN has in fact fallen from around 850 a month in June and July to 669 in October.<sup>44</sup>

#### *Emergency services*

We assume the council has included emergency services in the current consultation. Clearly, their feedback, based on their operational data, should be conclusive in determining whether the changes have adversely affected their performance. So far as we are aware, despite frequent scaremongering on social media, there is no evidence of any material impact on emergency service response. Before and after comparisons in the Waltham Forest mini-Holland suggested that there was little impact on emergency service response, indeed a slight improvement.<sup>45</sup> The London Ambulance Service said at its annual meeting, in relation to schemes across London, that they were “not aware of any LTNs that have led to any patient safety concerns or any significant delays.”<sup>46</sup>

Emergency service vehicles can, of course, pass through the Auckland Road bus gate and, we assume, if necessary, could disregard the school street restriction on Cypress Road. If the council retains the LTN with Automatic Number Plate Recognition (ANPR)-controlled access at the current filters, there will, of course, be no reason why there should be any effect at all on emergency vehicles.

#### *Diversion to Bromley streets*

Some Bromley streets have unequivocally benefited from the LTN, certainly Hamlet Road. It no longer experiences high volumes of traffic, including long queues of standing vehicles eastbound. However, the closure of Croydon borough streets further south to through traffic means that the only route from Hamlet Road or Auckland Road to Church Road, avoiding the main A214, is via Belvedere Road, Cintra Park, Patterson Road and Milestone Road. Residents have reported increases in vehicle numbers on these streets, including, at times, standing traffic, and confrontations between drivers attempting to navigate between parked vehicles.

These streets certainly offer a route from the northern part of the LTN to Church Road without going on to the A214. They also offer a potential diversion northbound away from the A214 to Church Road. Observation of navigation apps suggests drivers are being routed away from the main road at times of high congestion, but not at other times. However, unlike the currently closed roads, they do not offer a useful diversion route for traffic heading towards Anerley Hill from Church Road, since Milestone Road can only be accessed after travelling all the way round the Triangle. Once a driver has reached the Westow Hill/Anerley Hill junction, continuing into Church Road and down Milestone Road would take much longer than simply continuing along the main road.

In September 2020, volunteers from Shape Better Streets carried out observations in these streets to assess the scale and nature of this problem. Their findings were as follows:

- There appears to be a morning peak between 8 and 9am, of around 250 vehicles in the hour, mostly uphill, taking the four observations together, though there clearly are significant upward spikes from time to time.
- It is highly likely that the reaction of navigation apps to congestion on Anerley Hill may contribute to the higher levels of traffic at this time. That said, observations at the Auckland Road junction suggest that around 40 % of uphill movements originate from the south, within the LTN, not from Anerley Road.
- At other times, including the evening peak, it looks like the traffic does not exceed 100 vehicles an hour and is often significantly less.
- Many more vehicles drive uphill than downhill, especially in the morning peak. Cycle and pedestrian movements are more balanced.
- From the data collected, a guesstimate of vehicles per day would be 1,000-2,000, compared with over 10,000 a day in the Croydon streets further south before the LTN was implemented. At worst, no more vehicles are using these streets than continue to use Auckland Road for access (Figure 12, page 20 above).
- At the morning peak, traffic levels are comparable, though somewhat lower, than those observed in Auckland Road and Sylvan Hill before the Croydon LTN was implemented. At other times, however, they are around 25 % or less of those observed in the Croydon streets.<sup>47</sup>

There is clearly a relationship between traffic on these streets and congestion on Anerley Hill. At the time of the observations, there was frequent congestion at peak times in the northern part of Church Road, back from the temporary lights then in place at the Westow Street junction. This tended in turn to knock on to Anerley Hill, as one of the roads feeding into Church Road. With the removal of the temporary lights, congestion on Church Road and Anerley Hill has reduced significantly (see following sections). So, the frequency and impact of episodes of high traffic on these streets should reduce (Figure 17).

Figure 17: Milestone Road, reported location of high volumes of diverted traffic, view west to Church Road, 8.45am, 3 December 2020



If the council introduces ANPR access on the streets accessing Church Road further south, the element of traffic which is using these streets for journeys from the neighbourhood to Church Road should reduce.

It remains to be seen how far there will be a recurrence of heavy traffic phases on these streets with the nearby main roads now being clearer following the removal of the Church Road temporary lights. However, there would be better answers to tackling the problem than allowing far larger volumes of traffic to start rat-running again through the streets further south. For example, a further modal filter (fixed barrier or ANPR device) could be installed, or the section of Milestone Road nearest Church Road could be made one-way from Church Road only. We understand, of course, that such measures would be a matter for Bromley Council.

#### *Diversion of traffic on to nearby main roads*

The Low Traffic Neighbourhood approach, by design, seeks to end the diversion of traffic from main roads, which are designated and designed to carry high levels of traffic, on to other streets, which are not, with the consequences explained above (pages 10-19 above).

However, if the result were that the main roads became unacceptably congested, that would clearly be a significant consequence to weigh up against the benefits set out above.

Before examining the evidence on this point, it is important to emphasise that the Triangle, South Norwood town centre and the main roads approaching them have experienced frequent serious traffic congestion for decades. This congestion is a consequence of high volumes of motor traffic on roads laid out in the 19<sup>th</sup> century with no conception of use by motor vehicles, let alone at today's traffic levels. While for much of the 168 hours in a week, these roads can and do carry high volumes of traffic without significant congestion, they become busy at peak times, and are vulnerable to incidental disruptions, for example road works, breakdowns, obstructive parking or collisions.

#### *Congestion during the experimental period*

Assessing the impact, if any, of the LTN measures on nearby main roads during the experimental period is very problematic:

- There was a general rise in traffic across London as lockdown restrictions eased, from May through to October.
- From March to late October, Church Road was reduced to alternate one-way working at the junction with Westow Street, and the right turn normally permitted from Westow Street was not available. This was because a car had collided with and seriously damaged a building, which had to be supported by a large scaffolding installation. As lockdown eased, before the completion of the LTN in early August, this was already resulting in lengthy queuing traffic along Church Road in both directions.
- At times during the experimental period, there have also been road works at various locations, including on South Norwood Hill during August, on at least two occasions at the crossroads in South Norwood, at Crown Point, and at the junction of Crystal Palace Park Road and Thicket Road.

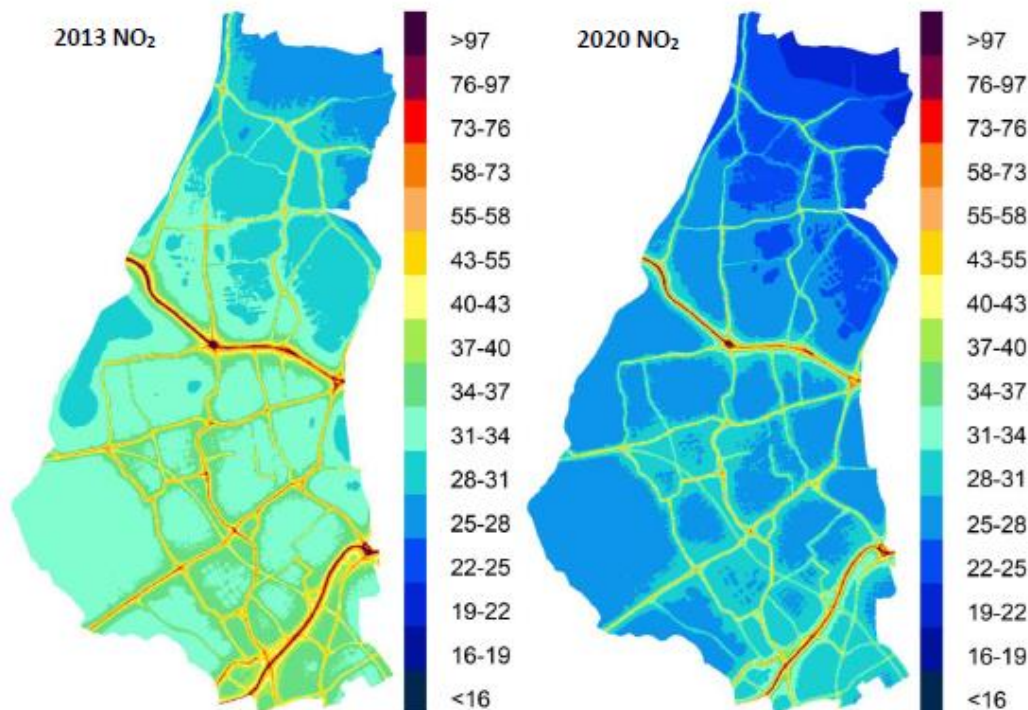
Aside from Church Road, which was badly affected by the alternate one-way restriction, it does not appear to us that, so far as one can generalise from the significant day-to-day variations, congestion on the main roads was any worse than it has been for many years. It would certainly go far beyond any evidence of which we are aware to suggest that vehicles no longer being able to drive through the LTN was decisive.

The removal of the scaffolding and one-way restriction in Church Road at the end of October made a big and immediate difference, however, to congestion in and around the Triangle. That suggests strongly that, to the extent vehicles are now using main roads which would otherwise have driven through the LTN, the main roads are able to carry the additional demand.

#### *Air quality*

Air quality on adjoining roads and in the two town centres is beyond doubt frequently poor. However, if, as we argue above, the heavy traffic and congestion which causes it cannot reliably be attributed to the LTN, opening the LTN roads again to rat-running would not assist. The Waltham Forest mini-Holland, including progressively rolling out LTNs, has reduced air pollution on 90 % of the borough's streets without worsening it on the main roads. (Figure 18)<sup>48</sup>

Figure 18: Change in Nitrogen Dioxide emissions, Waltham Forest, 2013-2020



#### *Local economy*

Opponents of the LTN claim it has damaged the economy of the Triangle. Their chain of logic appears to be:

1. Businesses suffering loss of footfall and turnover, because:
2. Streets are unpleasant and access difficult for car-borne customers, because:
3. The Triangle and approaching main roads are congested, because:



#### 4. The LTN has diverted traffic on to main roads.

We have seen nothing other than anecdote and assertion to support this line of argument. We have dealt above with the impact of the LTN on main road congestion (3 and 4). As for 1 and 2, so far as we are aware, only two retail or hospitality businesses have closed in the last six months. At weekends especially, the Triangle appears busy, in terms of walking footfall. Both closed premises have been taken over by new tenants. Despite the pandemic, several new businesses have opened in recent weeks. Tens of thousands of people live within walking distance; there are two nearby rail stations and numerous bus routes, and there is, so far as we know, no recent or reliable data on how customers travel to the Triangle. National research suggests retailers tend to over-estimate the proportion of customers travelling by car and under-estimate the proportion walking, cycling or using public transport.<sup>49</sup>

It may be that some businesses are experiencing reduced footfall and turnover. However, aside from the implausibility of attributing traffic congestion to the LTN, there are many other current factors affecting customers' ability to spend and shopping choices, including uncertainty about employment and earnings, and reluctance to visit busy environments. Older residents in the LTN have commented to us that they feel unable to maintain social distancing using the narrow pavements in the Triangle, particularly since the removal of the temporarily widened footways installed in the spring.

#### *Diversion of traffic into other residential neighbourhoods*

We are aware of concern about rat-running in two nearby neighbourhoods, the streets between Beulah Hill and Central Hill, around Harold Road, and west of South Norwood Hill. In the latter area, the council has installed modal filters which prevent Holmesdale Road from being used for east-west motor journeys, but the north-south streets remain open.

Rat-running may well have been increasing in these neighbourhoods, for the same reasons it had been increasing in the LTN before its inception (see pages 10-19 above). We are not aware of any evidence that the introduction of the LTN has made a significant difference, on top of the other factors contributing to congestion on main roads. In any event, a more effective response than re-opening the LTN to rat-running would be to make these neighbourhoods LTNs as well. We understand that some residents are beginning to campaign for that.

## Next steps

We hope and trust that, in the light of this submission and other contributions to the consultation, the council will decide to retain the LTN, with modifications.

We support the proposed re-siting of the bus gate to improve access to the doctors' surgery.

There are differences of view within our group about the respective merits of retaining physical barriers to vehicles and replacing them with ANPR-controlled access. As a group, we are content for the council to make that judgement, on the basis of the views of residents and the reasons they give for them. Both approaches would bring about the important result, which is a continuation of the reduction in vehicle movements brought about by the LTN.

If the LTN is retained, there will need to be strong communication with residents and others about the following:

- If the decision is to proceed with ANPR access, the location of 'gates', and how to obtain permits. The routes which will be open to those without permits should be well publicised and signed.
- Encouraging further increased take-up of cycling. From what we can see, there is not enough awareness either outside the LTN of the safe, pleasant, cycling routes which have now been opened up, nor inside and outside the LTN about how, combined with other measures along Holmesdale Road and Albert Road, it is now possible to ride most of the way to Croydon town centre with minimal use of busy main roads.
- Continued explanation of the intent and benefits of LTNs, and myth-busting.

As a group, we offer our support to work alongside the council in these communication challenges.

It is regrettable that relationships between the two neighbouring boroughs, Croydon and Bromley, have not been managed well. Neither council emerges with much credit from recent history. We hope that they will now start to co-operate to the benefit of residents, who are very much part of one community, whichever side of the boundary they happen to live. In particular, there should be continuing engagement with residents of Belvedere Road and other streets which have experienced periodic spikes of rat-run traffic and dangerous driving, to find a solution. We hope that the newly established cross-boundary councillor group can assist with this.

We do not accept that the LTN has worsened, or will, worsen congestion, air quality, traffic danger or other characteristics of surrounding main roads and town centres. If anything, the behaviour change which it is intended to bring about should help by encouraging shift from private cars to other modes. However, that does not alter the fact they have been for many years, and, without action, will continue to be, poor environments for people living and travelling on them by active modes. We encourage the council to develop plans to improve them, working with other boroughs around the Triangle. Again, the councillor forum is a good platform for making this happen.

## Conclusion

Over the last decade, rat-running in the neighbourhood has increased to the point where it has been having a completely unacceptable impact on residents' health and quality of life, because of air quality, noise, and traffic danger. These impacts affected the whole neighbourhood, not just the busy streets, since the latter are the main access routes from anywhere in the neighbourhood to nearby main roads and amenities. Over 40 % of households do not have access to a vehicle, so were experiencing nothing but detriment from uncontrolled motor vehicle access through the neighbourhood.

Traffic levels also made active travel unpleasant and unsafe, for residents and those passing through on foot or cycling. There could be no realistic prospect of the Lancaster Road/Auckland Road cycle route being brought up to the required London standards without either suppressing motor vehicle use of it, or engineering solutions such as cycle lanes and junction improvements which would both be hugely costly and not achievable without removing all or most on-street parking.

Safe active travel through the neighbourhood is critical, not only as a means of maintaining a decent cycling network in the borough, but as a means of enabling local families, inside and nearby the LTN, to use active travel to access the park, their children's school and other services and amenities.

The global climate emergency, and the weight of national, London and local policy on air quality, public health and local transport all point overwhelmingly towards the adoption of measures such as those put in place or now proposed for the LTN. Though far from perfect, the experimental scheme has shown that the approach can produce strong improvements in local health and well-being, and, only three months on, has produced very significant increases in active travel.

By contrast, the claims of opponents about the adverse consequences of the scheme are almost entirely based on assertion and anecdote. The concerns which are more credible: disproportionate diversions for residents who need to use vehicles, including disabled residents, and the intermittent heavy traffic on some of the Bromley streets, can be addressed effectively without reopening the whole neighbourhood to rat-running.

If the LTN trial is removed, we can expect traffic volumes and speeds once again to return to levels which would have huge adverse impacts on residents' health and well-being and make healthy travel choices less convenient, less attractive and less safe.

Children and young people cannot vote and families with young children are often least able to participate in debate around local issues. These voices are so often lost in our local decision-making processes. They must not be ignored.

The streets in the LTN can either be a pleasant, safe neighbourhood to live, and an active travel corridor. Or they can be a congested, polluted, dangerous, bypass for the Triangle and the main roads. They cannot be both. There is no credible basis for the council choosing the latter.

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