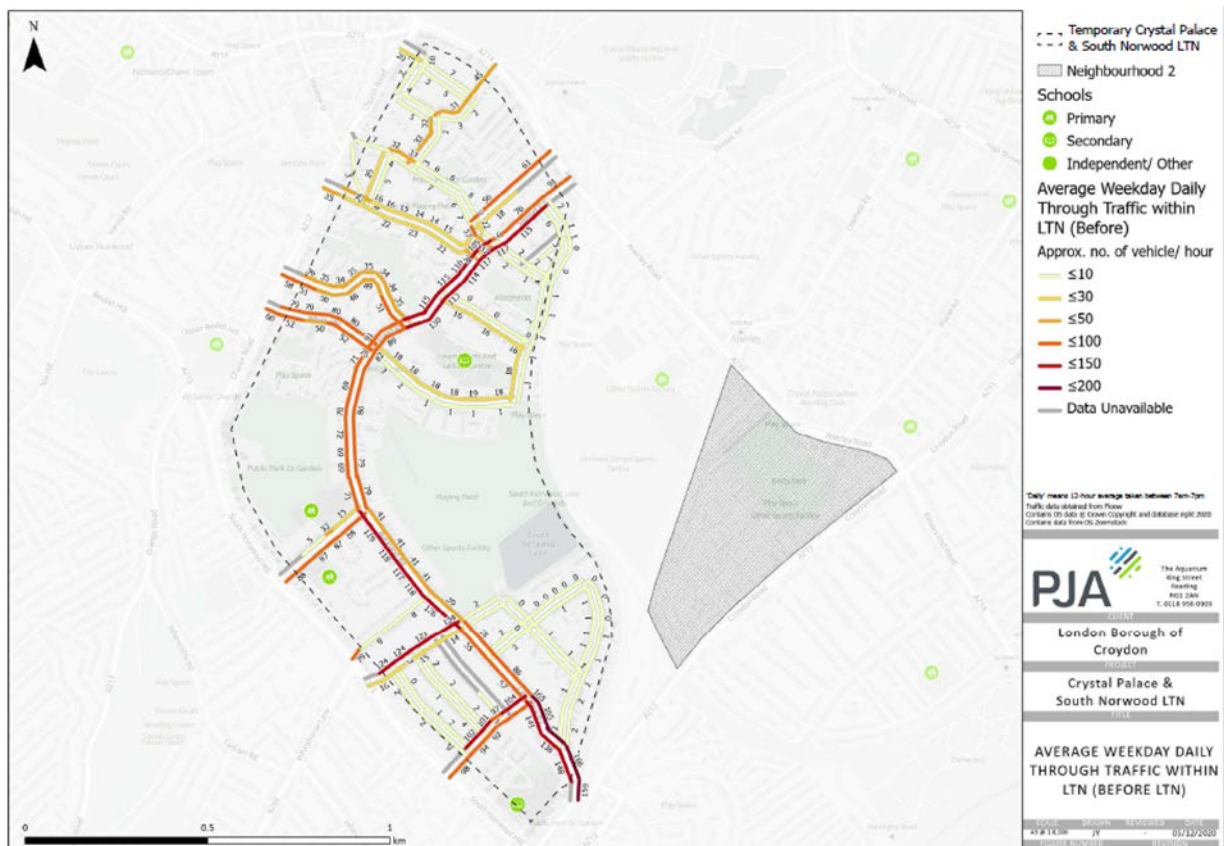


### **Analysis of Traffic Effects**

#### The Effects Arising from the Implementation of the Temporary LTN

- 1.1. As the Covid19 Pandemic worsened, and the UK was entering the first lockdown, traffic surveys which were in the process of being commissioned, were not pursued. As the temporary LTN grew in stages from South Norwood towards Crystal Palace, officers began to consider how the effects of the temporary measure might be assessed. PJA consultants were commissioned to use 'Flow' data (derived from in vehicle telematics equipment) and other data to paint a picture of the traffic effects arising whilst the temporary measures have been in place. The 'Flow' data can only paint a picture in broad brush strokes.
- 1.2. Because of how the 'Flow' data are derived, they are collected over extended time periods. 'Flow' data for the period 'before the LTN', was taken from February 2019 to March 2019. This was before any temporary measures went into Lancaster Road and was also before the temporary traffic signals were installed in Church Road. The data used to assess the effects 'during the LTN' were drawn from the period June to November. This period starts prior to the measures being placed in Sylvan Hill, Stambourne Way and Fox Hill (and hence the results have to be approached with caution). It also covered the period when the temporary traffic signals were in Church Road, severely constraining the capacity of the A212 / A214. It was also 'During Covid Pandemic' when traffic levels dropped sharply at the start of the first Lockdown but from April began to increase again.
- 1.3. The Flow data were used to assess the number of vehicles using streets within the Temporary LTN to pass through the LTN without stopping at a destination within the LTN, or starting the journey in the LTN. The image below is taken from the PJA report. The darker colours indicate the higher through traffic flows. The figures are vehicles per hour in each direction, averaged over a 12hr weekday day. The pattern it shows pre Temporary LTN reveal high flows in Hamlet Road and Auckland (north) with some of this flow dissipating via Sylvan Hill, Stambourne Way and Fox Hill. Hence the flow further south in Auckland Road is lessened somewhat. The image does indicate high traffic flows in Lancaster Road, (particularly the southern section, and in Southern Avenue).

Figure 1. Average Weekday Through Traffic Before the Temporary LTN



4.4 PJA compared the:

- daily traffic flows; and
- traffic flow in the morning and evening peaks averaged over the three hours of each peak

before and 'during' the Temporary LTN. As the 'During LTN' data were collected from June, but Sylvan Hill, Stambourne Way and Fox Hill were not closed until August, the 'During LTN' shows a considerable number of through vehicles using these streets. (The figures will have been further heightened due to traffic using these streets between June and August to avoid the queues in Church Road A212 and elsewhere, arising from the scaffolding and temporary traffic signals in Church Road) Consequently, it is likely over representing the flow in Auckland Road north 'during the Temporary LTN', and under representing the flow in Belvedere Road, Cintra Park, Patterson Road and Milestone Road in the Borough of Bromley. The consult report refers to 'an anomaly' appearing on Hamlet Road. However, the picture painted here is as one might expect. Hamlet Road would have received increased flows between June and July from traffic using Sylvan Hill and Stambourne Way to avoid the queuing in Church Road. After the closure of Sylvan Hill, Stambourne Way and Fox Hill, Hamlet Road would have continued to carry traffic seeking to avoid the historic que on Annerley Hill, but which was then using Belvedere and Milestone etc. Roads. The picture is probably most accurately painted south of the temporary closure / bus gate in Auckland Road.

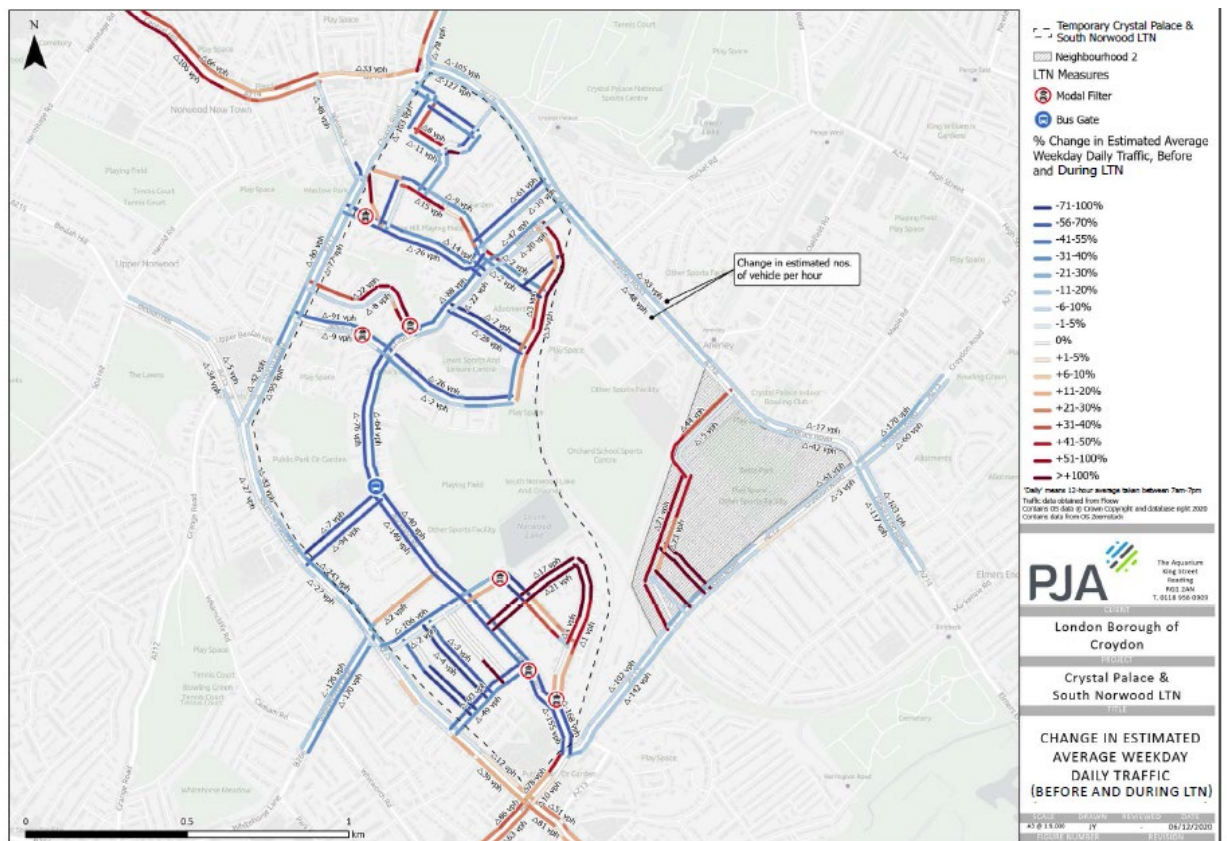
The PJA report includes a table comparison of flow in the peaks before and during the Temp LTN, on 'Roads commonly used by through traffic'. The likes of Belvedere and Milestone etc. Roads are not included in the table as these were previously not 'commonly used by through traffic'

Table 1 Comparison of through traffic flows 'Before' and 'During' the Temporary LTN

Roads commonly used by through traffic within LTN (excluding roads with anomaly)		AM Peak		PM Peak	
		Before (vph)	During (vph)	Before (vph)	During (vph)
Waldegrave Road	NB	105	8	96	15
Cintra Park-Tudor Road	NB	84	4	29	0
Stambourne Way	WB	37	12	99	33
	EB	90	0	20	12
Auckland Road (Sylvan Hill-Cypress Road)	NB	96	8	132	20
	SB	70	24	155	37
Cypress Road	WB	206	12	87	37
Auckland Road (Cypress Road-Woodvale Avenue)	NB	283	8	158	28
	SB	38	12	88	5
	EB	250	4	201	6
Woodvale Avenue	WB	20	8	96	30
	EB	55	4	201	6
Southern Avenue	WB	20	8	96	26
	NB	263	4	182	9
Lancaster Road	SB	111	4	364	7

- 1.5 The 'Flow' data analysis suggests that during weekdays average traffic volume reduced in most streets including on the A Roads surrounding the LTN during the period of the LTN, compared with before (with some important exceptions). The blue in the image below indicates reductions, the red an increase. (the 'red' / increase indicated in Stambourne Way will be arising from vehicles diverting through it between June and August to avoid the effects of the scaffolding and temporary signals is Church Road)

Figure 2 Change in Estimated Average Weekday Traffic Flow



- 1.6 In the morning and evening peak periods, some links on the surrounding 'A' Roads experienced an increase in traffic whilst others a decrease 'During Temporary LTN' compared with before. As the daily average was in the large part lower 'during the Temporary LTN' compared to before, it is suggested that the increase in traffic on some links during the peaks was perhaps arising from people choosing the car over public transport for the commute. The reason for some links experiencing a decrease may have been due to the 'during covid' car based commuter journey pattern being different to that pre-covid. People would probably also have adjusted their journeys in response to the delays caused by the temporary signals in Church Road.
  
- 1.7 The 'Flow' data indicate that before the LTN period there was a flow of through traffic from Church Road via Fox Hill and Cintra Park (Bromley) to Anerley in the morning peak which was on a par with the flow from Auckland Road via Sylvan Hill to Church Road. This stopped 'During the Temporary LTN', to be replaced by vehicles using Belvedere Road, Cintra Park, Patterson Road and Milestone Road. This is a movement repeatedly drawn to the attention of Council officers, Members and others by the residents of these streets. The magnitude of this movement is understated in the data, due to the period of the 'During LTN' starting in June, when Fox Hill, Stambourne Way and Sylvan Hill where still open to through traffic (until August).

- 1.8 Bromley Council officers requested that the study also look at Selby Road and Seymour Villas in Bromley, a longstanding route (through in some places very narrow streets) used by drivers seeking to avoid the queues at the junction of Annerley Road A214 and Croydon Road A213 (When the DfT last surveyed traffic in 2009 at Seymour Villas to estimate annual average daily traffic flows the estimate was 1600 vehicles eastbound and 1616 westbound). The 'Flow' data analysis indicates an increase in traffic using these and a couple of connecting streets when traffic on other streets had fallen.
- 1.9 PJA supplement the Flow data with bus journey time data provided by TfL. They use both data sets to paint the picture of change at section 3.5 ('Discussion') of the report and draw their conclusions at section 4. They also make recommendations at section 4, including that the Council considers monitoring the effects of the temporary LTN comprehensively, with ATCs after the traffic flows have returned to normal. The Appendix to the report summarises the results of Traffic surveys undertaken after the scaffolding was removed from Church Road but still in second Lockdown, for comparison purposes during the recommended experiment / trial LTN. The surveys are however providing some useful indications here and now as they are beginning to be analysed.
- 1.10 Traffic entering and exiting Milestone Road at its junction with Church Road was recorded on weekdays (24 hours) at the end of November / beginning of December. The average daily flows recorded in Milestone Road were 1011 vehicles per day northbound and 289 southbound (the latter is assumed not to be traffic travelling through the area/rather it has a destination in the Temporary LTN). The DfT count traffic on one street within the Temporary LTN, namely on Stambourne Way, PJA estimated annual daily traffic flow in Stambourne Way, based on the DfT 2019 count was 1768 total vehicles. This provides a useful comparison. However, making the comparison is not intended to suggest that the level of traffic currently using Milestone Road and the streets connecting to it, is acceptable.
- 1.11 TfL has provided its own monitoring analysis at Appendix 4(b). The TfL analysis relies primarily on bus journey time data provided by the iBus system. These are the same data used by PJA consultants as part of their analysis, except the TfL analysis is more recent and so includes data gathered after the removal of the traffic signals from Church Road.

#### Cycling and Walking in Auckland Road

- 1.13 The Council commissioned surveys including of pedestrians and cyclists in Auckland Road at Cypress Road carried out over three separate days:
- |          |                  |           |         |     |        |                             |
|----------|------------------|-----------|---------|-----|--------|-----------------------------|
| Saturday | 28 <sup>th</sup> | November, | weather | was | mainly | overcast                    |
| Tuesday  | 1 <sup>st</sup>  | December, | weather | was | mainly | bright                      |
| Thursday | 3 <sup>rd</sup>  | December, | weather | saw | light  | rain and drizzle throughout |

The Open Our Roads group also carried out a cycling survey over two days, 14<sup>th</sup> and 15<sup>th</sup> September, with both surveys covering the hours 07:00 – 10:00.

### Cycling Survey

The survey undertaken by residents at the Cypress Road junction on the weekday (the 14<sup>th</sup>) recorded a total of 49 cycling journeys between 7am and 10am. The weather on the day of the survey was bright and sunny.

The survey carried out by the Council, over the same 7am to 10 period saw:

1<sup>st</sup> December 37 journeys

3<sup>rd</sup> December 26 journeys

The downturn in cycling at this time can be considered to be as a consequence of darker mornings, colder weather and, particularly on 3<sup>rd</sup> December, rain. There is also the effect of the second lockdown which may have meant that fewer people had a need to travel at that time.

### Pedestrian Survey

The pedestrian count shows that the presence of two local schools within the area has an effect on the numbers of children and teenagers walking through the area during the week, their numbers dropped significantly at the weekend. It should also be noted that the poor weather on 3<sup>rd</sup> also saw a significant drop in the number of pedestrians (across all classes) accessing the local area.