Appendix K Monitoring Report

Lewisham & Lee Green Low Traffic Neighbourhood

Date: November 2021

1. **INTRODUCTION**

- 1.1.1 The London Borough of Lewisham introduced the Lewisham and Lee Green Low Traffic Neighbourhood as a response to Government encouragement, following the outbreak of the COVID-19 pandemic.
- 1.1.2 The Lewisham and Lee Green Low Traffic Neighbourhood (LTN) was first introduced in July 2020. At the time, in response to the pandemic, the Government was encouraging councils to make significant changes to their road layouts to give more space to cyclists and pedestrians and urgently put measures like LTNs in place.
- 1.1.3 The primary aim was to encourage people to walk and cycle more, and to do so safely whilst maintaining social distancing, as more of us were working from home and exercising and shopping in our local area.
- 1.1.4 LTNs also aim to improve air quality and public health, reduce air and noise pollution, and make roads safer, which are all in line with the Council's longer term aims for the whole borough LTNs achieve this by restricting motor vehicle through traffic within a residential area while keeping through movement for pedestrians and cyclists.
- 1.1.5 The London Borough of Lewisham published a monitoring strategy in October 2020 for the Lewisham and Lee Green Low Traffic Neighbourhood (LTN), which identified a plan for measuring and trying to understand the impacts of the scheme using a range of metrics. A copy of the strategy can be found here. The identified metrics were:

1.2 Automatic Traffic Count Data:

1.2.1 This is undertaken using pneumatic tubing that runs across the width of the road. This is installed on a temporary basis over a period of seven consecutive days to collect traffic data such as vehicle classification, vehicles flow count and vehicles speed data. It can also be undertaken via a radar device that attaches to street furniture, but is more commonly undertaken via pneumatic tubes.

1.3 Bus Journey Time Data:

1.3.1 Transport for London (TfL) collect network performance data on buses using automated recording equipment on the buses and on street furniture to understand the overall journey time of a route, minus the dwell time spent in bus stops. This data enabled the council to review and calculate the time it takes for a specific route journey, averaged over a period covering its entire length or predetermined length between two points.

1.4 Air Quality Data

- 1.4.1 Air Quality Data is used to help communicate the severity of air quality levels for pollutants to the public and the risks they may carry. To determine air quality in an area, pollutant concentrations are measured, analysed and reported. The calculations are based on the average concentrations of a particular pollutant measured over a period.
- 1.4.2 There are two main forms of measurement device for air quality data:
- 1.4.3 Real time sensors, these are small sensors that can be installed on street furniture that offer the ability to 'live' track pollutant levels. They were first developed for workplaces, and they can give misleading results when used to measure the pollution that we experience in everyday London.
- 1.4.4 Diffusion tubes, also known as diffusive samplers, are widely used for indicative monitoring of ambient nitrogen dioxide (NO₂) in the context of review and assessment. They are particularly useful in areas of high NO₂ concentration particularly when dealing with sources such as traffic emissions, which do not change very much from day to day.
- 1.4.5 For further information on Air Quality in the borough please refer to https://lewisham.gov.uk/airquality.
- 1.4.6 It is important to note that any transport related data capture has limitations and does not consider external factors on the network such as road works, collisions, broken down vehicles etc. However data capture during a national pandemic is not representative of normal conditions, due to the tightening and easing of lockdown

- measures by Government which have severely influenced travel behaviour; resulting in at times volatile results.
- 1.4.7 The monitoring data has been undertaken over a period that is not under 'normal' conditions with frequent changes in restrictions on movements and social distancing. In November 2021 Although conditions have now improved, as there are currently no restrictions on movement or social distancing, travel patterns are still likely to be different to pre pandemic levels with many people still working from home and choosing different modes and times to travel.
- 1.4.8 Therefore the data produced/ analysed in this report is to aid in the monitoring and evaluation of the scheme, with the knowledge that its holds some limitations.
- 1.4.9 The below timeline summarises the measures introduced as well as the COVID-19 restrictions introduced by the UK Government.

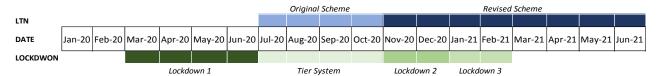


Figure 1 – Timeline of Measures and UK Government restrictions.

- 1.4.10 During this time there have been several notable changes such as the opening and closing of schools, restrictions on public transport patronage numbers and encouragement where possible to work from home. This has resulted in unpredictable travel patterns, with many people choosing to walk and cycle over public safety concerns when needing to travel. This fear also resulted in people opting to drive as an alternate to the reduced capacity levels on public transport, resulting in an increase in vehicle movements at times.
- 1.4.11 As stated in para 1.4.7 travel patterns are still in flux with many people still working from home and establishments such as schools have and may continue to close depending on the level of Covid-19 infections and Government advice. We are only able to provide comments based on the data rather than more general observations.

2. **AUTOMATIC TRAFFIC COUNT DATA:**

- 2.1.1 Automatic Traffic Count data was available prior to the introduction of the LTN for some locations as part of a scheme that was being developed by the Council prior to the pandemic called the 'Healthy Neighbourhoods' scheme (further information on this scheme can be found here). Data for these locations was collected over a consecutive seven day period starting on the 23rd March 2019, however when the original scheme was being developed it was understood that this did not cover the entire area and to gain a better understanding in the time frames outlined by Government additional data was collected to provide indicative information based on street similar streets. This data was collected over a consecutive seven day period starting on the 25thJune 2020. From this point on this data will be referred to as pre-scheme data.
- 2.1.2 As a part of the original monitoring report which can be found here, an additional data capture was undertaken in October 2020over a consecutive seven day period starting on the 28th September 2020 This data forms a datum which covers the 'original LTN scheme' that was introduced in July 2020.
- 2.1.3 The scheme was revised in November 2020 for several reasons, one of the reasons was in response to resident concerns and data that indicated that vehicle flows, journey times and bus journey times could be increasing as a consequence of the scheme. The original scheme was therefore revised with the following changes:
 - Manor Lane, the existing camera adjusted to allow vehicles to pass through in both directions, except heavy goods vehicles (HGVs)
 - Manor Park, the existing camera adjusted to allow vehicles to travel northbound (towards Lee High Road). The camera will enforce vehicles who try to travel southbound.
 - Cameras on Ennersdale Road and Dermody Road adjusted to allow vehicles to travel one-way west to east (from Hither Green towards Lee Green). The camera will continue to enforce vehicles who try to travel east to west (from Lee Green towards Hither Green)
 - Leahurst Road, the fire gate was removed to allow vehicles to travel west to east (from Hither Green towards Lee Green). A new camera to

- enforce this restriction. The width restriction was replaced by a 7.5 tonne weight restriction which is also enforced by camera.
- 2.1.4 A final survey was undertaken in February 2021, over a consecutive seven day period starting on the 4th February 2021. These surveys were outlined in the monitoring report as a datum collection point which would provide an insight into the operation of the 'revised LTN scheme' as introduced in November 2020.
- 2.1.5 Traffic volume has been monitored across 55 locations within and outside of the LTN at different periods of time to understand the effects of the scheme. Comparable data that was available has been presented below (Table 1, Table 2). Additional surveys were undertaken during the course of the scheme however these are at locations that were identified during the course of the scheme and have no comparable pre-scheme data available (Table 3).
- 2.1.6 Table 1 below details pre-scheme data for locations where prescheme data was recorded in March 2019 and that detail that average traffic volumes on the roads surveyed have reduced by approximately 69% between March 2019 and February 2021. March 2019 recorded an average of 3352 vehicles per day per road, before falling to 1227 in October 2020 during the original LTN scheme and 1038 in February 2021 during the revised LTN scheme. Morley Road, North of Dermody Road showed the greatest decrease of 8353 vehicles per day and Pitfold Road recorded the smallest decrease of 64 vehicles per day. None of these sites recorded an increase in volume.

Location	Before LTN Mar 19	Original Scheme Oct 20	Revised Scheme Feb 21
Dallinger Road	1337	434	236
Cambridge Drive	1436	417	233
Dorville Road West of Cambridge Drive	2626	644	380
Dorville Road West of Leyland Road	3215	1765	1021
Eastdown Park	8970	4165	3782
Effingham Road	947	619	374
Ennersdale Road	8895	1532	1674
Gilmore Road	3153	3235	1671
Handen Road	1797	895	614
Holme Lacey Road	1523	379	161
Manor Lane Terrace	1274	903	634
Leahurst Road South of Longhurst Road	7640	683	1656
Leahurst Road North of Ennersdale Road	2002	1025	1148
Leyland Road North of Osberton Road	813	147	296
Leyland Road North of Upwood Road	276	251	133
Longhurst Road	3911	607	961
Manor Lane	2642	332	255
Manor Park North of Northbrook Road	3839	1429	1653
Manor Park West of Thornwood Road	3923	1611	1181
Micheldever Road	3193	1108	952
Morley Road North of Dermody Road	10672	2337	2318
Morley Road South of Lingards Road	3883	2764	2414
Newstead Road	1673	881	668
Pitfold Road	245	240	181
Southbrook Road	4369	2543	1759
Staplehurst Road	4761	1154	1339
Taunton Road	2781	1484	1184
Upwood Road	3403	1255	667
Woodyates Road	1998	734	555
Average	3352	1227	1038
Difference	-	-2125	-2314
% Change from Mar 19	-	-63.39	-69.03

Table 1 – Pre-Scheme data collected in March 2019

Location	Before LTN Mar-19	Original Scheme Oct 20	Revised Scheme Feb 21
Within the LTN			
Ballinger Road	1337	434	236
Cambridge Drive	1436	417	233
Dorville Road West of Cambridge Drive	2626	644	380

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Dorville Road West of Leyland Road	3215	1765	1021
Eastdown Park	8970	4165	3782
Effingham Road	947	619	374
Ennersdale Road	8895	1532	1674
Gilmore Road	3153	3235	1671
Handen Road	1797	895	614
Holme Lacey Road	1523	379	161
Lane Terrace	1274	903	634
Leahurst Road South of Longhurst Road	7640	683	1656
Leahurst Road North of Ennersdale Road	2002	1025	1148
Leyland Road North of Osberton Road	813	147	296
Leyland Road North of Upwood Road	276	251	133
Longhurst Road	3911	607	961
Manor Lane	2642	332	255
Manor Park North of Northbrook Road	3839	1429	1653
Manor Park West of Thornwood Road	3923	1611	1181
Micheldever Road	3193	1108	952
Morley Road North of Dermody Road	10672	2337	2318
Morley Road South of Lingards Road	3883	2764	2414
Newstead Road	1673	881	668
Pitfold Road	245	240	181
Southbrook Road	4369	2543	1759
Staplehurst Road	4761	1154	1339
Taunton Road	2781	1484	1184
Upwood Road	3403	1255	667
Woodyates Road	1998	734	555

2.1.7 Table 2 below details pre-scheme data for locations where pre-scheme data was recorded in June 2020 and highlights that vehicle movements on these roads has reduced on average by approximately 20% between June 2020 and February 2021. In June 20 daily traffic volume was an average of 1867 across all roads, rising slightly to 1944 during the original LTN scheme in October 2020 and then falling to 1493 in the revised LTN scheme in February 2021. Belmont Park, Brandram Road and Springrice Road had the greatest decrease

- in vehicle flow with a reduction of 1129, 1112 and 1312 vehicles per day respectively.
- 2.1.8 Four locations however recorded an average increase in traffic of 16% between June 2020 and February 2021, these were Benin Street +149 vehicle movements per day, Courthill Road +813 vehicle movements per day, Harvard Road +5 vehicle movements per day, Hither Green Lane +98 vehicle movements per day and Manor Lane Terrace (east of Abernathy Road) +105 vehicle movements per day.
- 2.1.9 Reviewing these locations further Benin Street, recorded its increase in vehicle movements off peak, with 85% of the increased movements being between 10:00 and 16:00. Peak travel times between 07:00 and 10:00 noted an average reduction of 4 vehicle movements an hour and between 16:00 and 19:00 noted an average increase of 13 vehicle movement an hour.
- 2.1.10 Courthill Road recorded its increase in vehicle movements throughout the entirety of the day, though during the June 2020 surveys it is noted that there was some data loss from the pneumatic tube recording device for the vehicles travelling westbound for a period of approximately 2.5 days. Given the limitation with time and the inability to redo the survey the data has been presented as an increase, acknowledging the data limitation.
- 2.1.11 Harvard Road recorded its increase in 5 vehicle movements during the hours of 02:00 and 04:00 and as such will not impact the overall vehicle movements on this road.
- 2.1.12 Hither Green Lane recorded its increase in vehicle movements during peak travel times, with 76% of the increased movements being between 07:00 -10:00 and 16:00-19:00. Peak travel times between 07:00 and 10:00 noted an average increase of 73 vehicle movements an hour and between 16:00 and 19:00 noted an average increase of 76 vehicle movement an hour.
- 2.1.13 Manor Lane Terrace recorded its largest increase in vehicle movements during off peak travel times, with 35% of the increased movements being between 14:00 -17:00. The remainder were randomly distributed throughout the rest of the day.

Location	Before LTN Jun 20	Original Scheme Oct 20	Revised Scheme Feb 21
Ardgowan Road	291	803	242
Belmont Park	2324	1358	1195
Benin Street	364	562	513
Blessington Road	933	1140	861
Brandram Road	2325	2199	1213
Campshill Road	1509	1427	1289
Courthill Road	7252	9804	8065
Dacre Park	1607	2033	919
George Lane	2347	1793	2049
Harvard Road	589	568	594
Hither Green Lane	7275	7690	7373
Lanier Road	1126	550	402
Longbridge Way	2157	2483	1203
Manor Lane Terrace, East of Abernethy Road	396	512	501
Manor Lane, South of Dallinger Road	4621	2389	3667
Minard Road	268	1131	231
Nightingale Grove	1524	1501	893
Old Road	667	343	282
Radford Road	648	672	540
Springbank Road North of Duncrievie Road	1574	2029	1136
Springbank Road, South of Torridon Road	1055	1559	938
Springrice Road	1910	2304	598
Thornford Road	2058	1920	1464
Torridon Road	3221	3080	2289
Wellmeadow Road, South of Hither Green Lane	214	262	175
Wellmeadow Road, South of Torridon Road	294	443	191
Average	1867	1944	1493
Difference	-	77	-374
% Change from Jun 20	-	4.12	-20.03

Table 2 – Pre-Scheme data collected in June 2020

Location	Before LTN Mar-19	Original Scheme Oct 20	Revised Scheme Feb 21
Within the LTN			
Ballinger Road	1337	434	236
Cambridge Drive	1436	417	233
Dorville Road West of Cambridge Drive	2626	644	380
Dorville Road West of Leyland Road	3215	1765	1021
Eastdown Park	8970	4165	3782
Effingham Road	947	619	374

Ennersdale Road	8895	1532	1674
Gilmore Road	3153	3235	1671
Handen Road	1797	895	614
Holme Lacey Road	1523	379	161
Lane Terrace	1274	903	634
Leahurst Road South of Longhurst Road	7640	683	1656
Leahurst Road North of Ennersdale Road	2002	1025	1148
Leyland Road North of Osberton Road	813	147	296
Leyland Road North of Upwood Road	276	251	133
Longhurst Road	3911	607	961
Manor Lane	2642	332	255
Manor Park North of Northbrook Road	3839	1429	1653
Manor Park West of Thornwood Road	3923	1611	1181
Micheldever Road	3193	1108	952
Morley Road North of Dermody Road	10672	2337	2318
Morley Road South of Lingards Road	3883	2764	2414
Newstead Road	1673	881	668
Pitfold Road	245	240	181
Southbrook Road	4369	2543	1759
Staplehurst Road	4761	1154	1339
Taunton Road	2781	1484	1184
Upwood Road	3403	1255	667
Woodyates Road	1998	734	555

2.1.14 Although there is no comparable pre-scheme data Table 3 below outlines data for additional locations that was collected during the original LTN scheme and then again during the revised LTN scheme during October 2020 and February 2021 respectively. The data reveals that vehicle volume has fallen by an average of almost 800 cars a day, this is on average a 25% reduction. Only one location noted a small increase, Hither Green Lane North of Brightside Road +140 vehicles per day, just under 5%. It is however noteworthy that the increase observed north of Brightside Road on Hither Green Lane was not recorded at the survey location north of George Lane on Hither Green Lane. This location recorded a reduction in average daily movements of -407 vehicles per day, or just over 11%.

Location	Original Scheme Oct 20	Revised Scheme Feb 21
Ardgowan Road	13226	8931
Beacon Road West of Ardmere Road	548	283
Broadfield Road	866	591
Hither Green Lane North of Brightside Road	2930	3070
Hither Green Lane North of George Lane	3932	3525
Laleham Road North of Brownhill Road	3081	2438
Laleham Road North of Elmer Road	2052	1612
Minard Road	6143	4118
Torridon Road	481	280
Veradant Lane	391	209
Wellmeadow Road	289	218
Average	3085	2298
Difference		-788
% Change from Oct 20		-25.53%

Table 3 – Comparison of original scheme vs revised where no pre scheme data was captured

2.1.15 Table 4 below provides a snapshot of vehicle movements on the boundary roads; this data was captured using radar based traffic surveys as opposed to the pneumatic tubes as used in Tables 1, 2 and 3. Similar to the data recorded in Table 3 this data has no comparable data sets, inaccuracies in data and the cost of these surveys resulted in them not being repeated. The below table will however provide a snapshot of some results recorded.

Location	Before LTN Jun 20 Flow	Before LTN Jun 20 Speed
Brownhill Road	18762	21.1
Lee High Road near Burnt Ash Road	14924	20.0
Lee High Road near Manor Road	18952	21.2
Burnt Ash Hill near Glenmere Row	13731	23.2
Burnt Ash Hill near Kimbolton Close	12586	26.0

Table 4 – Snapshot of Radar data collected in June 2020

2.2 Traffic Speed Monitoring

2.2.1 Traffic speed was also monitored at the same 55 locations. Prescheme surveys can also be found from March 2019, and June 2020, when COVID-19 restrictions were in place. Comparable data that is

- available has been presented below (Table 5, Table 6). Additional monitoring has taken place on other roads with no comparable prescheme data available (Table 7).
- 2.2.2 Table 5 below details vehicle speeds for locations where pre-scheme data was recorded in March 2019 and highlights that on average vehicle speeds on these roads have reduced by approximately 11%, or 2.1mph between March 2019 and February 2021, this reduction was also noted during the original scheme surveys in October 2020. Five locations however recorded a small increase in average speed of approximately 10%, or 1.5mph, though none of these locations noted speeds in excess of 20mph. They were recorded on Eastdown Park +2.9 mph to 18.4mph, Gilmore Road +1.9mph to 19.1mph, Leahurst Road (south of Longhurst Road) +2.1mph to 16.7mph, Leahurst Road (north of Ennersdale Road) +0.6mph to 13.9mph and Morley Road +0.3mph to 18.5mph.
- 2.2.3 Manor Park (both locations) and Southbrook Road recorded speeds in excess of 20mph at 20.6mph, 20.5mph and 22.5mph respectively, however noted a reduction on the pre-scheme March 2019 surveys. The speeds recorded on Manor Park (both locations) and Southbrook Road are below the design speed of a 20mph limit and at a speed that would not warrant enforcement action by the Police.

Location	Before LTN Mar 19	Original Scheme Oct 20	21
Ballinger Road	21.8	17.5	15.6
Cambridge Drive	23.4	19.9	15.3
Dorville Road West of Cambridge Drive	18.8	18.4	16
Dorville Road West of Leyland Road	19.6	18.8	18
Eastdown Park	15.5	18.5	18.4
Effingham Road	18.1	13	17.5
Ennersdale Road	19.3	17.1	17.2
Gilmore Road	17.2	16.3	19.1
Handen Road	19.8	18.6	18
Holme Lacey Road	20.1	13.7	13.3
Manor Lane Terrace	14.3	14.1	13
Leahurst Road South of Longhurst Road	14.6	12.9	16.7
Leahurst Road North of Ennersdale Road	13.3	14.6	13.9
Leyland Road North of Osberton Road	19.3	11.3	14.6
Leyland Road North of Upwood Road	13.6	14.4	13.3
Longhurst Road	19.2	16	16
Manor Lane	19.6	16.4	15.5
Manor Park North of Northbrook Road	20.7	21.5	20.6
Manor Park West of Thornwood Road	24	21.4	20.5
Micheldever Road	24.4	20.6	19.9
Morley Road North of Dermody Road	18.2	16.1	18.5
Morley Road South of Lingards Road	17.4	14.9	15.4
Newstead Road	19.7	18.5	19.1
Pitfold Road	17.7	13.4	12
Southbrook Road	24.2	21	22.5
Staplehurst Road	17.1	17.8	16
Taunton Road	19.3	19	18.8
Upwood Road	17.5	15.9	16.1
Woodyates Road	21.5	19.8	17
Average	18.9	16.9	16.8
Difference	-	-2	-
% Change from Mar 19	-	-10.58	-11.11

Table 5 – Pre-Scheme data collected in March 2019

Location	Before LTN Mar-19	Original Scheme Oct 20	Revised Scheme Feb 21
Within the LTN			
Ballinger Road	1337	434	236
Cambridge Drive	1436	417	233
Dorville Road West of Cambridge Drive	2626	644	380
Dorville Road West of Leyland Road	3215	1765	1021

Eastdown Park	8970	4165	3782
Effingham Road	947	619	374
Ennersdale Road	8895	1532	1674
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Morley Road North of Dermody Road	10672	2337	2318
Morley Road South of Lingards Road	3883	2764	2414
Newstead Road	1673	881	668
Pitfold Road	245	240	181
Southbrook Road	4369	2543	1759
Staplehurst Road	4761	1154	1339
Taunton Road	2781	1484	1184
Upwood Road	3403	1255	667
Woodyates Road	1998	734	555

- 2.2.4 Table 6 below details pre-scheme data for locations where pre-scheme data was recorded in June 2020 and shows that on average vehicle speeds on these roads have reduced by approximately 4.7%, or 0.8mph between June 2020 and February 2021.
- 2.2.5 Seven locations however did record a small increase in average speed of approximately 9%, or 1.4mph. They were recorded on Belmont Park +0.1mph to 18.1mph, Benin Street +2.9mph to 18.2mph, Blessington Road +0.5mph to 16mph, George Lane +0.3 mph to 14mph, Minard Road +2.1mph to 14.8mph, Radford Road +2.4mph to 17mph and Torridon Road +0.9mph to 21mph. Courthill Road and Springbank Road (south of Torridon Road) recorded speeds in excess of 20mph at 21.6mph and 21.5mph respectively, however noted a reduction on the pre-scheme June 2020 surveys. The speeds recorded at these locations are below the design speed

of a 20mph limit and at a speed that would not warrant enforcement action by the Police.

2.2.6

Location	Before LTN Jun-20	Original Scheme Oct- 20	Revised Scheme Feb-21	
Within the LTN				
Ardgowan road	20.2	17.8	16.7	
Belmont Park	18	17.2	18.1	
Blessington Road	15.5	18.5	16	
Brandram Road	19.6	20	18.1	
Manor Lane Terrace, East of Abernethy Road	15.7	14.6	13.4	
Manor Lane, South of Dallinger Road	20.2	20	19.5	
Old Road	14.5	13.1	10.2	
Wellmeadow Road, South of Hither Green Lane	14	13.2	10.7	
Wellmeadow Road, South of Torridon Road	15.4	12.9	14.4	
Outside of the LTN				
Benin Street	15.3	14.8	18.2	
Campshill Road	18.6	15.3	14.8	
Courthill Road	21.7	19.9	21.6	
Dacre Park	18.2	17.4	17	
George Lane	13.7	14.2	14	
Harvard Road	11.3	12	8.4	
Hither Green Lane	20.9	19.5	18.7	
Lanier Road	15.4	15.1	14.6	
Longbridge Way	14.4	12.8	14.2	
Minard Road	12.7	13.7	14.8	
Nightingale Grove	17.2	15.6	16.2	
Radford Road	14.6	17.6	17	
Springbank Road North of Duncrievie Road	18.4	17	17.9	
Springbank Road, South of Torridon Road	23	20.5	21.5	
Springrice Road	15.8	14.9	14.7	
Thornford Road	19.3	19.5	18.6	
Torridon Road	20.1	21.1	21	

Table 6 – Pre-Scheme data collected in June 2020

2.2.7 Table 7 below details the speed data collected from the locations where no comparable pre-scheme data was available. The data details that between the original LTN scheme in October 2020 and the revised scheme in February 2021 there has been a 0.64%, or 0.1mph reduction on the speeds recorded at the below locations.

- 2.2.8 Five of these locations however did note an increase in speed, they were recorded on Beacon Road +0.5 mph to 14.8mph, Hither Green Lane (north of Brightside Road) +2.9mmph to 22mph, Hither Green Lane (north of George Lane) +1.6mph to 20mph, Torridon Road +1.5mph to 18.8mph and Verdant Lane +1.9mph to 21.7mph.
- 2.2.9 Hither Green Lane (north of Brightside Road) and Verdant Lane recorded speeds in excess of 20mph at 22mph and 21.7mph respectively. The speeds recorded on Hither Green Lane (north of Brightside Road) and Verdant Lane are below the design speed of a 20mph limit and at a speed that would not warrant enforcement action by the Police.

Location	Original Scheme Oct 20	Revised Scheme Feb 21
	(mph)	(mph)
Ardgowan Road	16.8	
Beacon Road	14.3	14.8
Broadfield Road	18.1	12.3
Hither Green Lane North of Brightside Road	19.1	22.0
Hither Green Lane North of George Lane	18.4	20.0
Laleham Road North of Brownhill Road	18.3	18.1
Laleham Road North of Elmer Road	13.7	13.1
Minard Road	15.7	15.4
Torridon Road	17.3	18.8
Veradant Lane	19.8	21.7
Wellmeadow Road	15.6	13.5
Average	17.0	16.9
Difference		-0.1
% Change from Oct 20		-0.64%

Table 7 – Comparison of original scheme vs revised where no pre scheme data was captured

Location	Before LTN Jun 20 Speed
Brownhill Road	21.1
Lee High Road near Burnt Ash Road	20.0
Lee High Road near Manor Road	21.2
Burnt Ash Hill near Glenmere Row	23.2
Burnt Ash Hill near Kimbolton Close	26.0

2.3 Bus Journey Times

- 2.3.1 The Council has worked with Transport for London (TfL) who have been monitoring bus journey times. The monitoring area covers journey times for three key corridors; Brownhill Road, Burnt Ash Hill/Burnt Ash Road and Lee High Road/ Eltham Road, These routes were selected to provide an insight to the effects on key corridors that are on the boundary of the scheme.
- 2.3.2 Figure 2 below identifies the key corridors which TfL have provided data.

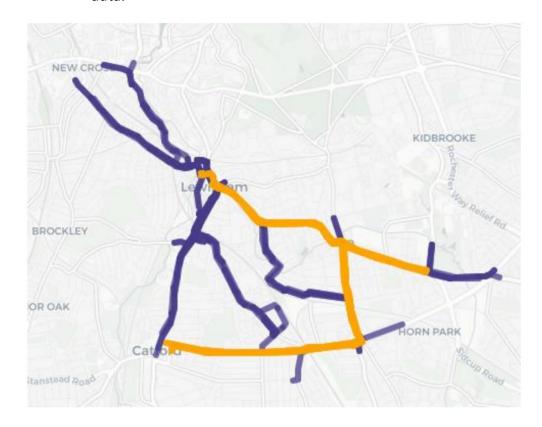


Figure 2 - Key bus corridors within the borough that have been assessed (Orange)

- 2.3.3 The following data sets show the changes over time for bus journey times and traffic flow. We have selected the most recent data at the time of writing the report which includes up to the end of October 2021.
- 2.3.4 TfL data shows bus journey times on these corridors fluctuated over the course of 2020, coinciding with the introduction and easing of COVID restrictions. This includes an increase when the original scheme was introduced in July 2020 and when schools returned in

- September 2020. The data indicates that the fluctuations have settled since the scheme was revised in November 2020
- 2.3.5 The below graphic, figure 3, details the changes in bus journey times for the week 20/09/2021 -24/09/2021. It details marginal delays of between 1 minute and 3 minutes per km along the A205 South Circular and 0.5minutes and 1 minute per km on Burnt Ash Hill. The following sections provide greater detail and changes over the last 18 months.

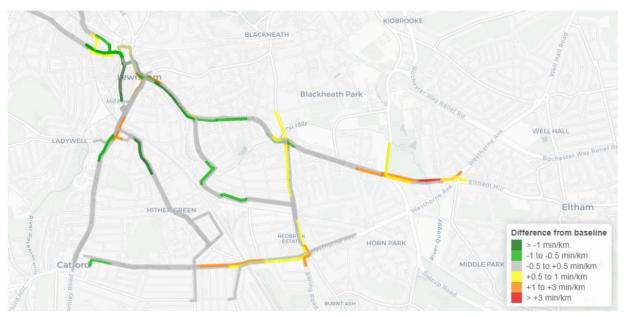


Figure 3 -the changes in bus journey times for the week 20/09/2021 -24/09/2021

2.4 Brownhill Road

2.4.1 TfL data for the 12 hour average between 7am and 7pm on Brownhill Road eastbound (Figure 4) details pre-covid bus journey times averaged out at around 4.3 minutes per km for the above indicated route between Lewisham High Street and Burnt Ash Hill. In April 2020 this fell to under 3 minutes per Km as Covid-19 resulted in the first lockdown. As the original LTN launched in July 2020, journey times retuned to 4 minutes per Km on average, increasing to around 10 minutes per Km for the next few months, which coincided with the easing of restrictions/ the tier system. A increase in bus journey time was noted in September 2020, which coincided with the reopening of

- schools, however from November 2020 journey times settled to roughly 5 minutes per Km coinciding with the revised LTN launch.
- 2.4.2 In 2021 a similar pattern was observed with increases in bus journey times after the relaxation of social distance restrictions. There is also an increase bus journey time around September with the beginning of the school term. Within the latest month (October 2021) the eastbound bus journey times are within the upper baseline figure recorded prior to the start of the Pandemic. Overall there is an average increase of 0.4 minutes per Km in comparison to pre-scheme average.
- 2.4.3 This data would suggest that there hasn't been a large migration of eastbound traffic from the scheme area on the A205.
- 2.4.4 The westbound (Figure 5) average bus journey times however has stayed the same over the same period. Pre-covid bus journey times were around 3.9 minutes per km, in March 2020 this increased to over 9 minutes per km but then fell to under 3 minutes per km until May 2020. June 2020 saw average bus journey times of 7 minutes per km, falling to around 4 minutes per km again in July 2020 when the original LTN scheme was introduced, until an increase of over 1.5 minutes per km in September 2020 when the schools reopened. When the scheme was revised in November 2020, bus times settled to around 4 minutes per km again.
- 2.4.5 In 2021 there has been less fluctuation and a more consistent bus journey time. The majority of 2021 has seen the bus journey time with the upper and lower bus journey times and in several instances over the past few months actually recording a journey time below the baseline value. In the last week bus journey times has match the times of 3.9 minutes per km. This would suggest that the impact on the A205 in both directions from the revised scheme has been minimal.



Figure 4 Average Weekday Journey Times Eastbound on Brownhill versus baseline (minutes per km)

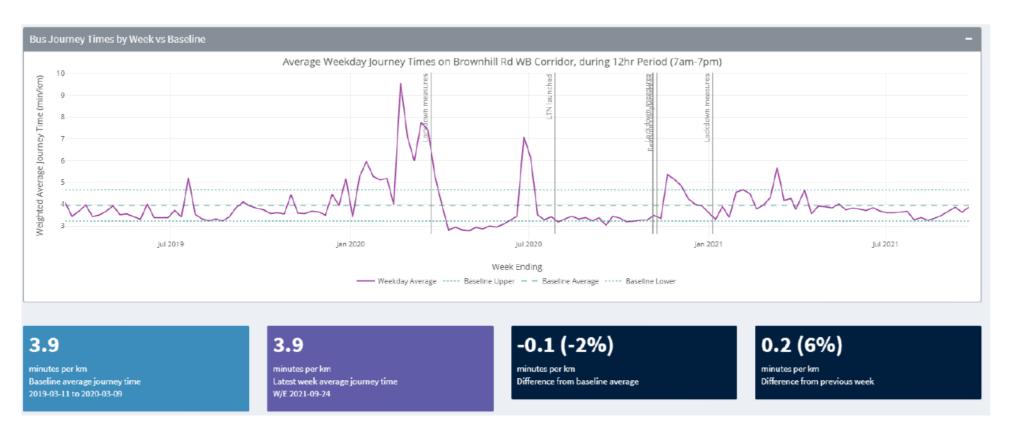


Figure 5 Average Weekday Journey Times on Brownhill Rd WB Corridor, during 12hr Period (7am-7pm) - Weekly Basis

2.4.6 The below graphics provide an update on vehicle traffic flows from TfL for the period to October 2021.



Figure 6 Traffic flow eastbound on A205 Brownhill Road (October 2021 snapshot)

2.4.7 The above graphic (Figure 6) details that under comparison the A205 eastbound is resulting in a small increase of 8 vehicles per hour compared to the baseline data set. Since April 2021 the 12 hour traffic flow eastbound has been operating lower than the 2019 12 hour baseline. Thus it can be concluded that since the easing of restrictions that traffic has not simply migrated on to the A205 and increased it exponentially as many responses to the public consultation have stated.



Figure 7 Traffic flow westbound on A205 Brownhill Road (October 2021 snapshot)

The westbound traffic flow details a very similar scenario and as of the October snapshot actually details a reduction of 18 vehicles per hour in vehicle flow when compared to the 2019 base line.

2.4.8 It can be seen from the above October snapshot (Figure 7) that the conditions recorded on the A205 for bus journey times and traffic flow do not align with responses to the public consultation that the situation is worse than it was prior to the pandemic.

2.5 Burnt Ash Hill/Burnt Ash Road.

- 2.5.1 For the Burnt Ash Hill / Burnt Ash Road corridor northbound (Figure 8), data indicated an average increase in northbound bus journey times of 0.5 minutes per km. The average journey times were 3.6 minutes per km precovid, this fell to around 2.5 minutes per km post covid until September 2020, coinciding with the reopening of schools. Journey times peaked at over 7 minutes per km in October 2020 before falling to around the 3.6 minute per km mark at the end of 2020.
- 2.5.2 In 2021 the bus journey times have been consistent and stayed between 3.2 and 4.5 minutes per km. In comparison to the latest week of data the journey time per km has increased by 0.5 minutes per km in comparison to pre-covid and scheme implementation average.

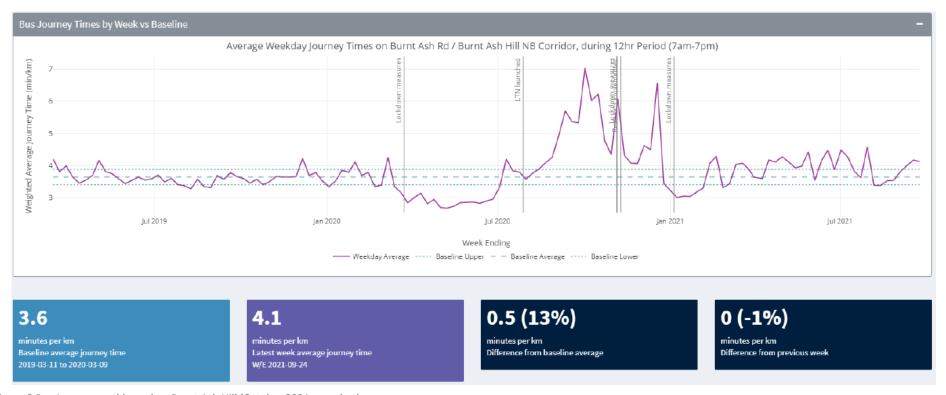


Figure 8 Bus Journey northbound on Burnt Ash Hill (October 2021 snapshot)

2.5.3 Recorded journey times southbound along the Burnt Ash Hill/ Burnt Ash Road corridor showed little no change in journey times when comparing pre-covid/pre-LTN and October 2021 (**Error! Reference source not found.**9) data. In January 2020 average bus journey times were 3 minutes per km, this fell for the next few months before reaching its lowest time of 2.5 minutes in June, the launch of the LTN. Journey times then increased on average each month until peaking in October 2020 at 7 minutes per km. After the LTN was revised in November 2020, journey times stabilised at around 3 minutes per km. This has continued throughout 2021.

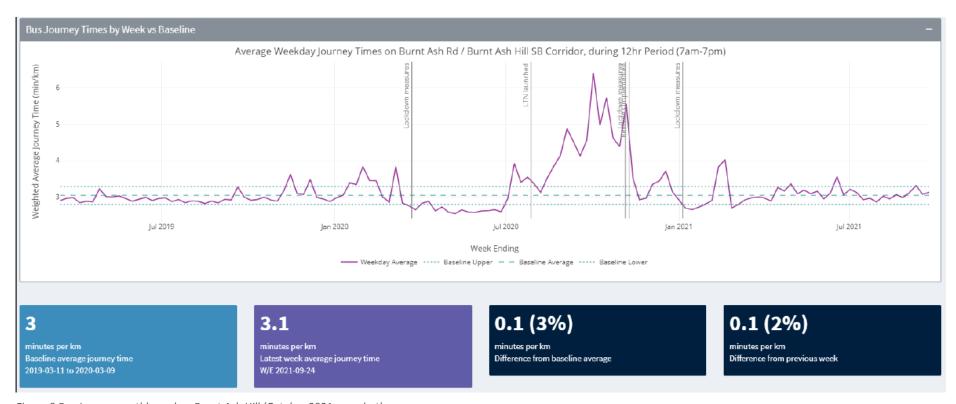


Figure 9 Bus Journey southbound on Burnt Ash Hill (October 2021 snapshot)

2.6 Lee High Road/Eltham Road

- 2.6.1 TfL data for the 12-hour average between 7am and 7pm on Lee High Road eastbound details pre-covid bus journey times averaged out at around 3.8 minutes per km. During the first lockdown this time reduce to below 3 minutes per km.
- 2.6.2 Journey times rose and peaked in July 2020, just after the launch of the original LTN reaching 5.2 minutes per km, before stabilising for the rest of the year between 4 and 4.5 minutes per km on average. In late January and

- February, the average journey time dropped to under 3.5 minutes per km. Since then, the journey times have been consistently between 4 and 4.5 minutes per km. This is a 0.7 minute per km increase to the base line figure.
- 2.6.3 The Lee High Road Eastbound movement is only one of the boundary road which has shown a consistent increase in journey times after the inclusion of the LTN.



Figure 10 Average Weekday journey times on Lee High Rd Eastbound

2.6.4 TfL data for the 12-hour average between 7am and 7pm on Lee High Road westbound details pre-covid bus journey times averaged out at around 4 minutes per km. During the first lockdown this time reduce to below 2.8 minutes per km.

- 2.6.5 Journey times start to increase from April 2020, with an increase to the baseline of 4 minutes per km in July 2020 as the original LTN was implemented and peaking in September 2020 just under 6 minutes per km, coinciding with the return of schools.
- 2.6.6 In 2021 the average journey time per km rose from a low in January to peak at 5.5 minutes per km in July 2021. This drop dramatically in august to under 3.5 minutes per km. Since then it has remained consistently between the upper and lower baseline range of 3.5 and 4,5 minutes per km.



Figure 11 Average Weekday journey times on Lee High Rd Westbound

2.6.7 Bus Journey time data is under constant review with TfL and the data used within the report was the latest at the time of writing. TfL have advised that they are unable to determine the overall effects of the scheme as although

the above analysis investigates delays along the specific sections around the LTN, along the overall corridors the journey times have remained largely the same with little difference to no difference.

2.6.8 The data suggests that the vast majority of the metrics are all within baseline values that TfL use to monitor the TLRN.

2.7 Air Quality Data

- 2.7.1 The Council maintains a network of Nitrogen Dioxide (NO₂) diffusion tubes to assess pollution levels. NO₂ is a pollutant that is harmful to health and is related to the use of petrol and diesel engines. Further information on air quality and live readings can be found on the Council's website: www.lewisham.gov.uk/airquality
- 2.7.2 There are variables that will influence overall air quality in an area, such as weather conditions that may disperse air pollution from one area to another, and changes in lockdown restrictions, which will have influenced people's travel patterns. Please note that some of the longer roads were subject to multiple survey locations. The data presented in the below section of this report is provisional data that has been supplied ahead of its intended publication. Due to the timescales involved with the consultation and to ensure that data is presented, it should be noted that this data may be subject to change upon further investigation and validation.
- 2.7.3 The data presented in (Figure 12) below details the average NO₂ recorded within and around the Lewisham and Lee Green Low Traffic Neighbourhood. The data has been split to provide an average over four periods in time (with a minimum period of 3 months):
 - Pre pandemic to provide a baseline figure for what is 'normal' conditions;
 - Pandemic to understand what effect the pandemic and lockdown had;
 - Original scheme to understand the effects of the original LTN scheme;
 and
 - **Revised scheme** to understand the effects of the revises LTN scheme.
- 2.7.4 The data details that over the original LTN scheme a reduction on pre-pandemic levels across all surveyed locations was noted and that over the course of the two variations of the scheme, the LTN has had little to no impact on air quality in and around it.
- 2.7.5 Looking at the average NO_2 readings in **Error! Reference source not found.**12, there are no locations where NO_2 exceed the United Kingdom annual mean objective of 40 micrograms per cubic metre of air (40 μ g/m³).

2.7.6 Monitoring found that the overall mean NO_2 concentration for the whole network was 29.0 μ g/ m³ during the 'original LTN' period and 31.4 μ g/m³ during the 'revised LTN' period, this is an increase of 8.3%.

2.8 WHO Air Quality

2.8.1 The World Health Organization (WHO) have their own air quality guidelines for air quality levels. The LTN scheme was introduced back in July 2020 when the guidelines advised of a mean objective of 40 micrograms per cubic metre of air (40 μg/m³). The have however recently been revised in September 2021 and the new guidelines advise of a mean objective of 25 micrograms per cubic metre of air (25 μg/m³) mean over a 24 hour period. This new guideline differs to the EU/ UK legal limit as it is not a target, but guidance on what is acceptable. This adjusted figure however is a very ambitious guidance and would result in many streets in London not complying with.

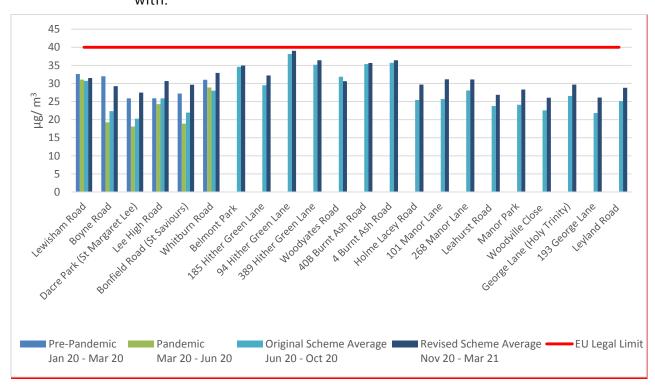
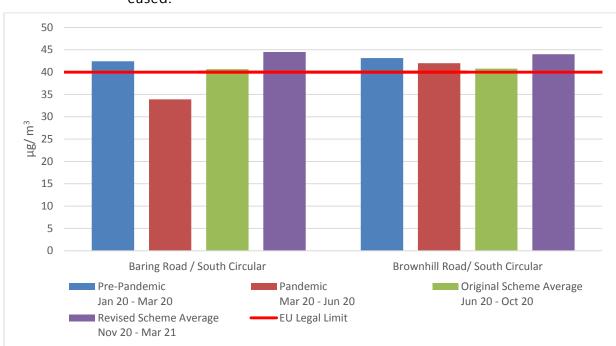


Figure 12 Mean NO2 concentrations within and on surrounding roads to the LTN

2.8.2 Air Quality monitoring of the A205 South Circular (**Error! Reference source not found.**13) indicates that air quality improved during the first lockdown when people's travel was restricted. The air quality is



now comparable to pre-pandemic levels as restrictions have been eased.

Figure 13 Mean NO2 concentrations on the South Circular

Readings from the live sensors installed within the borough can be found on the following here.

2.9 Emergency Services Response Times

- 2.9.1 Prior to the launch and during the Lewisham and Lee Green LTN,
 Council officers held regular meetings with the emergency services
 to discuss any emerging operational issues coming from police, fire
 and ambulance service representatives. Discussions at these
 meetings also covered impacts on emergency service.
- 2.9.2 At no point have the emergency services highlighted any incidents as significant or requested specific changes be made to the LTN. The London Ambulance Service had reported a small number of incidents that led to delays within the original LTN scheme, but this has since been revised. However, it should be noted that similar to monitoring traffic data within a pandemic, the emergency services have been operating under different circumstances to 'normal'. Officers are therefore continuing to liaise with emergency services.