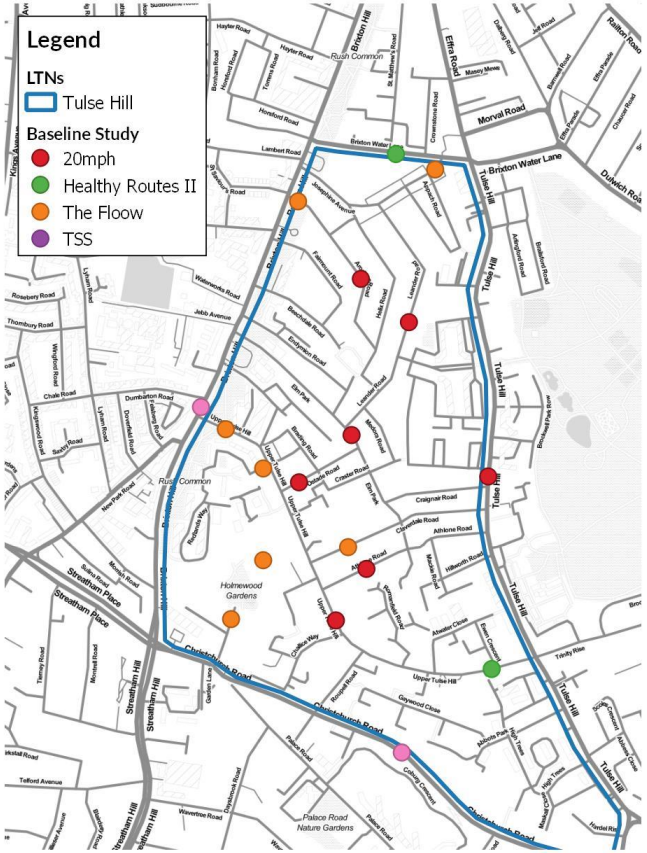
Appendix A: Data Collection & Vehicle Classification

Data Collection

- As the LTN was introduced as a response to COVID-19, no comprehensive dataset existed to represent pre-implementation data. Instead, data was drawn from the following studies commissioned by LB Lambeth since 2017:
  - **Healthy Routes:** two rounds of data collection to support development of Healthy Cycling Routes (Nov 2019-Mar 2020)
  - **20mph Study**: data collected to underpin analysis on the 20mph Borough-wide speed limit (Jan 2017)
  - **The Floow**: GPS telemetry data, providing detail on vehicle routing through neighbourhood cells; this data will be used alongside Healthy Routes data for roads where no historic data was collected to approximate vehicle flows
- Of the ATC sites, **2** sites use the Healthy Routes study, **7** sites use the 20mph study and **7** utilise both The Floow data and Healthy Routes. A further **2** sites use data directly from TfL ATCs.

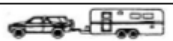


Data Collection

- Through the monitoring programme, data has been collected across the Borough – this has generally been installed in the same locations as those used in a previous study to ensure a fair comparison, although some additional sites have been added, and these will need to make use of The Floow data instead to enable a comparison.
- Almost all new data has been collected via **Automatic Traffic Counters (ATCs)**, which are installations that consist of two pneumatic tubes spanning the width of roads to be surveyed – these capture 15 vehicle classes in both directions based on number of vehicle axles and the distance between axles, and are regularly used across the transport planning profession to capture traffic information. Some sites on the Transport for London Road Network (i.e. "Red Routes") have had data collected by radar instead.
- Based on the vehicle classifications on the following slide, class 1 & 2 vehicles have been classified as "**car**", class 3 vehicles have been classed as "**LGV**", classes 4 to 12 vehicles have been classified as "**HGV**", class 14 vehicles have been classed as "**motorcycle**" and class 15 vehicles have been classed as "**cycle**."

Vehicle Classifications

- The table below outlines the **axle-based** vehicle classes as defined by survey companies.

Class		Axles	Groups	Description	Parameters	Dominant Vehicle	Aggregate
1	SV	2	1 OR 2	Short - Car, light Van	d(1)>=1.7m, d(1)<=3.2m & axles=2		Light
2	SVT	3, 4 OR 5	3	Short Towing - Trailer, Caravan, Boat, etc.	groups=3, d(1)>=2.1m, d(1)<=3.2m, d(2)>=2.1m & axles=3,4,5		
3	TB2	2	2	Two axle truck or Bus	d(1)>3.2m & axles=2		Medium
4	TB3	3	2	Three axle truck or Bus	axles=3 & groups=2		
5	T4	>3	2	Four axle truck	axles>3 & groups=2		
6	ART3	3	3	Three axle articulated vehicle or Rigid vehicle and trailer	d(1)>3.2m, axles=3 & groups=3		Heavy
7	ART4	4	>2	Four axle articulated vehicle or Rigid vehicle and trailer	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles = 4 & groups>2		
8	ART5	5	>2	Five axle articulated vehicle or Rigid vehicle and trailer	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles = 5 & groups>2		
9	ART6	>=6	>2	Six (or more) axle articulated vehicle or Rigid vehicle and trailer	axles=6 & groups>2 or axles>6 & groups=3		
10	BD	>6	4	B-Double or Heavy truck and trailer	groups=4 & axles>6		
11	DRT	>6	5	Double road train or Heavy truck and two trailers	groups=5,6 & axles>6		
12	TRT	>6	>6	Triple road train or Heavy truck and three (or more) trailers	groups>6 & axles>6		
14	M/C	2	1 OR 2	Motorcycle	d(1)>=1.18m, d(1)<=1.7m & axles=2		Light
15	CYCLE	2	1 OR 2	Cycle	d(1)<1.18 & axles=2		

Vehicle Classifications

- The Automatic Traffic Counters (ATCs) used in this study are considered a reliable, tested method of data collection, and are utilised throughout the transport industry to understand traffic volumes on roads.
- Whilst such counters are generally considered at least 95% accurate in collecting correct traffic data, there is some room for error in vehicle classification (for example tandem cycles being classed as motorbikes given the distance between axles, or scooters being classed as cycles). However, **most** issues occur in the sorting of different types of HGVs into the 9 relevant categories.
- More commonly, vehicles park on or across ATCs, leading to periods where no data is collected. This occurs in pre- and post-implementation data in equal measure, and where such occurrences are likely to have a material impact on analysis results, such missing data has been “patched” or “infilled” using appropriate replacements (*for example, patching blank data 10-11am on a Wednesday with data from 10-11am the day before*). This is a standard practice in the transport industry.

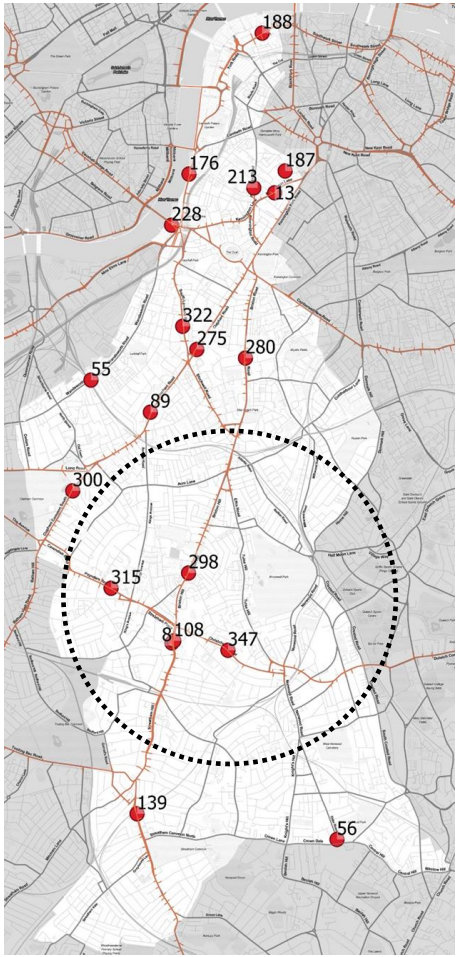
Appendix B: Baseline Calculations

Baseline Calculations (1)

- A “**baselining**” or “**normalisation**” process has been undertaken to approximate a “no-LTN” case for all sites, providing a point of comparison against which recorded “with-LTN” data can be compared.
- Under normal circumstances, this baseline case would have taken flows from before the scheme implementation and compared these (sometimes with a slight adjustment to compensate for population change/employment levels/etc.) to post-implementation flows.
- The nominal (# of vehicles) and percentage changes would *help* indicate, amongst other factors, whether the scheme had achieved its stated goals.
- Given that the LTNs have been part of Lambeth’s emergency response to the Covid-19 pandemic, and that background traffic flows have been very abnormal since March 2020, the aforementioned process could not be followed in such a straightforward manner.

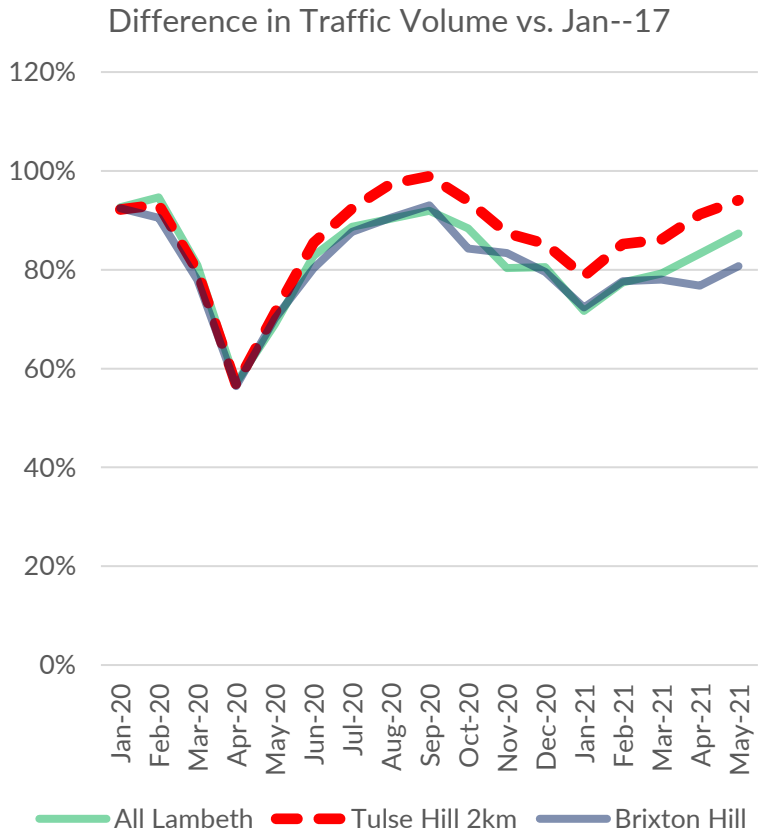
Baseline Calculations (2)

- Instead, to ensure as fair a comparison as possible, flow data from before the LTN was installed ("pre-implementation" data) has been **normalised to May 2021**, when the most recent traffic counts were conducted, representing what would have happened *with* the Covid-19 pandemic, but *without* the LTN.
- The normalisation process uses a "scaling factor" based on the volume of traffic at TfL continuous traffic counters in Lambeth, and within 2km of the LTN's centre (shown right), for locations where consistent data is available.
- It should be noted that the baseline is a **general** adjustment in terms of **magnitude and direction** of change, rather than an **exact** adjustment.



Baseline Calculations (3)

- The chart to the right shows profiles of traffic flows under various calculation methodologies: ATC counters in all of Lambeth, within 2km of the Tulse Hill LTN and at an ATC adjacent to the LTN on Brixton Road
- As a balance between representing local flows and ensuring erroneous traffic events (accidents/construction) do not unduly impact normalisation, the **Tulse Hill +2km approach has been utilised in this report**, which leads to more conservative results (i.e. understating reductions in cars/HGVs/LGVs) than does the Borough average.



Baseline Calculations (4)

- The “scaling factor” used for this normalisation **differs by site**, as pre-implementation data was drawn from a variety of different studies occurring between 2017 and early 2020.
- Because traffic has typically been lower than pre-Covid throughout 2020-2021, normalising data represents a conservative approach to analysis, and would tend to underestimate reductions in vehicle numbers.
- The below example shows how the scaling factor is calculated and applied to flows for Upper Tulse Hill (Central):

$$\frac{\text{TfL ATC traffic flow: May 10-16, 2021}}{\text{TfL ATC traffic flow: December 16-22, 2017}} = \frac{777{,}194}{811{,}352} = \mathbf{95.8\%}$$

→ **April ‘21 flows are 95.8% of January ’17 flows**

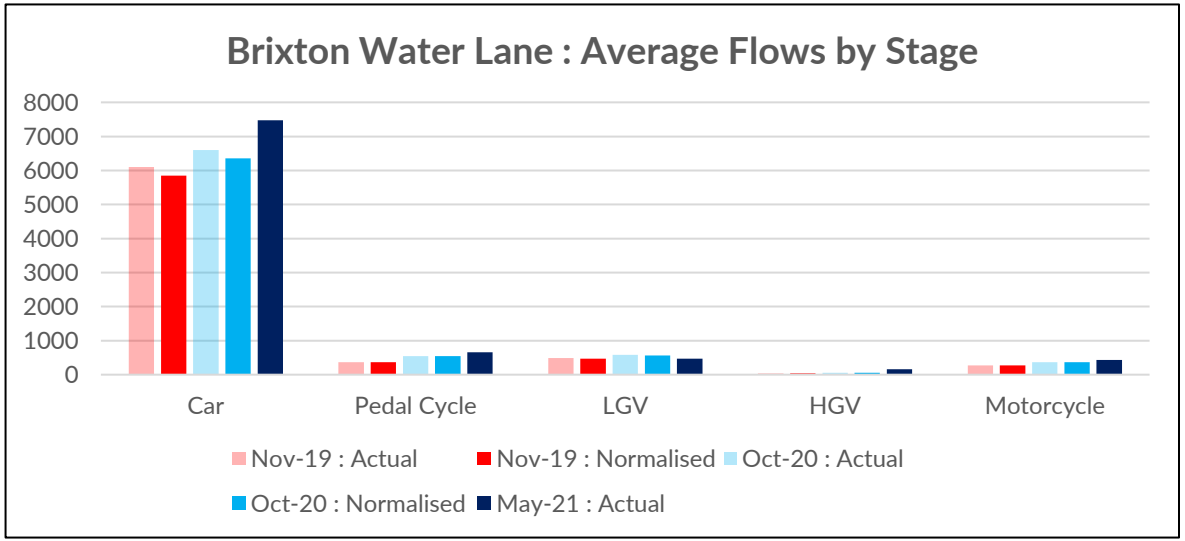
$$\frac{\text{Upper Tulse Hill Central flows: April 2021}}{\text{(Upper Tulse Hill Central flows: December 2019) * (Scaling Factor)}} - 1 = \frac{918}{4{,}196 * 95.8\%} - 1 = \frac{918}{4{,}019} - 1 = 0.23 - 1 = \mathbf{-77\%}$$

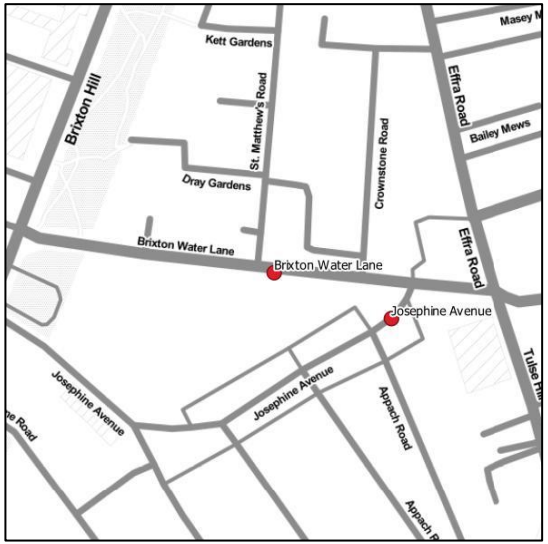
↓ **77% decrease in car flows**

Appendix C: Traffic Flow Results

Brixton Water Lane (Daily Flows)

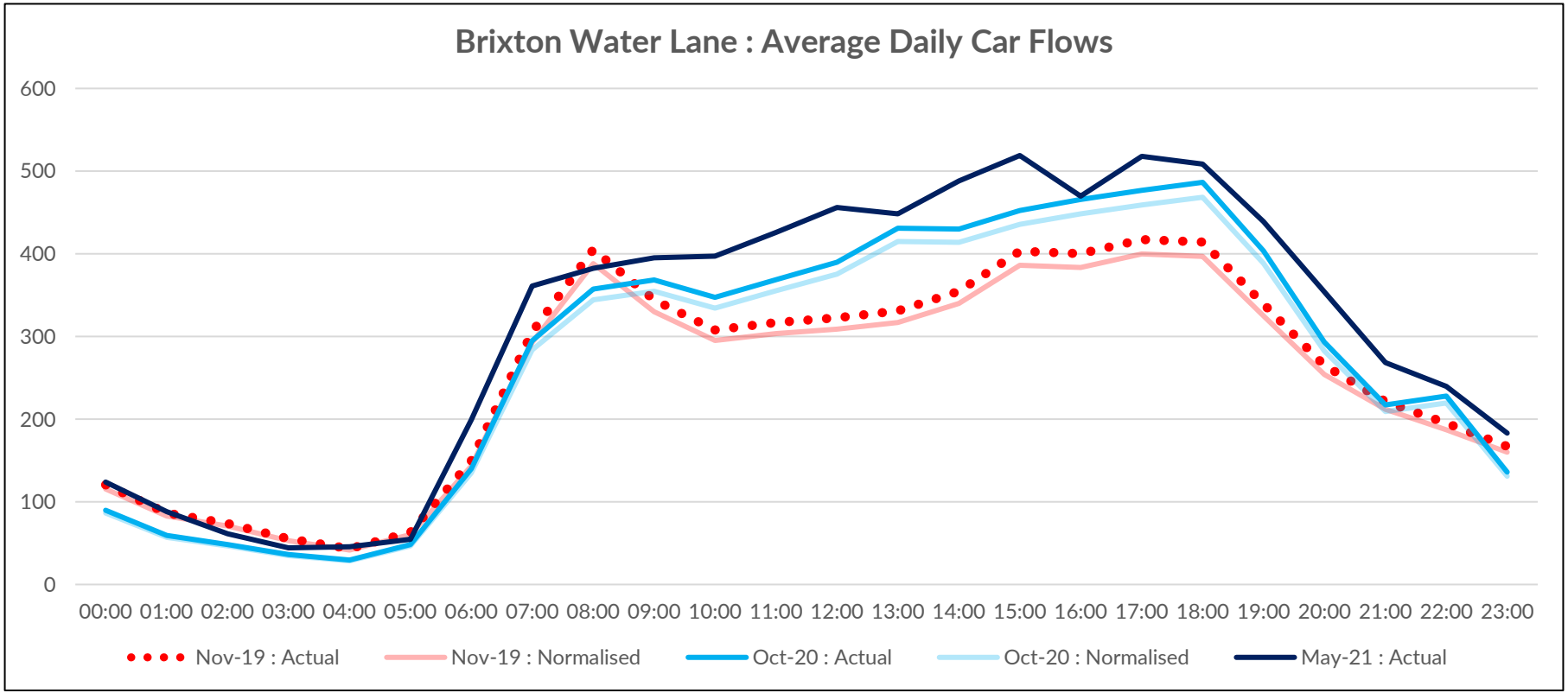
- The charts below and on the following pages show the normalised **average daily flows on Brixton Water Lane**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



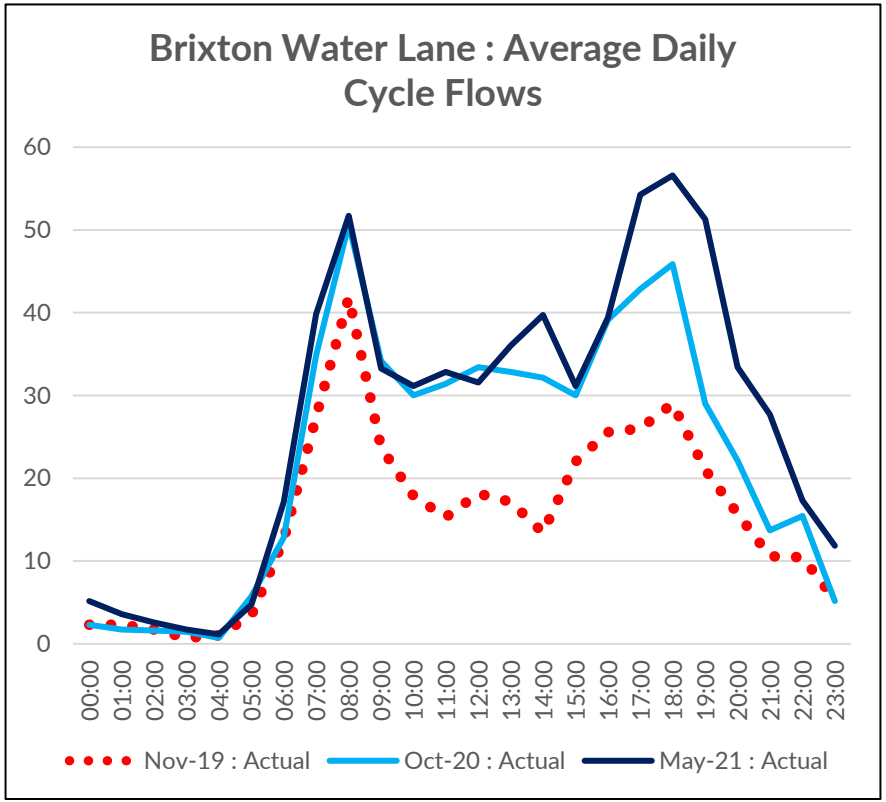


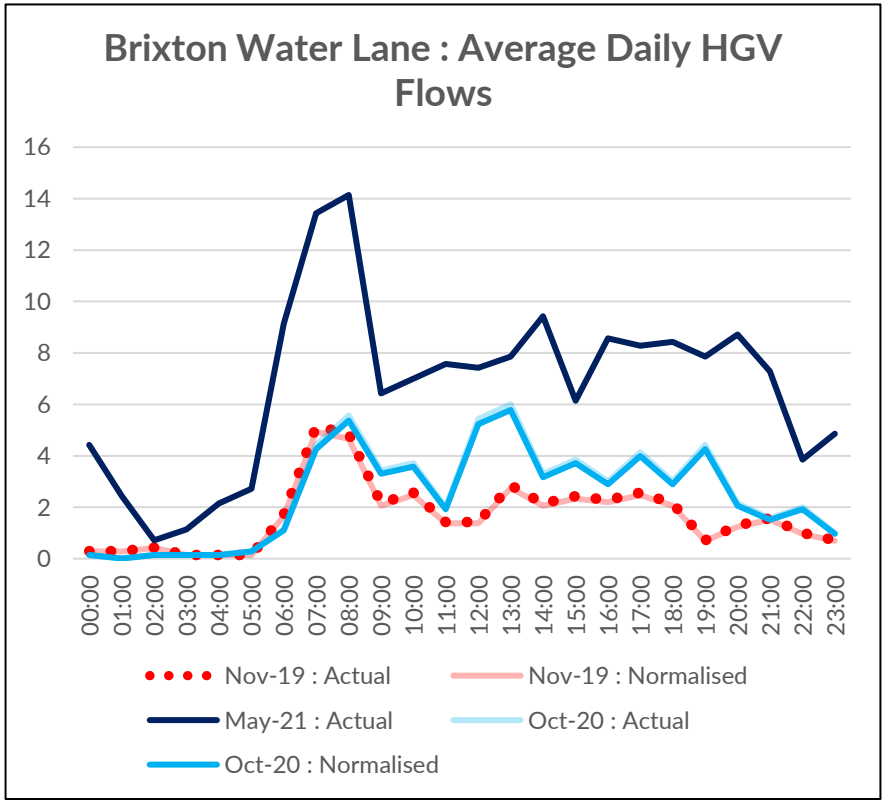
Basemap: ESRI

Brixton Water Lane

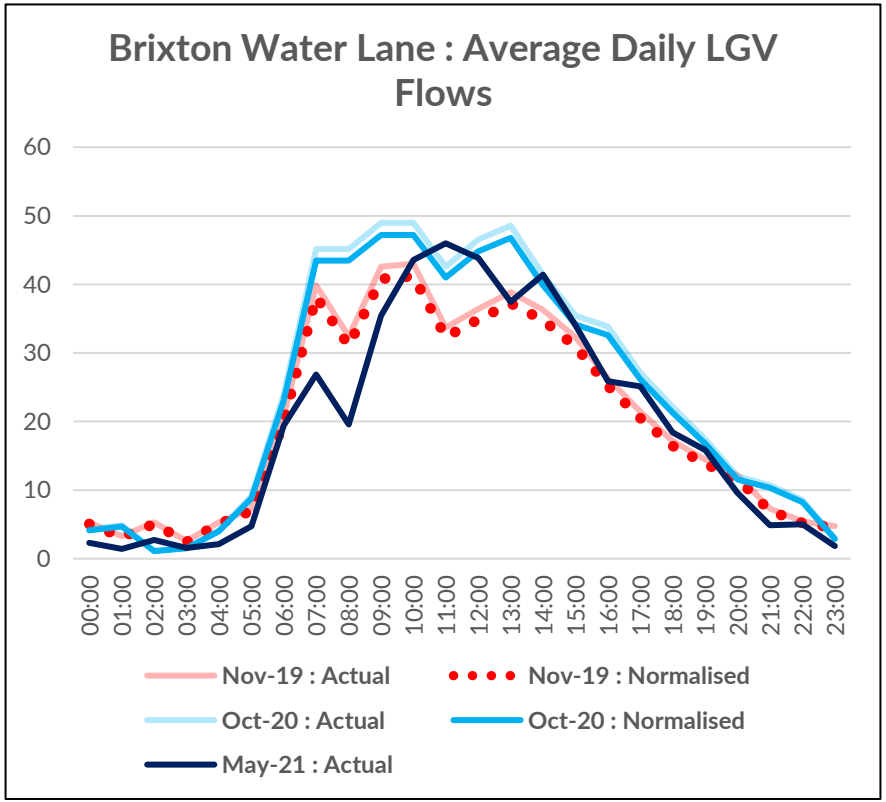


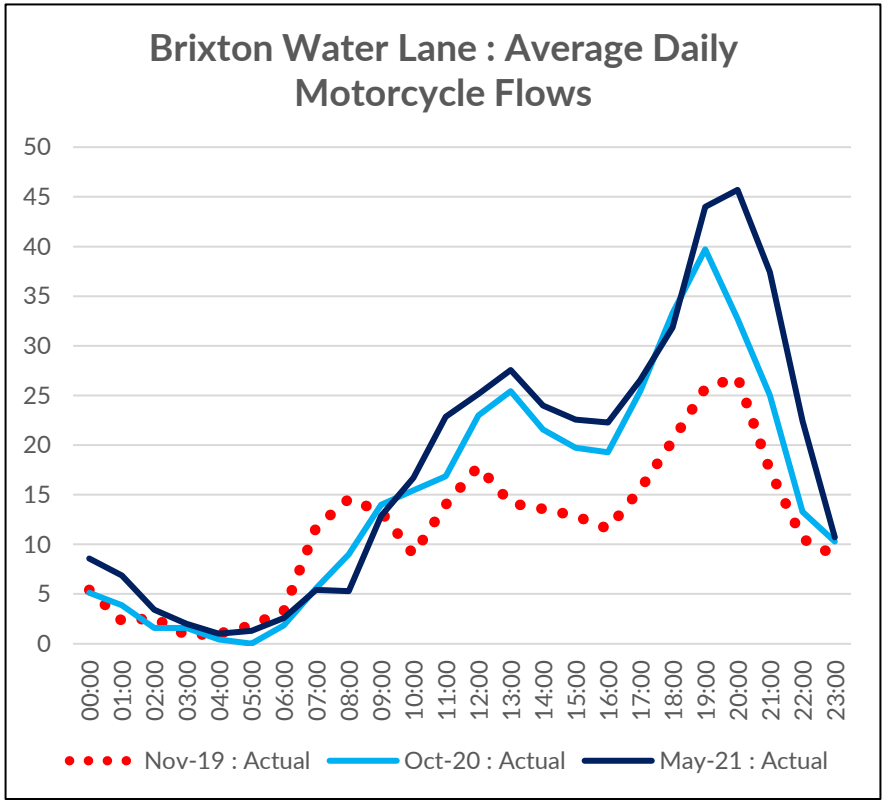
Brixton Water Lane





Brixton Water Lane



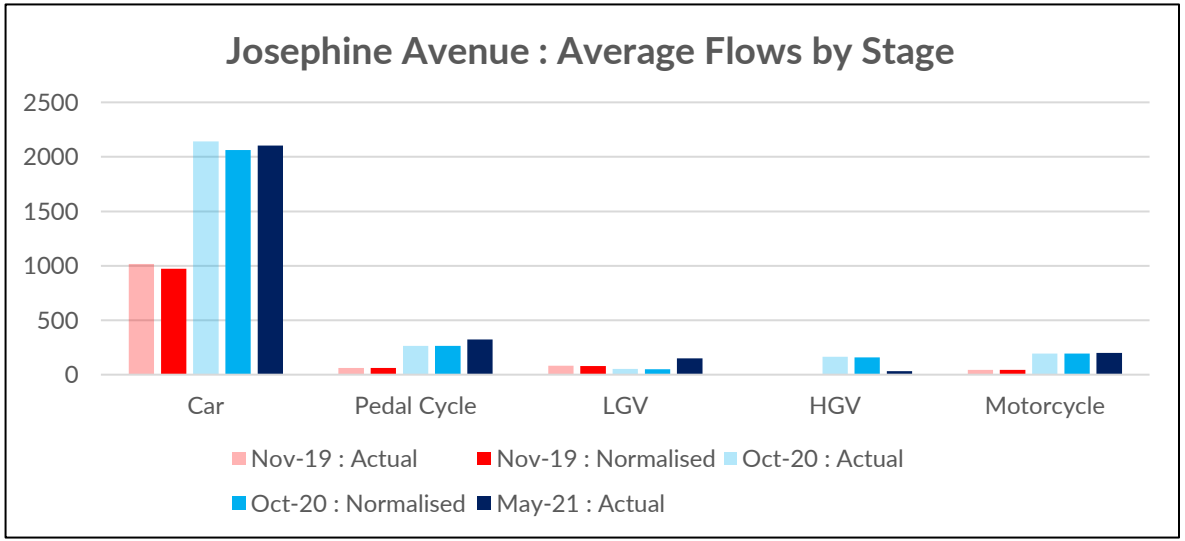


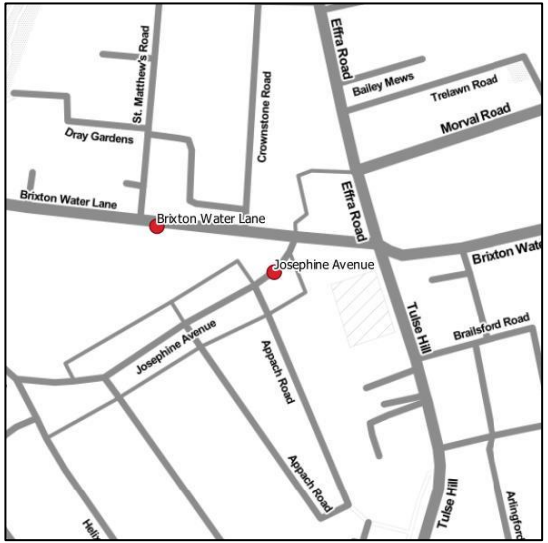
Brixton Water Lane – Summary Table

	Nov-19 : Actual	Nov-19 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Nov-19 -> Oct-20 : Actual Difference	Nov-19 -> Oct-20 : Actual % Difference	Nov-19 -> Oct-20 : Normalised Difference	Nov-19 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Nov-19 -> May-21 : Actual Difference	Nov-19 -> May-21 : Actual % Difference	Nov-19 -> May-21 : Normalised Difference	Nov-19 -> May-21 : Normalised % Difference
Car	6,106	5,850	6,601	6,357	496	8%	506	9%	7,474	7,474	1,368	22%	1,624	28%
Cycle	364	364	549	549	185	51%	185	51%	655	655	291	80%	291	80%
HGV	40	39	61	59	21	51%	20	52%	160	160	120	296%	121	313%
LGV	494	473	587	565	93	19%	92	19%	469	469	-25	-5%	-4	-1%
Motorcycles	275	275	364	364	89	32%	89	32%	429	429	154	56%	154	56%
Total Motorised Vehicles	**6,640**	**6,362**	**7,249**	**6,980**	**609**	**9%**	**618**	**10%**	**8,103**	**8,103**	**1,463**	**22%**	**1,741**	**27%**

Josephine Avenue (Daily Flows)

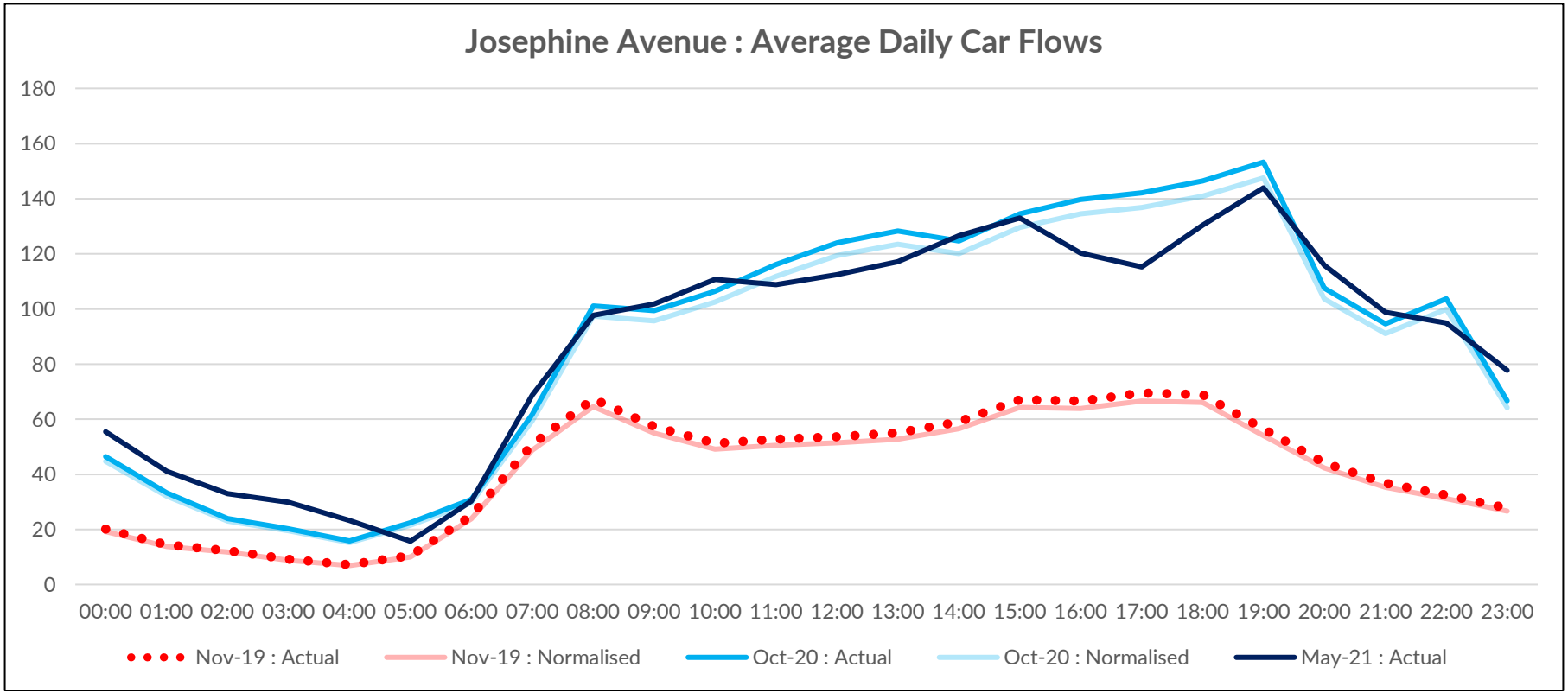
- The charts below and on the following pages show the normalised **average daily flows on Josephine Avenue**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



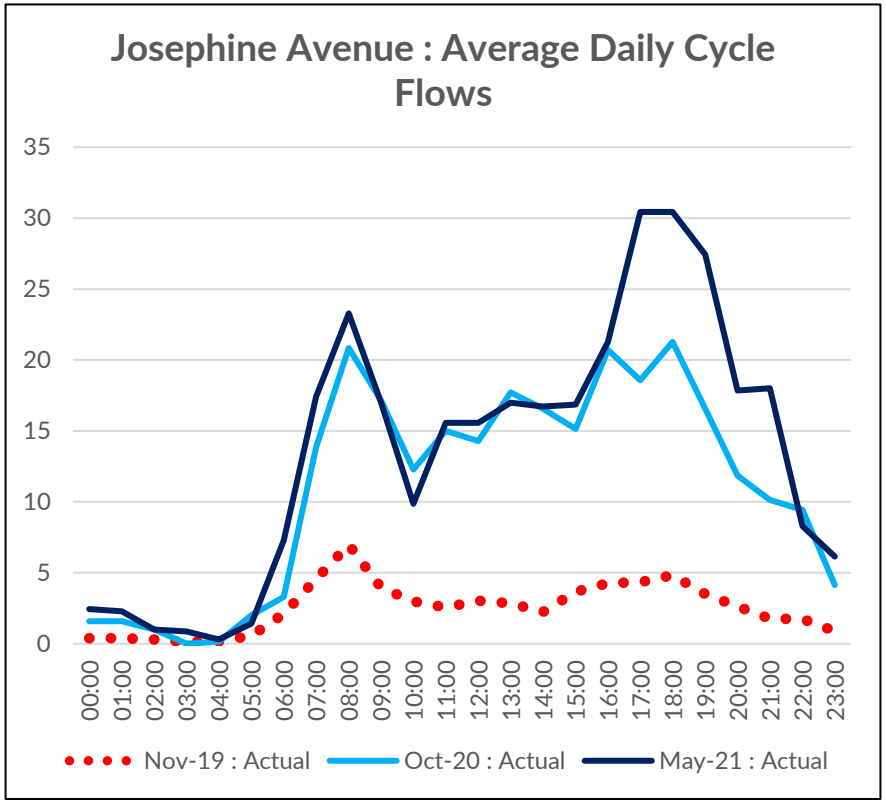


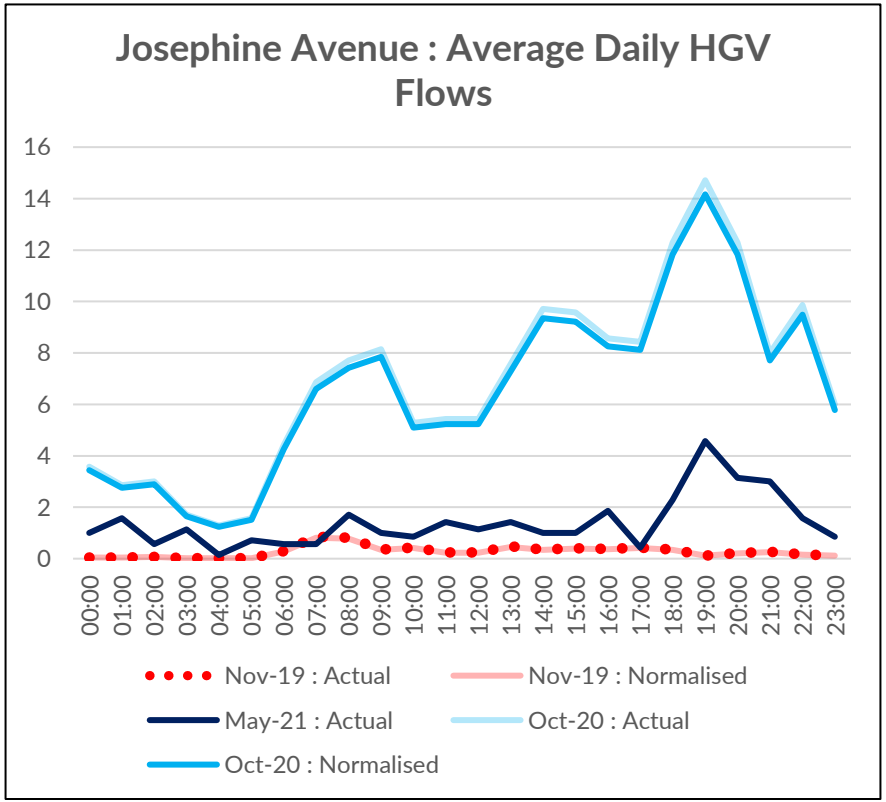
Basemap: ESRI

Josephine Avenue

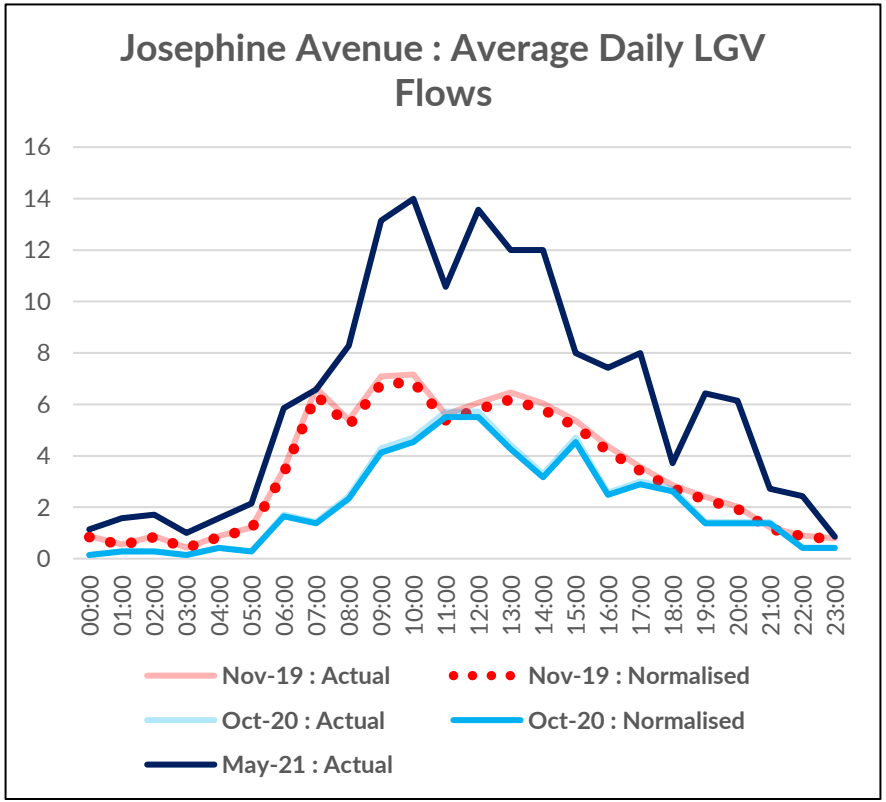


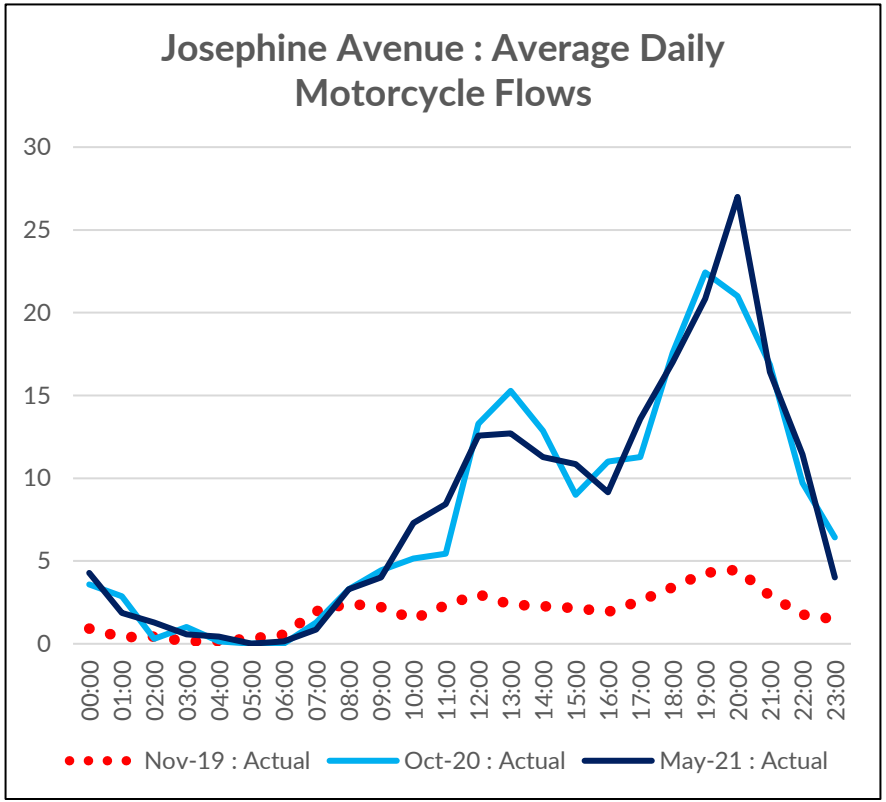
Josephine Avenue





Josephine Avenue



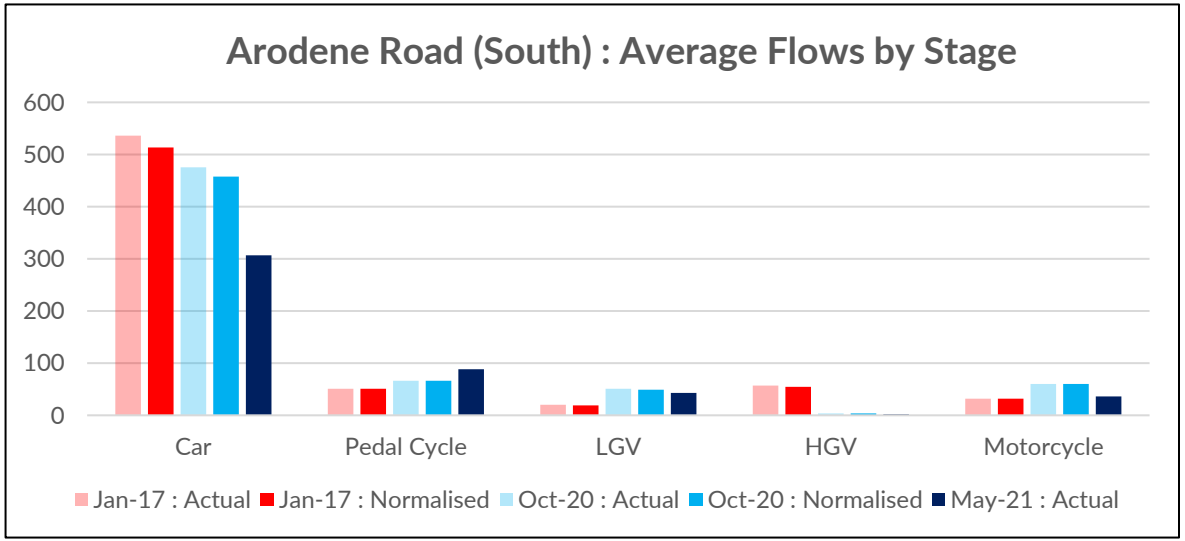


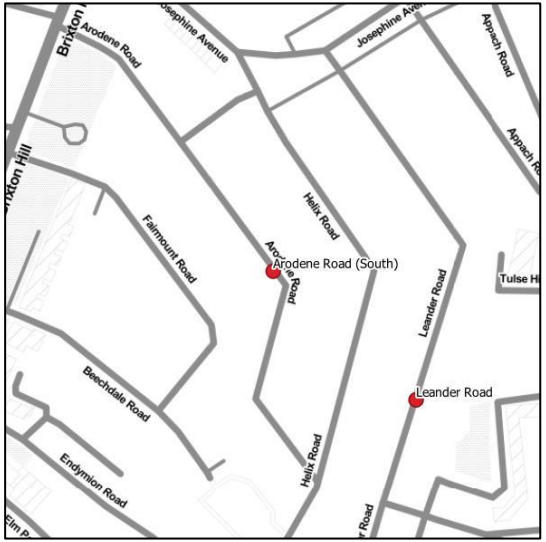
Josephine Avenue – Summary Table

	Nov-19 : Actual	Nov-19 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Nov-19 -> Oct-20 : Actual Difference	Nov-19 -> Oct-20 : Actual % Difference	Nov-19 -> Oct-20 : Normalised Difference	Nov-19 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Nov-19 -> May-21 : Actual Difference	Nov-19 -> May-21 : Actual % Difference	Nov-19 -> May-21 : Normalised Difference	Nov-19 -> May-21 : Normalised % Difference
Car	1,016	974	2,144	2,064	1,127	111%	1,090	112%	2,103	2,103	1,087	107%	1,129	116%
Cycle	61	61	265	265	204	337%	204	337%	325	325	264	435%	264	435%
HGV	7	6	164	158	158	2341%	152	2354%	34	34	27	399%	27	421%
LGV	82	79	53	51	-29	-35%	-27	-35%	151	151	69	83%	72	91%
Motorcycles	46	46	194	194	148	324%	148	324%	199	199	153	335%	153	335%
Total Motorised Vehicles	**1,105**	**1,059**	**2,361**	**2,274**	**1,256**	**114%**	**1,215**	**115%**	**2,287**	**2,287**	**1,182**	**107%**	**1,228**	**116%**

Arodene Road South (Daily Flows)

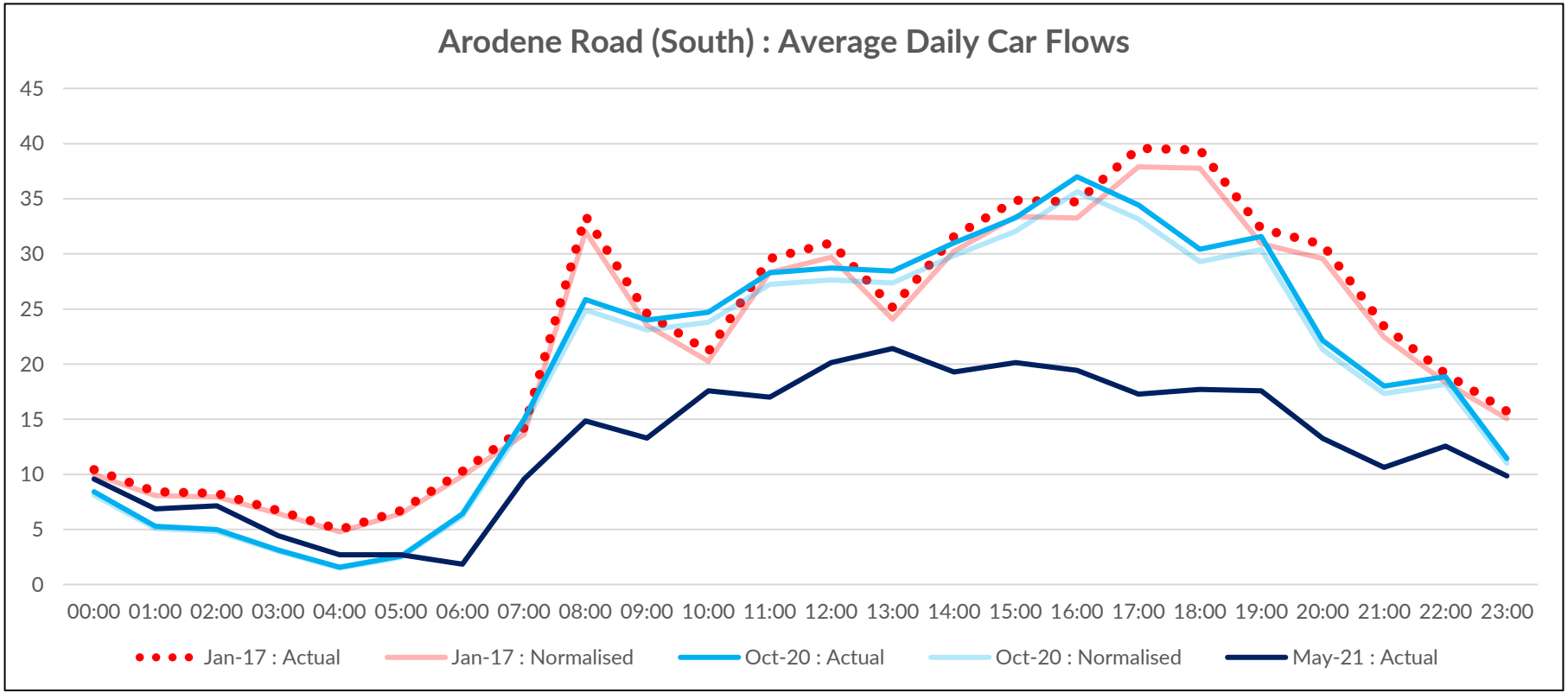
- The charts below and on the following pages show the normalised **average daily flows on Arodene Road South**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



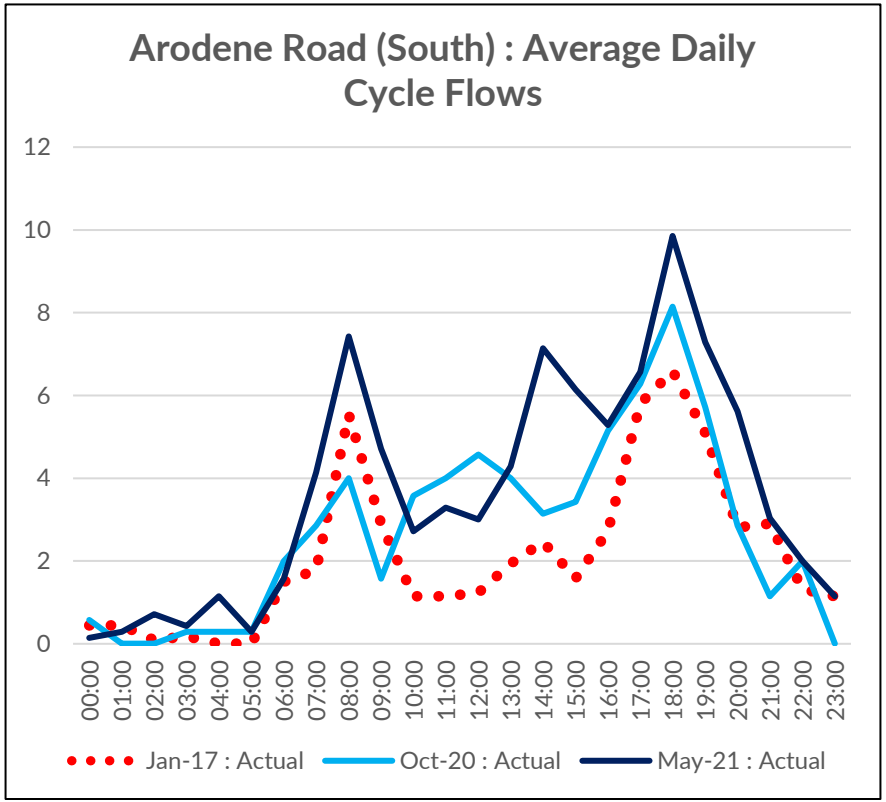


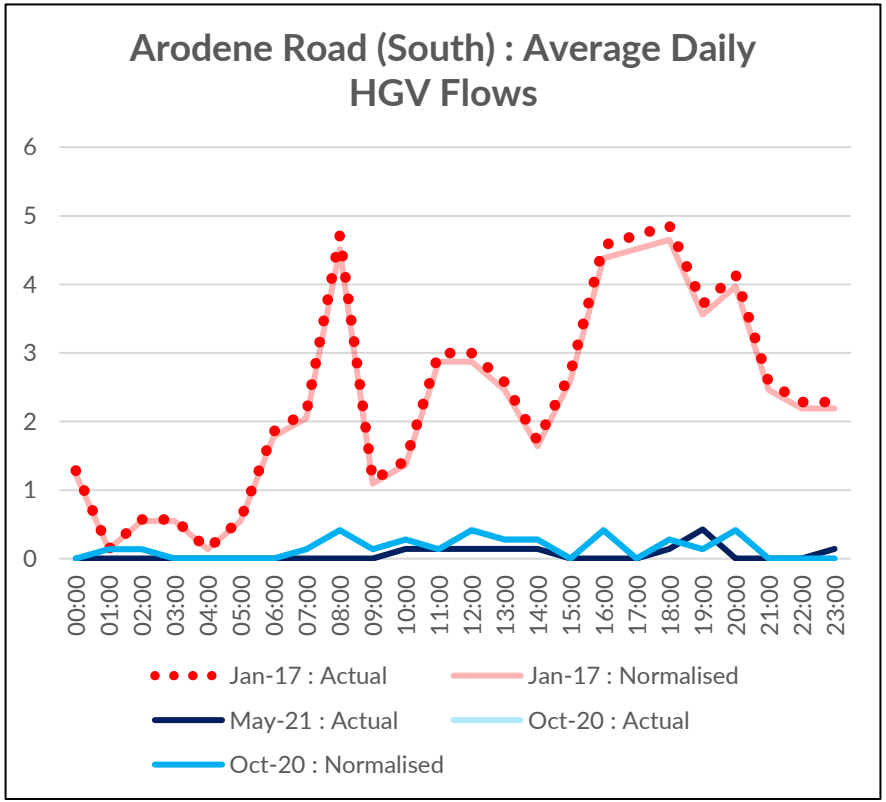
Basemap: ESRI

Arodene Road South

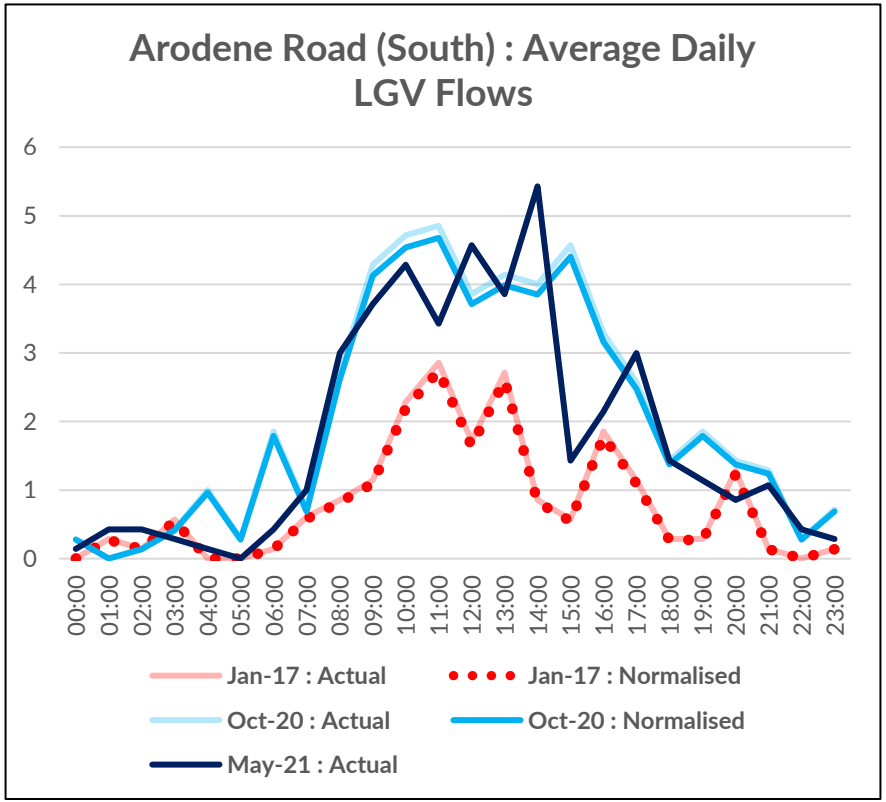


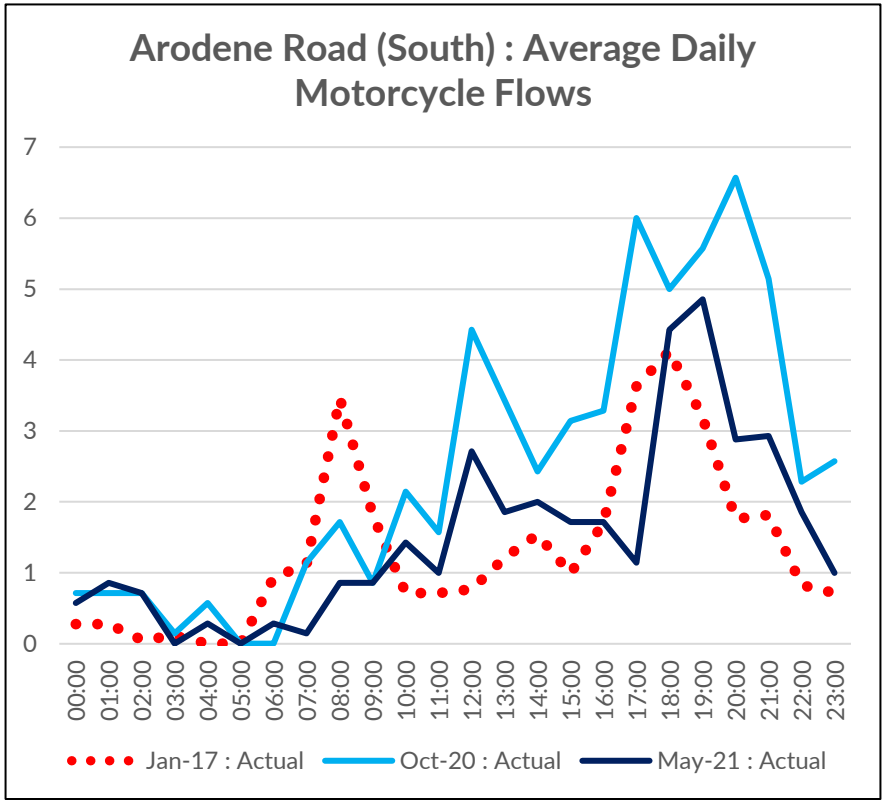
Arodene Road South





Arodene Road South



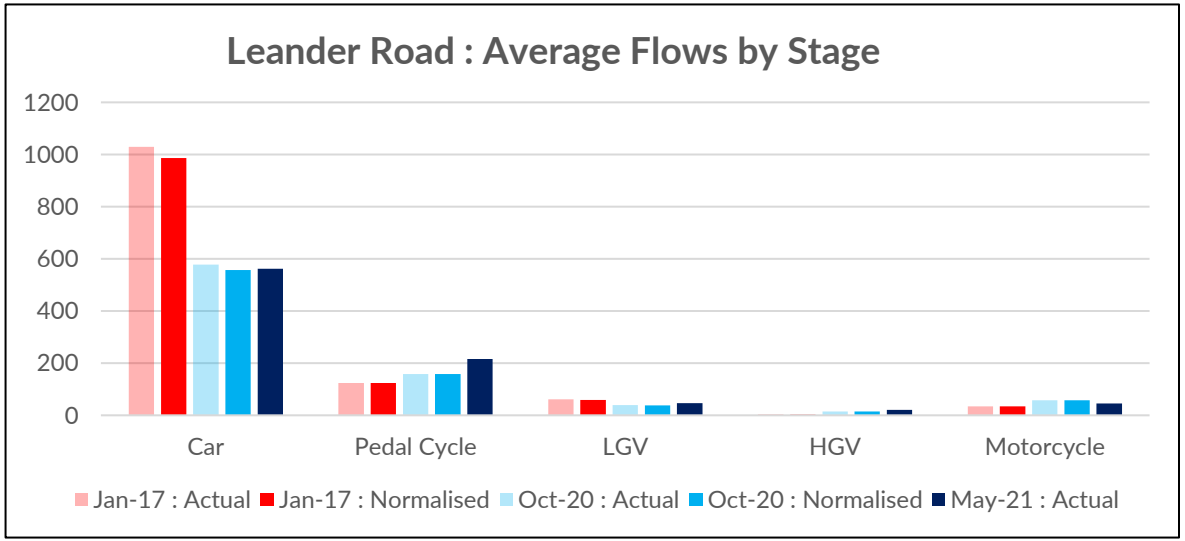


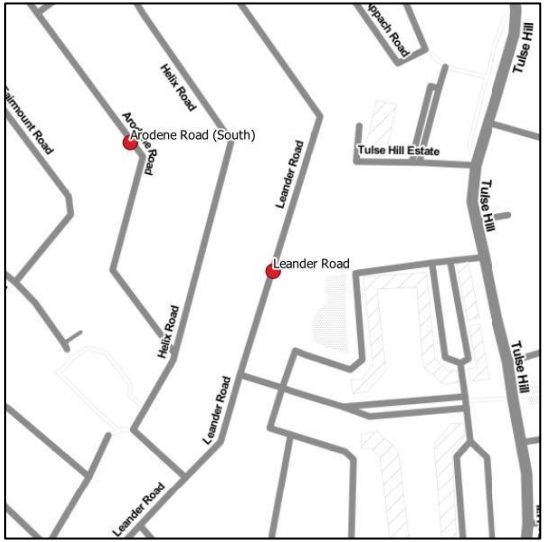
Arodene Road South – Summary Table

	Jan-17 : Actual	Jan-17 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Jan-17 -> Oct-20 : Actual Difference	Jan-17 -> Oct-20 : Actual % Difference	Jan-17 -> Oct-20 : Normalised Difference	Jan-17 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Jan-17 -> May-21 : Actual Difference	Jan-17 -> May-21 : Actual % Difference	Jan-17 -> May-21 : Normalised Difference	Jan-17 -> May-21 : Normalised % Difference
Car	537	514	476	458	-61	-11%	-56	-11%	307	307	-230	-43%	-207	-40%
Cycle	51	51	66	66	15	30%	15	30%	88	88	37	74%	37	74%
HGV	57	54	4	4	-53	-93%	-51	-93%	1	1	-55	-97%	-53	-97%
LGV	20	19	51	49	31	155%	30	156%	43	43	23	116%	24	125%
Motorcycles	32	32	60	60	28	90%	28	90%	36	36	4	14%	4	14%
Total Motorised Vehicles	**613**	**587**	**530**	**510**	**-83**	**-14%**	**-77**	**-13%**	**351**	**351**	**-262**	**-43%**	**-236**	**-40%**

Leander Road (Daily Flows)

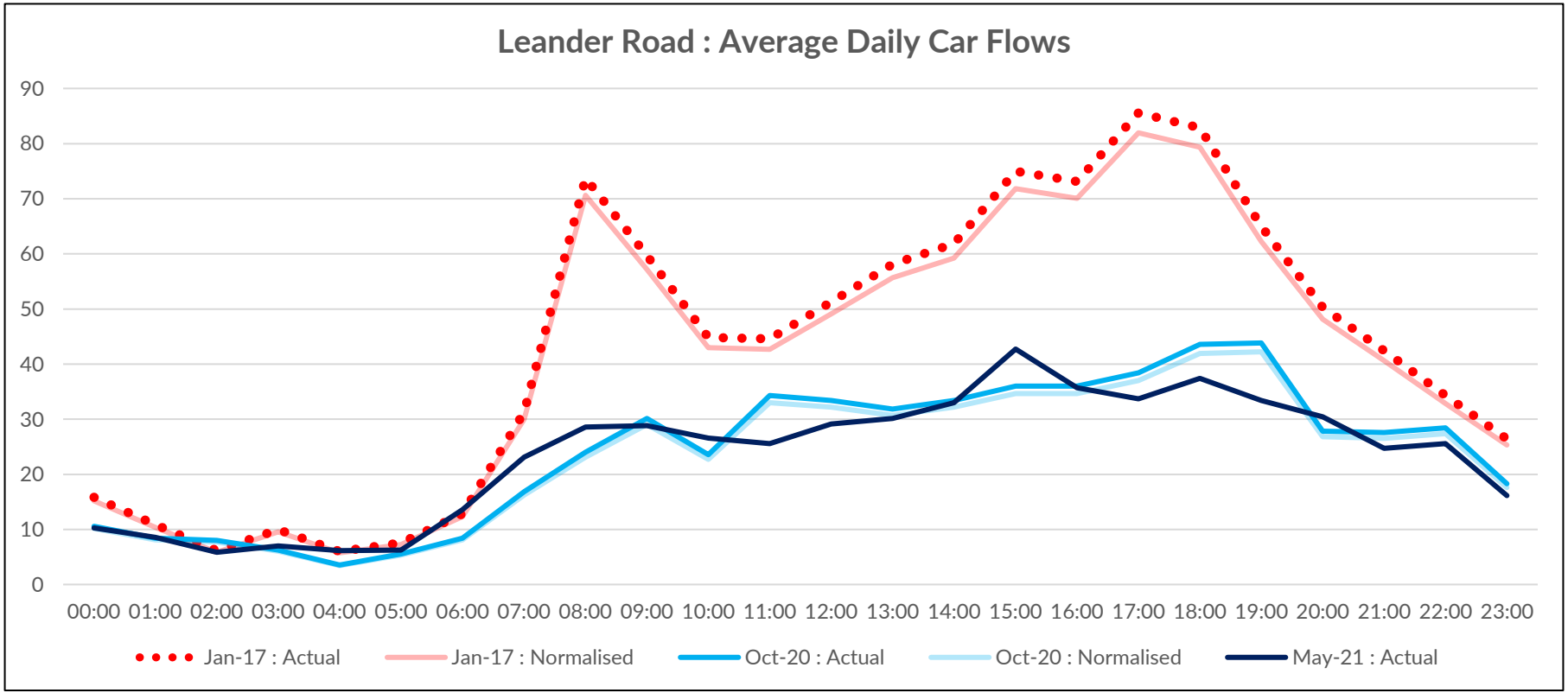
- The charts below and on the following pages show the normalised **average daily flows on Leander Road**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



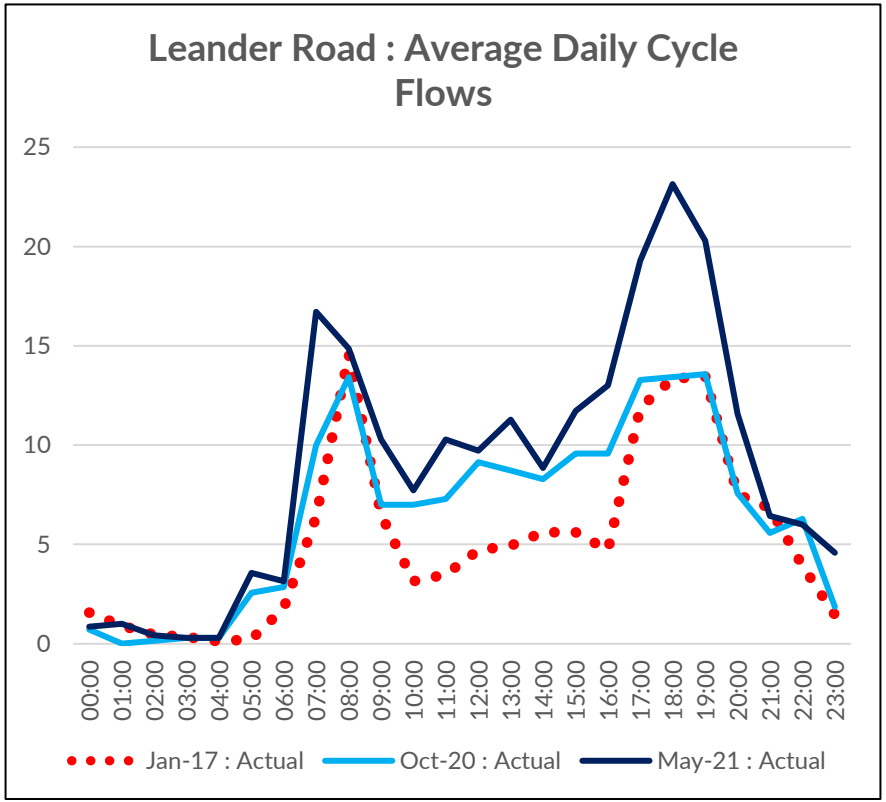


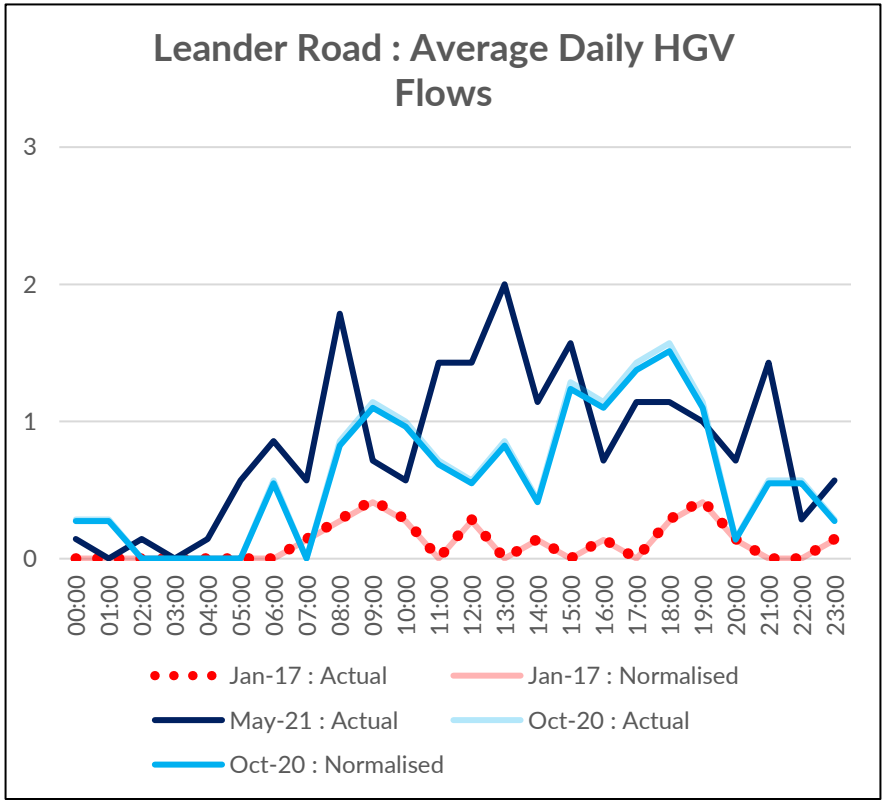
Basemap: ESRI

Leander Road

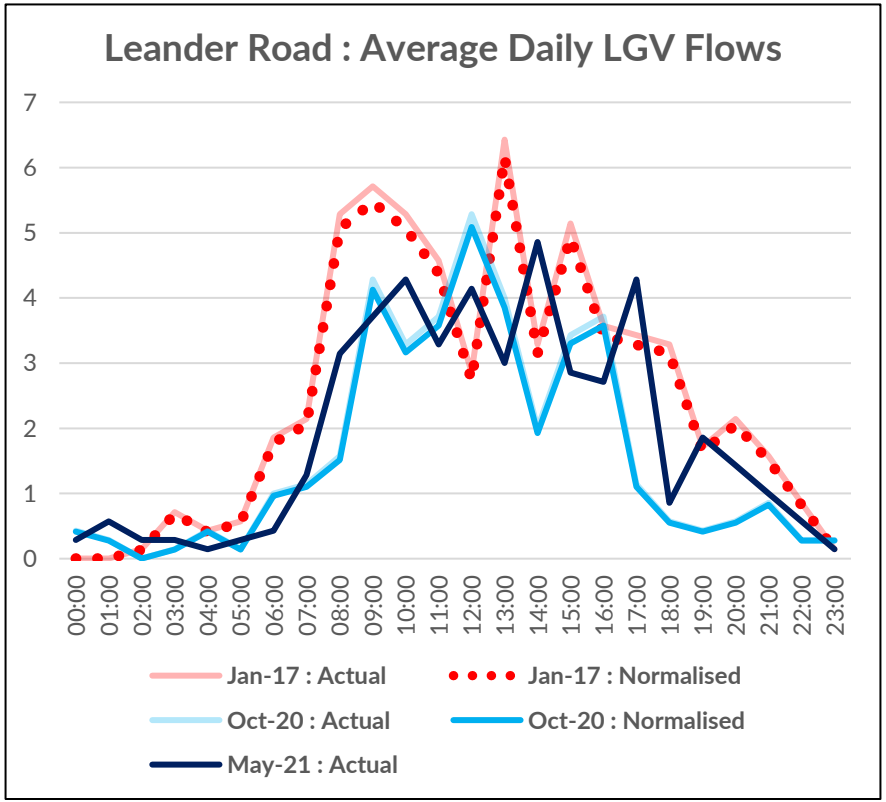


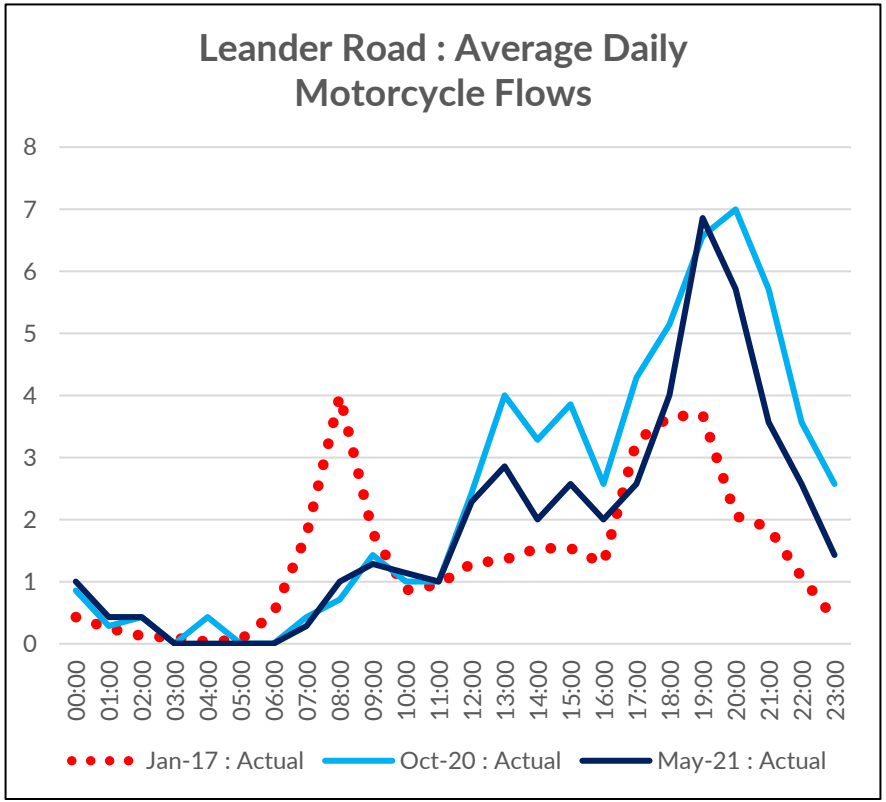
Leander Road





Leander Road



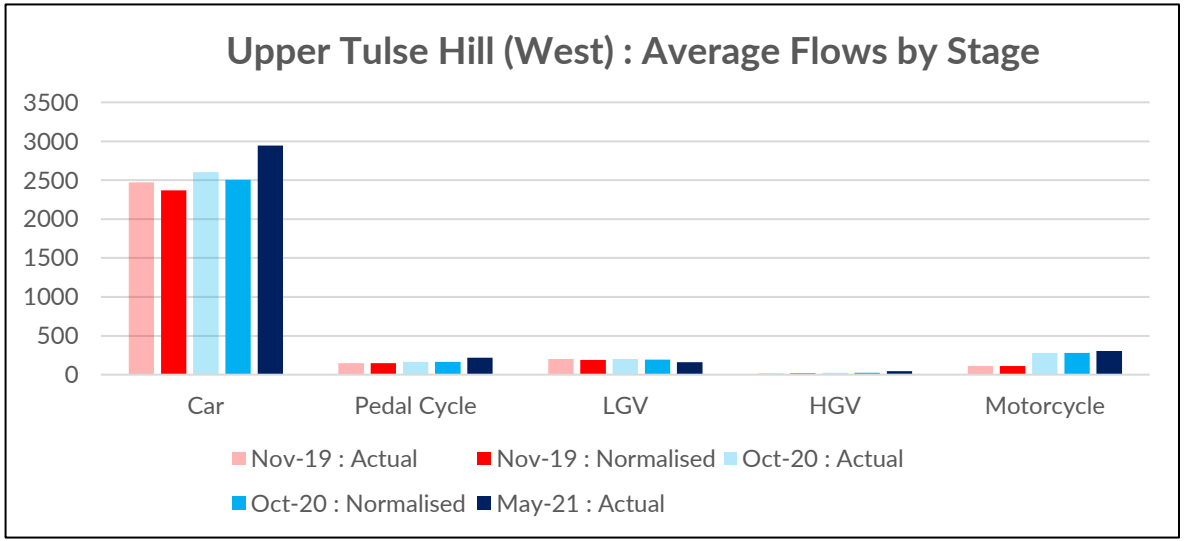


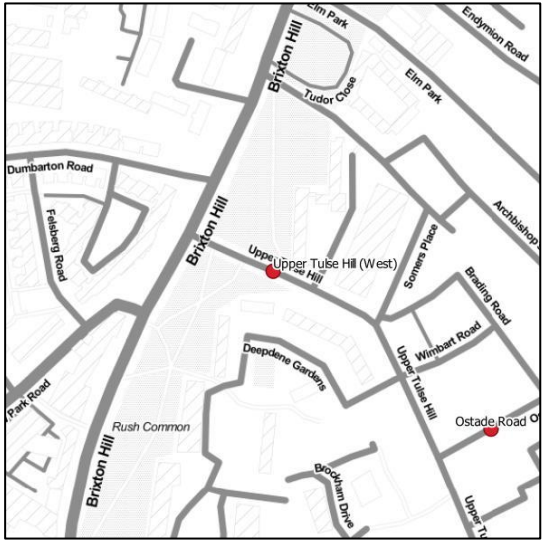
Leander Road – Summary Table

	Jan-17 : Actual	Jan-17 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Jan-17 -> Oct-20 : Actual Difference	Jan-17 -> Oct-20 : Actual % Difference	Jan-17 -> Oct-20 : Normalised Difference	Jan-17 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Jan-17 -> May-21 : Actual Difference	Jan-17 -> May-21 : Actual % Difference	Jan-17 -> May-21 : Normalised Difference	Jan-17 -> May-21 : Normalised % Difference
Car	1,030	986	578	557	-451	-44%	-429	-44%	563	563	-467	-45%	-424	-43%
Cycle	123	123	158	158	35	28%	35	28%	215	215	92	74%	92	74%
HGV	3	3	15	14	12	447%	12	450%	20	20	17	639%	17	672%
LGV	61	59	39	38	-22	-36%	-21	-36%	46	46	-15	-25%	-13	-22%
Motorcycles	34	34	58	58	24	70%	24	70%	45	45	11	33%	11	33%
Total Motorised Vehicles	**1,094**	**1,048**	**632**	**609**	**-461**	**-42%**	**-439**	**-42%**	**628**	**628**	**-465**	**-43%**	**-419**	**-40%**

Upper Tulse Hill West (Daily Flows)

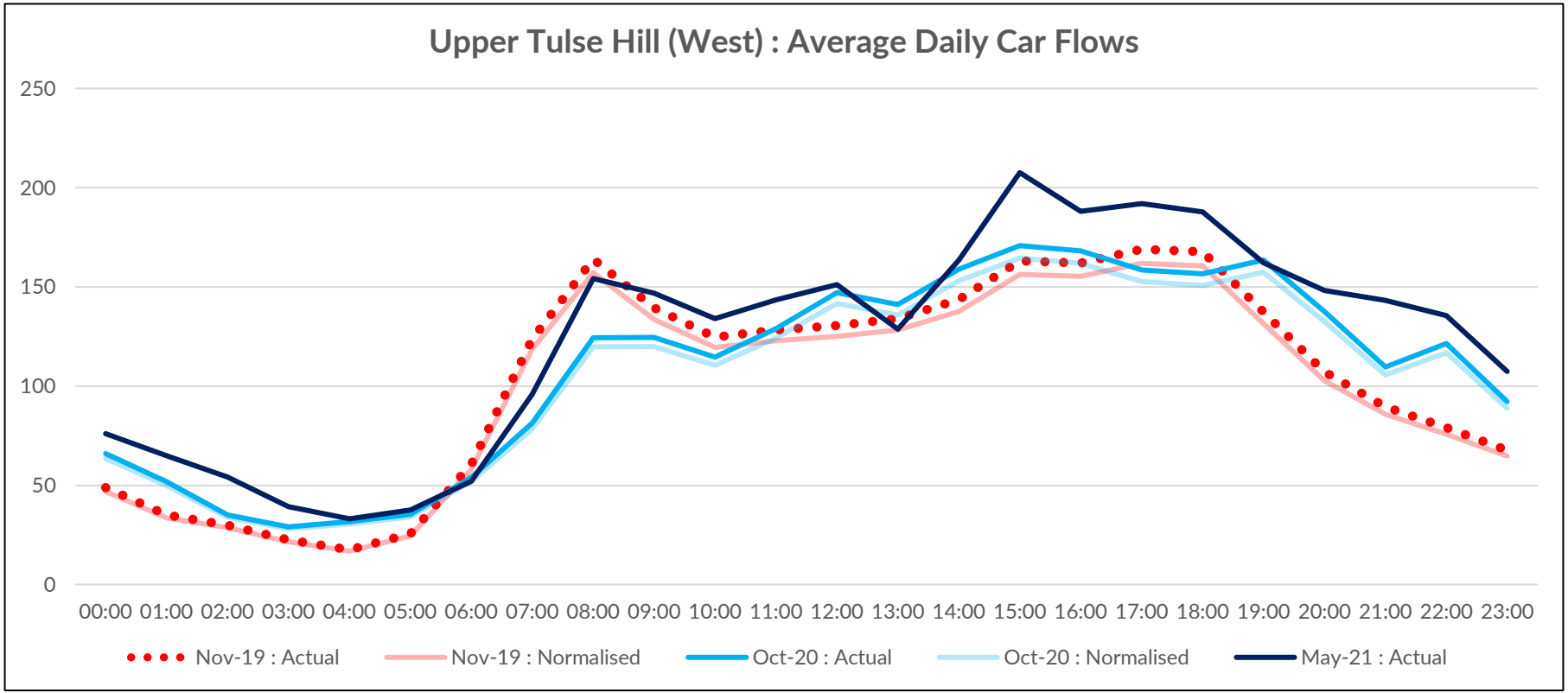
- The charts below and on the following pages show the normalised **average daily flows on Upper Tulse Hill West**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



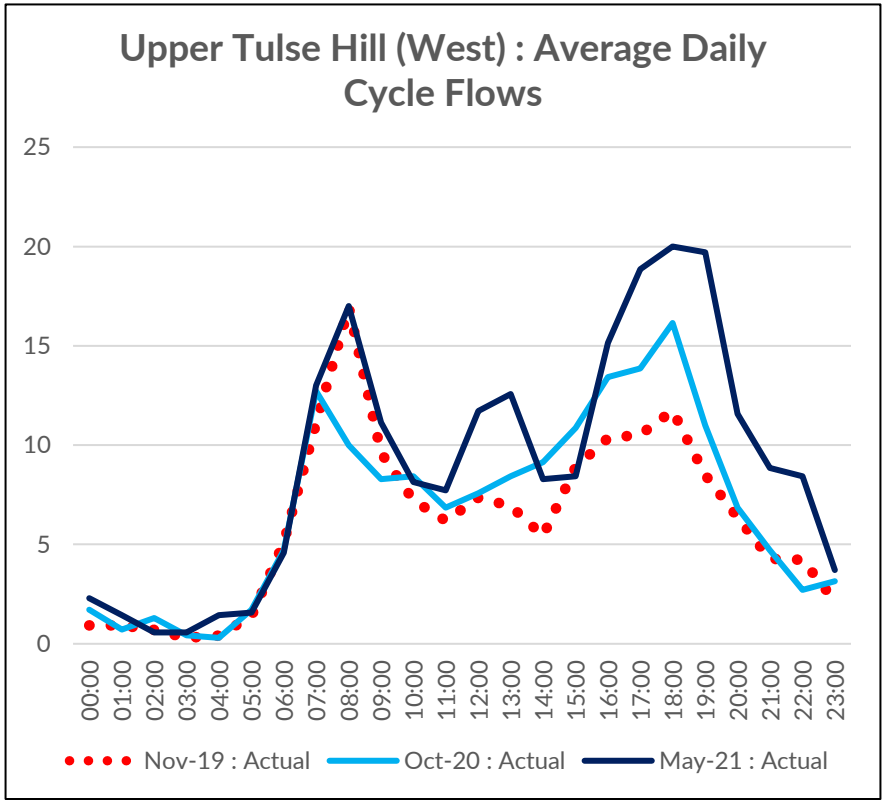


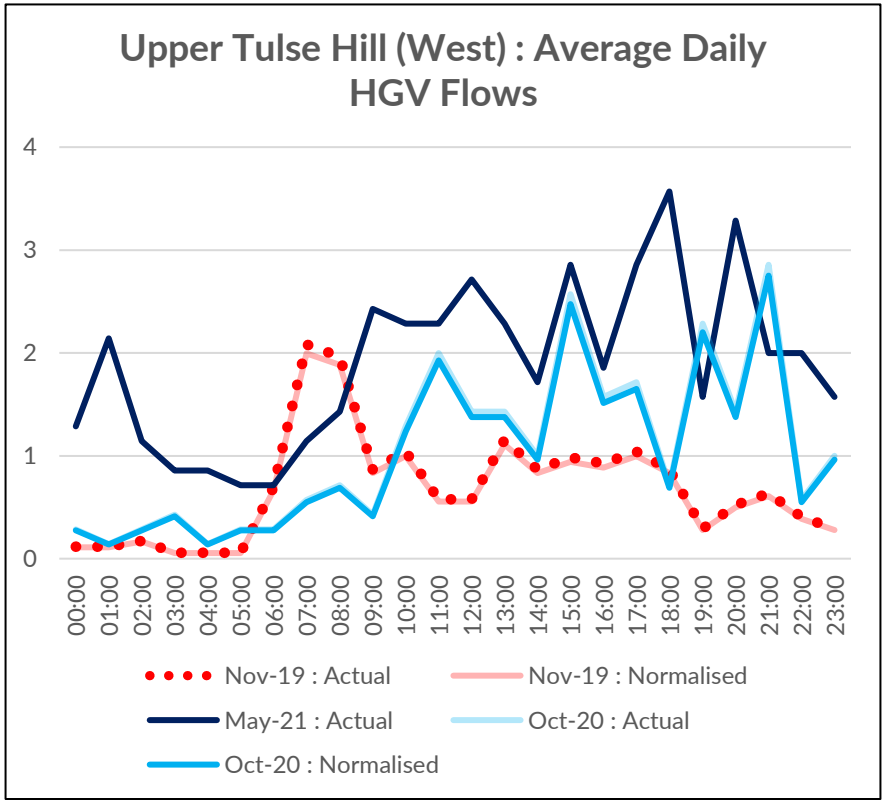
Basemap: ESRI

Upper Tulse Hill West

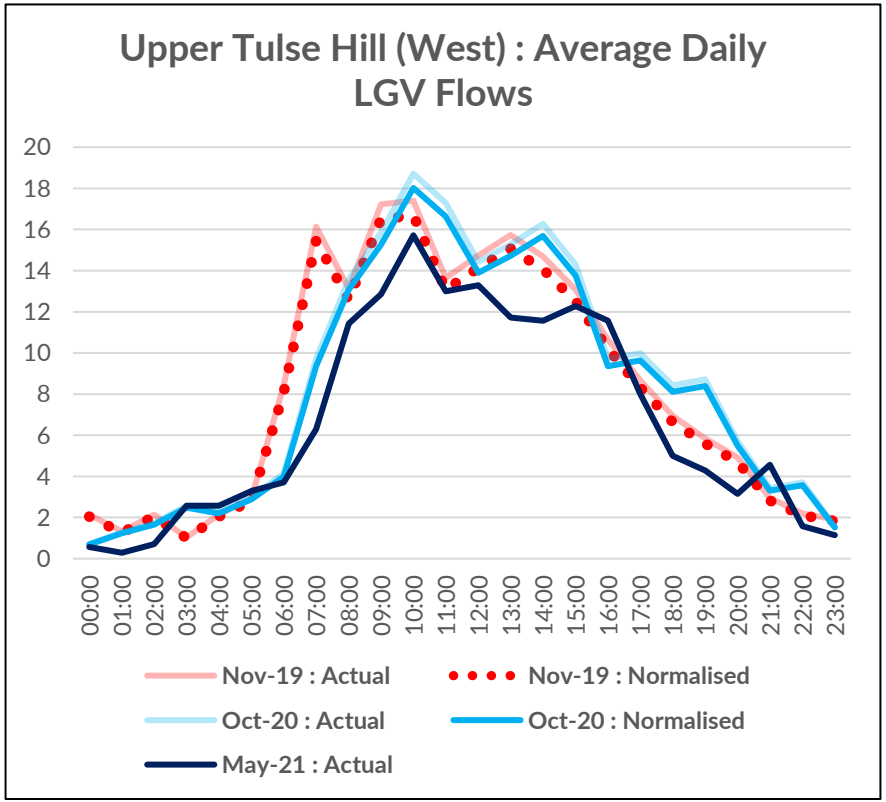


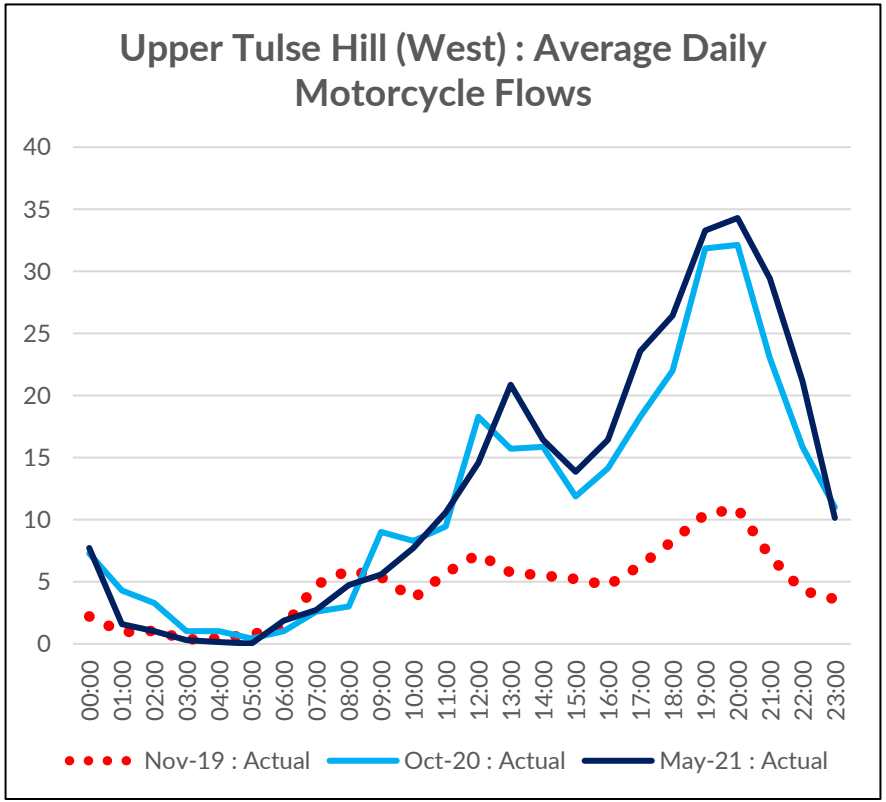
Upper Tulse Hill West





Upper Tulse Hill West



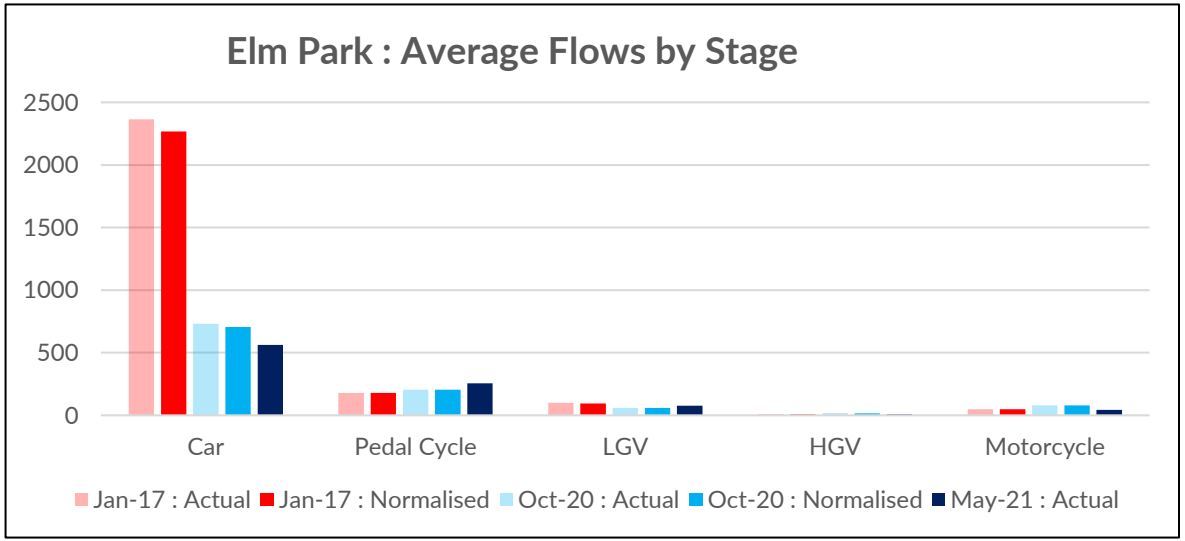


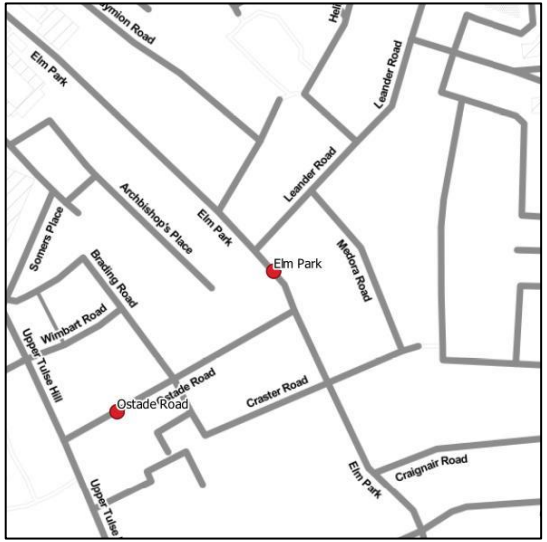
Upper Tulse Hill West – Summary Table

	Nov-19 : Actual	Nov-19 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Nov-19 -> Oct-20 : Actual Difference	Nov-19 -> Oct-20 : Actual % Difference	Nov-19 -> Oct-20 : Normalised Difference	Nov-19 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Nov-19 -> May-21 : Actual Difference	Nov-19 -> May-21 : Actual % Difference	Nov-19 -> May-21 : Normalised Difference	Nov-19 -> May-21 : Normalised % Difference
Car	2,472	2,368	2,604	2,507	132	5%	139	6%	2,947	2,947	476	19%	579	24%
Cycle	148	148	165	165	17	12%	17	12%	217	217	69	47%	69	47%
HGV	16	16	25	24	9	55%	9	56%	46	46	29	178%	30	191%
LGV	200	192	202	195	2	1%	3	2%	161	161	-39	-19%	-31	-16%
Motorcycles	111	111	281	281	169	152%	169	152%	304	304	193	173%	193	173%
Total Motorised Vehicles	**2,688**	**2,575**	**2,831**	**2,726**	**143**	**5%**	**151**	**6%**	**3,154**	**3,154**	**466**	**17%**	**579**	**22%**

Elm Park (Daily Flows)

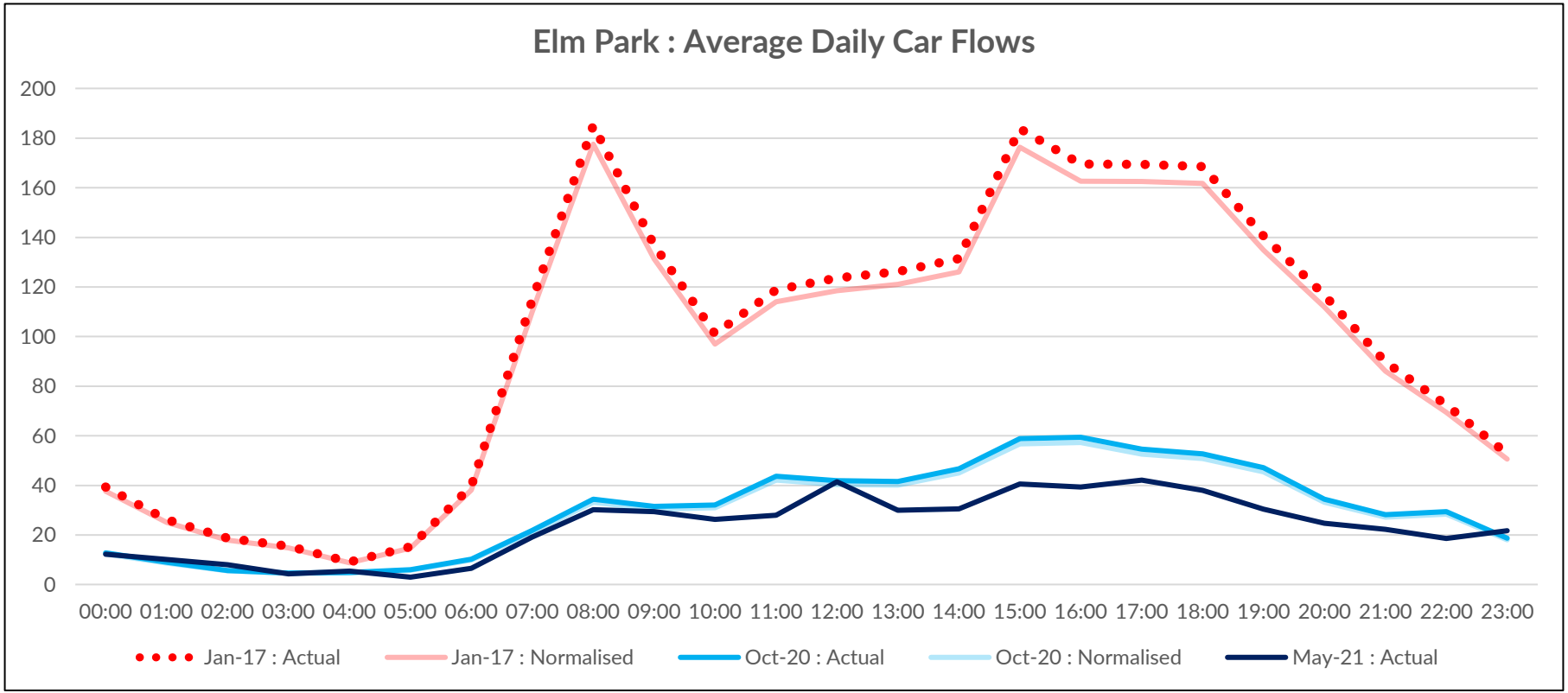
- The charts below and on the following pages show the normalised **average daily flows on Elm Park**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



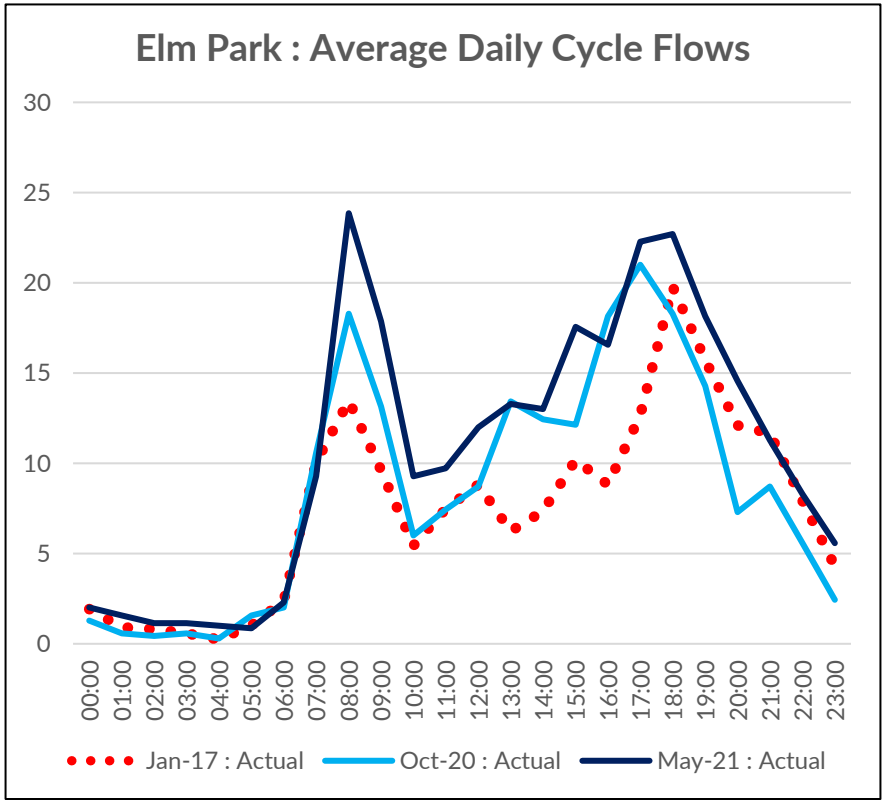


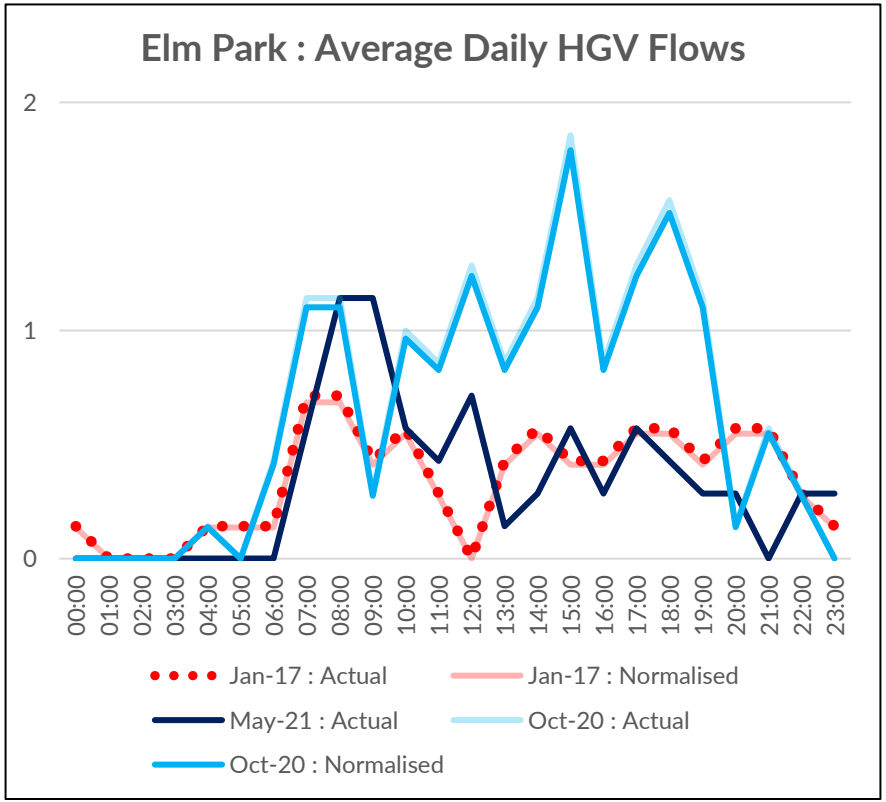
Basemap: ESRI

Elm Park

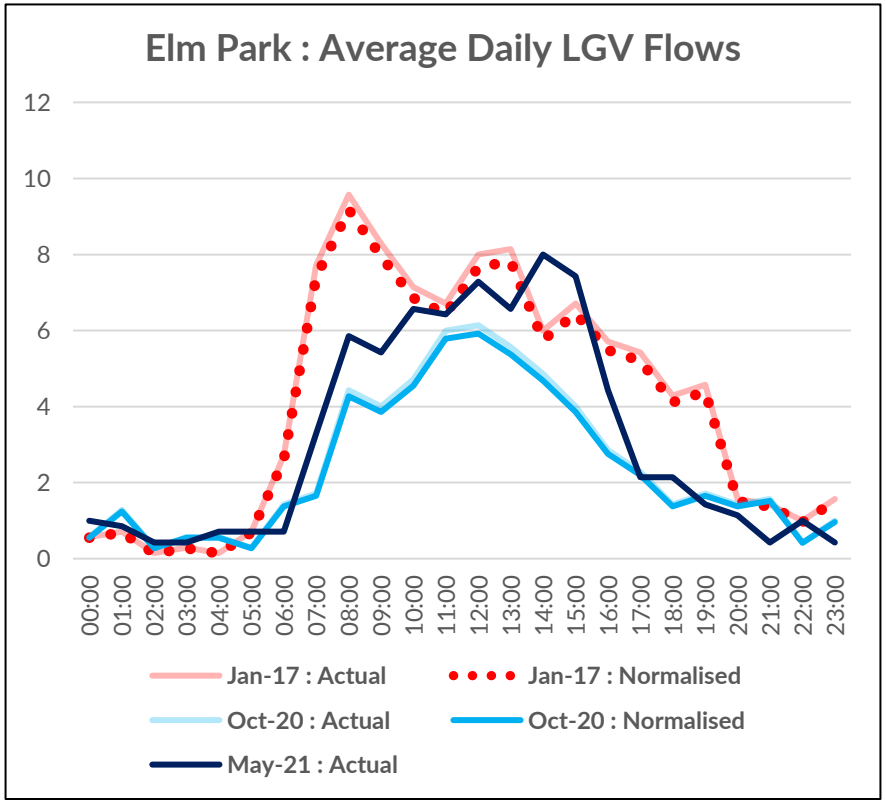

Elm Park : Average Daily Car Flows
200
180
160
140
120
100
80
60
40
20
0
00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
Jan-17 : Actual
Jan-17 : Normalised
Oct-20 : Actual
Oct-20 : Normalised
May-21 : Actual

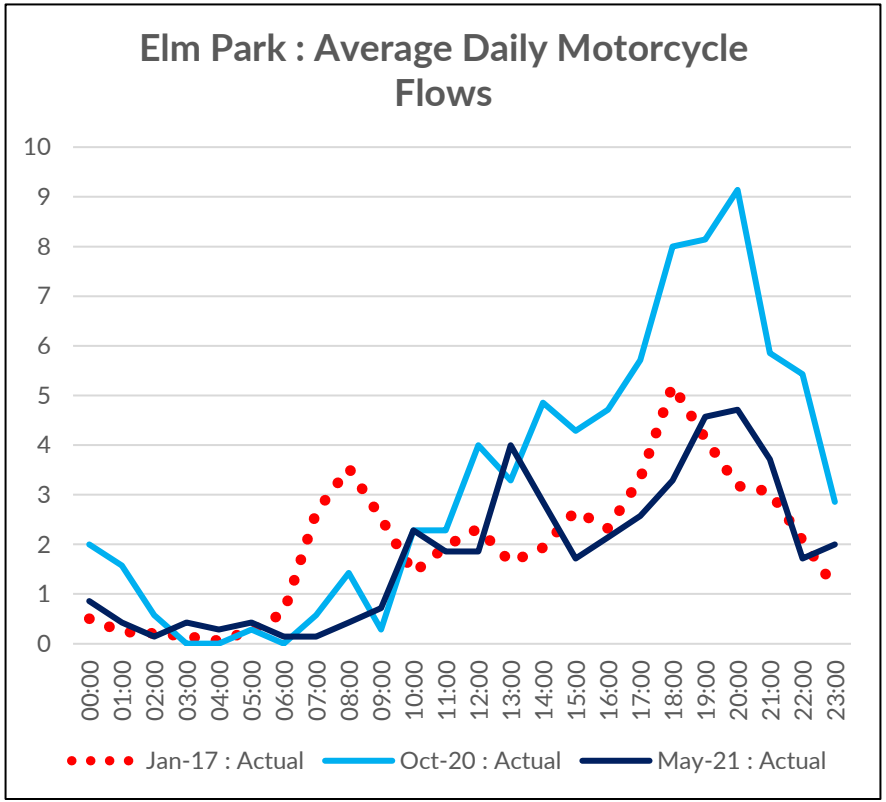
Elm Park


Elm Park : Average Daily Cycle Flows
30
25
20
15
10
5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Oct-20 : Actual
May-21 : Actual


Elm Park : Average Daily HGV Flows
2
1
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Jan-17 : Normalised
May-21 : Actual
Oct-20 : Actual
Oct-20 : Normalised

Elm Park


Elm Park : Average Daily LGV Flows
12
10
8
6
4
2
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Jan-17 : Normalised
Oct-20 : Actual
Oct-20 : Normalised
May-21 : Actual

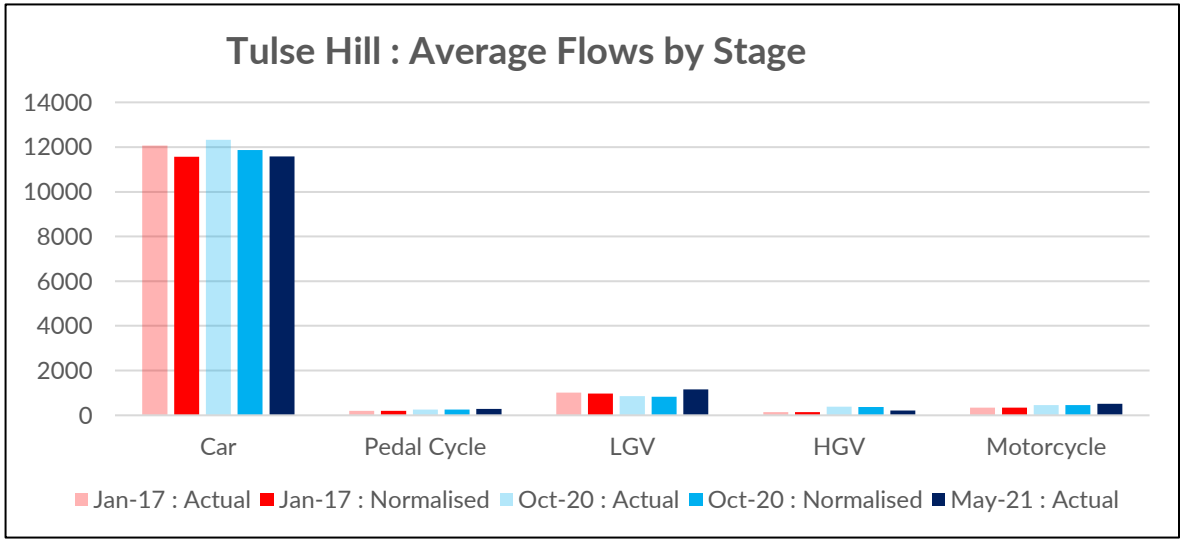

Elm Park : Average Daily Motorcycle Flows
10
9
8
7
6
5
4
3
2
1
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Oct-20 : Actual
May-21 : Actual

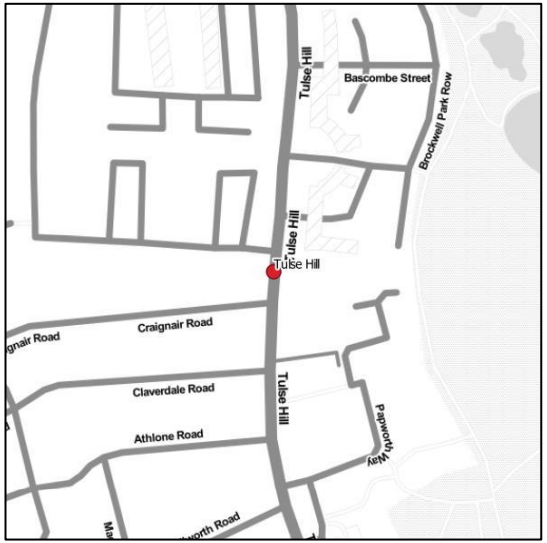
Elm Park– Summary Table

	Jan-17 : Actual	Jan-17 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Jan-17 -> Oct-20 : Actual Difference	Jan-17 -> Oct-20 : Actual % Difference	Jan-17 -> Oct-20 : Normalised Difference	Jan-17 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Jan-17 -> May-21 : Actual Difference	Jan-17 -> May-21 : Actual % Difference	Jan-17 -> May-21 : Normalised Difference	Jan-17 -> May-21 : Normalised % Difference
Car	2,365	2,269	731	705	-1,634	-69%	-1,564	-69%	562	562	-1,803	-76%	-1,706	-75%
Cycle	179	179	205	205	25	14%	25	14%	255	255	76	42%	76	42%
HGV	8	8	16	15	8	93%	7	94%	8	8	0	-3%	0	1%
LGV	99	95	59	57	-40	-40%	-38	-40%	75	75	-24	-24%	-20	-21%
Motorcycles	47	47	78	78	30	65%	30	65%	43	43	-4	-8%	-4	-8%
Total Motorised Vehicles	**2,472**	**2,372**	**806**	**777**	**-1,667**	**-67%**	**-1,595**	**-67%**	**645**	**645**	**-1,827**	**-74%**	**-1,726**	**-73%**

Tulse Hill (Daily Flows)

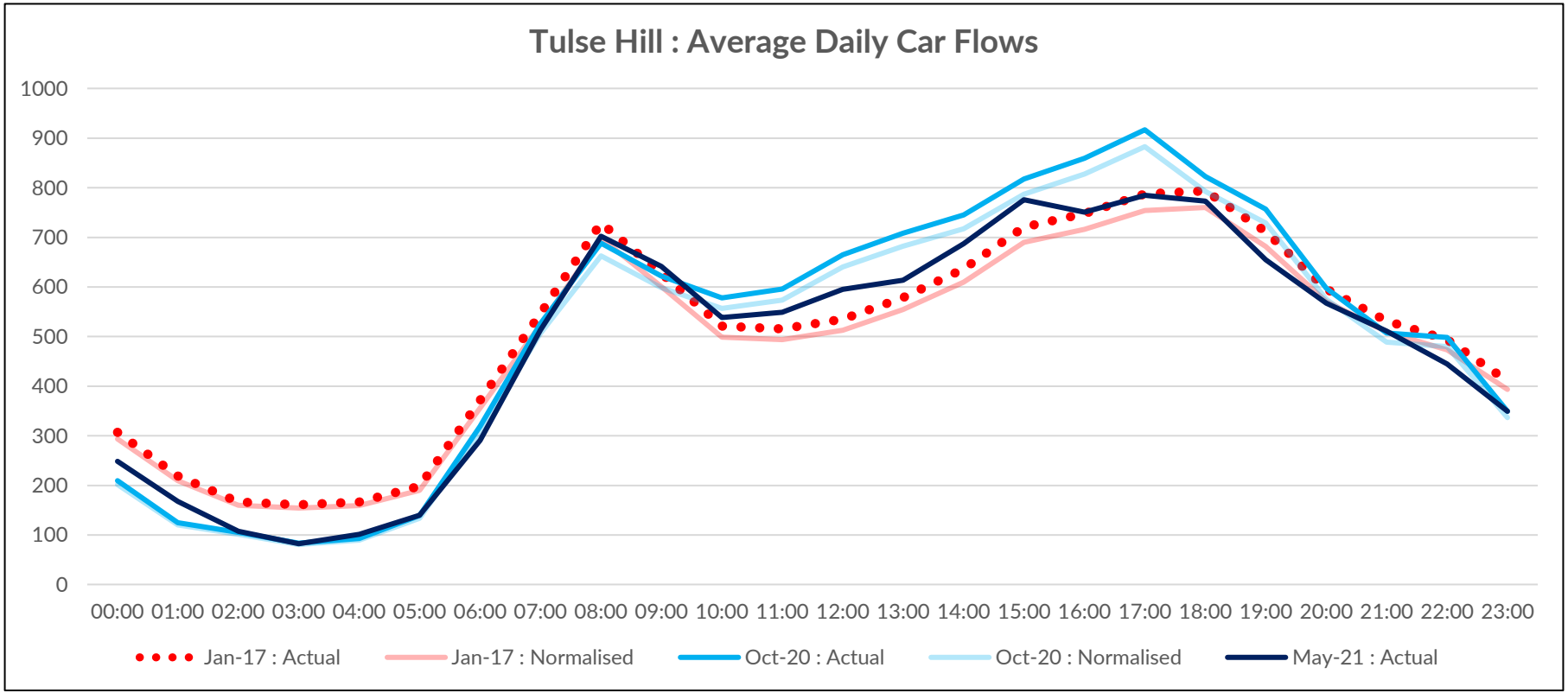
- The charts below and on the following pages show the normalised **average daily flows on Tulse Hill**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



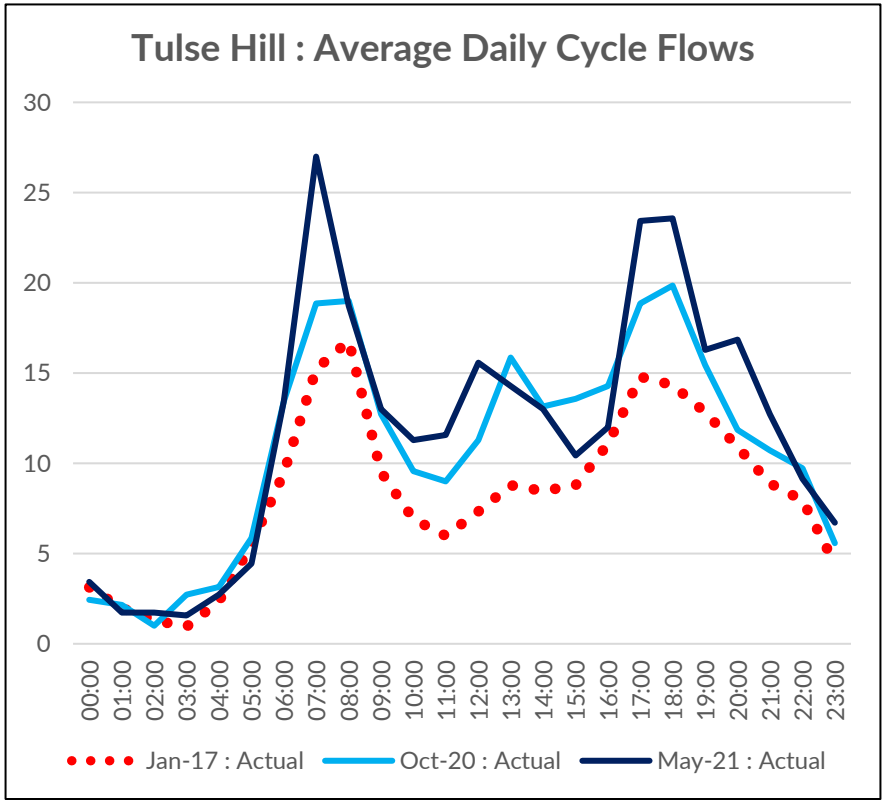


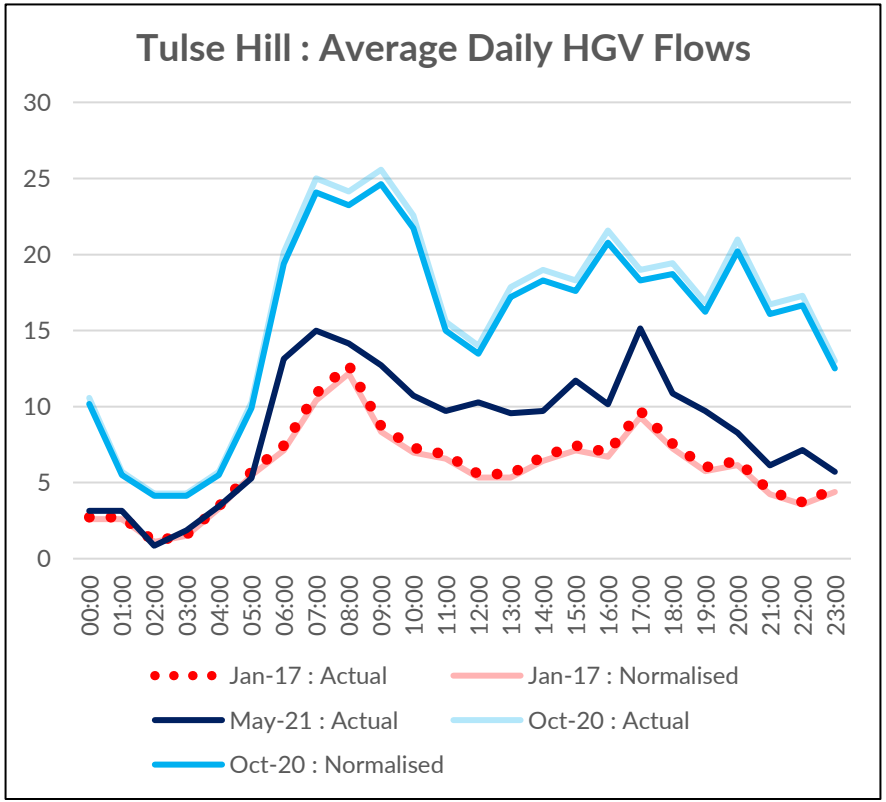
Basemap: ESRI

Tulse Hill

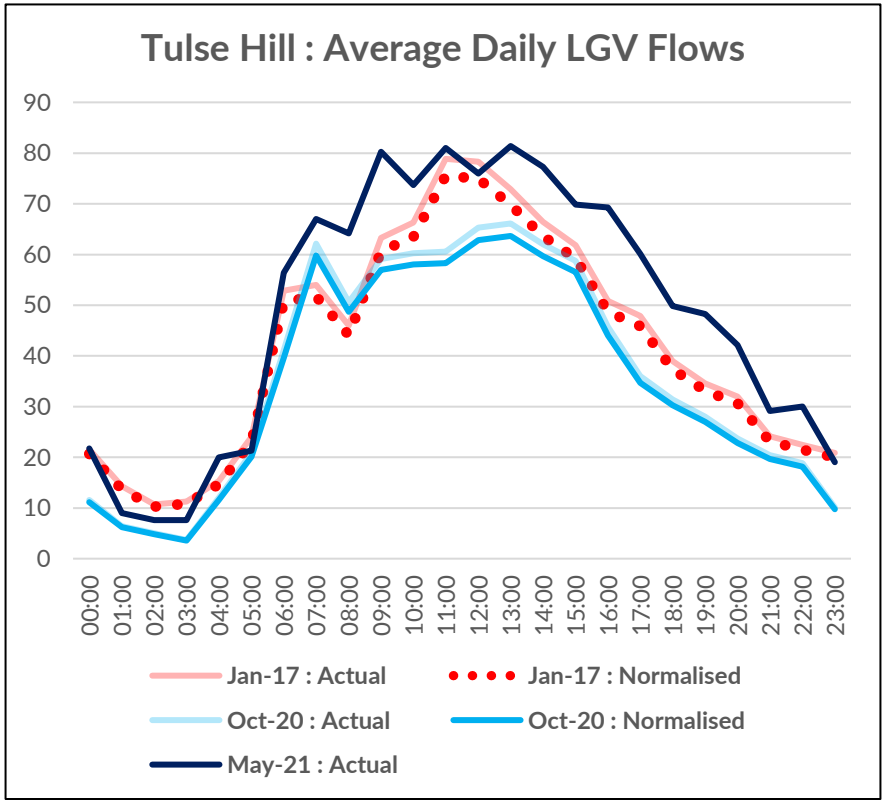

Tulse Hill : Average Daily Car Flows
1000
900
800
700
600
500
400
300
200
100
0
00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
Jan-17 : Actual
Jan-17 : Normalised
Oct-20 : Actual
Oct-20 : Normalised
May-21 : Actual

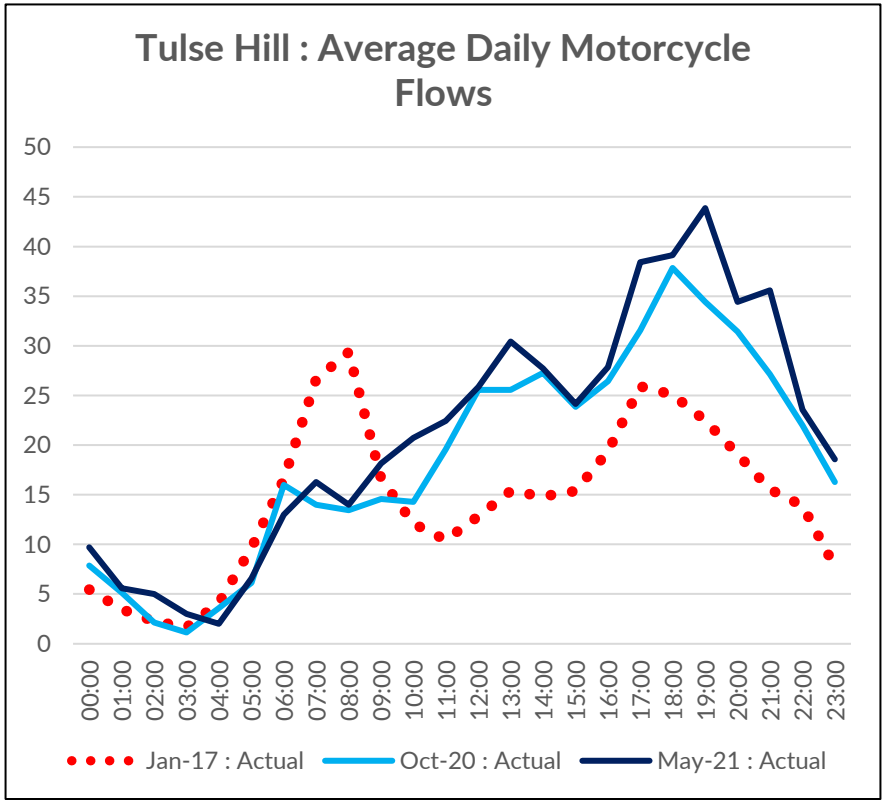
Tulse Hill


Tulse Hill : Average Daily Cycle Flows
30
25
20
15
10
5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Oct-20 : Actual
May-21 : Actual


Tulse Hill : Average Daily HGV Flows
30
25
20
15
10
5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Jan-17 : Normalised
May-21 : Actual
Oct-20 : Actual
Oct-20 : Normalised

Tulse Hill


Tulse Hill : Average Daily LGV Flows
90
80
70
60
50
40
30
20
10
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Jan-17 : Normalised
Oct-20 : Actual
Oct-20 : Normalised
May-21 : Actual

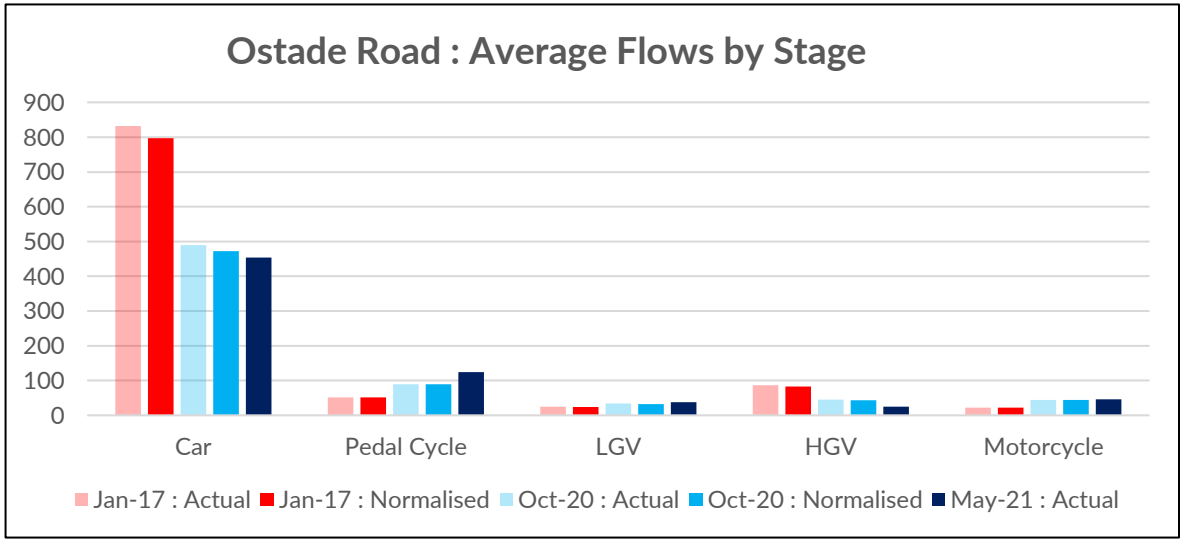

Tulse Hill : Average Daily Motorcycle Flows
50
45
40
35
30
25
20
15
10
5
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Oct-20 : Actual
May-21 : Actual

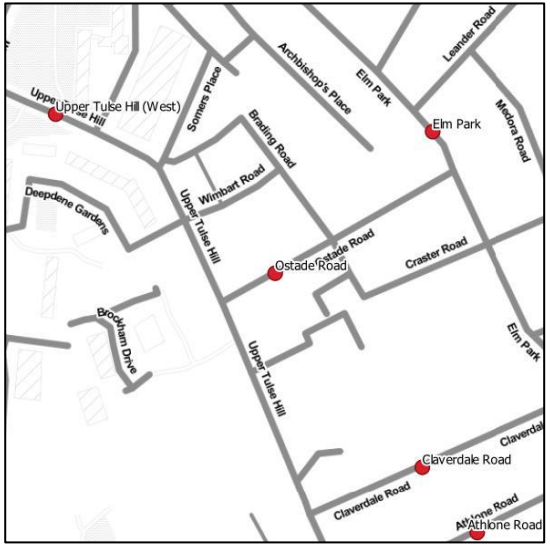
Tulse Hill – Summary Table

	Jan-17 : Actual	Jan-17 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Jan-17 -> Oct-20 : Actual Difference	Jan-17 -> Oct-20 : Actual % Difference	Jan-17 -> Oct-20 : Normalised Difference	Jan-17 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Jan-17 -> May-21 : Actual Difference	Jan-17 -> May-21 : Actual % Difference	Jan-17 -> May-21 : Normalised Difference	Jan-17 -> May-21 : Normalised % Difference
Car	12,073	11,565	12,329	11,872	256	2%	307	3%	11,591	11,591	-483	-4%	25	0%
Cycle	198	198	260	260	62	32%	62	32%	285	285	87	44%	87	44%
HGV	146	140	388	373	242	166%	234	167%	208	208	62	42%	68	49%
LGV	1,010	967	860	828	-150	-15%	-139	-14%	1,162	1,162	153	15%	195	20%
Motorcycles	346	346	447	447	102	29%	102	29%	506	506	160	46%	160	46%
Total Motorised Vehicles	**13,229**	**12,672**	**13,577**	**13,074**	**348**	**3%**	**402**	**3%**	**12,960**	**12,960**	**-269**	**-2%**	**288**	**2%**

Ostade Road (Daily Flows)

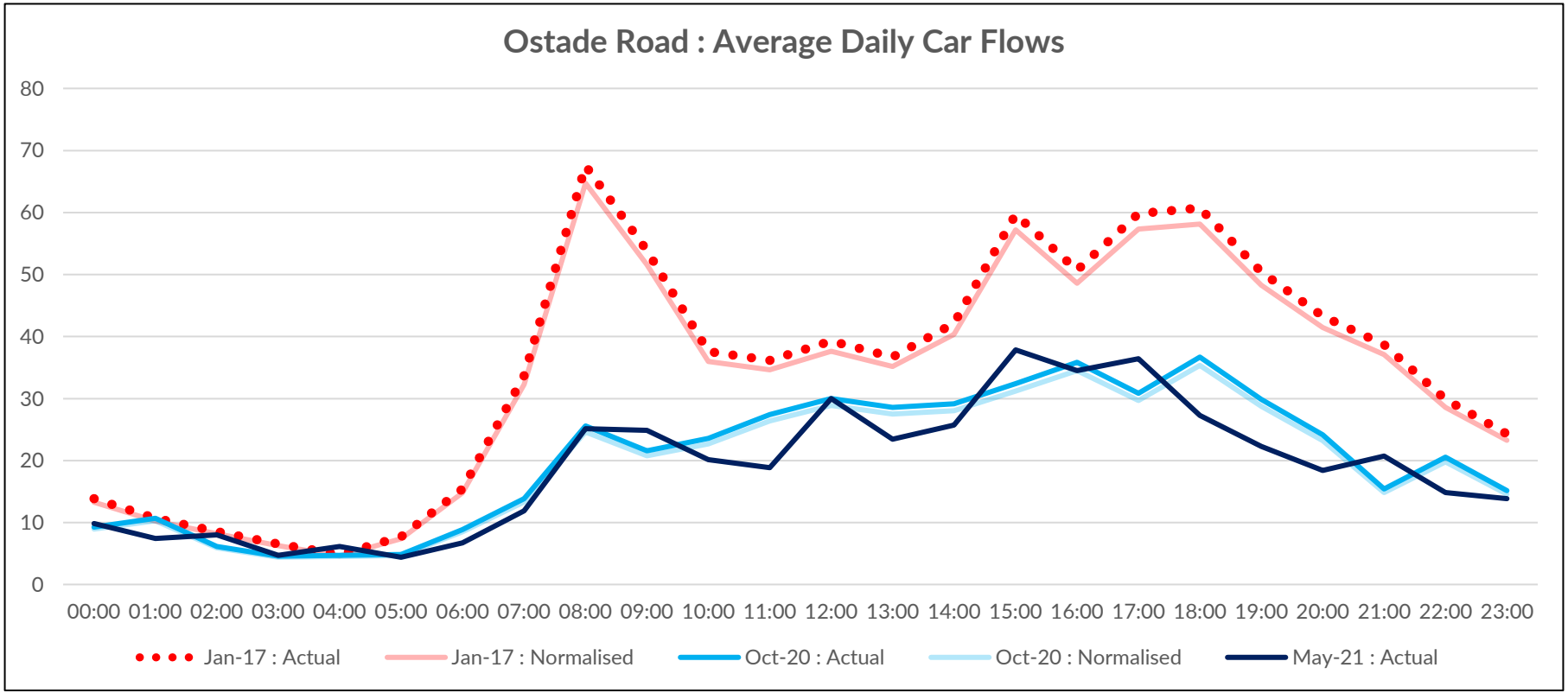
- The charts below and on the following pages show the normalised **average daily flows on Ostade Road**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



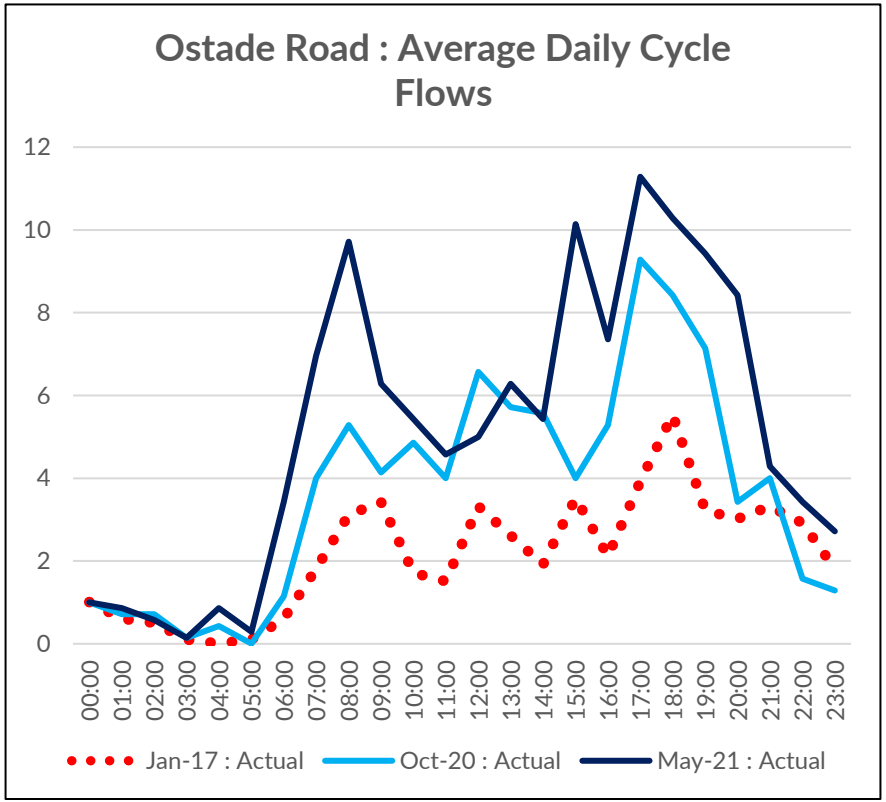


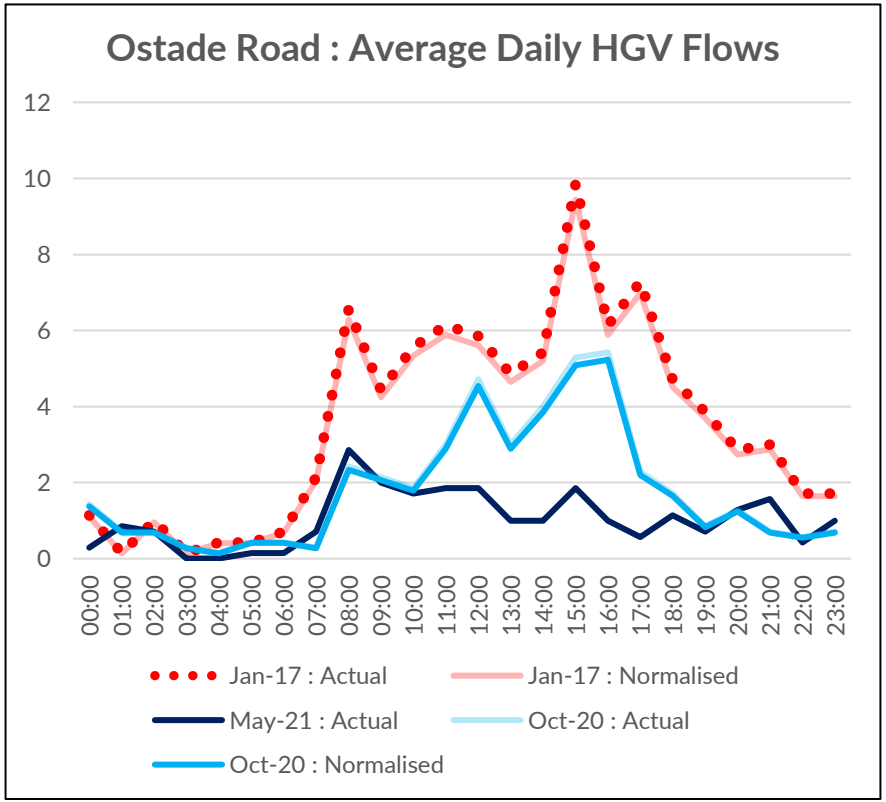
Basemap: ESRI

Ostade Road

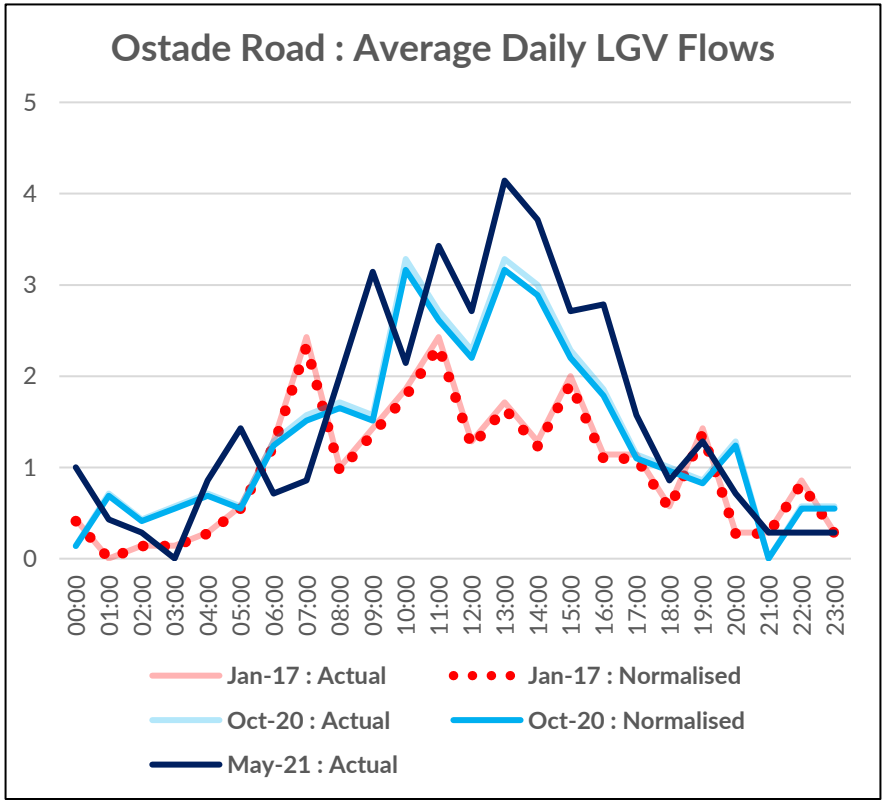

Ostade Road : Average Daily Car Flows
80
70
60
50
40
30
20
10
0
00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
Jan-17 : Actual
Jan-17 : Normalised
Oct-20 : Actual
Oct-20 : Normalised
May-21 : Actual

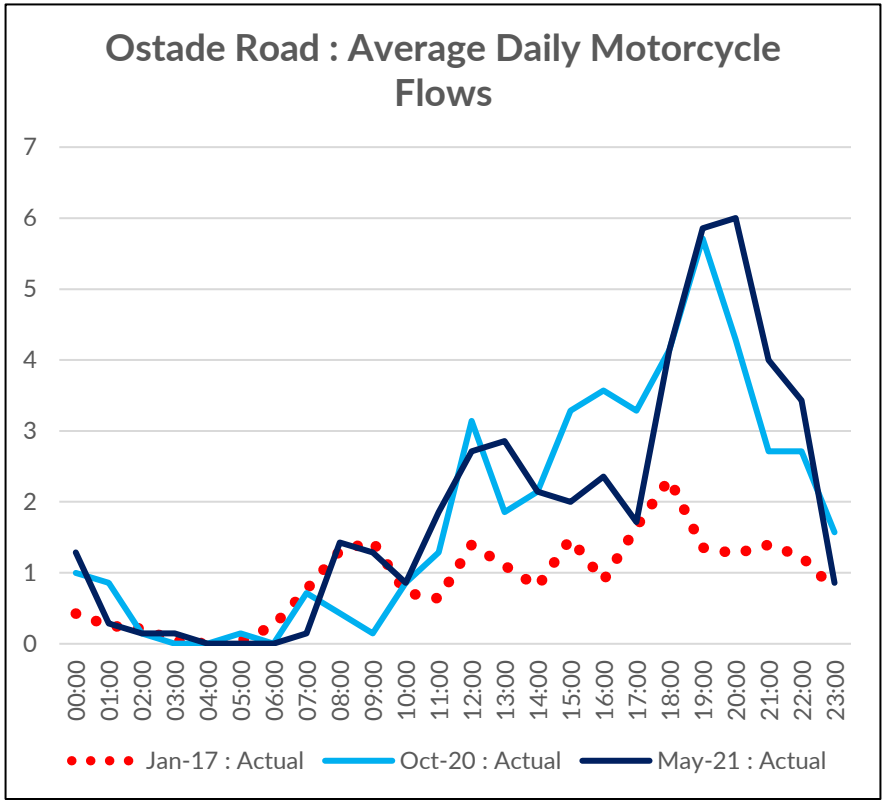
Ostade Road


Ostade Road : Average Daily Cycle Flows
12
10
8
6
4
2
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Oct-20 : Actual
May-21 : Actual


Ostade Road : Average Daily HGV Flows
12
10
8
6
4
2
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Jan-17 : Normalised
May-21 : Actual
Oct-20 : Actual
Oct-20 : Normalised

Ostade Road


Ostade Road : Average Daily LGV Flows
5
4
3
2
1
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Jan-17 : Normalised
Oct-20 : Actual
Oct-20 : Normalised
May-21 : Actual

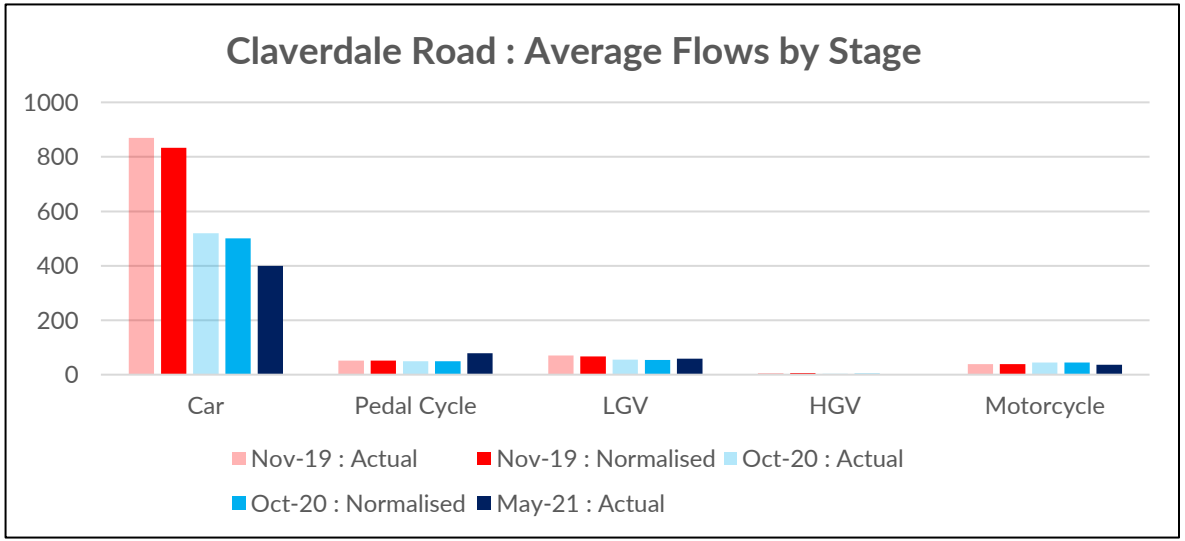

Ostade Road : Average Daily Motorcycle Flows
7
6
5
4
3
2
1
0
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
Jan-17 : Actual
Oct-20 : Actual
May-21 : Actual

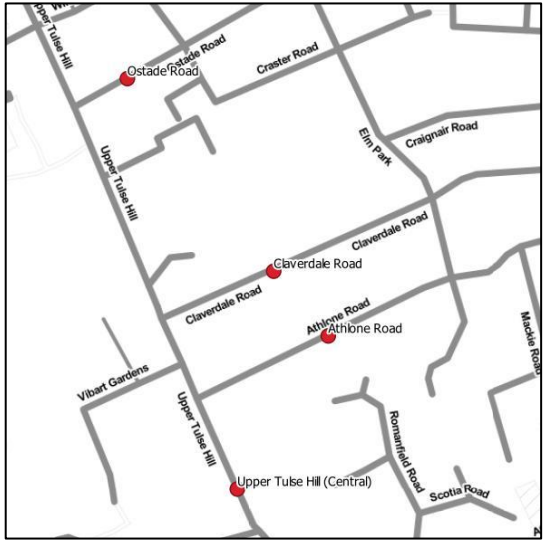
Ostade Road – Summary Table

	Jan-17 : Actual	Jan-17 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Jan-17 -> Oct-20 : Actual Difference	Jan-17 -> Oct-20 : Actual % Difference	Jan-17 -> Oct-20 : Normalised Difference	Jan-17 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Jan-17 -> May-21 : Actual Difference	Jan-17 -> May-21 : Actual % Difference	Jan-17 -> May-21 : Normalised Difference	Jan-17 -> May-21 : Normalised % Difference
Car	832	797	490	472	-342	-41%	-326	-41%	454	454	-379	-46%	-344	-43%
Cycle	52	52	89	89	37	72%	37	72%	124	124	72	140%	72	140%
HGV	86	83	44	43	-42	-48%	-40	-48%	25	25	-61	-71%	-58	-70%
LGV	24	23	33	32	9	38%	9	38%	38	38	13	55%	14	62%
Motorcycles	22	22	44	44	22	102%	22	102%	46	46	24	109%	24	109%
Total Motorised Vehicles	**943**	**903**	**568**	**547**	**-375**	**-40%**	**-356**	**-39%**	**516**	**516**	**-427**	**-45%**	**-387**	**-43%**

Claverdale Road (Daily Flows)

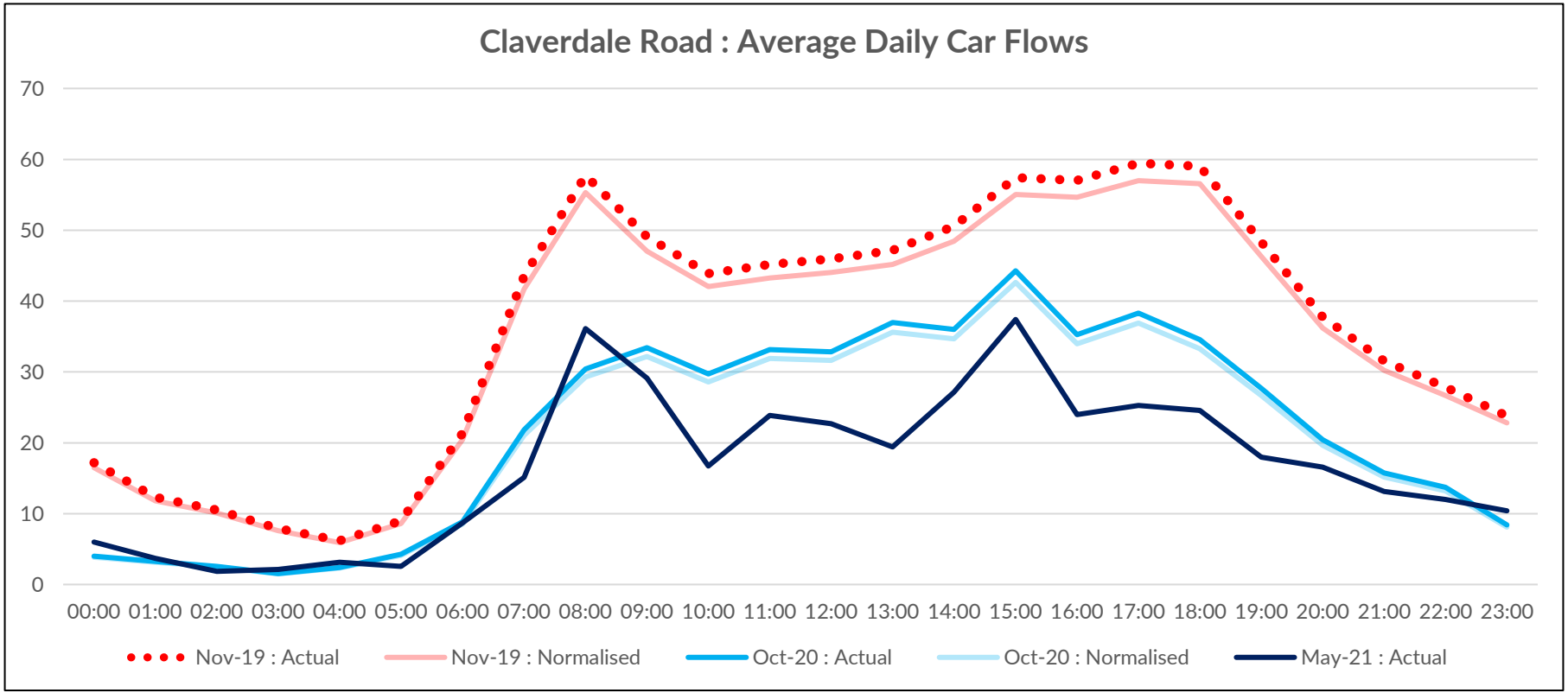
- The charts below and on the following pages show the normalised **average daily flows on Claverdale Road**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



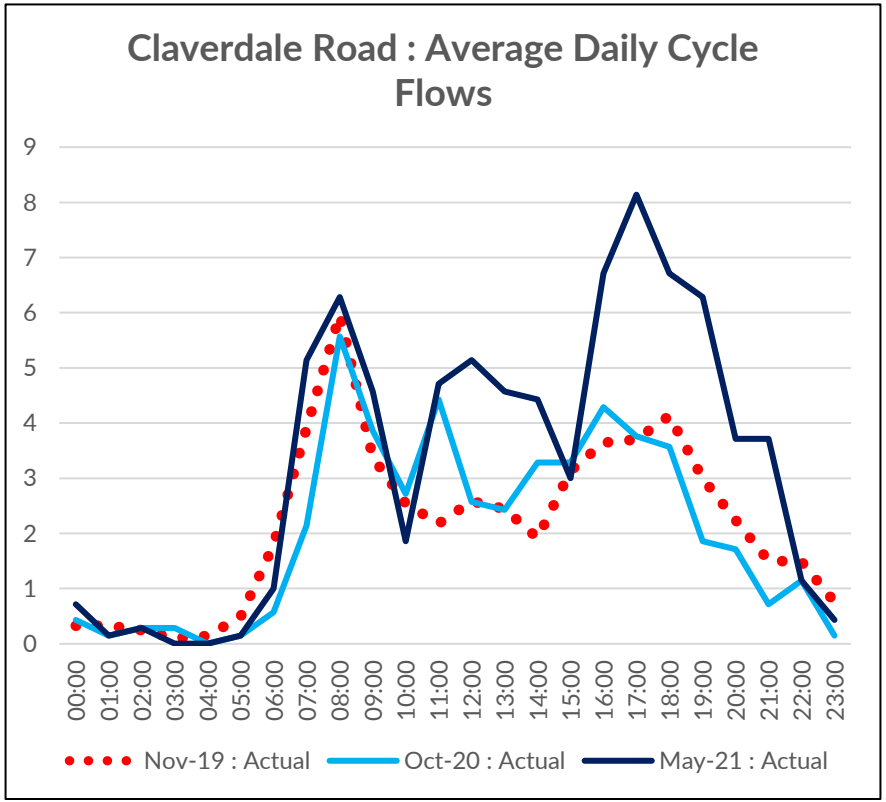


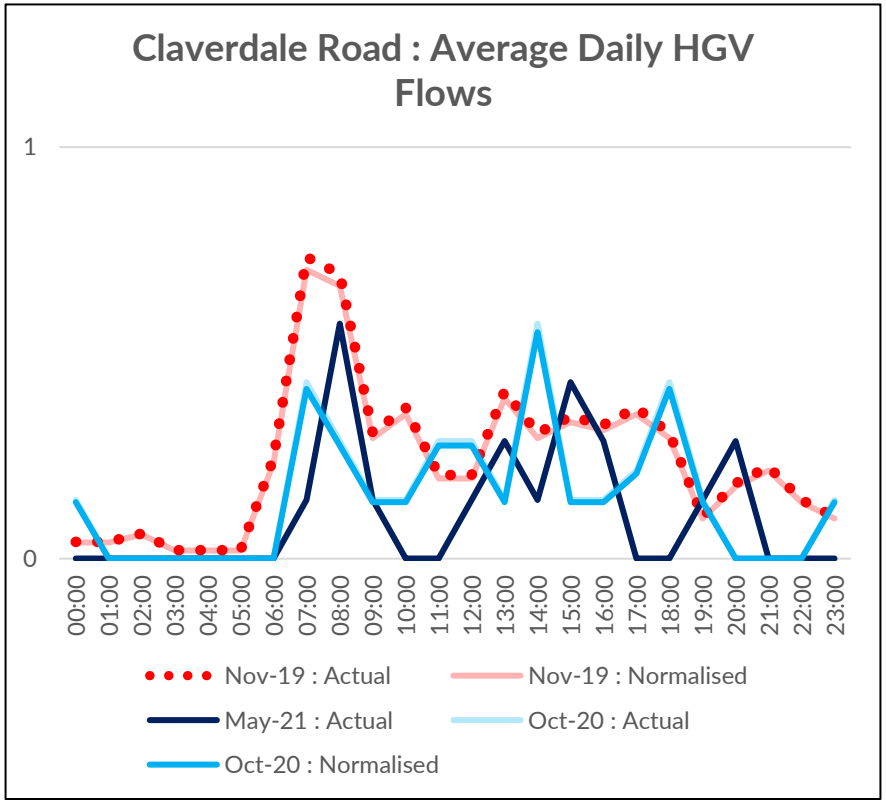
Basemap: ESRI

Claverdale Road

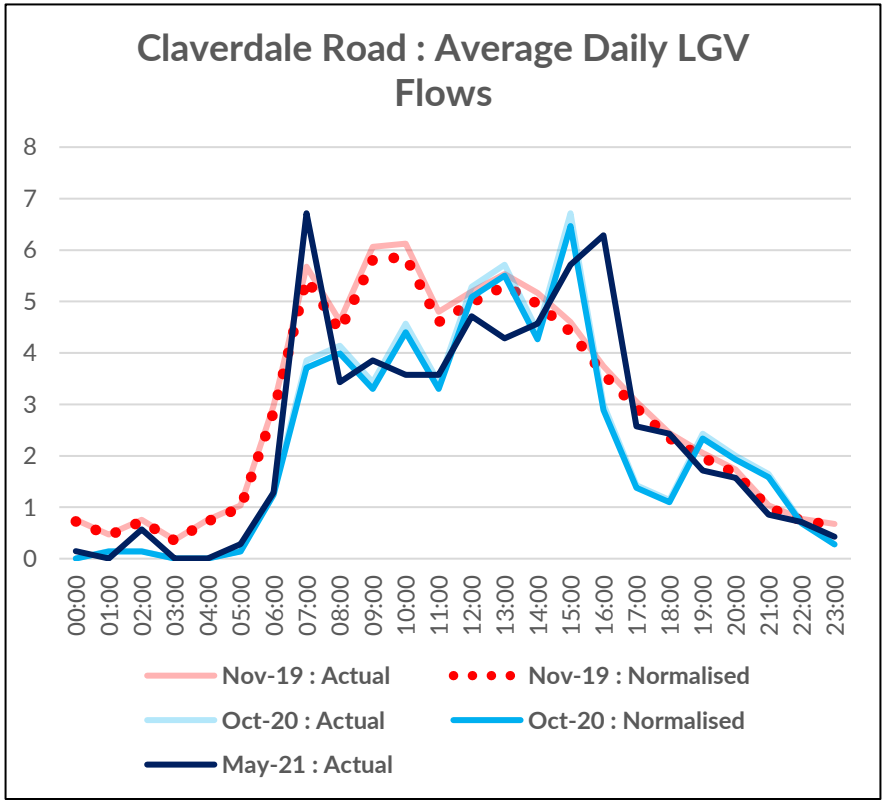


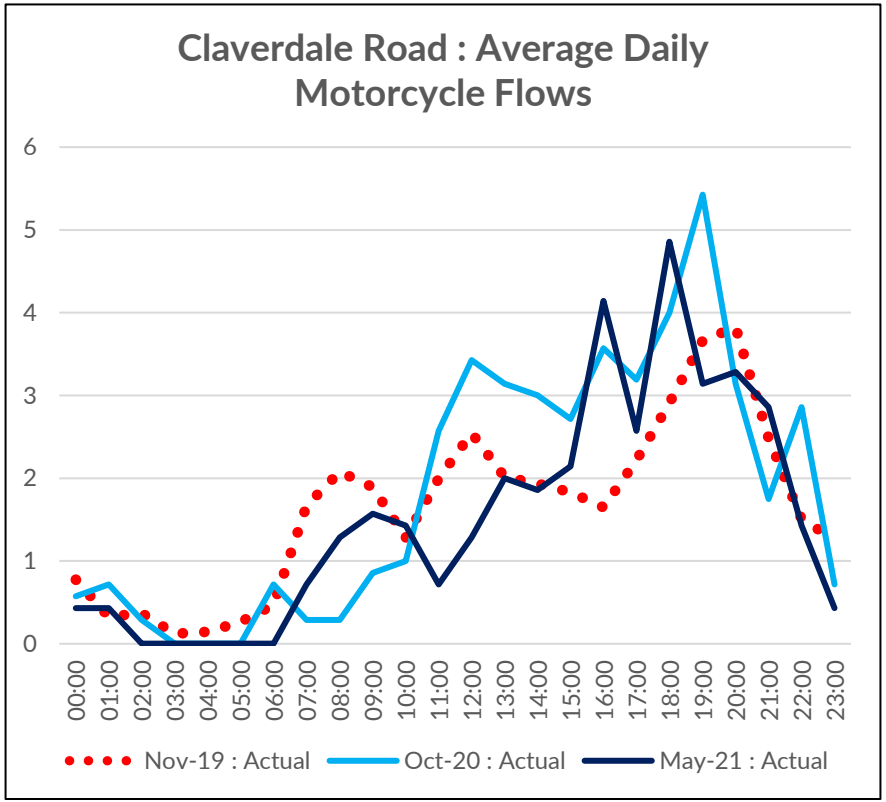
Claverdale Road





Claverdale Road



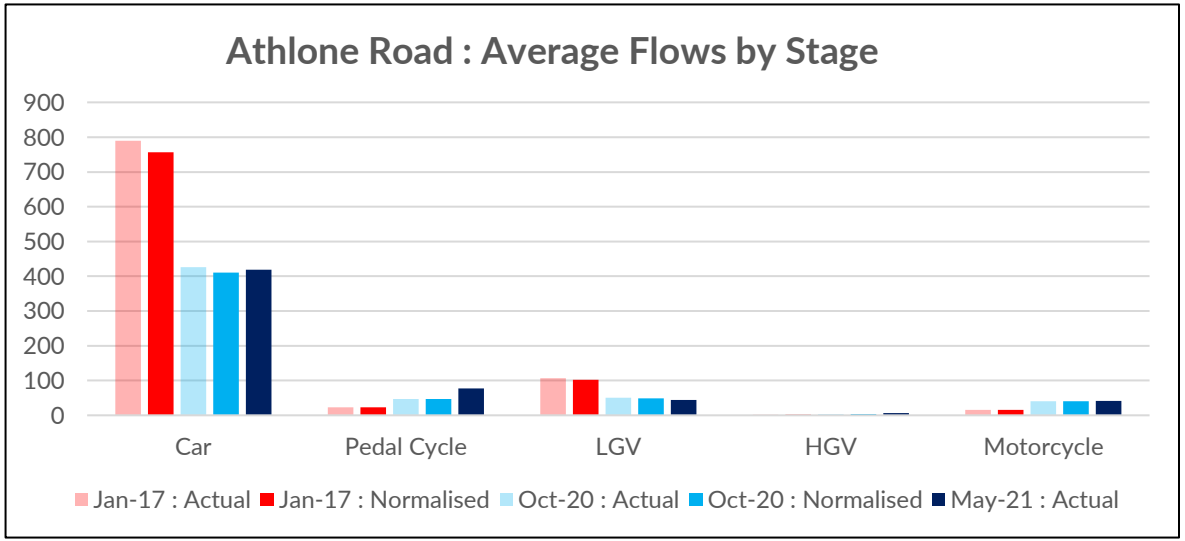


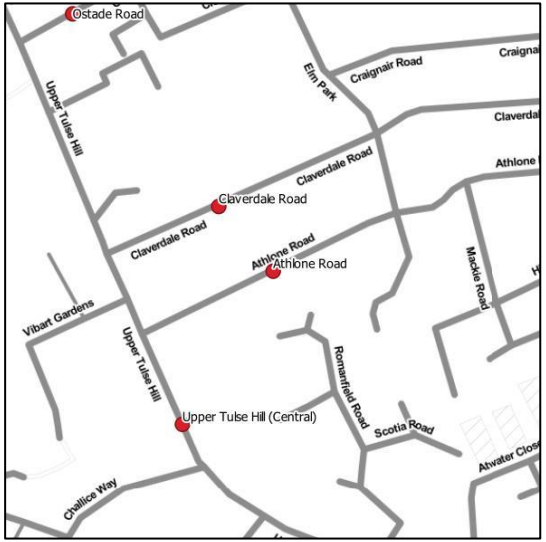
Claverdale Road – Summary Table

	Nov-19 : Actual	Nov-19 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Nov-19 -> Oct-20 : Actual Difference	Nov-19 -> Oct-20 : Actual % Difference	Nov-19 -> Oct-20 : Normalised Difference	Nov-19 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Nov-19 -> May-21 : Actual Difference	Nov-19 -> May-21 : Actual % Difference	Nov-19 -> May-21 : Normalised Difference	Nov-19 -> May-21 : Normalised % Difference
Car	870	834	520	501	-350	-40%	-333	-40%	400	400	-470	-54%	-434	-52%
Cycle	52	52	49	49	-3	-5%	-3	-5%	79	79	27	52%	27	52%
HGV	6	6	4	4	-2	-37%	-2	-36%	3	3	-3	-55%	-3	-53%
LGV	70	67	56	54	-14	-21%	-14	-20%	59	59	-11	-16%	-8	-12%
Motorcycles	39	39	44	44	5	13%	5	13%	37	37	-3	-7%	-3	-7%
Total Motorised Vehicles	**946**	**907**	**579**	**558**	**-367**	**-39%**	**-349**	**-38%**	**462**	**462**	**-484**	**-51%**	**-445**	**-49%**

Athlone Road (Daily Flows)

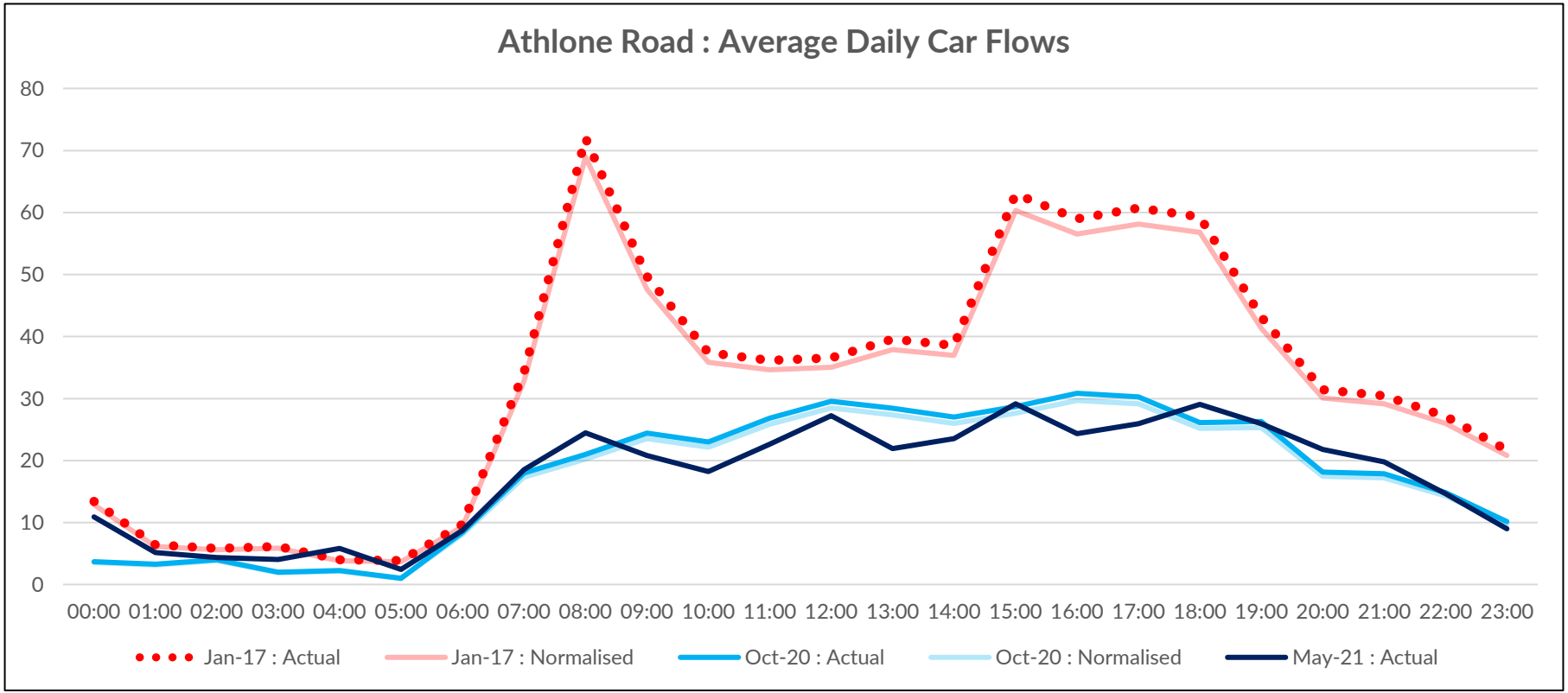
- The charts below and on the following pages show the normalised **average daily flows on Athlone Road**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



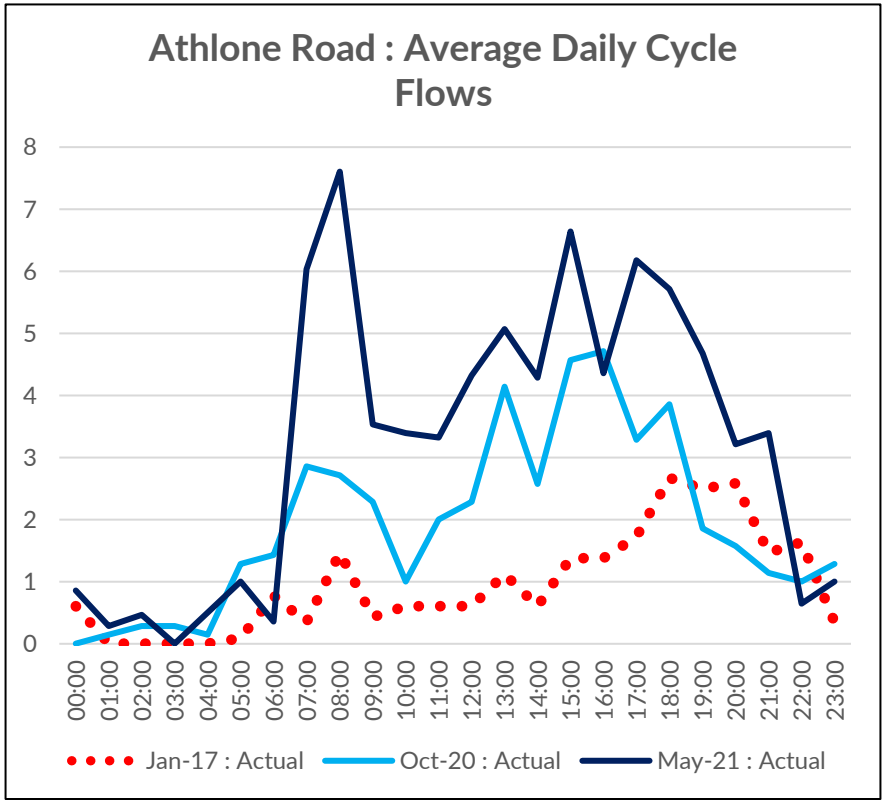


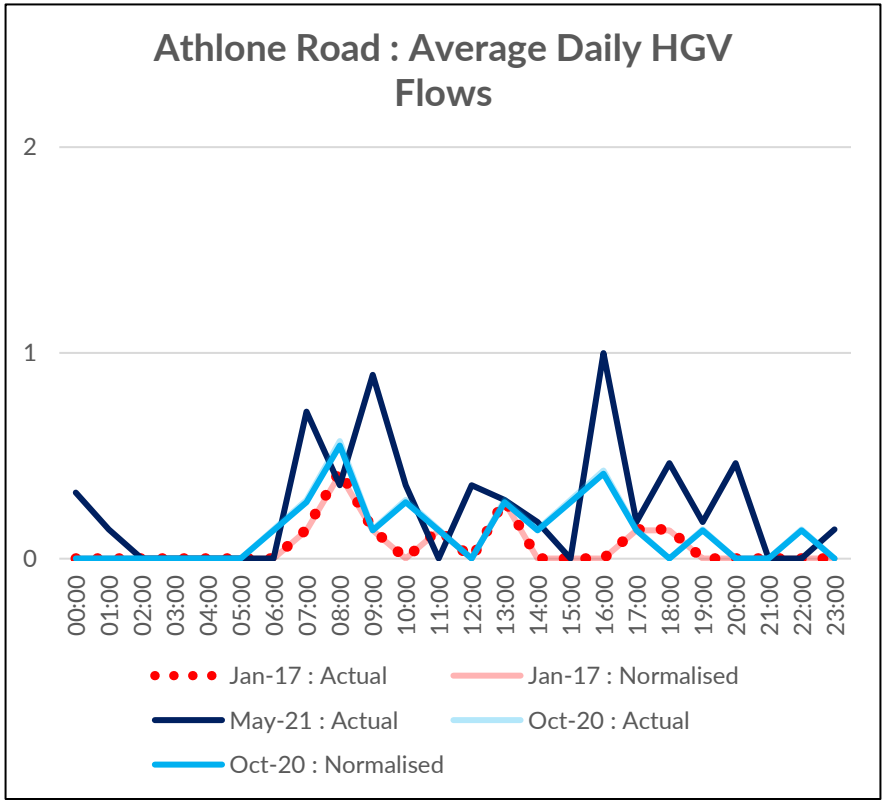
Basemap: ESRI

Athlone Road

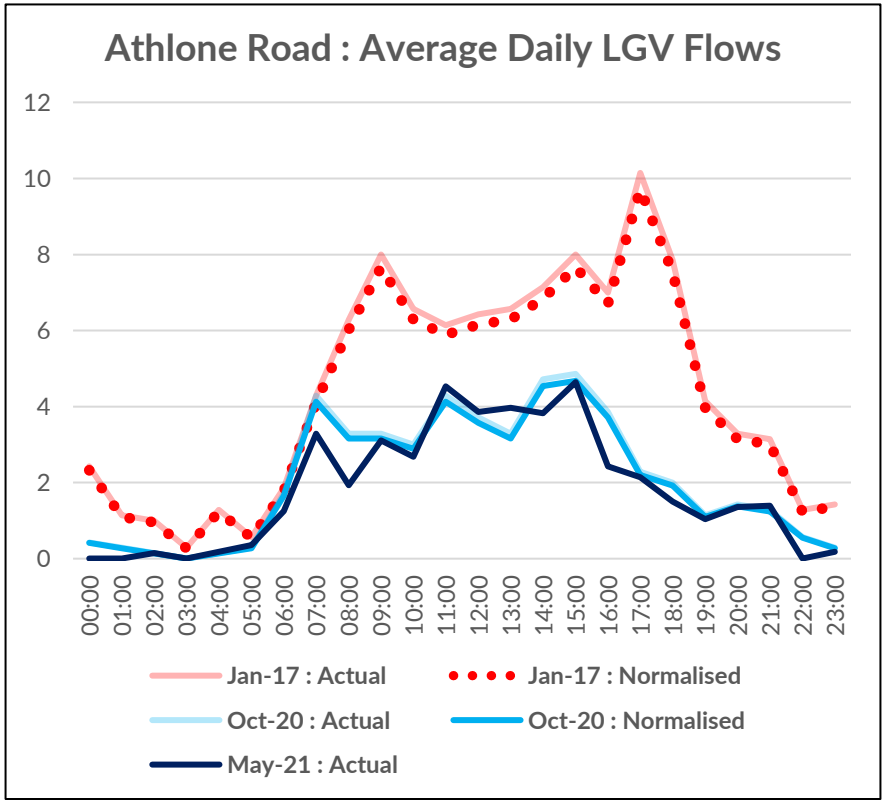


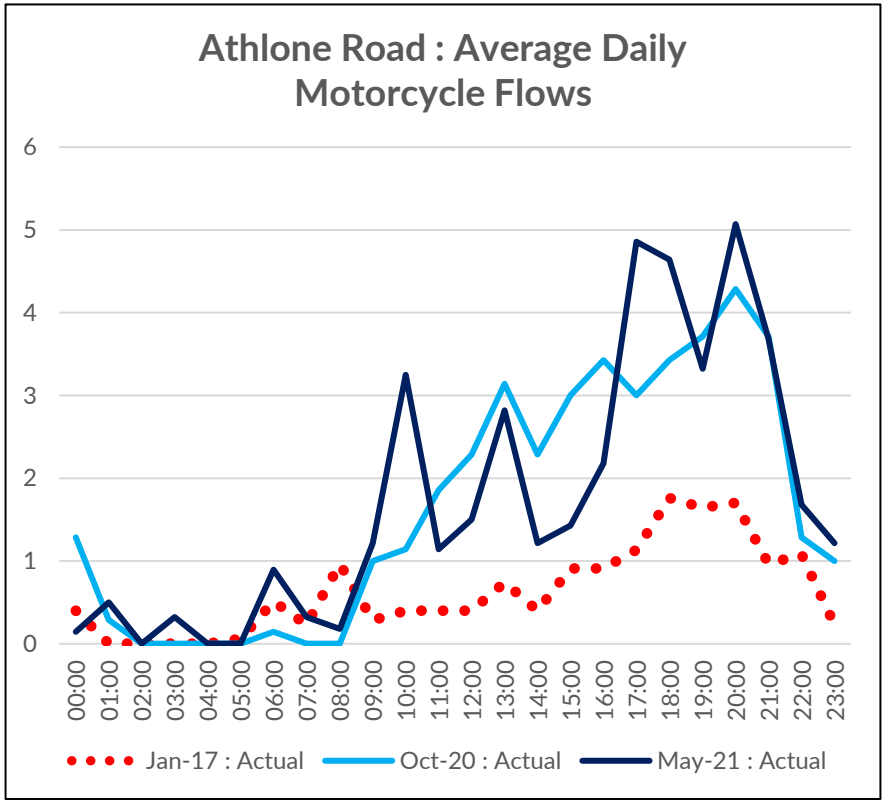
Athlone Road





Athlone Road



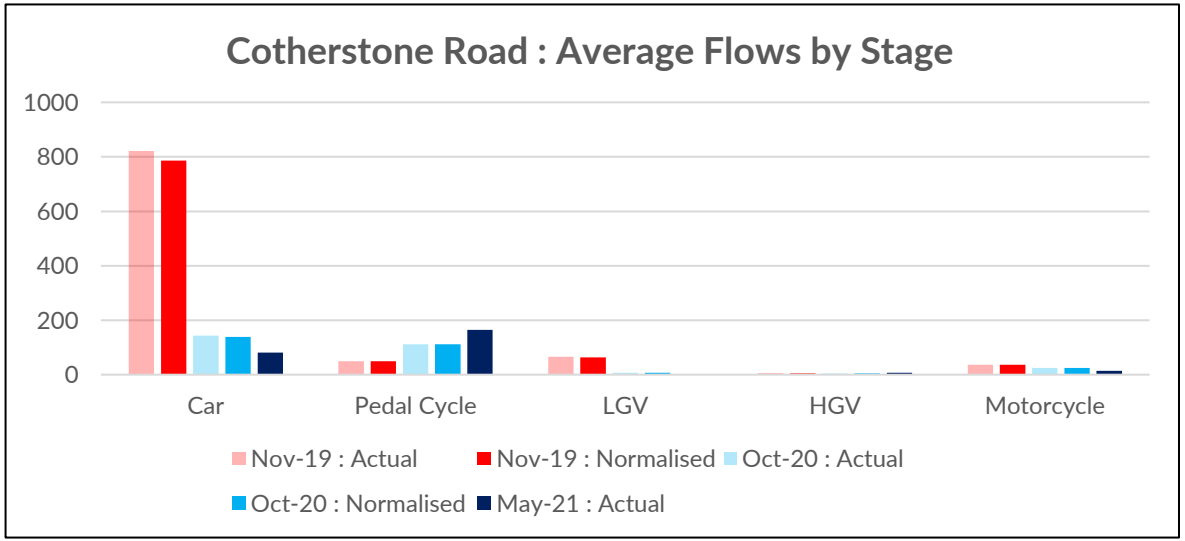


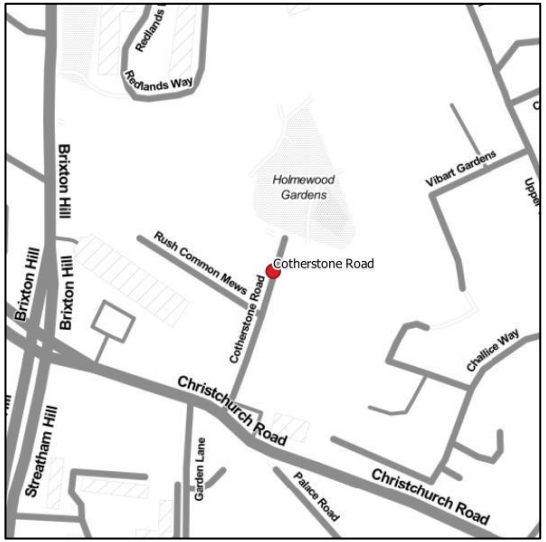
Athlone Road – Summary Table

	Jan-17 : Actual	Jan-17 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Jan-17 -> Oct-20 : Actual Difference	Jan-17 -> Oct-20 : Actual % Difference	Jan-17 -> Oct-20 : Normalised Difference	Jan-17 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Jan-17 -> May-21 : Actual Difference	Jan-17 -> May-21 : Actual % Difference	Jan-17 -> May-21 : Normalised Difference	Jan-17 -> May-21 : Normalised % Difference
Car	790	756	426	410	-363	-46%	-346	-46%	419	419	-371	-47%	-338	-45%
Cycle	23	23	47	47	24	104%	24	104%	77	77	54	236%	54	236%
HGV	1	1	3	3	2	120%	2	121%	6	6	5	323%	5	341%
LGV	106	102	51	49	-56	-52%	-53	-52%	44	44	-63	-59%	-58	-57%
Motorcycles	15	15	40	40	25	167%	25	167%	42	42	26	175%	26	175%
Total Motorised Vehicles	**897**	**860**	**480**	**462**	**-417**	**-47%**	**-397**	**-46%**	**469**	**469**	**-429**	**-48%**	**-391**	**-45%**

Cotherstone Road (Daily Flows)

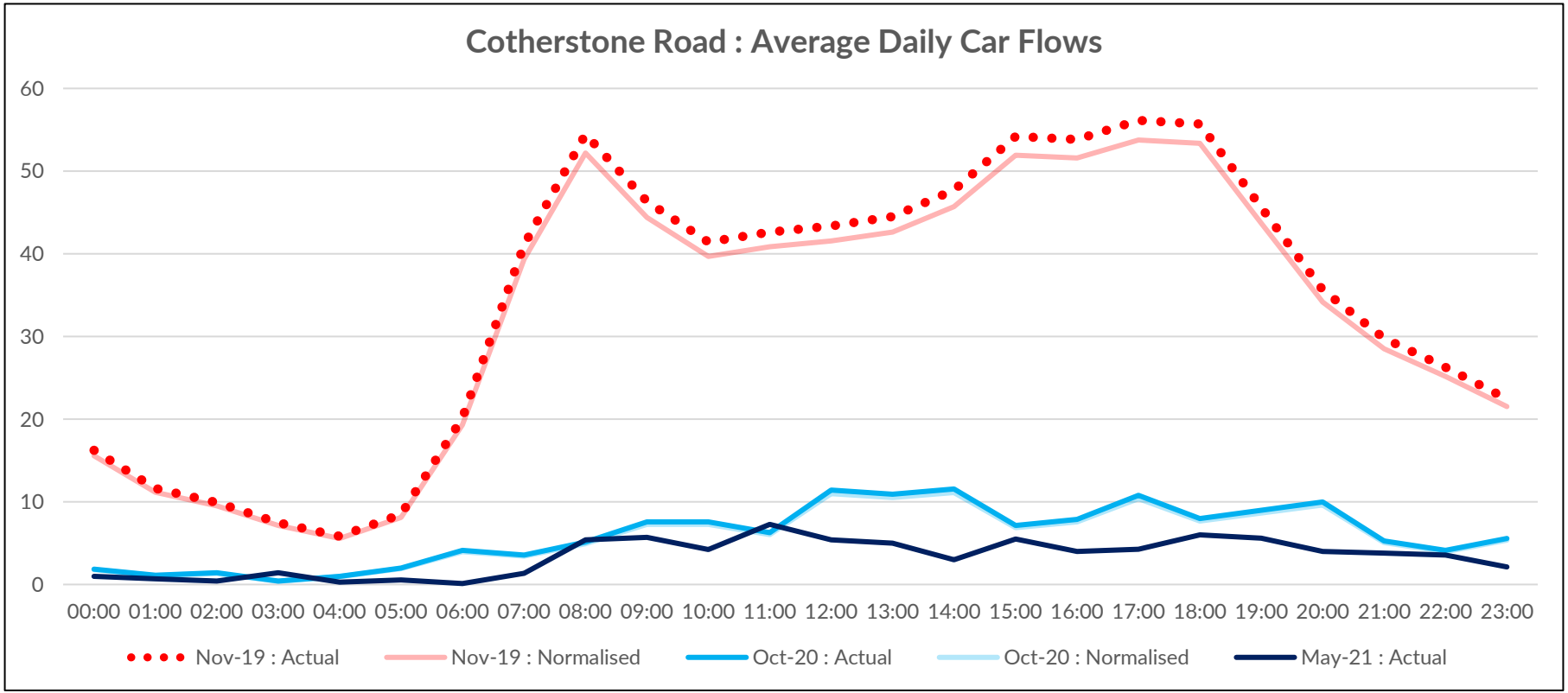
- The charts below and on the following pages show the normalised **average daily flows on Cotherstone Road**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



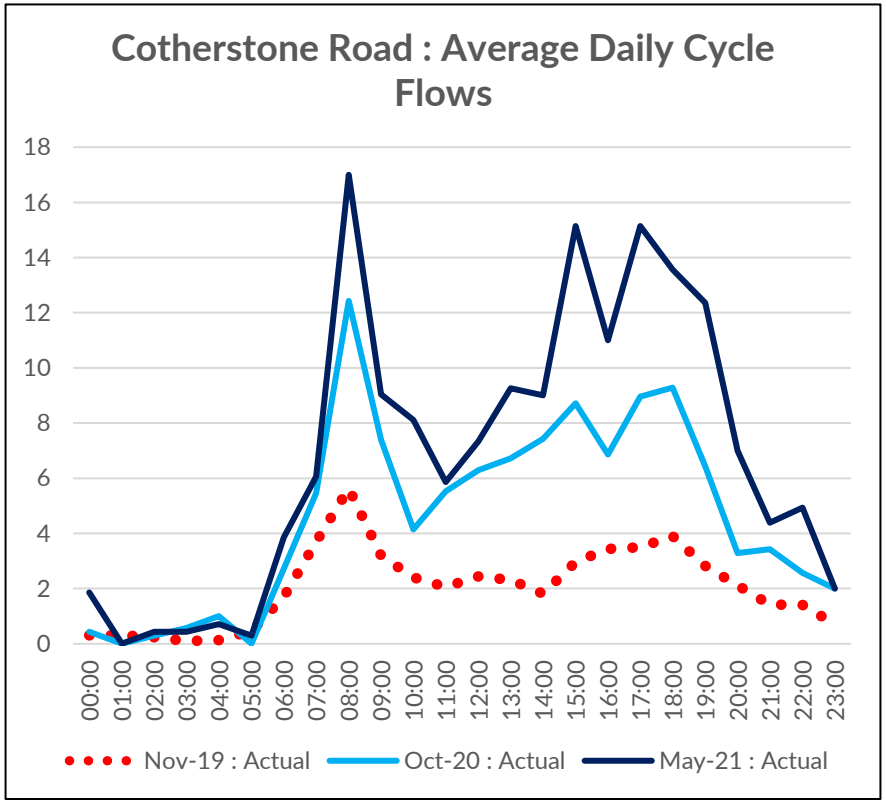


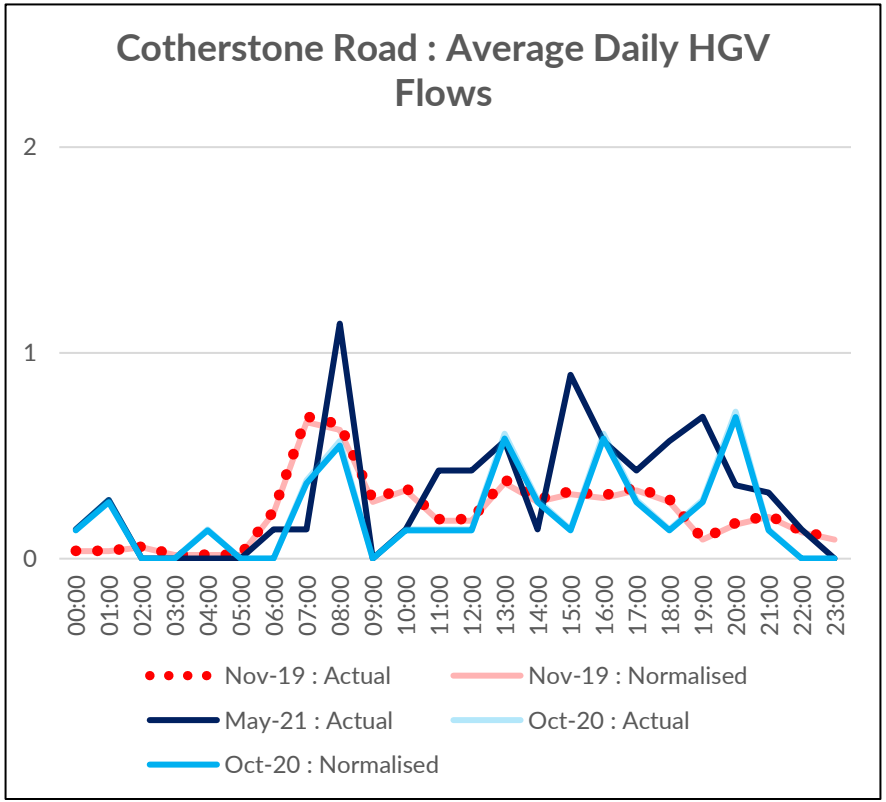
Basemap: ESRI

Cotherstone Road

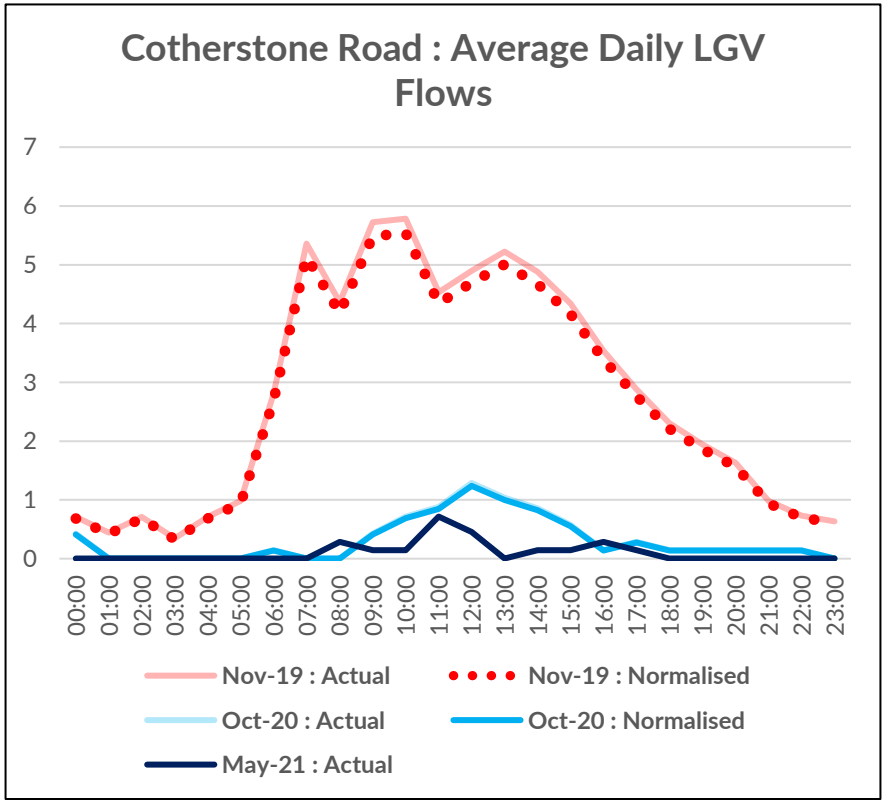


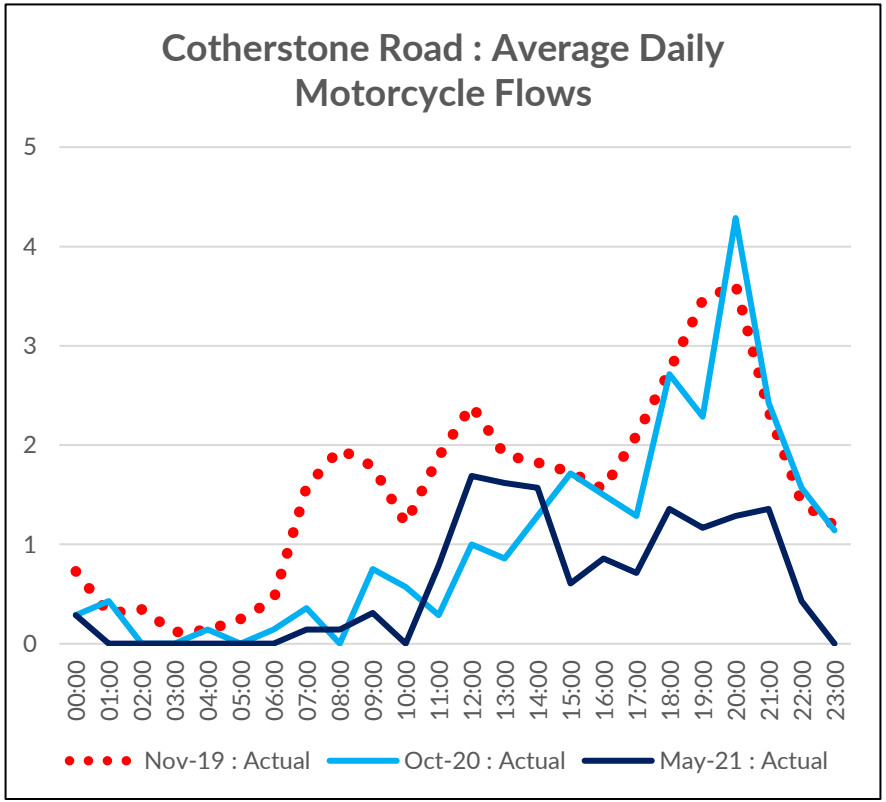
Cotherstone Road





Cotherstone Road



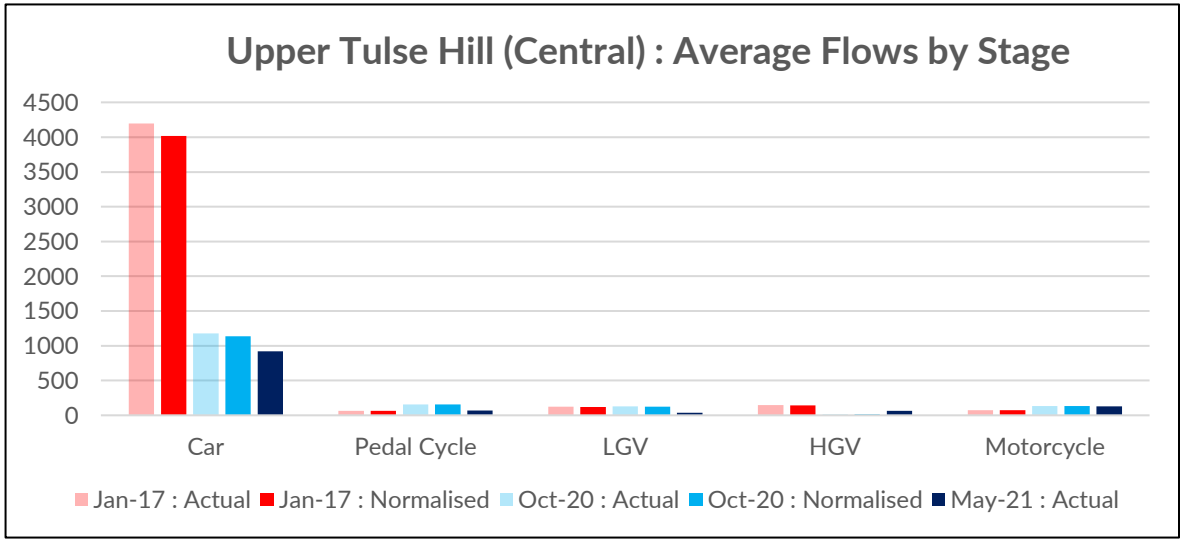


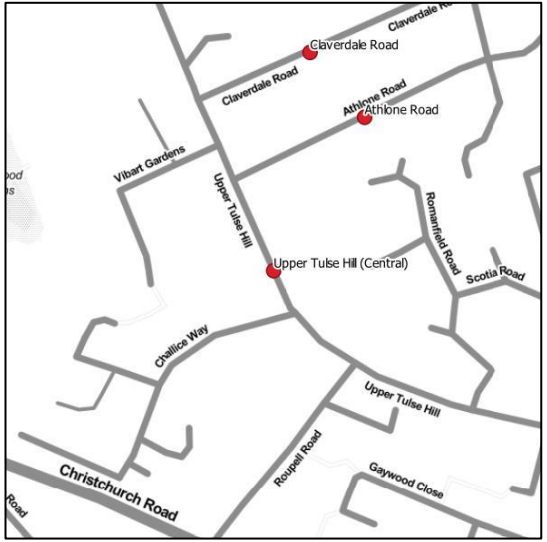
Cotherstone Road – Summary Table

	Nov-19 : Actual	Nov-19 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Nov-19 -> Oct-20 : Actual Difference	Nov-19 -> Oct-20 : Actual % Difference	Nov-19 -> Oct-20 : Normalised Difference	Nov-19 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Nov-19 -> May-21 : Actual Difference	Nov-19 -> May-21 : Actual % Difference	Nov-19 -> May-21 : Normalised Difference	Nov-19 -> May-21 : Normalised % Difference
Car	821	787	144	139	-677	-82%	-648	-82%	81	81	-740	-90%	-706	-90%
Cycle	49	49	112	112	63	128%	63	128%	165	165	116	236%	116	236%
HGV	5	5	5	5	0	-5%	0	-5%	8	8	2	39%	2	45%
LGV	66	64	7	7	-59	-89%	-56	-89%	2	2	-64	-96%	-61	-96%
Motorcycles	37	37	25	25	-12	-32%	-12	-32%	14	14	-23	-61%	-23	-61%
Total Motorised Vehicles	**893**	**856**	**157**	**151**	**-737**	**-82%**	**-705**	**-82%**	**91**	**91**	**-802**	**-90%**	**-765**	**-89%**

Upper Tulse Hill Central (Daily Flows)

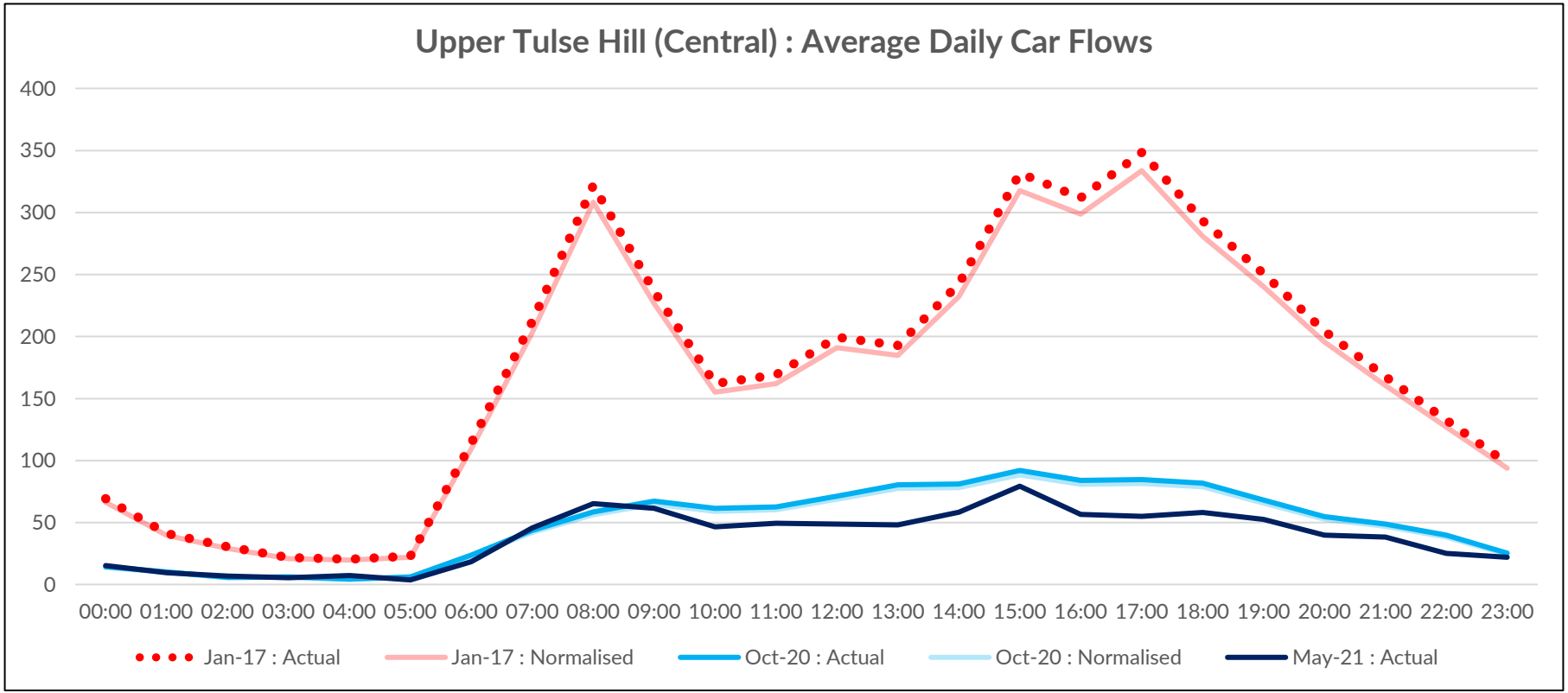
- The charts below and on the following pages show the normalised **average daily flows on Upper Tulse Hill Central**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



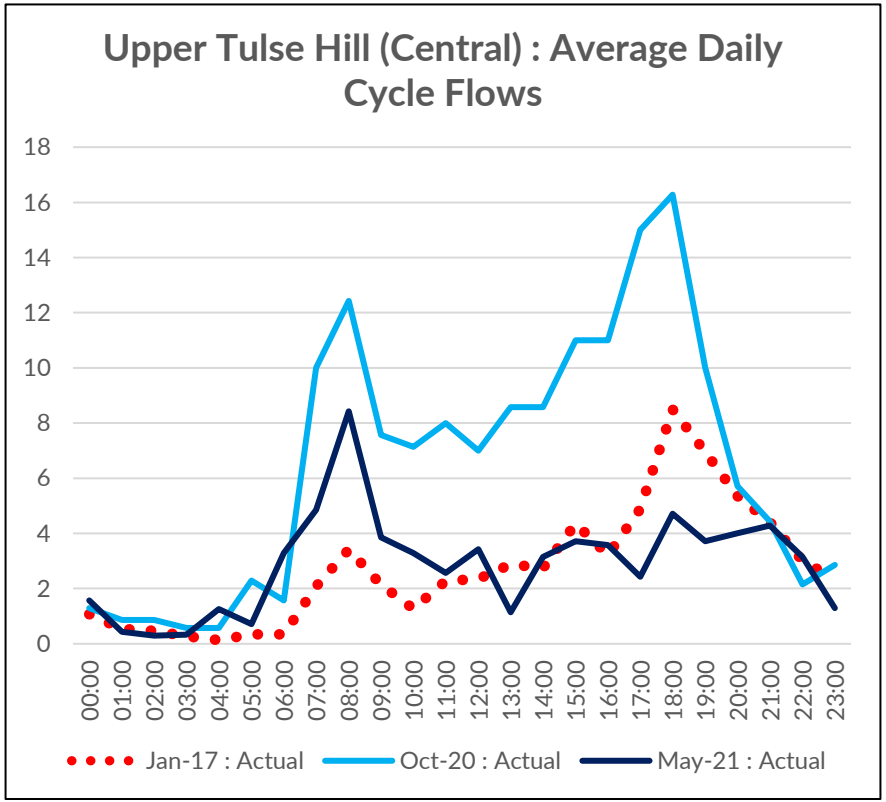


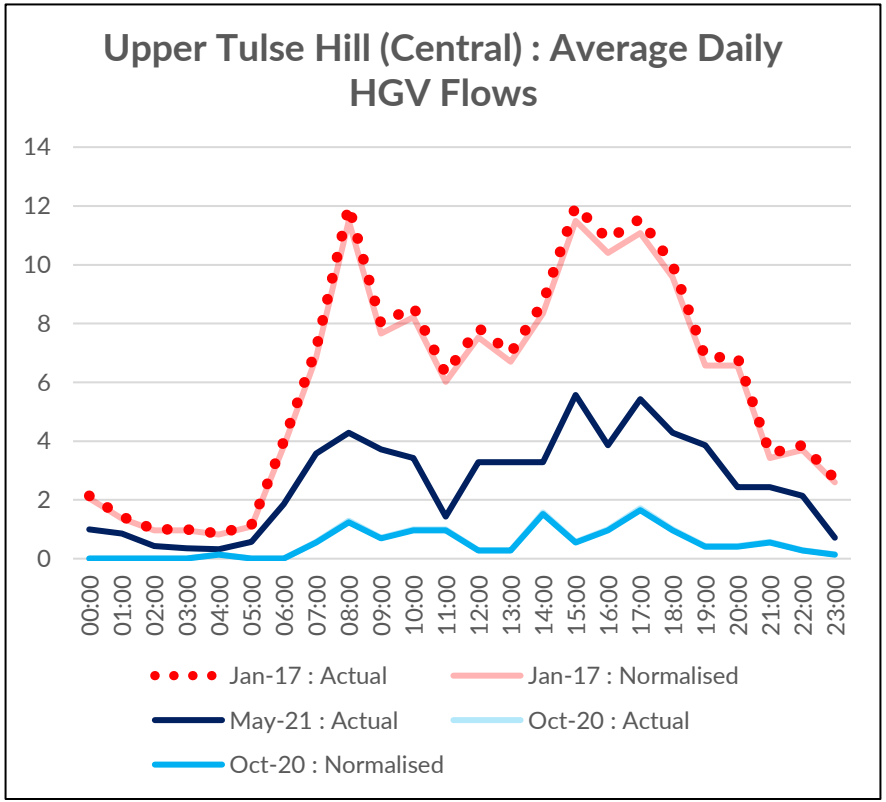
Basemap: ESRI

Upper Tulse Hill Central

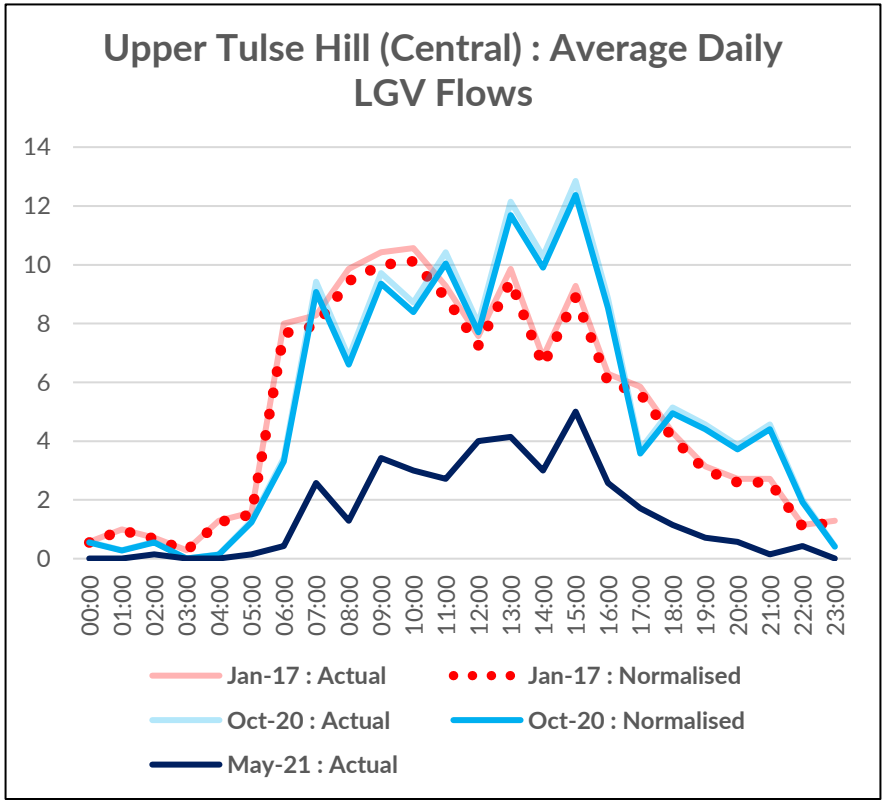


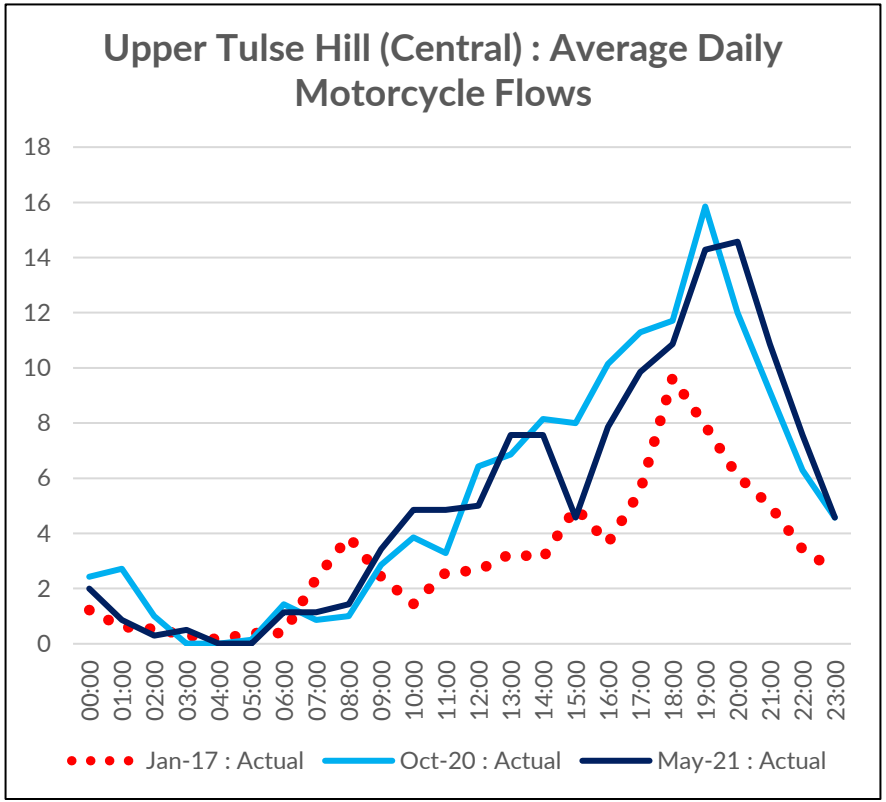
Upper Tulse Hill Central





Upper Tulse Hill Central



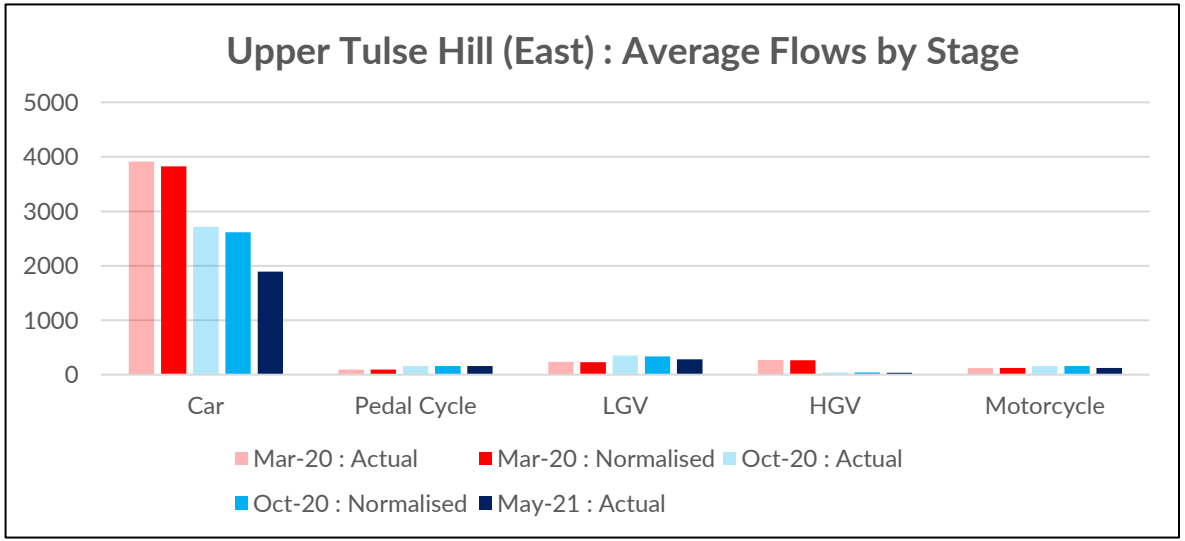


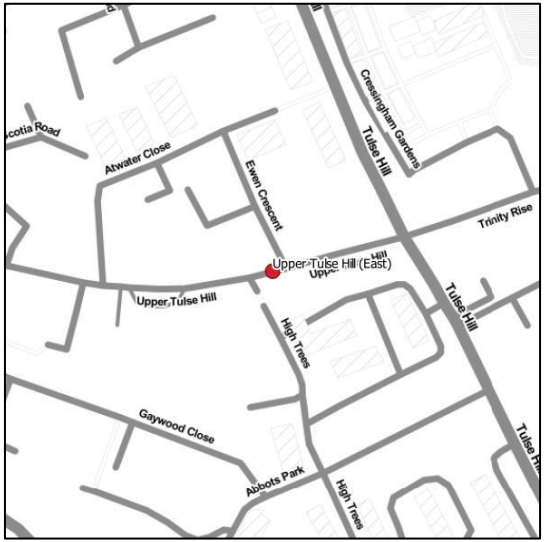
Upper Tulse Hill Central – Summary Table

	Jan-17 : Actual	Jan-17 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Jan-17 -> Oct-20 : Actual Difference	Jan-17 -> Oct-20 : Actual % Difference	Jan-17 -> Oct-20 : Normalised Difference	Jan-17 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Jan-17 -> May-21 : Actual Difference	Jan-17 -> May-21 : Actual % Difference	Jan-17 -> May-21 : Normalised Difference	Jan-17 -> May-21 : Normalised % Difference
Car	4,196	4,019	1,178	1,134	-3,018	-72%	-2,885	-72%	918	918	-3,278	-78%	-3,101	-77%
Cycle	65	65	156	156	90	139%	90	139%	69	69	4	6%	4	6%
HGV	145	139	13	13	-132	-91%	-127	-91%	62	62	-83	-57%	-77	-55%
LGV	123	118	128	123	5	4%	5	5%	37	37	-86	-70%	-81	-68%
Motorcycles	74	74	130	130	56	75%	56	75%	126	126	51	69%	51	69%
Total Motorised Vehicles	**4,464**	**4,276**	**1,319**	**1,270**	**-3,145**	**-70%**	**-3,006**	**-70%**	**1,018**	**1,018**	**-3,446**	**-77%**	**-3,258**	**-76%**

Upper Tulse Hill East (Daily Flows)

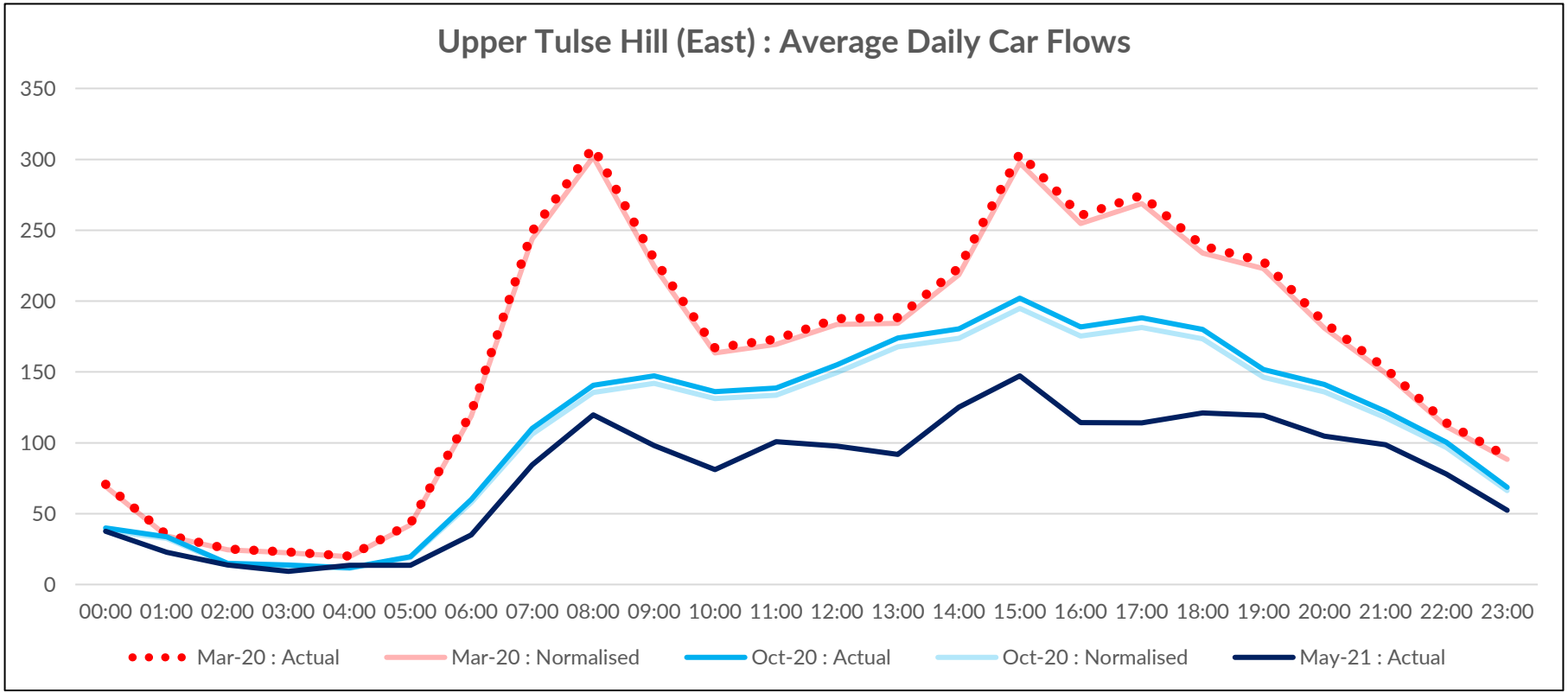
- The charts below and on the following pages show the normalised **average daily flows on Upper Tulse hill East**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows from October 2020 and May 2021.



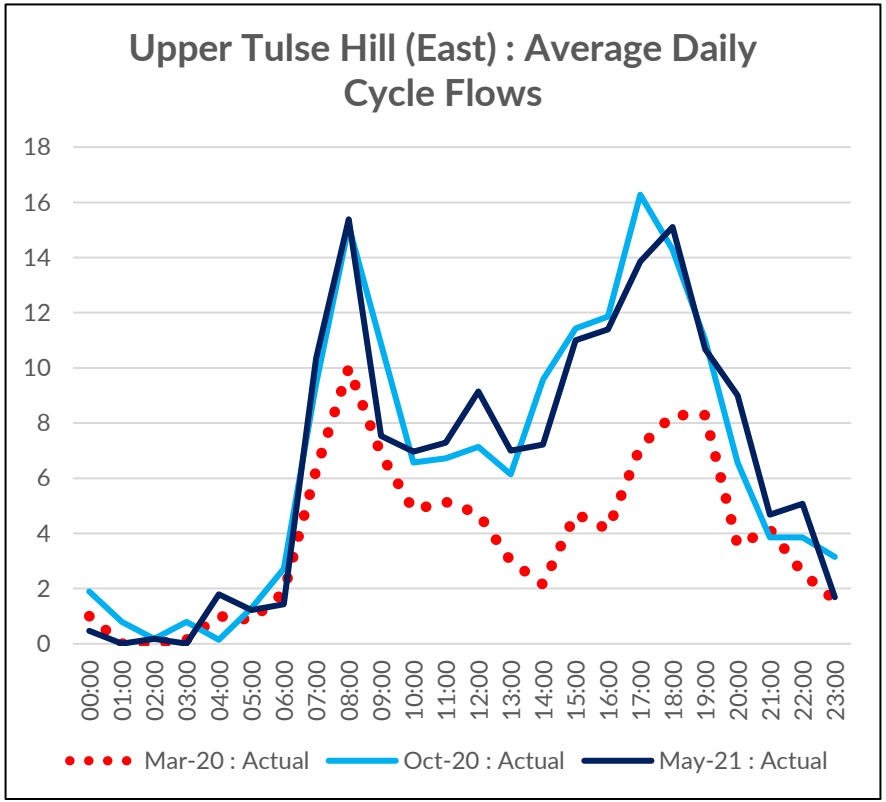


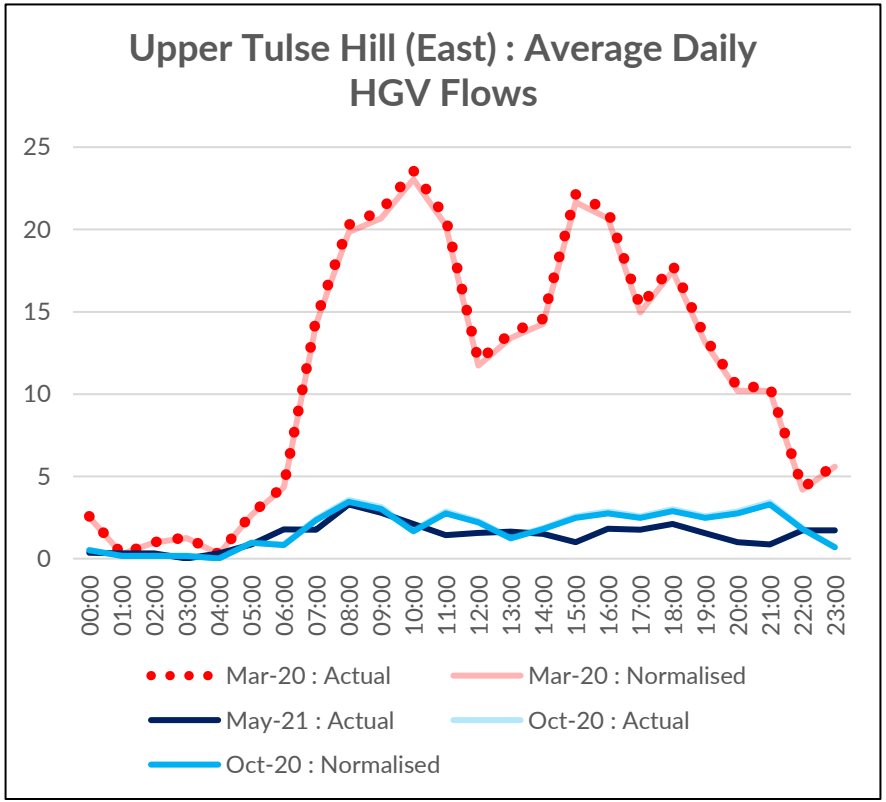
Basemap: ESRI

Upper Tulse Hill East

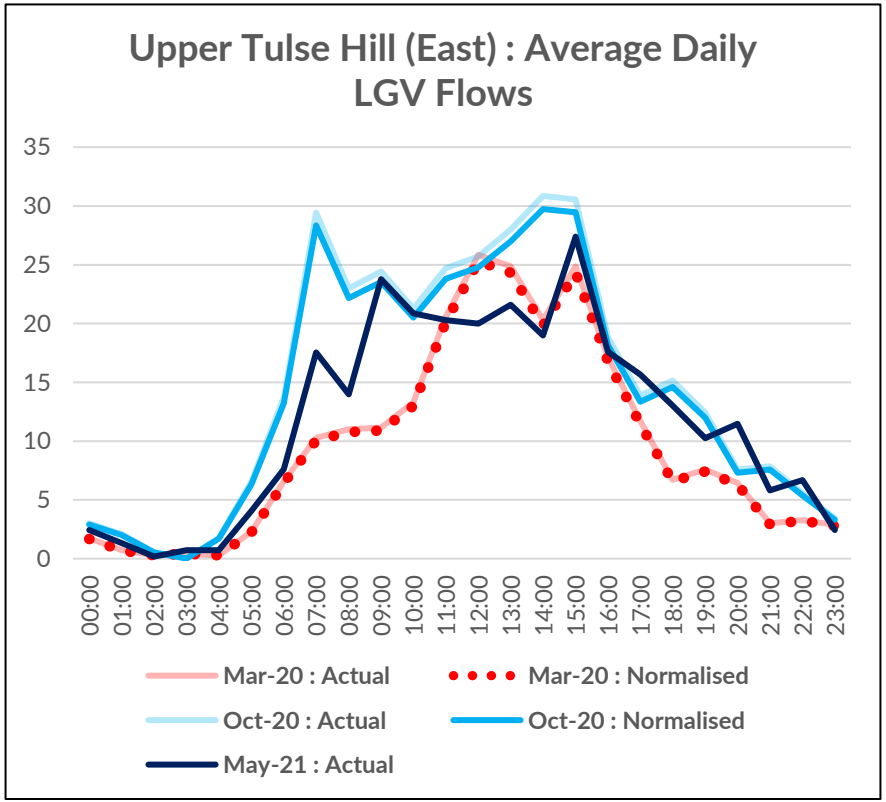


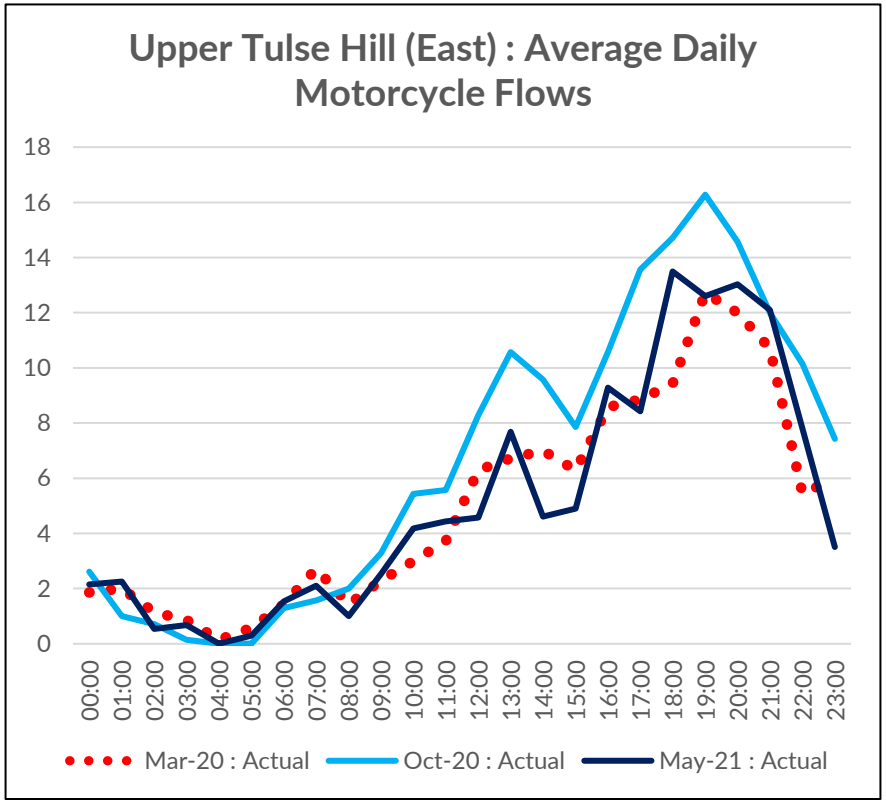
Upper Tulse Hill East





Upper Tulse Hill East



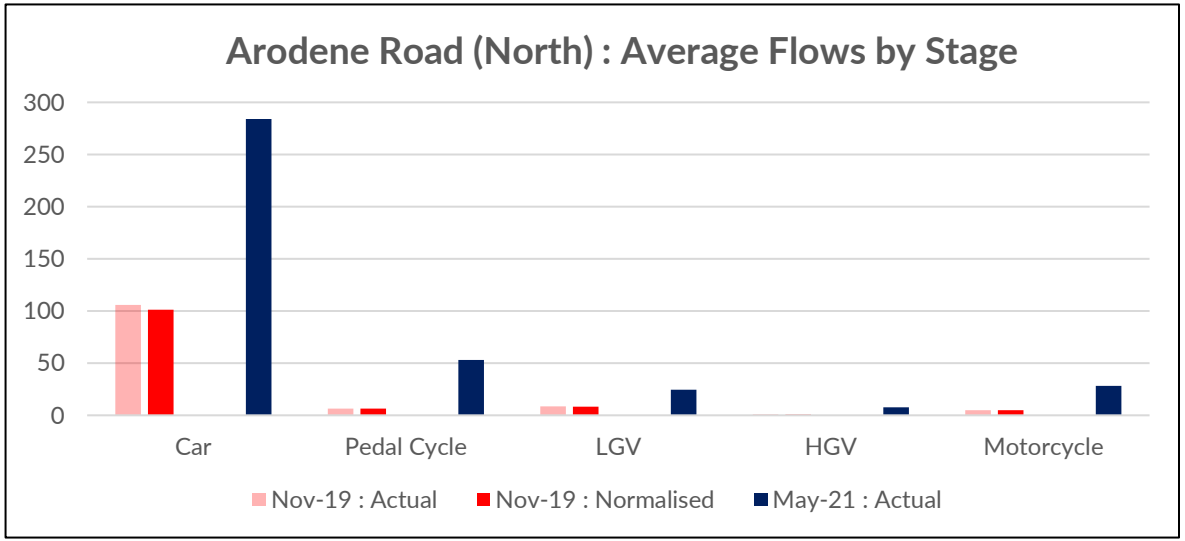


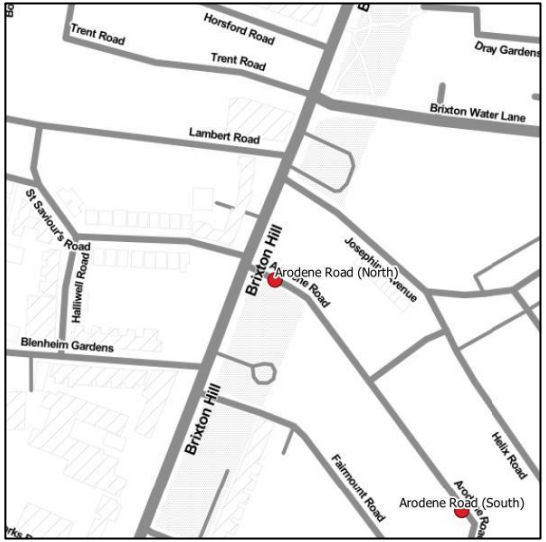
Upper Tulse Hill East – Summary Table

	Mar-20 : Actual	Mar-20 : Normalised	Oct-20 : Actual	Oct-20 : Normalised	Mar-20 -> Oct-20 : Actual Difference	Mar-20 -> Oct-20 : Actual % Difference	Mar-20 -> Oct-20 : Normalised Difference	Mar-20 -> Oct-20 : Normalised % Difference	May-21 : Actual	May-21 : Normalised	Mar-20 -> May-21 : Actual Difference	Mar-20 -> May-21 : Actual % Difference	Mar-20 -> May-21 : Normalised Difference	Mar-20 -> May-21 : Normalised % Difference
Car	3,915	3,829	2,713	2,615	-1,202	-31%	-1,215	-32%	1,895	1,895	-2,019	-52%	-1,934	-51%
Cycle	92	92	162	162	69	75%	69	75%	158	158	66	72%	66	72%
HGV	274	268	45	43	-229	-84%	-225	-84%	34	34	-240	-88%	-234	-87%
LGV	233	228	350	338	117	50%	110	48%	284	284	51	22%	56	25%
Motorcycles	121	121	159	159	38	31%	38	31%	124	124	3	2%	3	2%
Total Motorised Vehicles	**4,422**	**4,325**	**3,108**	**2,995**	**-1,314**	**-30%**	**-1,330**	**-31%**	**2,213**	**2,213**	**-2,208**	**-50%**	**-2,112**	**-49%**

Arodene Road North (Daily Flows)

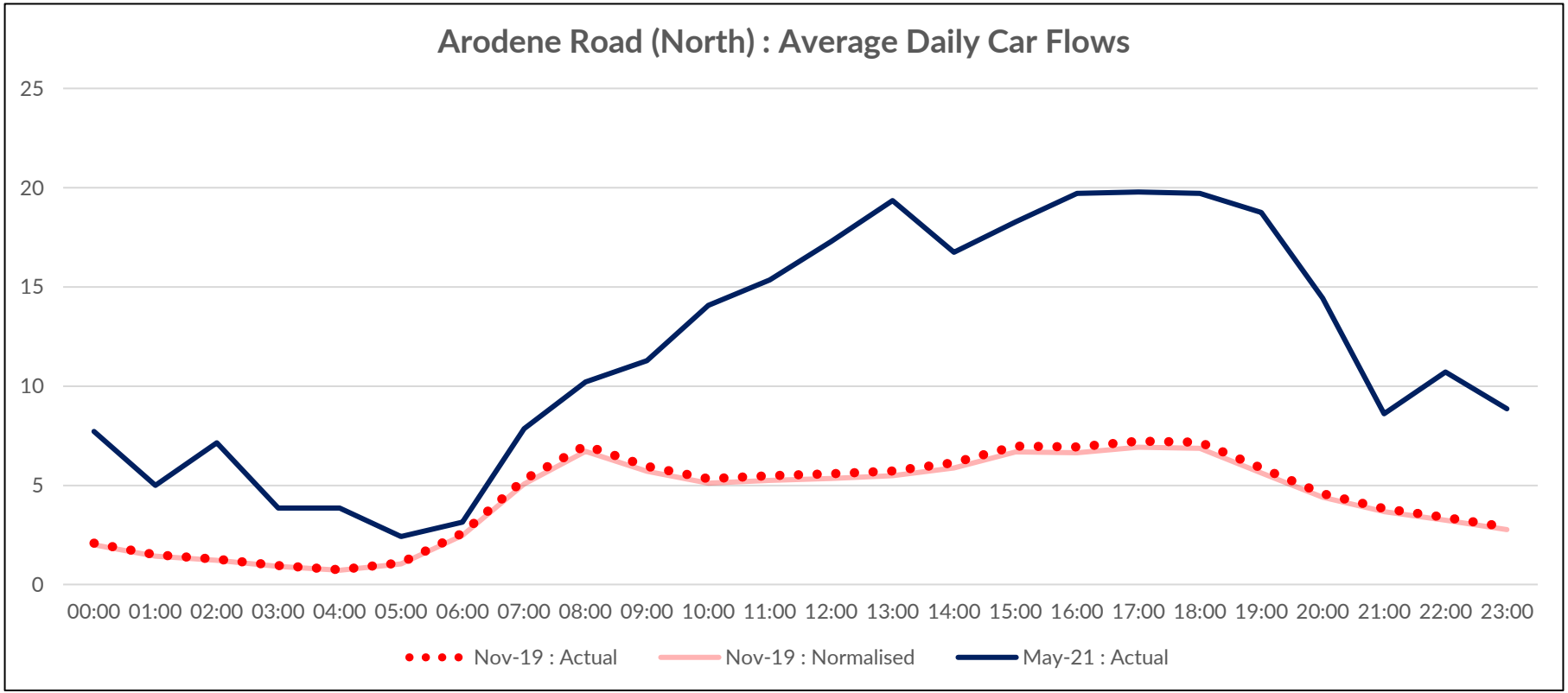
- The charts below and on the following pages show the normalised **average daily flows on Arodene Road North**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows May 2021.



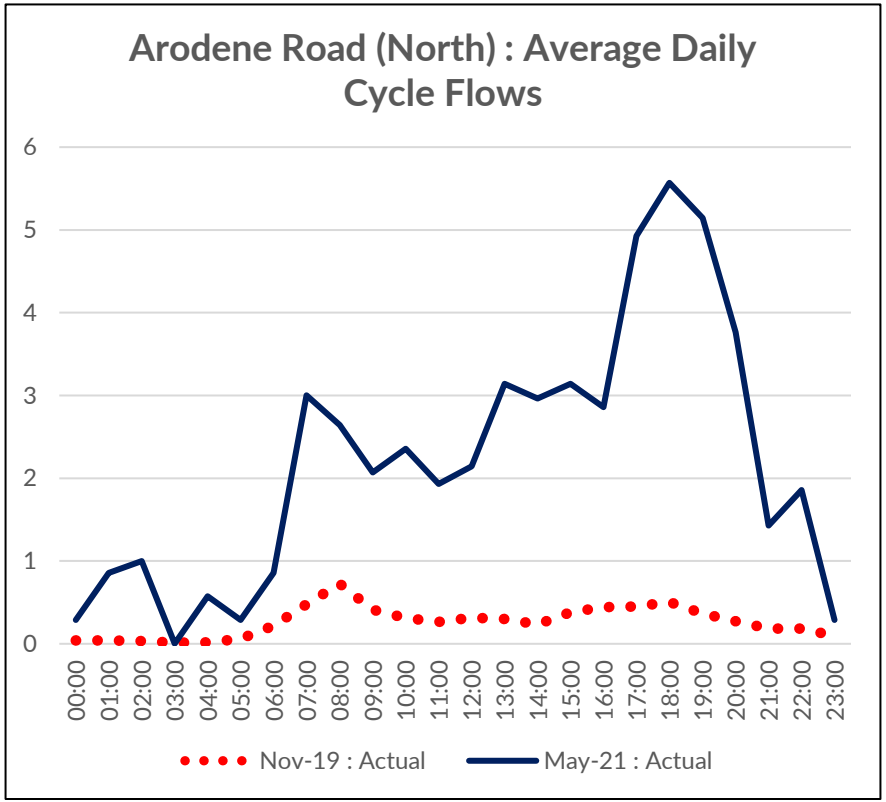


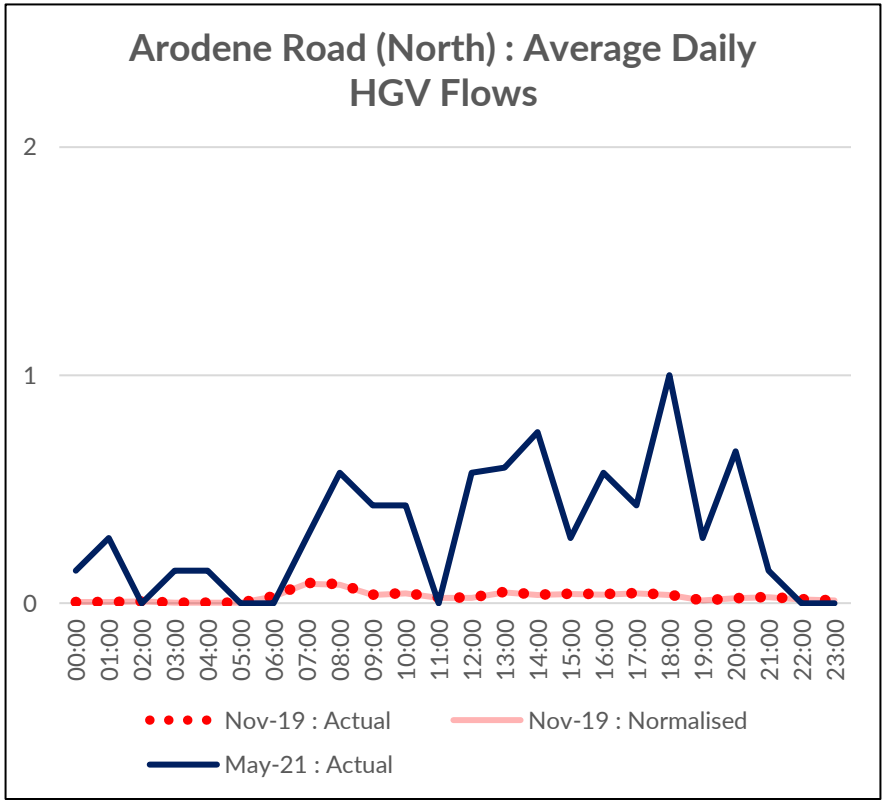
Basemap: ESRI

Arodene Road

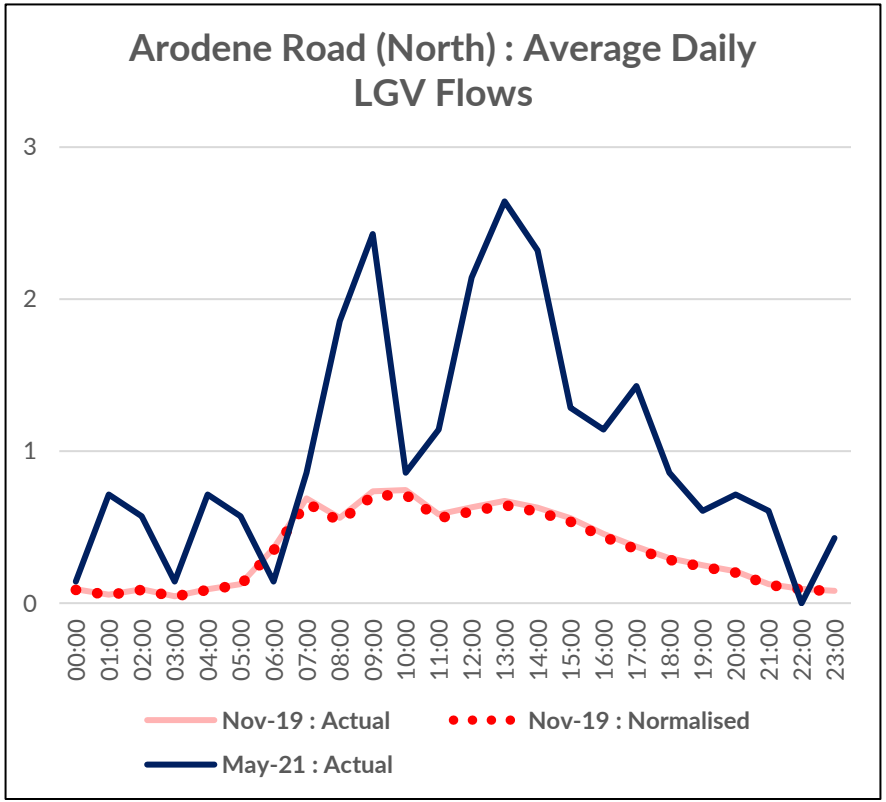


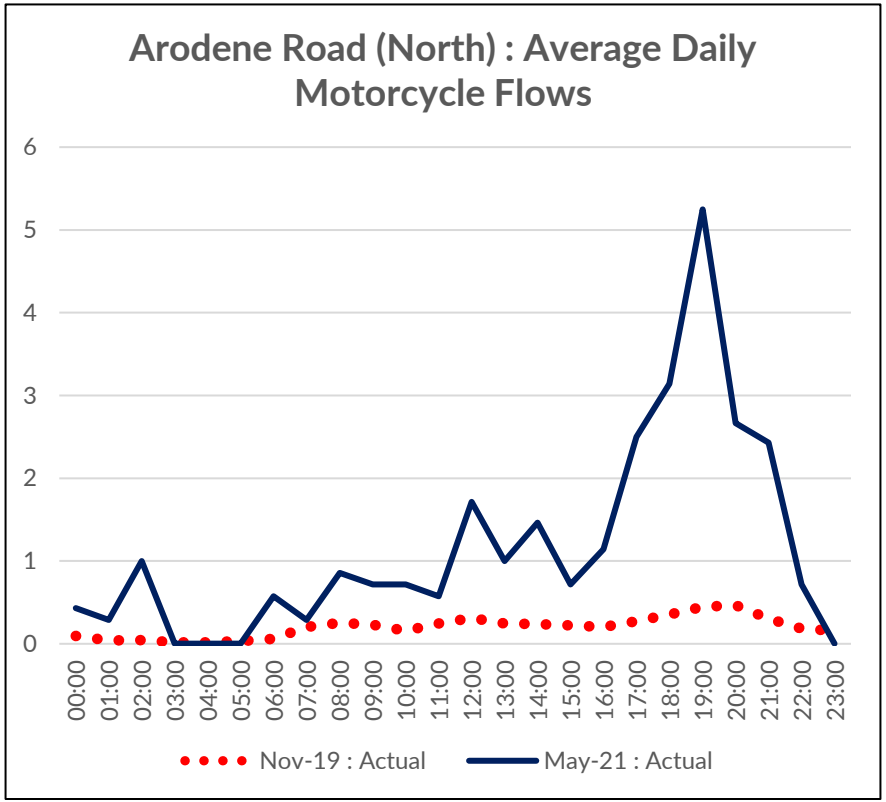
Arodene Road





Arodene Road



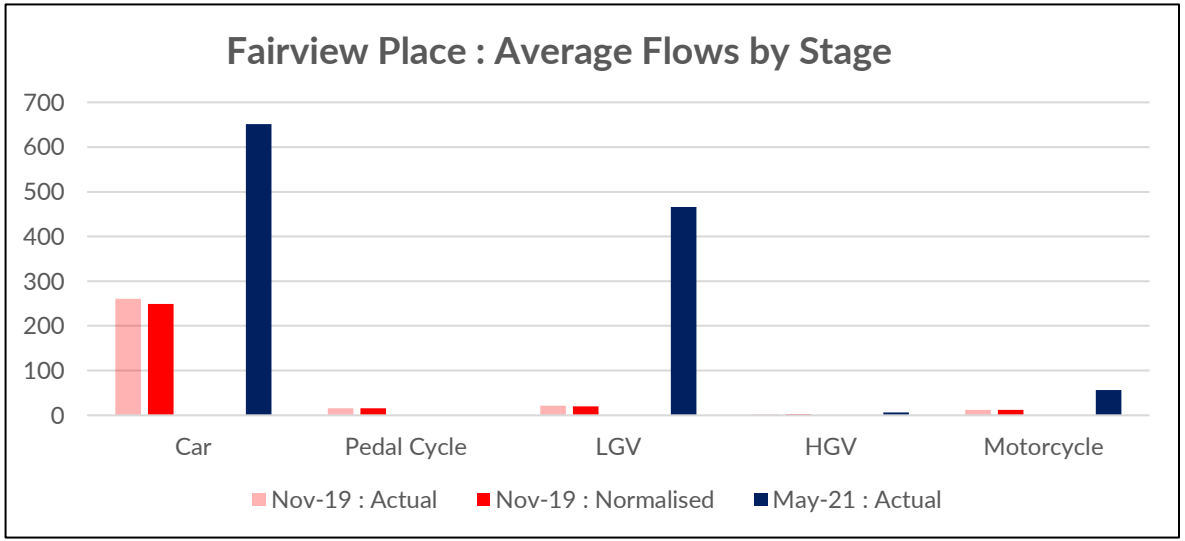


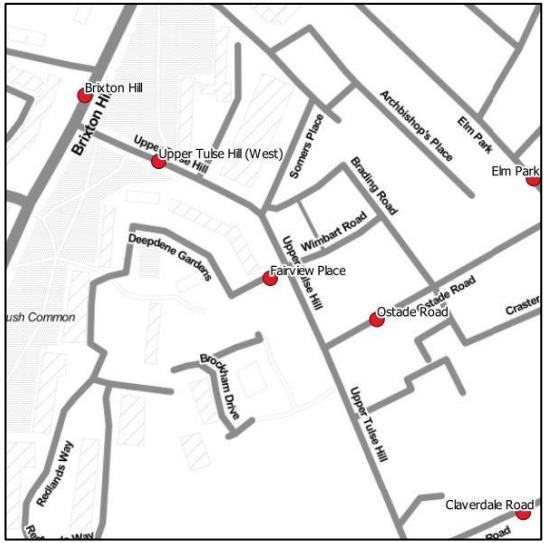
Arodene Road– Summary Table

	Nov-19 : Actual	Nov-19 : Normalised	May-21 : Actual	May-21 : Normalised	Nov-19 -> May-21 : Actual Difference	Nov-19 -> May-21 : Actual % Difference	Nov-19 -> May-21 : Normalised Difference	Nov-19 -> May-21 : Normalised % Difference
Car	106	101	284	284	178	169%	183	181%
Cycle	6	6	53	53	47	741%	47	741%
HGV	1	1	8	8	7	1004%	7	1052%
LGV	9	8	24	24	16	184%	16	197%
Motorcycles	5	5	28	28	23	491%	23	491%
Total Motorised Vehicles	**115**	**110**	**316**	**316**	**201**	**175%**	**206**	**187%**

Fairview Place (Daily Flows)

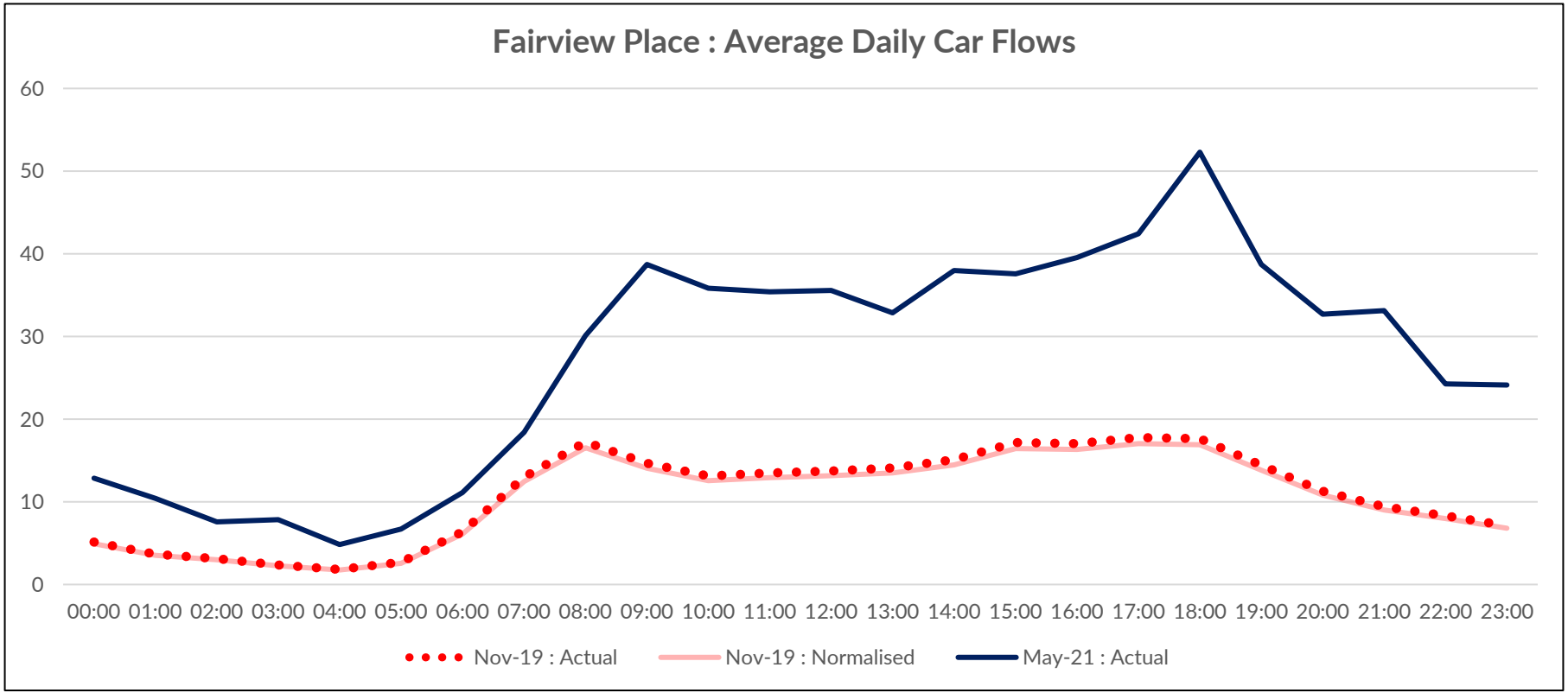
- The charts below and on the following pages show the normalised **average daily flows on Fairview Place**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows May 2021.



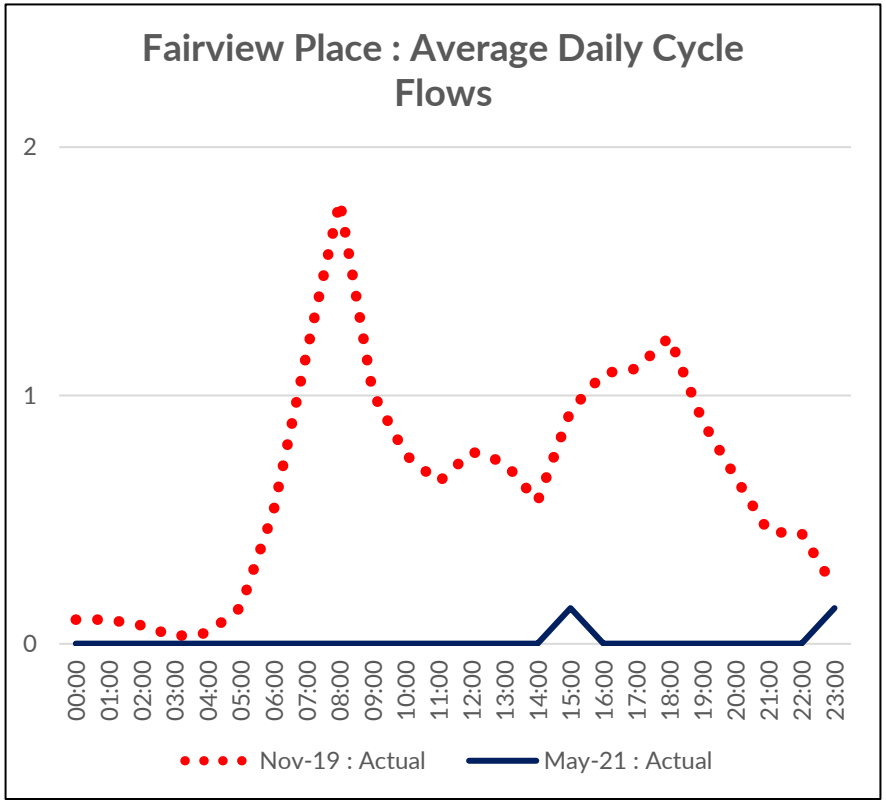


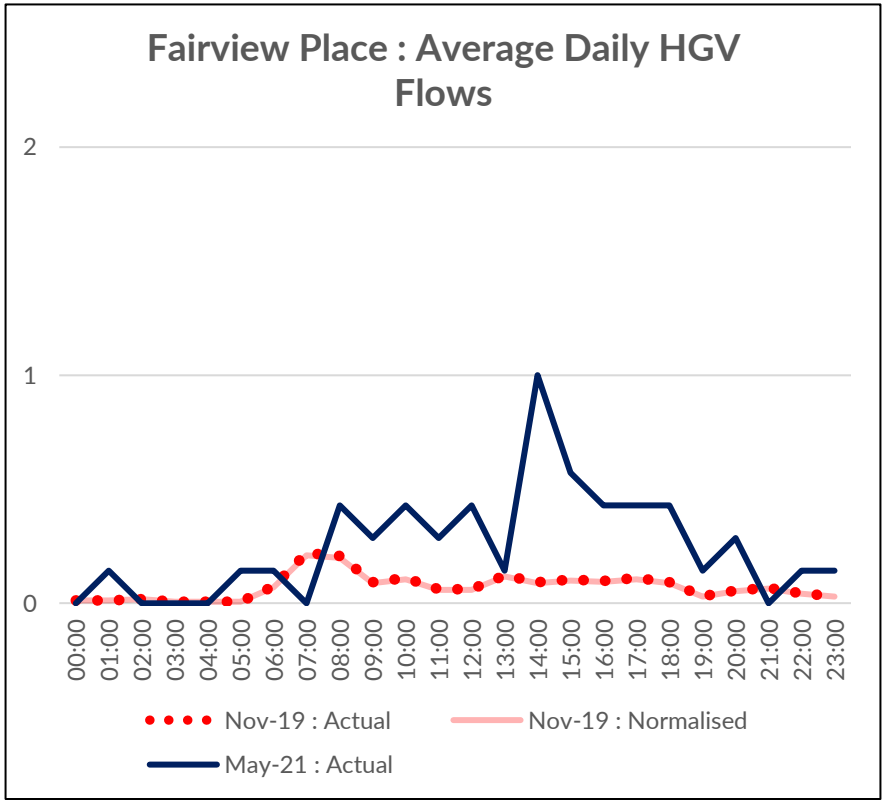
Basemap: ESRI

Fairview Place

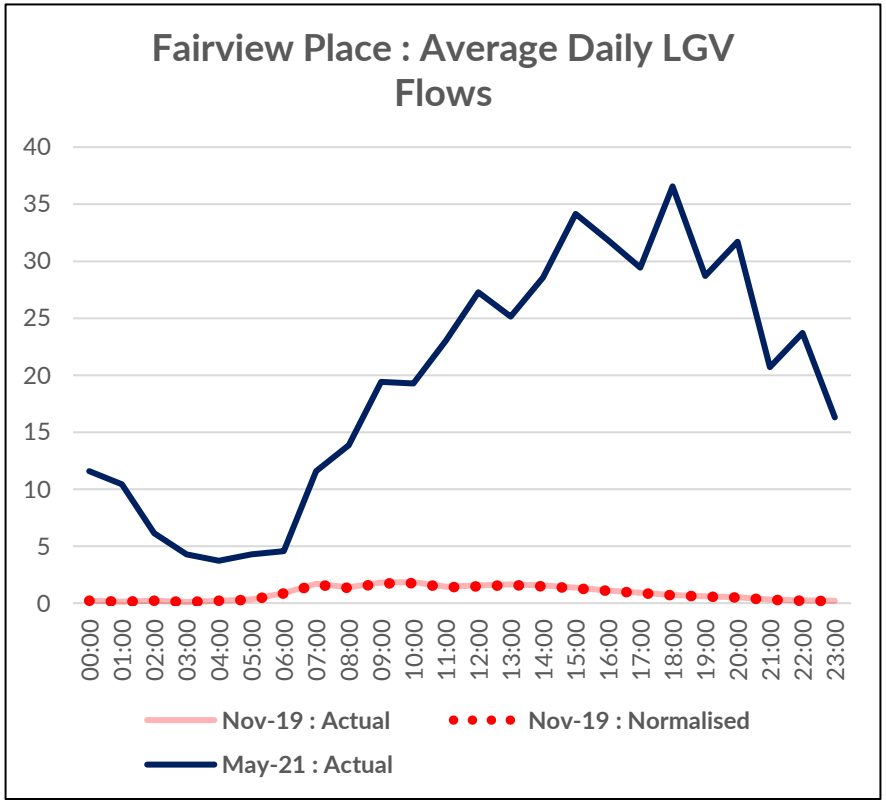


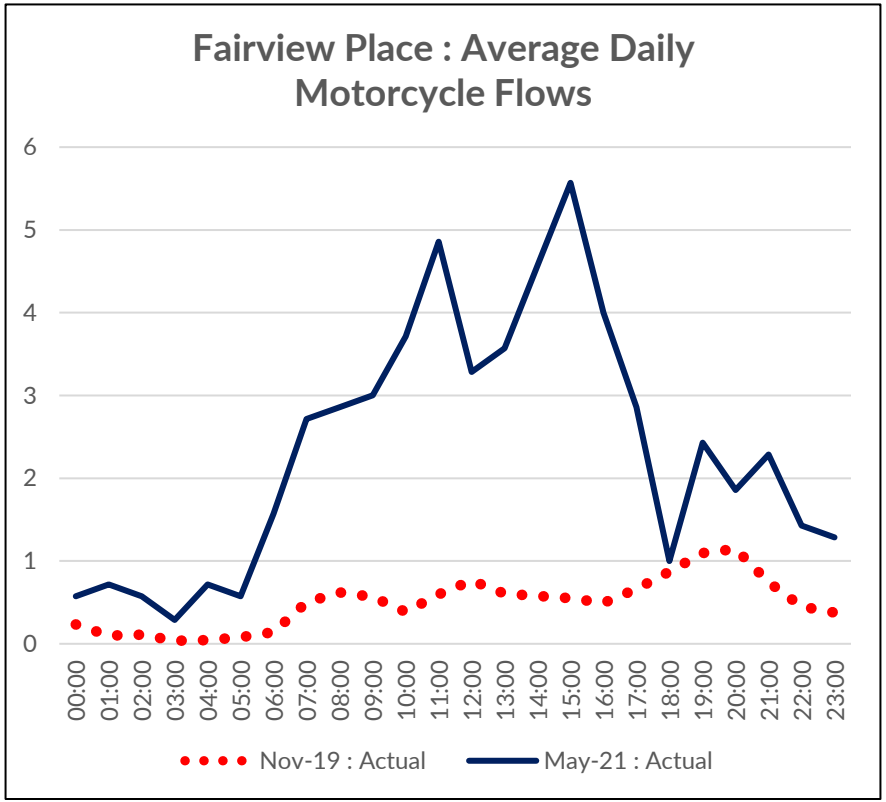
Fairview Place





Fairview Place



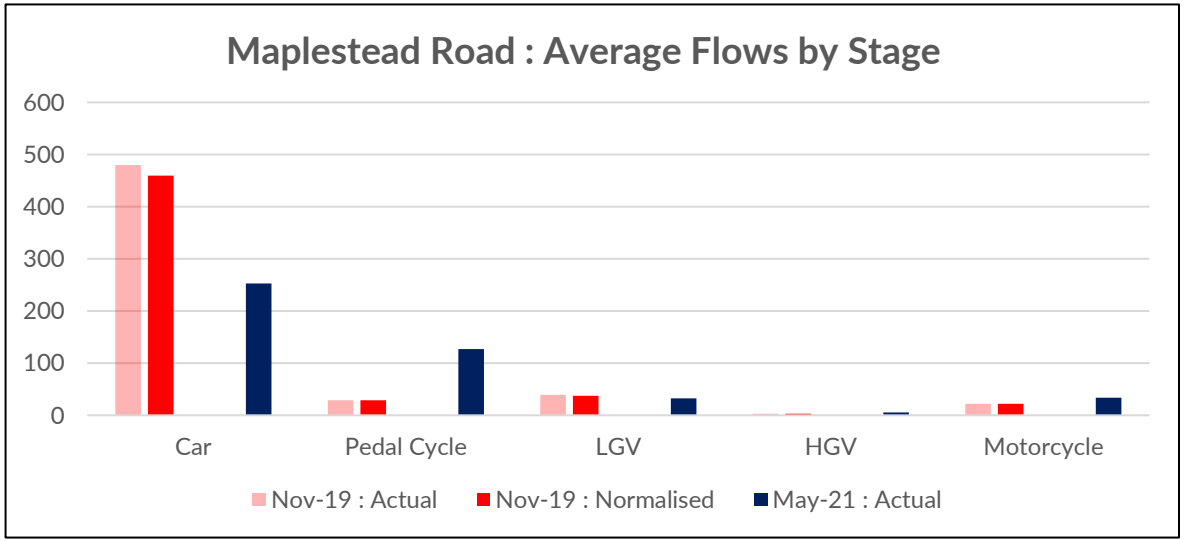


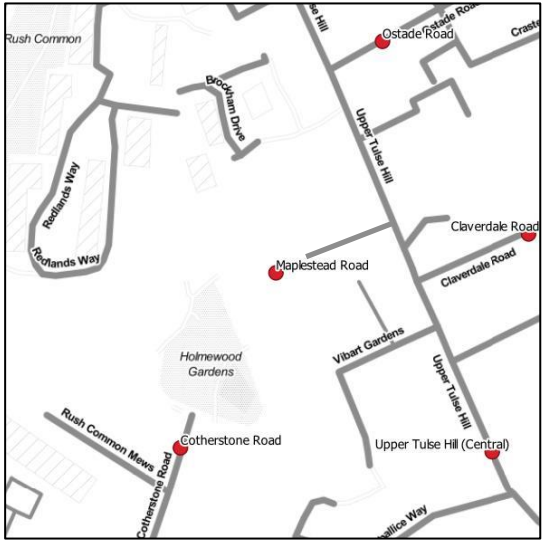
Fairview Place– Summary Table

	Nov-19 : Actual	Nov-19 : Normalised	May-21 : Actual	May-21 : Normalised	Nov-19 -> May-21 : Actual Difference	Nov-19 -> May-21 : Actual % Difference	Nov-19 -> May-21 : Normalised Difference	Nov-19 -> May-21 : Normalised % Difference
Car	260	249	651	651	391	150%	402	161%
Cycle	16	16	0	0	-15	-98%	-15	-98%
HGV	2	2	6	6	4	248%	4	264%
LGV	21	20	466	466	445	2115%	446	2211%
Motorcycles	12	12	56	56	45	380%	45	380%
Total Motorised Vehicles	**283**	**271**	**1,124**	**1,124**	**841**	**297%**	**852**	**314%**

Maplestead Road (Daily Flows)

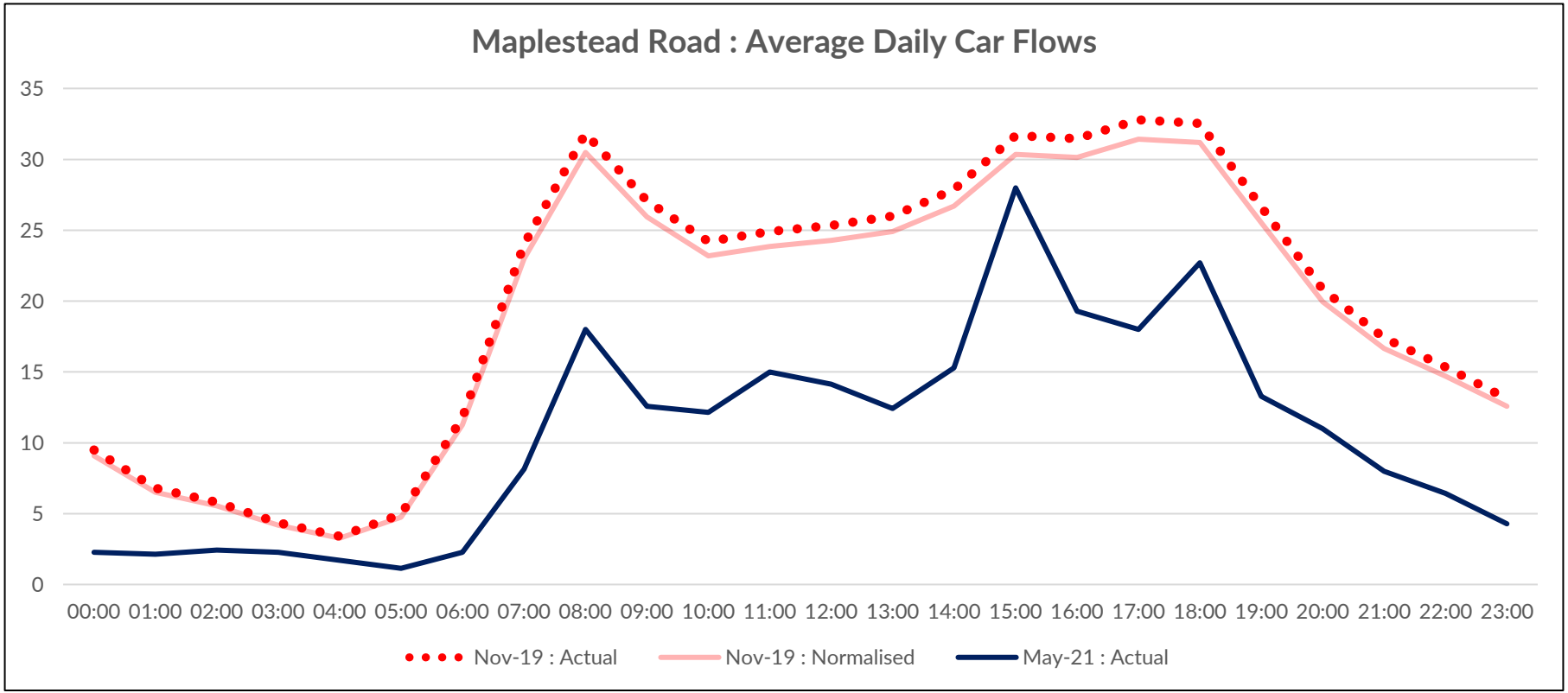
- The charts below and on the following pages show the normalised **average daily flows on Maplestead Road**, showing the difference between pre-implementation flows collected in November 2019 and post-implementation flows May 2021.



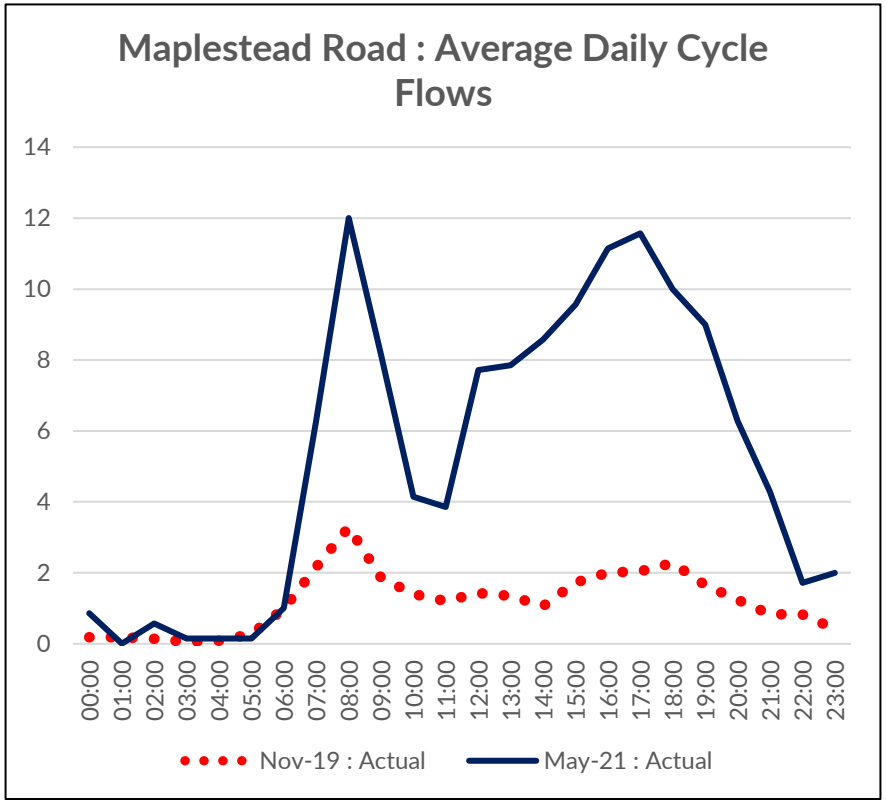


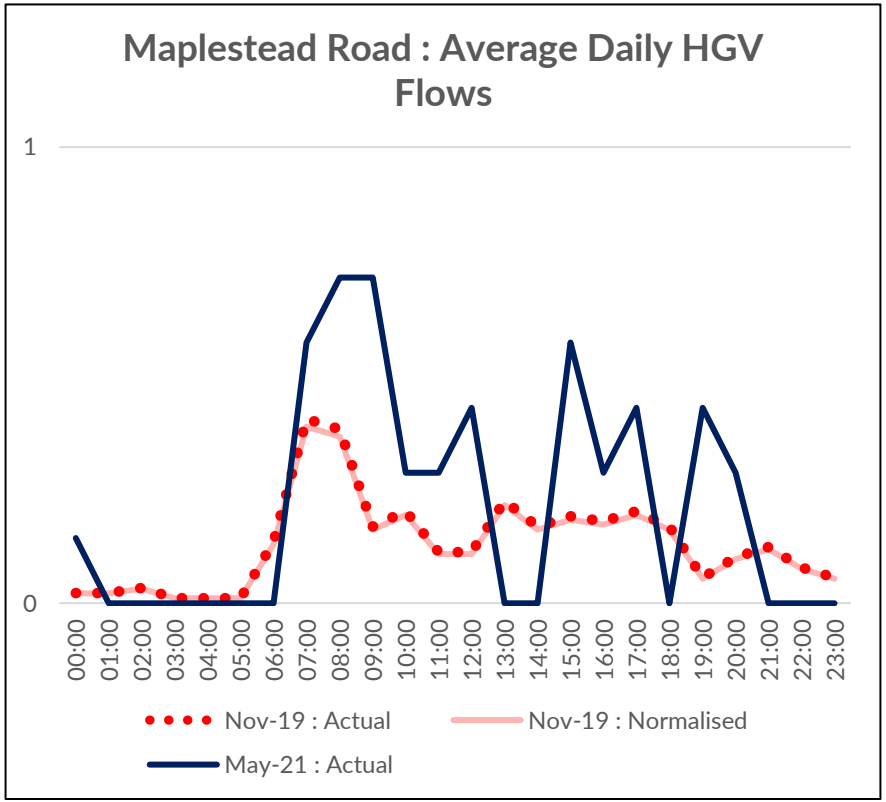
Basemap: ESRI

Maplestead Road

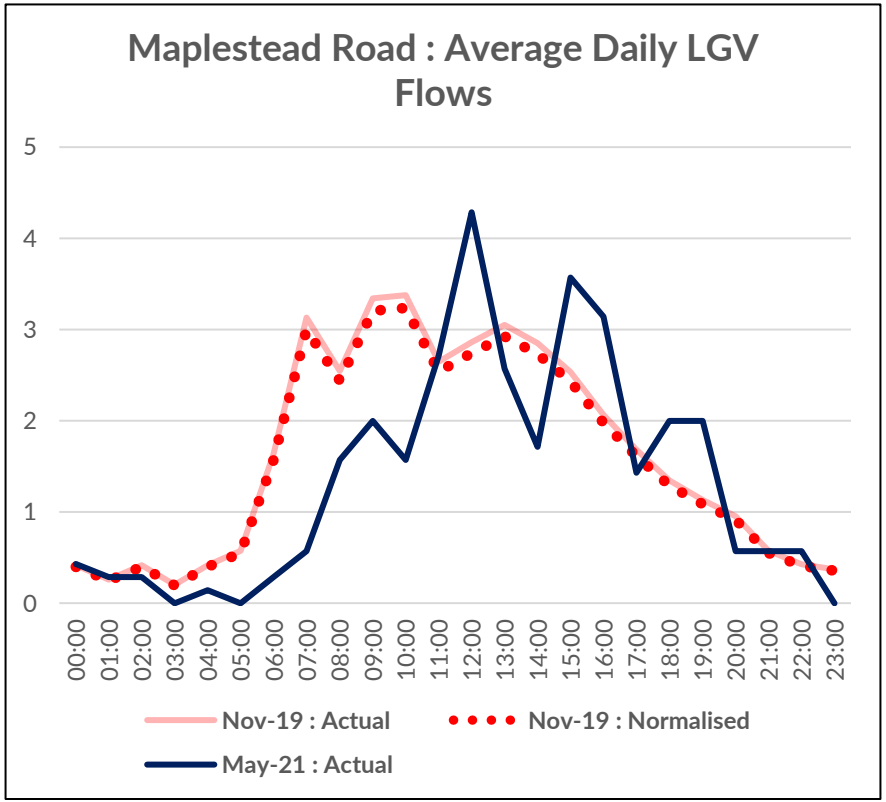


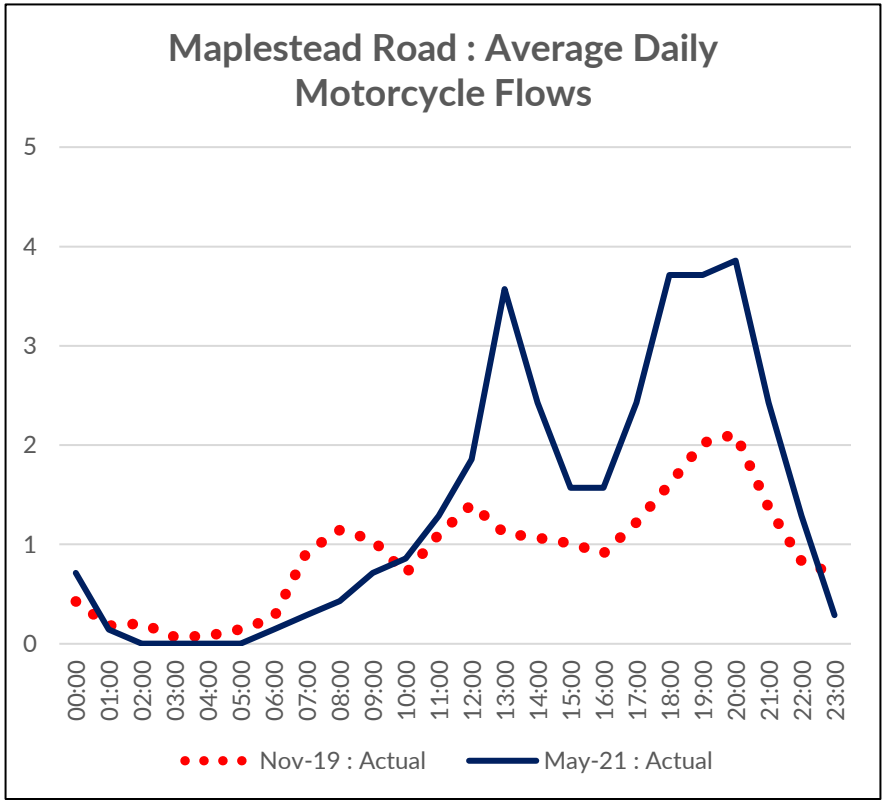
Maplestead Road





Maplestead Road



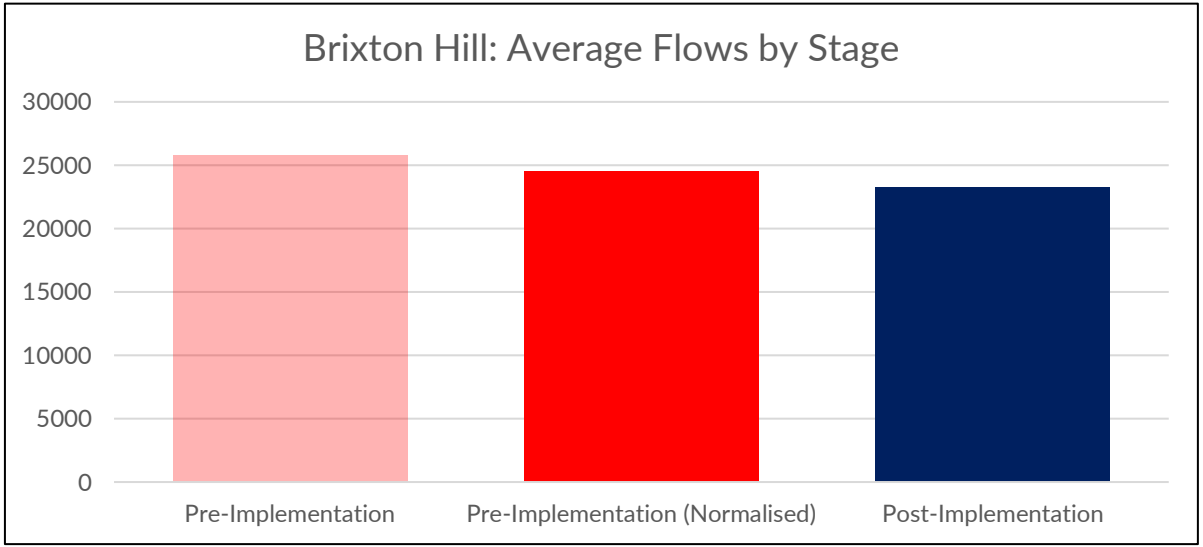


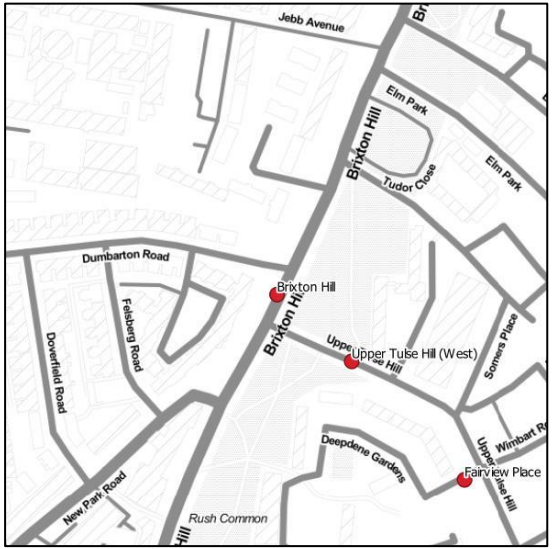
Maplestead Road – Summary Table

	Nov-19 : Actual	Nov-19 : Normalised	May-21 : Actual	May-21 : Normalised	Nov-19 -> May-21 : Actual Difference	Nov-19 -> May-21 : Actual % Difference	Nov-19 -> May-21 : Normalised Difference	Nov-19 -> May-21 : Normalised % Difference
Car	480	460	253	253	-227	-47%	-207	-45%
Cycle	29	29	127	127	98	344%	98	344%
HGV	3	3	5	5	2	62%	2	69%
LGV	39	37	32	32	-7	-17%	-5	-13%
Motorcycles	22	22	33	33	12	54%	12	54%
Total Motorised Vehicles	**522**	**500**	**290**	**290**	**-231**	**-44%**	**-209**	**-42%**

Brixton Hill (Daily Flows)

- The chart below shows the normalised **average daily flows on Brixton Hill,** showing the difference between pre- and post-implementation flows. Hour-by-hour data is not available for this site.
- This site at Brixton Hill uses data directly from a TfL continuous ATC, which provides daily motor vehicles totals. To determine the impact of the scheme on this site, a comparison has been made between what flows **would have been** at this site if it had followed the trend of other ATCs within 2km of the LTN, and what flows actually were.
- TfL ATCs do not break down traffic by vehicle class. Similarly, hour-by-hour data is not available for this site.





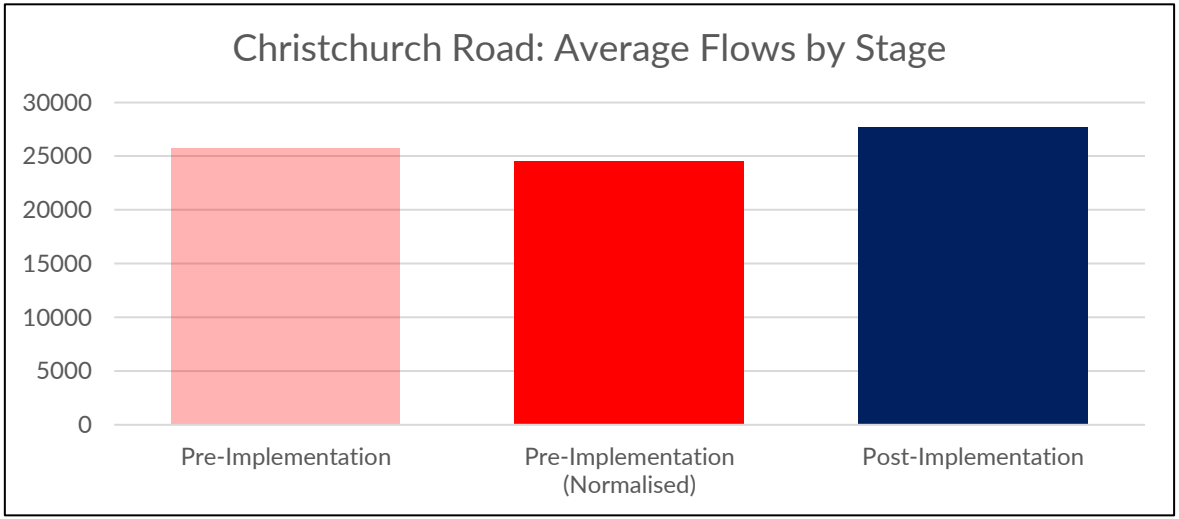
Basemap: ESRI

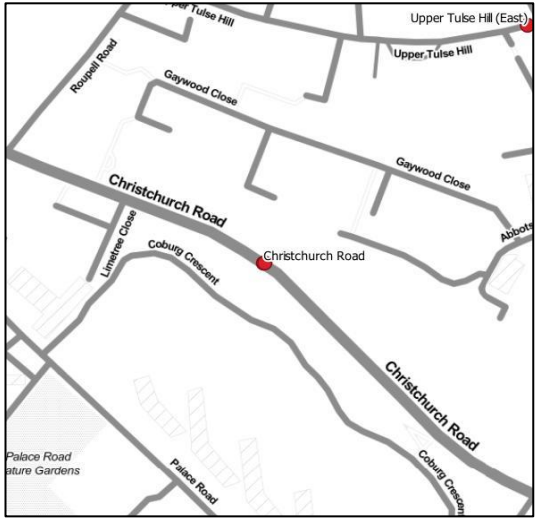
Brixton Hill - Summary Table

	Jul-20: Actual Average	LTN +2km ATC Projected	Post-Implementation Actual Average	Jul-20 vs. Post-Implementation Actual Averages, Difference	Projected vs. Actual Average, Difference	June-20 vs. Post-Implementation Actual Averages, % Difference	Projected vs. Actual Average, % Difference
Total Motorised Vehicles	**25,750**	**24,471**	**23,237**	**-2,463**	**-1,234**	**-10%**	**-5%**

Christchurch Road (Daily Flows)

- The chart below shows the normalised **average daily flows on Christchurch Road,** showing the difference between pre- and post-implementation flows. Hour-by-hour data is not available for this site.
- This site at Christchurch Road uses data directly from a TfL continuous ATC, which provides daily motor vehicles totals. To determine the impact of the scheme on this site, a comparison has been made between what flows **would have been** at this site if it had followed the **trend at the ATC about 1 mile further west on the South Circular at Clarence Avenue** (given abnormally high flows across the entirety of the South Circular as it passes through Lambeth)
- TfL ATCs do not break down traffic by vehicle class. Similarly, hour-by-hour data is not available for this site.





Basemap: ESRI

Christchurch Road - Summary Table

	Jul-20: Actual Average	Projected based on Clarence Ave ATC.	Post-Implementation Actual Average	Jul-20 vs. Post-Implementation Actual Averages, Difference	Projected vs. Actual Average, Difference	June-20 vs. Post-Implementation Actual Averages, % Difference	Projected vs. Actual Average, % Difference
Total Motorised Vehicles	**25,743**	**24,464**	**27,718**	**1,975**	**3,254**	**+7%**	**+13%**

- As Christchurch Road lies between two LTNs (Tulse Hill and Streatham Hill), the overall impact to traffic has been evenly split across both LTNs when presented in the executive summary – this means that the total impact to summed Tulse Hill vehicle counts is **+1,627**.