LAND NORTH-WEST OF SOUTHWATER, HORSHAM

TRANSPORT ASSESSMENT ANNEX H – SATURN MODEL TECHNICAL NOTE

FEBRUARY 2026

Berkeley Strategic Land Limited

LAND NORTH-WEST OF SOUTHWATER

Pre-COVID and Post-COVID traffic flow comparisons

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INTRODUCTION

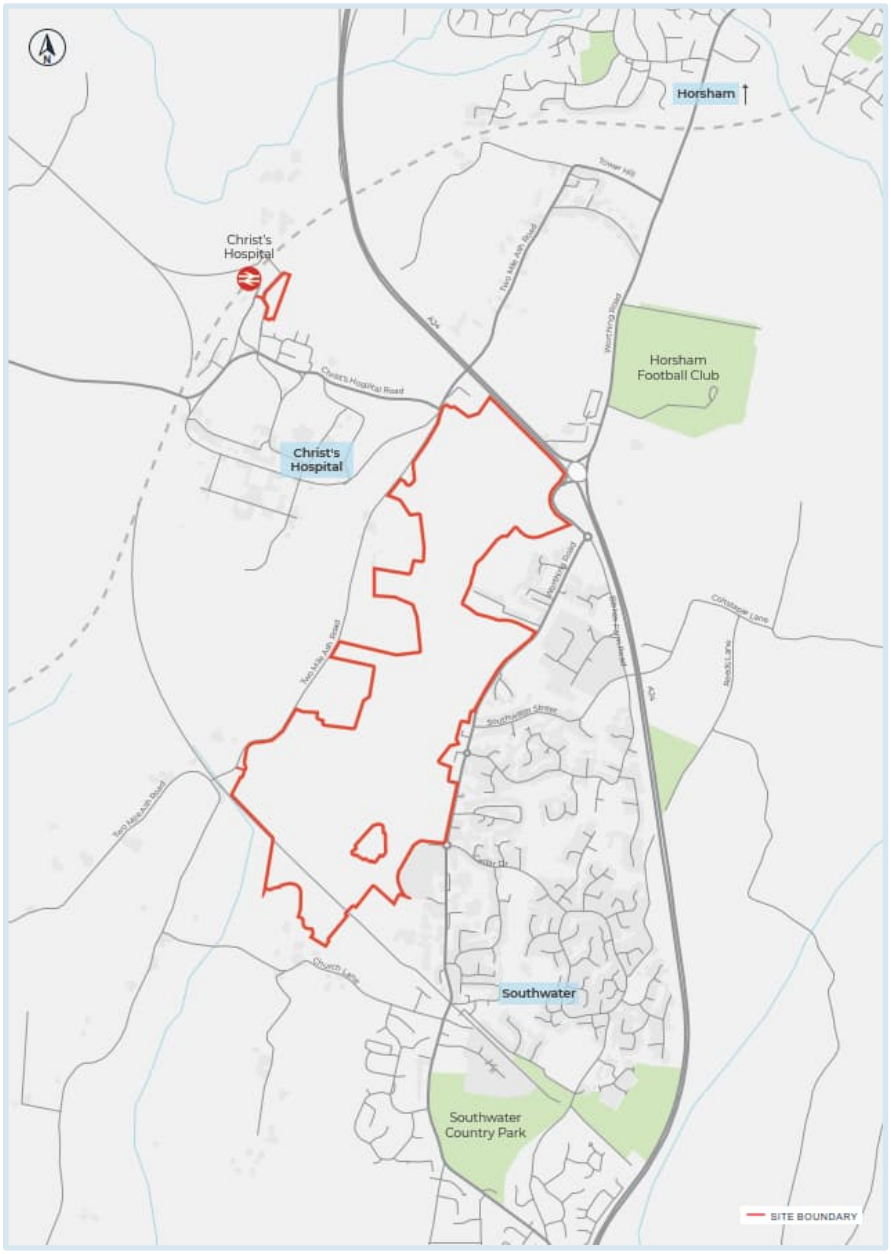
1 INTRODUCTION

1.1 INTRODUCTION

1.1.1. WSP has been commissioned by Berkeley Strategic Land Limited to support in the delivery of the Land North-West of Southwater (the 'Site'). The Site is identified as a draft allocation up to 1,000 homes along with approximately 4ha of employment land, primary and secondary schools and associated facilities under Horsham District Council's (HDC) Strategic Policy HA3 within the draft Horsham Local Plan.

1.1.2. The location of the Site is shown in Figure 1-1.

Figure 1-1: Site Location



1.1.3. The initial assessment work to be undertaken by WSP's Transport Modelling team was to review the Horsham Transport Study Model (HTSM) considering the impacts of COVID-19. As part of the review an assessment will be undertaken to determine whether the current HTSM base year model remains a valid tool for producing updated 2039 forecast year model.

1.1.4. The HTSM base year model is validated to a base of year of 2019 and includes the following time periods:

- AM Peak**:** 08:00–09:00
- Inter-Peak: Average 10:00–16:00
- PM Peak: 17:00–18:00.

1.1.5. The assessment includes for:

- Comparison of permanent Automatic Traffic Count data for 2024 from the West Sussex County Council (WSCC) website[1] to the 2019 observed surveys used to develop the HTSM 2019 base year model
- Derivation of COVID-19 adjustment factors for AM peak, Inter peak and PM peak
- Insights into the emerging impacts of the pandemic on traffic flows within the model area.

1.1.6. WSP were provided with the WSCC observed surveys for 2019 and 2024. Analysis has been undertaken on the changes in observed traffic flows within WSCC since the COVID-19 pandemic to determine whether additional sensitivity tests are required, in accordance with Department for Transport (DfT) Transport Analysis Guidance (TAG) Unit M4 Forecasting and Uncertainty (December 2025)[2].

1.2 PURPOSE OF THE REPORT

1.2.1. The purpose of the report is to assess the appropriateness of the HTSM model in greater detail, with the objective of determining whether any base model refinements are required prior to using the model to produce updated a 2029 forecast year model.

1.2.2. The report also provides a comparison between the 2024 observed surveys and the 2019 observed surveys.

1.3 BACKGROUND

1.3.1. The Department for Transport (DfT) recognises that many transport models will be based on data collected pre-COVID as the HTSM model currently is i.e., it has a 2019 base year model.

1.3.2. To understand if traffic patterns have changed in the years since 2019, an assessment of pre-COVID and post-COVID observed data can be undertaken to ascertain the extent of the divergence of travel patterns and volumes from pre-pandemic projections.

[1] https://trafficdata.westsussex.gov.uk/
[2] TAG Unit M4 Forecasting and Uncertainty (publishing.service.gov.uk)

1.3.3. If it is clear COVID-19 has not had a material impact on travel i.e., there is a change of + / - 10%, this would be represented using an appropriate change in travel demand across the HTSM trip matrix, considering trip purpose and patterns as appropriate.

1.3.4. This would mean that the 2019 Base Year model will be maintained with factors applied between 2019 and 2024. Factors between 2019 and 2024 will have been calculated by modelled time period from the survey data used for the model screenlines and applied globally to all car user classes in the base year matrices to consider the impact of COVID-19.

1.3.5. Light Goods Vehicles (LGV) and Heavy Goods Vehicles (HGV) growth will not be adjusted for COVID-19 and will be taken directly from National Road Traffic Projections (NRTP) 2022.

1.4 STRUCTURE OF THE REPORT

1.4.1. Following this introductory section, this report is structured as follows:

- Section 2: Automatic Traffic Count Surveys and Analysis
- Section 3: COVID Adjustment Factors
- Section 4: Conclusions and Next Steps.

2

AUTOMATIC TRAFFIC COUNT SURVEYS AND ANALYSIS

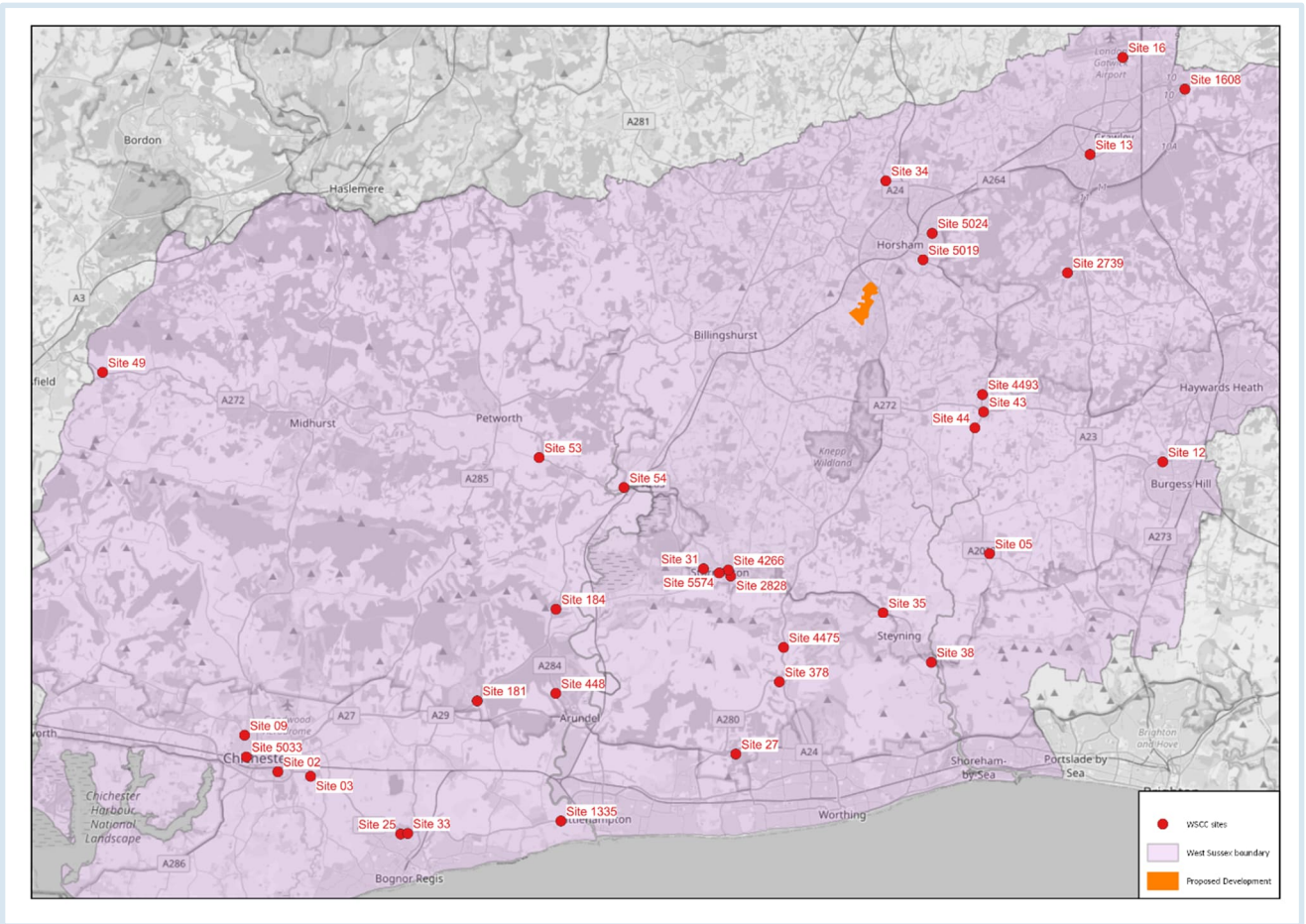
2 AUTOMATIC TRAFFIC COUNT SURVEYS AND ANALYSIS

2.1 WEST SUSSEX COUNTY COUNCIL: ATC SITES

2.1.1. Data from permanent Automatic Traffic Counts (ATC) counters at number of sites were extracted from WSCC website[3] for the years 2019 and 2024. For 34 sites of the sites, the dataset included total vehicles for 24 hours, recorded in 1-hour intervals for all months in both years.

2.1.2. The location of these sites is shown in Figure 2-1. The data from these sites were analysed by comparing the 2019 observed ATC counts against those from 2024. All the yearly ATC datasets were analysed monthly and underwent a data-cleaning process to identify traffic count values that fell the range of plus/minus ±1.96 standard deviation from the average

Figure 2-1: Location of the WSCC ATC Count Locations – 34 sites



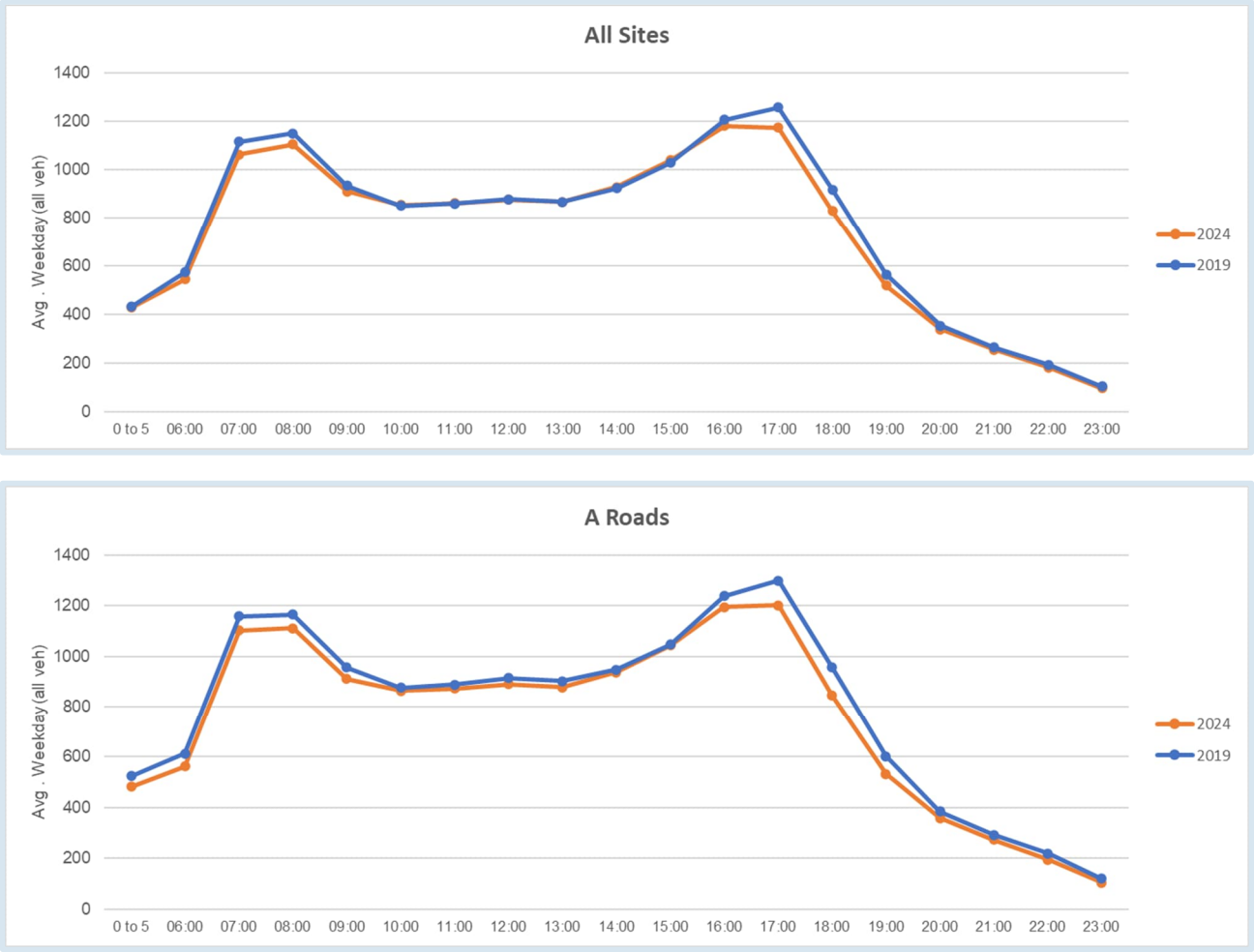
[3] https://trafficdata.westsussex.gov.uk/

2.1.3. Data was analysed for Monday to Thursday during the months of March, April, May, June, September, October, and November. Dates outside of school term time, weeks containing a bank holiday, and the Thursday preceding a bank holiday were excluded from analysis to calculate the average weekday flows.

2.1.4. The ATC data was analysed to derive bi-directional flows for AM peak (08:00-09:00), Inter peak (average 10:00-16:00) and PM peak (17:00-18:00), as well as 24-hour daily flow profiles for each of the year and site. These profiles are presented in Appendix A for 2019 and 2024 (Table A-1)

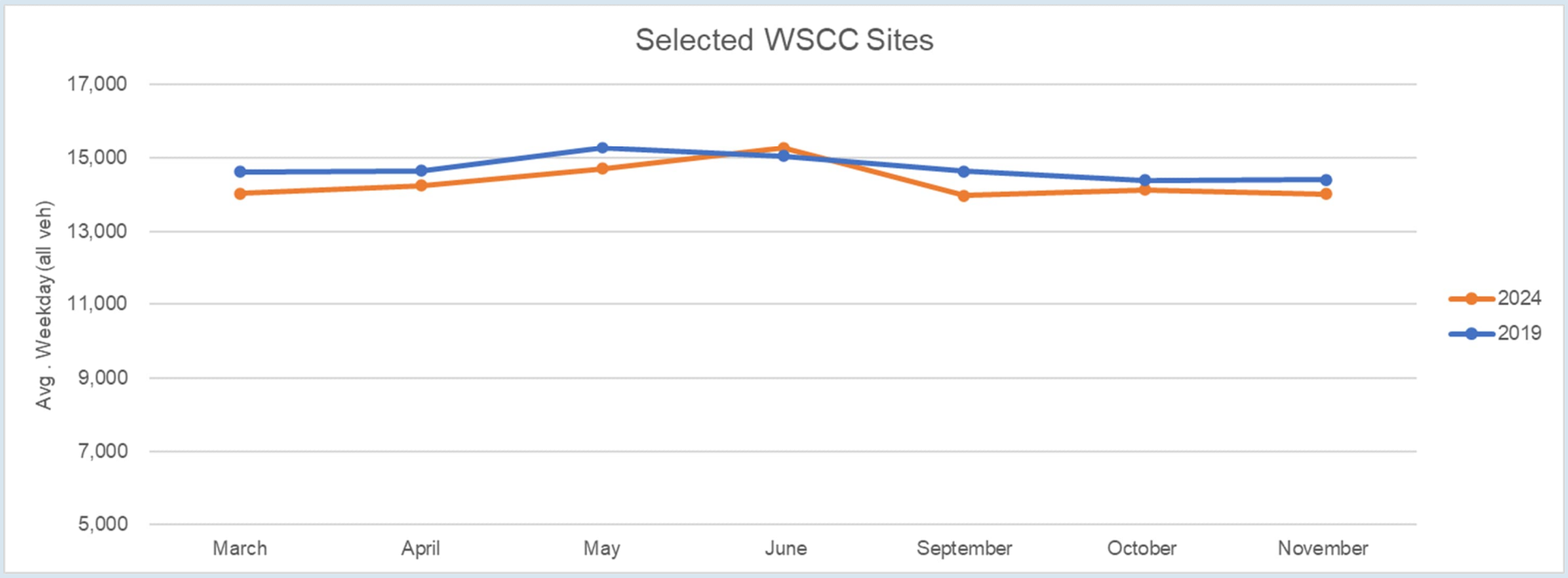
2.1.5. The average weekday (Monday – Thursday) 24-hour traffic flow profile is shown in Figure 2-2 along with the corresponding percentage growth in traffic between 2019 and 2024.

Figure 2-2: 24-hour traffic flow profiles for all the sites and A-Road sites for 2019 and 2024



2.1.6. Monthly traffic growth variation across sites is presented in Appendix A (Table A-2) and average weekday 24-hour flows are shown in Figure 2-3.

Figure 2-3: 24-Hour Flow Monthly variation for selected WSCC count sites

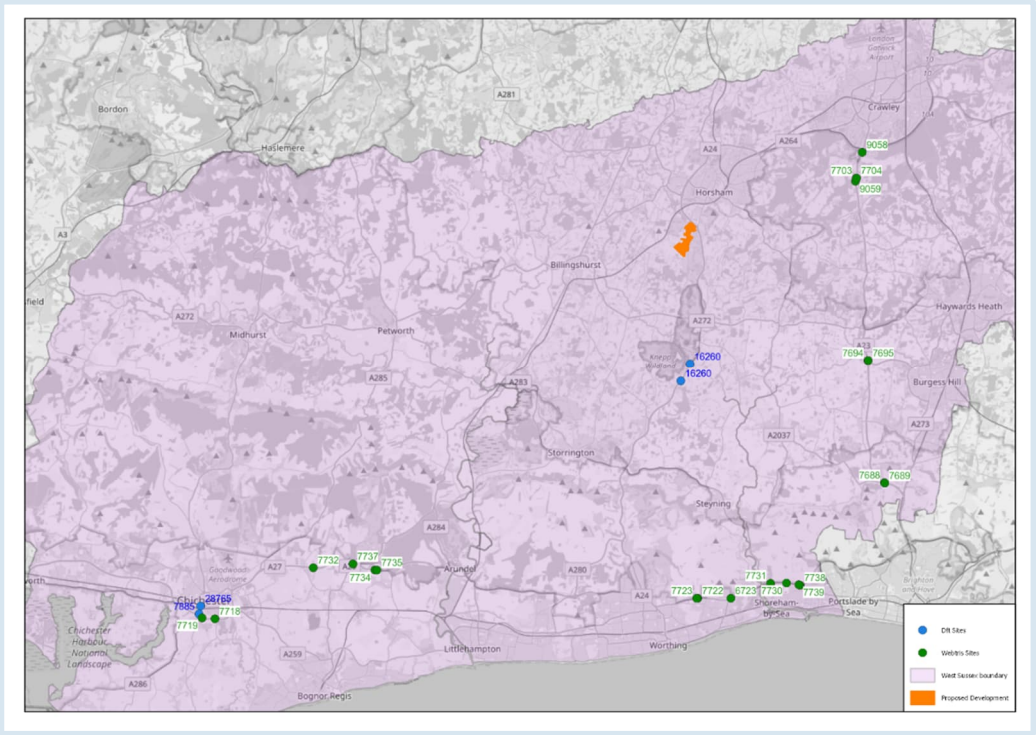


Note: selected sites based on availability across all neutral months, years, and data quality for direct comparison

2.2 NATIONAL HIGHWAYS: WEBTRIS DATA

2.2.1. National Highways WebTRIS data covering the Strategic Road Network at 21 sites was downloaded via https://webtris.highwaysengland.co.uk/. The location of these sites is shown in Figure 2-4.

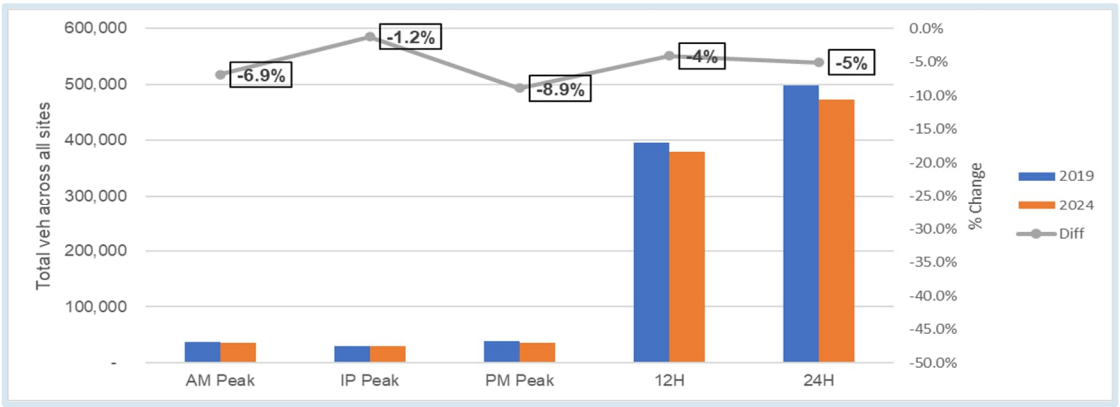
Figure 2-4: Location of the WebTRIS Count Locations



2.2.2. Data from these sites were analysed to compare observed WebTRIS ATC counts for 2019 and 2024 across the AM peak (08:00-09:00), Inter peak (10:00-16:00) and PM peak (17:00-18:00) time periods as shown in Figure 2-5.

2.2.3. The analysis indicates a decrease in traffic volumes across all time periods between 2019 and 2024. for all time periods. Detailed results are provided Appendix B (Table B-1)

Figure 2-5: Comparison of 2019 and 2024 observed WebTRIS data for the peak periods



3

COVID ADJUSTMENT FACTORS

3 COVID ADJUSTMENT FACTORS

3.1 OVERVIEW

3.1.1. DfT TAG Unit M4 (Forecasting and Uncertainty, December 2025)[4] states that COVID-19 impacts should be incorporated into modelling and appraisal from 2023 onwards. This update reflects the fact that national traffic volumes have not yet returned to pre-COVID levels.

3.1.2. The implication of this is that, in the absence of COVID-19, traffic would have continued to grow such that current traffic flows would have been higher than those seen before COVID-19. As a result, traffic forecasts will therefore assume a level of growth which will not be achieved due to the impacts of COVID-19, and an adjustment will be required to account for this over-estimation.

3.1.3. National Highways Transport Planning Group (TPG) published guidance in June 2023 following the release of TAG Unit M4. This sets out how to account for COVID 19 in transport modelling and appraisal.

3.1.4. TAG unit M4 (Forecasting and Uncertainty) identifies three acceptable approaches for proportionally adjusting forecasts based on pre-pandemic calibrated models. The three approaches are:

- **Approach 1:** Develop a present day forecast by applying adjustments to account for COVID-19 impacts, using observed data. This forecast can be used as a "new base year" for scheme forecasts. Whilst the "new base year" is not required to fully align with DfT TAG criteria, evidence of suitability is necessary. Note that calibration and validation to match observed data could be time-consuming and costly
- **Approach 2:** Apply adjustments to a forecast year model to produce a new scheme opening year forecast, or the first required forecast year, that include a COVID 19 impact to that point. This becomes new pivot for subsequent forecasts. This approach avoids creating a "new base year" but should use official statistics or observed data post base year and reflect changes up to the opening year
- **Approach 3:** Apply the adjustment globally to the model results as a post-model adjustment. This method is the simplest way of applying any adjustments but carries the highest risk to model accuracy and appraisal, in addition to issues noted in previous approaches.

3.1.5. This assessment evaluates the three approaches for assessing the impacts of COVID-19 and recommends the most appropriate approach given the context of West Sussex and the HSTM.

[4] *TAG Unit M4 Forecasting and Uncertainty (publishing.service.gov.uk)*

3.1.6. To develop an informed assumption on the impacts of COVID-19 on travel patterns within West Sussex two reviews have been undertaken:

- **Method 1:** analysis of motor vehicle traffic (vehicle miles) by local authority and vehicle type
- **Method 2:** comparison of permanent ATC traffic counts within the study area before and after the pandemic.

3.1.7. If COVID-19 has influenced travel patterns, this would be through appropriate adjustments to travel demand across the trip matrix, considering trip purpose and patterns. These adjustments will be applied to produce an updated core forecast. The objective is to determine whether changes to the base models are necessary to account for effect of the pandemic.

Method 1

3.1.8. The motor vehicle traffic data (million vehicle miles) published in *GOV.UK Road traffic statistics (TRA8902)*[5] has been used to calculate growth from 2019 to 2024.

3.1.9. For the HSTM, data from the South East Region (East Sussex, West Sussex, Kent, Surrey, Brighton and Hove) was considered. Growth in motor vehicle traffic for cars and taxis, Light Goods Vehicles (LGV) and Heavy Goods Vehicles (HGV) is presented in Table 3-1 to Table 3-3.

Table 3-1: Motor vehicle traffic (veh-miles) by local authority in SE Region – cars and taxis

Local Authority	2019	2020	2021	2022	2023	2024	Growth 2019-2024
Brighton and Hove	636	482	533	582	589	596	-6%
East Sussex	2161	1676	1824	1961	2016	2059	-5%
Kent	7239	5496	6068	6719	6937	7080	-2%
Surrey	6878	5096	5577	6319	6500	6552	-5%
West Sussex	**3575**	**2710**	**2996**	**3223**	**3337**	**3411**	**-5%**

[5] Road traffic statistics (TRA) - GOV.UK (www.gov.uk)

Table 3-2: Motor vehicle traffic (veh-kms) by local authority in SE Region – LGV

Local Authority	2019	2020	2021	2022	2023	2024	Growth 2019-2022
Brighton and Hove	134	129	136	138	135	135	0%
East Sussex	476	431	470	494	495	499	5%
Kent	1634	1492	1657	1783	1786	1804	10%
Surrey	1353	1255	1408	1533	1519	1501	11%
West Sussex	**726**	**669**	**736**	**760**	**761**	**767**	**6%**

Table 3-3: Motor vehicle traffic (veh-kms) by local authority in SE Region – HGV

Local Authority	2019	2020	2021	2022	2023	2024	Growth 2019-2022
Brighton and Hove	13	12	12	12	12	11	-17%
East Sussex	56	52	55	55	53	52	-8%
Kent	578	537	565	559	553	543	-6%
Surrey	334	330	338	346	337	324	-3%
West Sussex	**118**	**107**	**115**	**114**	**113**	**109**	**-8%**

3.1.10. It can be observed that cars/taxis and HGV in the West Sussex study experienced a post-pandemic reduction in traffic of 5% and 8%, respectively. However, there is an increase of 6% in LGV.

Method 2

3.1.11. Peak hour and 24-hour average traffic flow (Monday – Thursday), along with corresponding percentage growth in traffic between 2019 and 2024 across 34 WSCC permanent ATC sites have been extracted. Table 3-4 presents the growth traffic for total vehicles traffic.

Table 3-4: Average traffic and growth from 2019 to 2024 (WSCC ATC Sites)

Road Types (no of sites)	2019				2024				% Diff			
	AM	IP	PM	24 Hour	AM	IP	PM	24 Hour	AM	IP	PM	24 Hour
A Road (25)	32,014	25,574	35,497	413,234	30,402	25,392	33,116	396,383	-5%	-1%	-7%	-4%
B Road (4)	3,410	2,332	3,485	37,026	3,354	2,505	3,341	38,039	-2%	7%	-4%	3%
Minor Road (5)	3,664	2,700	3,752	41,593	3,571	2,694	3,448	40,797	-3%	0%	-8%	-2%
All sites (34)	**39,089**	**30,606**	**42,733**	**491,852**	**37,326**	**30,591**	**39,905**	**475,200**	**-4.5%**	**-0.05%**	**-6.6%**	**-3.4%**

3.1.12. Table 3-4 shows a 4.5% reduction in the AM peak, a very slight change in the Inter peak and 6.6% reduction in the PM peak. The 24-hour average traffic growth indicates an overall 3.4% decrease across WSCC.

3.1.13. The National Highways WebTRIS data for 2019 and 2024 has been analysed, and the results are presented in Table 3-5.

Table 3-5: Average traffic and growth from 2019 to 2024 (WebTRIS)

Time Period	2019	2024	Growth: 2019 - 2024
AM Peak (08:00-09:00)	37,702	35,111	**-6.9%**
IP Peak (10:00-16:00)	29,595	29,232	**-1.2%**
PM Peak (17:00-18:00)	38,603	35,158	**-8.9%**

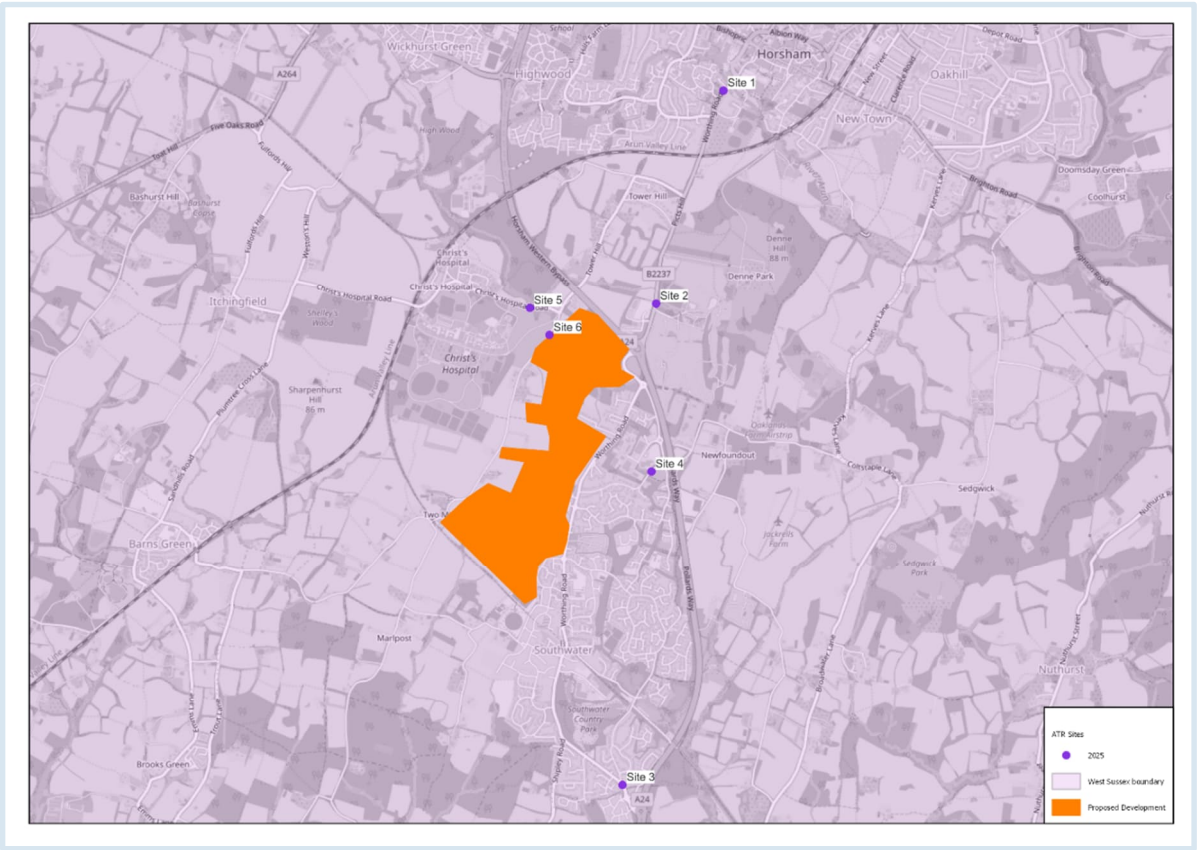
3.1.14. The National Highways WebTRIS data for 2019 and 2024 has been analysed, and the results are presented in Table 3-5.

3.1.15. Table 3-5 shows a reduction of 6.9% in the AM peak, 1.2% in the Inter peak and 8.9% in the PM peak between 2019 and 2024.

3.2 ATR SITES (2025)

3.2.1. A 7-day ATC survey was conducted at six locations neighbouring the development site. Traffic data was collected from the 9 September 2025 to the 15 September 2025, in 15 minutes bin for 6 vehicle classes. The location of the sites is shown in Figure 3-1.

Figure 3-1: Location of the ATR 2025 Count Locations



3.3 DFT DOMESTIC TRANSPORT DATA

3.3.1. The Department for Transport (DfT) publishes monthly statistics [6], released the second Wednesday of each month at 9.30am covering:

- Road traffic in Great Britain
- Rail passenger journeys in Great Britain
- Transport for London (TfL) tube and bus routes
- Bus travel in Great Britain (excluding London)
- Cycling in England.

[6] COVID-19-transport-use-statistics.ods (live.com)

3.3.2. The analysis is based on approximately 275 automatic traffic count sites across Great Britain. These sites form part of DfT's Quarterly Road Traffic National Statistics series, which is used to estimate traffic change. The sample of automatic traffic counters is stratified by area, road classification, and road management and has been designed to be representative of national traffic.

3.3.3. Based on the DfT data, the only comparable figures were for traffic along the A24 (between the B2133 and the A272 junction).

3.3.4. The 12-hour flow trend shows a slight reduction in car traffic by 0.6%, an increase in LGV traffic by 23.2%, which aligns with overall road traffic statistics, and a 3.5% increase in HGV traffic levels.

3.4 BASE MODEL UPDATE

3.4.1. The 2019 calibrated base model has been adopted as the baseline and updated to reflect 2024 conditions. COVID-19 recovery factors presented in Table 3-4 were applied across all trip purposes for Car mode and time periods to account for changes in travel demand.

3.4.2. LGV and HGV growth factors between 2019 and 2024 were calculated from National Road Traffic Projections (NRTP 2022)[7]. Supply-side updates included incorporation of network schemes delivered between 2020 and 2024. Cost parameters such as value of time and vehicle operating costs were also updated to 2024 prices using TAG data book v2.01 (May 2025). Further, a proportionate flow adjustment exercise at zone107 was undertaken in the AM model to match against the 2025 observed traffic counts to ensure compliance with accepted validation thresholds.

[7] National road traffic projections - GOV.UK

Table 3-6: Average traffic and growth from 2019 to 2024 (WebTRIS)

Road Name	Sites	Direction	AM Peak (08:00-09:00)				PM Peak (17:00-18:00)			
			Obs 2025	Mod 2024	Diff	GEH	Obs 2025	Mod 2024	Diff	GEH
Worthing Road	Site 1	NB	788	932	144	5	494	460	-34	2
		SB	501	497	-4	0	789	845	56	2
Worthing Road	Site 2	NB	754	780	26	1	441	454	13	1
		SB	341	363	22	1	557	488	-69	3
Mill Straight	Site 3	NB	278	179	-99	7	367	265	-102	6
		SB	353	295	-58	3	261	263	2	0
Southwater Street	Site 4	EB	143	91	-52	5	102	68	-34	4
		WB	101	47	-54	6	172	258	86	6
Christ's Hospital Road	Site 5	EB	135	59	-75	8	141	119	-21	2
		WB	174	61	-113	10	155	25	-130	14
Two Mile Ash Road	Site 6	EB	84	1	-83	13	56	1	-54	10
		WB	53	0	-53	10	91	197	106	9

3.4.3. The modelled flows from the 2024 base model were compared with the 2025 observed traffic counts along the Worthing Road corridor as shown in Table 3-6.

3.4.4. The comparison was undertaken at a detailed level, across time periods, vehicle classes, and directional flows. Performance metrics included absolute difference, and GEH statistics were calculated to assess model accuracy.

3.4.5. The analysis highlights that the flow along the Worthing Corridor from 2024 base year model are similar to the 2025 ATR count data, and this updated model will serve as the “new base year” for scheme forecasting.

3.5 SUMMARY

3.5.1. Analysis of the WSCC ATC sites and the National Highways WebTRIS sites indicates a similar decrease in average traffic volume between 2019 and 2024 across the AM peak, Inter peak and PM peak time periods.

3.5.2. Both methods show comparable overall traffic growth trends, with reductions in total traffic volumes, although LGV traffic continues to exhibit growth.

3.5.3. To account for the impact and application of a COVID-19 adjustment in the HSTM model, factors derived from Method 2 will be adopted, as this approach disaggregates COVID-19 impacts by peak hour.

3.5.4. As the 2019 model will be rebased to 2024, it is reasonable to assume that travel demand and patterns have changed since 2019 due to the impacts of COVID-19. The recommended approach is to apply proportionate and transparent adjustments to the 2024 demand. This updated forecast would serve as a “new base year” for scheme forecasting, with consideration of TEMPro 8.0 and NRTP factors representing normal growth without COVID-19 impacts.

4

CONCLUSIONS AND NEXT STEPS

4 CONCLUSIONS AND NEXT STEPS

4.1.1. This report assesses the impacts of COVID19 on traffic behaviour within the HSTM study area and consider whether adjustments to a rebased HSTM base year (from 2019 to 2024 based on TEMPro) are required.

4.1.2. Two methods were used for comparison:

- Motor vehicle traffic (in million vehicle miles) between the years of 2024 and 2019 in selected local authorities
- Permanent ATC (WSCC ATC and National Highways WebTRIS) traffic counts for 2019 and 2024 at selected sites the West Sussex area.

4.1.3. Both approaches indicate a similar trend of reduced overall traffic growth. Based on these findings, a reduction factor of 4.5% for AM peak, 0.05% for Inter peak and 6.6% for PM peak (Method 2) will be applied to the 2019 HSTM base year demand matrices for cars with NRTP growth factors applied to LGV and HGV traffic to produce the revised 2024 Base year.

STEP 2

4.1.4. Production of 2039 forecast year models.

Appendix A

ATC ANALYSIS

Table A-1: Average Peak Hour and 24-Hour Flows for 2019 and 2024 WSCC Observed ATC Counts

	2019				2024			
ATC Sites	AM (8-9)	IP (Avg 10-16)	PM (17-18)	24-Hour	AM (8-9)	IP (Avg 10-16)	PM (17-18)	24-Hour
9	951	660	1125	10279	1070	816	1079	12028
16	2041	1533	2092	27231	1494	1138	1499	19078
35	1619	990	1803	16810	1446	936	1566	15206
54	486	449	547	6226	459	418	453	5603
378	1274	1091	1495	17810	1283	1150	1467	17796
448	658	478	798	7950	640	476	739	7671
4475	2304	1996	3157	33913	2249	2006	2906	32693
4493	842	627	780	10014	779	610	739	9345
2	526	410	422	5487	548	399	379	5326
3	1859	1816	2032	27882	1862	1906	2086	28634
5	458	366	498	5443	442	360	465	5165
12	1167	840	1221	13298	1236	828	1214	13137
13	1268	1087	1180	18450	1527	1300	1669	21557
25	924	847	1084	12909	932	877	1052	13147
27	1165	773	1225	12604	1103	759	1014	11878
31	488	505	555	6962	461	458	491	6413
33	1747	1790	2143	26307	1753	1876	2062	27179
34	1526	1084	1651	19484	1365	1049	1472	17954
38	1924	1215	1927	19820	1776	1151	1764	18349
43	1559	1137	1648	18910	1570	1263	1637	20284
44	514	420	582	6414	426	380	472	5472
49	629	525	675	7672	648	546	660	7660
53	462	331	463	5047	474	348	457	5172
181	1253	908	1498	15848	1148	889	1371	15121
184	1009	723	1155	12066	950	672	1017	10899
1335	2335	2079	2681	31739	2355	2175	2606	32414
1608	1189	837	1300	14659	934	756	1014	12440
2739	972	472	775	8670	837	448	691	7860
2828	1237	1069	1335	16962	1130	1031	1195	15941
4266	677	488	619	7194	635	497	634	7204
5019	1160	778	1150	11946	1025	750	992	10901
5024	810	712	966	10882	811	744	936	10948
5033	588	339	557	5546	514	311	545	5273
5574	1471	1230	1594	19418	1446	1270	1561	19471

Table A-2: Monthly 24-Hour Flows for 2019 and 2024 WSCC Observed ATC Counts

	2019							2024						
ATC Sites	March	April	May	June	September	October	November	March	April	May	June	September	October	November
9	10477	8360	10808	10964	10630	10153	10564	12032	11380	11888	12021	12049	12065	12762
16	26283	26055	27194	27600	27841	28417	27231	20786	21743	22143	23660	19050	15052	11112
35	16752	16736	17701	17406	16585	15852	16639	14836	15016	16109	14962	14988	15394	15136
54	6140	6254	6565	6410	6218	6030	5963	5292	5526	5883	5828	5604	5533	5552
378	17712	18265	18286	18004	17702	17394	17304	17523	18133	18365	18535	17527	17409	17081
448	7675	8107	8437	8194	7876	7797	7568	7459	7668	8045	7984	7732	7489	7317
4475	33513	34463	34678	34062	33666	33733	33276	32408	32891	33650	34139	31603	32460	31705
4493	10086	10311	10457	10316	9695	9773	9460	8659	9043	8991	13418	8257	8514	8534
2	5426	5564	5441	5517	0	0	0	5123	5572	5294	5317	0	0	0
3	27729	27726	28318	27756	0	0	0	29130	29217	28611	27577	0	0	0
5	5399	5486	0	0	0	0	0	5063	5268	0	0	0	0	0
12	12921	12487	13926	0	14005	14249	12202	11843	12131	13547	0	13570	13803	13929
13	15404	15997	15849	18657	20788	20974	21478	21643	21293	21660	22236	21474	21030	21560
25	13396	13662	13741	13734	12969	11590	11269	13608	13353	13587	13399	13014	12389	12682
27	0	0	0	0	12400	12726	12687	0	0	0	0	11876	11944	11814
31	0	0	0	0	6962	0	0	0	0	0	0	6413	0	0
33	25906	26707	0	0	0	0	0	27653	26704	0	0	0	0	0
34	18779	19134	20537	0	0	0	0	18071	17292	18500	0	0	0	0
38	0	0	0	0	19374	19903	20184	0	0	0	0	18250	18395	18402
43	0	0	19219	18884	18488	19048	0	0	0	20890	20836	19953	19456	0
44	6312	6346	6583	0	0	0	0	5516	5465	5436	0	0	0	0
49	7273	7606	7954	7875	7661	7665	0	7089	7297	7670	7682	7767	8454	0
53	0	0	0	5316	4933	4890	0	0	0	0	5336	5132	5047	0
181	15258	15931	16213	15990	0	0	0	13595	14820	16069	16001	0	0	0
184	11771	12188	12891	12403	11949	11825	11433	10274	10636	11148	11480	11179	10883	10690
1335	31125	31803	32129	31901	0	0	0	32130	32196	32648	32684	0	0	0
1608	14586	14316	14711	15141	14526	14676	0	13126	12986	13566	13876	13912	7173	0
2739	0	0	0	0	0	0	8670	0	0	0	0	0	0	7860
2828	0	0	17630	17487	16374	16354	0	0	0	17745	16752	14177	15092	0
4266	7188	7052	7300	7282	7147	0	0	7923	7104	6967	7033	6991	0	0
5019	0	0	0	0	11766	12002	12071	0	0	0	0	10742	10901	11059
5024	0	0	11189	10298	11042	10999	0	0	0	10940	11079	10981	10790	0
5033	0	0	0	0	0	0	5546	0	0	0	0	0	0	5273
5574	19166	19621	19948	19910	18444	0	0	19684	19505	19753	19407	19006	0	0

Appendix B

NATIONAL HIGHWAYS WEBTRIS DATA

Table B-1: WebTRIS data for 2019 and 2024

	2019					2024					% Diff				
Location	AM Peak	IP Peak	PM Peak	12H	24H	AM Peak	IP Peak	PM Peak	12H	24H	AM Peak	IP Peak	PM Peak	12H	24H
30360440	2466	1788	2111	24018	30310	2172	1714	1909	22178	27920	-12%	-4%	-10%	-8%	-8%
5877/2	2203	2029	3320	27797	35729	2375	2056	2972	27566	35435	8%	1%	-10%	-1%	-1%
5884/2	2750	1730	2093	24246	31945	2461	1782	2127	23920	31420	-10%	3%	2%	-1%	-2%
5752/1	1929	1585	1609	19863	24909	1557	1541	1394	18141	20893	-19%	-3%	-13%	-9%	-16%
5751/1	1395	1525	1873	18750	24163	1359	1505	1713	18147	23273	-3%	-1%	-9%	-3%	-4%
5765/1	1410	1266	1353	15698	20310	1269	1204	1225	14578	18815	-10%	-5%	-9%	-7%	-7%
5766/1	1626	1504	1839	19337	24297	1614	1464	1649	18330	22736	-1%	-3%	-10%	-5%	-6%
5768/1	2730	2226	2761	29067	35381	2415	2108	2549	27670	33327	-12%	-5%	-8%	-5%	-6%
5767/1	3298	2145	2798	29942	36746	2892	2094	2539	28124	33736	-12%	-2%	-9%	-6%	-8%
5756/1	1746	1295	1394	16614	19772	1630	1278	1316	16239	19421	-7%	-1%	-6%	-2%	-2%
5760/1	1401	1027	968	12880	15541	1321	1000	933	12503	15228	-6%	-3%	-4%	-3%	-2%
5759/1	975	981	1119	12109	14886	1006	990	1010	11901	14675	3%	1%	-10%	-2%	-1%
5757/1	1471	1356	1738	17541	21875	1450	1316	1510	16683	20709	-1%	-3%	-13%	-5%	-5%
5770/1	1936	1508	2032	20561	25109	1781	1478	1930	19683	23894	-8%	-2%	-5%	-4%	-5%
5996/1	1622	1631	2748	22396	28604	1650	1602	2217	20910	27071	2%	-2%	-19%	-7%	-5%
5997/1	3357	2055	2666	28908	38703	3037	2206	2681	29749	38547	-10%	7%	1%	3%	0%
5884/1	208	188	236	2359	2958	226	192	218	2348	2938	8%	2%	-8%	0%	-1%
5881/2	1969	1712	2893	23921	30317	1938	1667	2440	22355	28342	-2%	-3%	-16%	-7%	-7%
5881/1	671	434	795	6489	7919	704	449	751	6584	8046	5%	4%	-6%	1%	2%

	2019					2024					% Diff				
Location	AM Peak	IP Peak	PM Peak	12H	24H	AM Peak	IP Peak	PM Peak	12H	24H	AM Peak	IP Peak	PM Peak	12H	24H
5877/1	130	143	216	1848	2329	163	137	202	1806	2272	25%	-4%	-7%	-2%	-2%
5769/1	2411	1466	2040	21389	26570	2091	1449	1872	20073	24550	-13%	-1%	-8%	-6%	-8%

Appendix D Reference Case Developments

Commited & Adopted Local Plan Developments

Reference	District	Development	Zone	Donor Zone	Land Use	Land Use Class	Unit	Trip Rate	Size
29	Arun	West End Nursery Roundstone Lane Angmering Littlehampton	506	506	Residential	C3	Dwellings	C3	**167**
30	Arun	Land west of Brook Lane & South of A259 Angmering	506	506	Residential	C3	Dwellings	C3	**90**
31	Arun	Land west of Westergate Street East of Hook Lane Westergate	505	505	Residential	C3	Dwellings	C3	**78**
32	Arun	Nyton Nursery Nyton Road Westergate Aldingbourne	505	505	Residential	C3	Dwellings	C3	**286**
33	Arun	Land West of New Barn Lane North Bersted	505	505	Residential	C3	Dwellings	C3	**90**
34	Arun	Land West of New Barn Lane Bersted	505	505	Residential	C3	Dwellings	C3	**50**
35	Arun	Angels Nursery Yapton Road Barnham	505	505	Residential	C3	Dwellings	C3	**95**
36	Arun	Pollards Nursery (Former Eric Wall Holdings Ltd & Epitair Ltd) Lake Lane Barnham	505	505	Residential	C3	Dwellings	C3	**63**
37	Arun	Land at former Eastergate Fruit Farm Eastergate	505	505	Residential	C3	Dwellings	C3	**60**
38	Arun	Land to the East of Fontwell Avenue Fontwell	16	16	Residential	C3	Dwellings	C3	**400**
39	Arun	Land at Summer Lane Pagham	505	505	Residential	C3	Dwellings	C3	**90**
40	Arun	Land East of Tye Lane Walberton	505	505	Residential	C3	Dwellings	C3	**175**
41	Arun	Windroos Nursery Worthing Road Littlehampton	506	506	Residential	C3	Dwellings	C3	**84**
42	Arun	Land north of Toddington Lane Littlehampton	506	506	Residential	C3	Dwellings	C3	**903**
43	Arun	Phase 2 - Land north of Toddington Lane Littlehampton	506	506	Residential	C3	Dwellings	C3	**126**
44	Arun	Land South of The Littlehampton Academy Littlehampton	506	506	Residential	C3	Dwellings	C3	**68**
45	Arun	Land off Burndell Road Yapton	505	505	Residential	C3	Dwellings	C3	**108**
46	Arun	Bonhams Field Main Road Yapton	505	505	Residential	C3	Dwellings	C3	**56**
47	Arun	Land to the South of Ford Lane East of North End Road Yapton	505	505	Residential	C3	Dwellings	C3	**100**
48	Mid Sussex	Wealden House, Lewes Road, Ashurst Wood	212	212	Residential	C3	Dwellings	C3	**50**
49	Mid Sussex	Northern Arc, Burgess Hill	222	222	Residential	C3	Dwellings	C3	**3500**
50	Mid Sussex	Station yard/car park Burgess Hill	223	223	Residential	C3	Dwellings	C3	**150**
51	Mid Sussex	Former Sewage Treatment Works, Phase 1	223	223	Residential	C3	Dwellings	C3	**108**
52	Mid Sussex	Former Sewage Treatment Works, Phase 2 onwards	223	223	Residential	C3	Dwellings	C3	**217**
53	Mid Sussex	Keymer Tile Works Nye Road, phase 1	222	222	Residential	C3	Dwellings	C3	**125**
54	Mid Sussex	Keymer Tile Works Nye Road Burgess Hill phase 2	222	222	Residential	C3	Dwellings	C3	**170**
55	Mid Sussex	Keymer Tile Works Nye Road phase 3	222	222	Residential	C3	Dwellings	C3	**180**
56	Mid Sussex	Land East of Kingsway Burgess Hill, Phase 1	222	222	Residential	C3	Dwellings	C3	**78**
57	Mid Sussex	Land East of Kingsway Burgess Hill Phase 2	222	222	Residential	C3	Dwellings	C3	**95**
58	Mid Sussex	Land East of Kingsway Burgess Hill, Phase 3 onwards	222	222	Residential	C3	Dwellings	C3	**307**
59	Mid Sussex	Land at Victoria Road (north), Burgess Hill	221	221	Residential	C3	Dwellings	C3	**55**
60	Mid Sussex	Burgess Hill Town Centre, Civic Way, Burgress Hill	223	223	Residential	C3	Dwellings	C3	**142**
61	Mid Sussex	The Brow, Burgess Hill	223	223	Residential	C3	Dwellings	C3	**100**
62	Mid Sussex	Land off Kings Way, East of Gerald Close, Burgess Hill	222	222	Residential	C3	Dwellings	C3	**64**
63	Mid Sussex	Land rear of 88 Folders Lane, Burgess Hill	224	224	Residential	C3	Dwellings	C3	**74**
64	Mid Sussex	Land at Hammonds Ridge, Burgess Hill	224	224	Residential	C3	Dwellings	C3	**51**
65	Mid Sussex	Martells Store, 1-4 Normans Road, Queens Road, East Gr	210	210	Residential	C3	Dwellings	C3	**129**
66	Mid Sussex	Imberhorne School, Windmill Lane, East Grinstead	210	210	Residential	C3	Dwellings	C3	**200**
67	Tandridge	15 and 39 Crawley Down Road, Felbridge	1015	1015	Residential	C3	Dwellings	C3	**63**
68	Mid Sussex	Hill Place Farm, Turners Hill Road, East Grinstead	213	213	Residential	C3	Dwellings	C3	**200**
69	Mid Sussex	Station Goods Yard Hassocks	226	226	Residential	C3	Dwellings	C3	**54**
70	Mid Sussex	Hassocks Golf Club, London Road, Hassocks	226	226	Residential	C3	Dwellings	C3	**130**
71	Mid Sussex	Land at The Ham, London Road, Hassocks	226	226	Residential	C3	Dwellings	C3	**97**
72	Mid Sussex	Land north of Clayton Mills, Hassocks	226	226	Residential	C3	Dwellings	C3	**500**
73	Mid Sussex	Land to the south of Rocky Lane and Weald Rise, Haywar	220	220	Residential	C3	Dwellings	C3	**320**
74	Mid Sussex	Land South of Rocky Lane, Haywards Heath (Phase 2)	220	220	Residential	C3	Dwellings	C3	**134**
75	Mid Sussex	Bolnore Village Phase 5b	218	218	Residential	C3	Dwellings	C3	**69**
76	Mid Sussex	Penland Farm, Balcombe Road, Hayward Heath	218	218	Residential	C3	Dwellings	C3	**210**
77	Mid Sussex	Land at Gamblemead, Fox Hill, Haywards Heath	220	220	Residential	C3	Dwellings	C3	**151**
78	Mid Sussex	Hurst Farm, Hurstwood Lane, Haywards Heath	220	220	Residential	C3	Dwellings	C3	**350**
79	Mid Sussex	The Priory, Syresham Gardens, Haywards Heath	218	218	Residential	C3	Dwellings	C3	**53**
80	Mid Sussex	37 -39 Perrymount Road, Haywards Heath	218	218	Residential	C3	Dwellings	C3	**145**
81	Mid Sussex	Land to north of Little Park Farm, Hurstpierpoint	225	225	Residential	C3	Dwellings	C3	**140**
82	Mid Sussex	Kingsland Laines Reeds Lane Sayers Common Hassocks	225	225	Residential	C3	Dwellings	C3	**120**
83	Mid Sussex	Land at Gravelye Lane, phase 2	217	217	Residential	C3	Dwellings	C3	**148**
84	Mid Sussex	Land Gravleye Lane and Scamps Hill	217	217	Residential	C3	Dwellings	C3	**130**
85	Mid Sussex	Land adjacent to Barn Cottage, Lewes Road, Scaynes Hill	215	215	Residential	C3	Dwellings	C3	**51**
86	Mid Sussex	Land south of Scamps Hill Lindfield	217	217	Residential	C3	Dwellings	C3	**200**
87	Mid Sussex	Land south west of Handcross Primary School (Phase 1)	216	216	Residential	C3	Dwellings	C3	**75**
88	Mid Sussex	Land east of Brighton Road, Pease Pottage Phase 1	216	216	Residential	C3	Dwellings	C3	**156**
89	Mid Sussex	Land east of Brighton Road, Pease Pottage	216	216	Residential	C3	Dwellings	C3	**444**
90	Mid Sussex	Land South of Hazel Close, Crawley Down	214	214	Residential	C3	Dwellings	C3	**60**
91	Mid Sussex	Land west of Copthorne, Copthorne Way	211	211	Residential	C3	Dwellings	C3	**500**
92	Crawley	15 - 29 Broadway	230	230	Residential	C3	Dwellings	C3	**78**
93	Crawley	Zurich House Park	233	233	Residential	C3	Dwellings	C3	**56**
94	Crawley	Southern Counties, 24 - 25 Ifield Road	233	233	Residential	C3	Dwellings	C3	**218**
95	Crawley	Forge Wood (Reserved Matters To be Approved)	228	228	Residential	C3	Dwellings	C3	**915**
96	Crawley	Forge Wood Phase 2A	228	228	Residential	C3	Dwellings	C3	**90**
97	Crawley	Forge Wood Phase 1A	228	228	Residential	C3	Dwellings	C3	**204**
98	Crawley	Forge Wood Phase 3A	228	228	Residential	C3	Dwellings	C3	**225**
99	Crawley	Forge Wood Phase 3B	228	228	Residential	C3	Dwellings	C3	**151**
100	Crawley	Forge Wood Phase 4A	228	228	Residential	C3	Dwellings	C3	**147**
101	Crawley	Forge Wood Phase 2D	228	228	Residential	C3	Dwellings	C3	**75**
102	Crawley	Ifield Community College	229	229	Residential	C3	Dwellings	C3	**193**
103	Crawley	Tinsley Lane	231	231	Residential	C3	Dwellings	C3	**120**
104	Crawley	Land Adj Desmond Anderson	237	237	Residential	C3	Dwellings	C3	**100**
105	Crawley	Oakhurst Grange	233	233	Residential	C3	Dwellings	C3	**55**
106	Crawley	Breezehurst Drive Playing Fields	236	236	Residential	C3	Dwellings	C3	**65**
107	Crawley	Telford Place / Haslett Avenue	230	230	Residential	C3	Dwellings	C3	**99**
108	Crawley	Crawlet Station and Car Parks	230	230	Residential	C3	Dwellings	C3	**308**
109	Crawley	County Buildings	230	230	Residential	C3	Dwellings	C3	**50**
110	Crawley	Land North of Boulevard	230	230	Residential	C3	Dwellings	C3	**50**
111	Crawley	Car Park, 11 - 13 The Boulevard	230	230	Residential	C3	Dwellings	C3	**91**
112	Crawley	East of London Road	227	227	Residential	C3	Dwellings	C3	**198**
113	Crawley	Stoner House, Kilnmead	230	230	Residential	C3	Dwellings	C3	**129**
114	Crawley	Sutherland House (Eastern Section), Russell Way	230	230	Residential	C3	Dwellings	C3	**136**

Commited & Adopted Local Plan Developments

Reference	District	Development	Zone	Donor Zone	Land Use	Land Use Class	Unit	Trip Rate	Size
1	Horsham	Windacres Farm Rudgwick	89	89	Residential	C3	Dwellings	C3	**55**
2	Horsham	West of Horsham (EAST)	108	108	Residential	C3	Dwellings	C3	**567**
3	Horsham	West of Bewbush - Colgate	236	236	Residential	C3	Dwellings	C3	**923**
5	Horsham	Land West of Southwater	90	90	Residential	C3	Dwellings	C3	**410**
6	Horsham	Development of Land South of Marringdean Acres	117	117	Residential	C3	Dwellings	C3	**51**
7	Horsham	Kingslea Farm Marringdean Road Billingshurst	117	117	Residential	C3	Dwellings	C3	**3**
8	Horsham	Abingworth Farm & Nursery Storrington Road	43	43	Residential	C3	Dwellings	C3	**49**
9	Horsham	Bishops Weald House, Albion Way, Horsham (Lifestyle Ford)	53	53	Residential	C3	Dwellings	C3	**62**
10	Horsham	East of Billingshurst	34	34	Residential	C3	Dwellings	C3	**403**
11	Horsham	Land at Millstraight Southwater	31	31	Residential	C3	Dwellings	C3	**111**
12	Horsham	Land East of Emmanuel Cottage, Rusper Road, Ifield	232	232	Residential	C3	Dwellings	C3	**48**
13	Horsham	Land North of Heath Barn Farm at Broadbridge Heath	43	43	Residential	C3	Dwellings	C3	**49**
14	Horsham	Land North of Highfield, Stane Street, Codmore Hill	77	77	Residential	C3	Dwellings	C3	**119**
15	Horsham	Land to the South of Billingshurst Surgery, Roman Way, Billinghurst	33	33	Residential	C3	Dwellings	C3	**45**
16	Horsham	Norfolk House 32-40 North Street Horsham	70	70	Residential	C3	Dwellings	C3	**20**
17	Horsham	Old Goods Yard Christs Hospital	92	92	Residential	C3	Dwellings	C3	**40**
18	Horsham	Land North of Old Guildford Road, Broadbridge Heath	38	38	Residential	C3	Dwellings	C3	**75**
19	Horsham	Paula Rosa Kitchens, Robell Way, Storrington	118	118	Residential	C3	Dwellings	C3	**26**
20	Horsham	Century House, 100 Station Road, Horsham	68	68	Residential	C3	Dwellings	C3	**49**
21	Horsham	Bellway Homes Development Site Old Guildford Road Broadbridge Heath	38	38	Residential	C3	Dwellings	C3	**22**
22	Horsham	The Holbrook Club North Heath Lane Horsham	59	59	Residential	C3	Dwellings	C3	**29**
23	Horsham	Land Adjacent Railway Cottages and Pulborough Railway Station Stopham Road Pulborough	79	79	Residential	C3	Dwellings	C3	**28**
24	Horsham	St Marks Court Chart Way Horsham	67	67	Residential	C3	Dwellings	C3	**203**
25	Horsham	Land at Pelham and Waverley Courts Bishopric Horsham	119	119	Residential	C3	Dwellings	C3	**21**
28	Horsham	East of Hayes Lane	71	71	Residential	C3	Dwellings	C3	**15**
115	Horsham	Windacres Farm Rudgwick	89	89	Employment	B1	sqm	B8	**2787**
116	Horsham	Billingshurst Road	105	105	Employment	A1	sqm	A1, non-food	**2806**
117	Horsham	Swan Walk Shopping Centre	107	107	Employment	D2	sqm	D2, leisure centre	**2176**
118	Horsham	Unit 10	107	107	Employment	D2	sqm	D2, leisure centre	**1348**
119	Horsham	Piries Place	107	107	Employment	A1	sqm	A1, non-food	**3426**
120	Horsham	Bishops Weald House	107	107	Employment	A1	sqm	A1, non-food	**4488**
121	Horsham	Broomers Hill Park	78	78	Employment	B1c	sqm	B2	**1650**
122	Horsham	Dial Post Park	110	110	Employment	B1a	sqm	B1	**1175**
123	Horsham	Nowhurst Business Park	71	71	Employment	B1	sqm	B8	**26942**
124	Horsham	Stane Street	71	71	Employment	C1	bed	C1, bed	**70**
125	Horsham	Ex Arun Feed Mills	31	31	Employment	B1c	sqm	B2	**1235**
126	Horsham	Land To The North of Thornhill Court	72	72	Employment	D2	sqm	D2, leisure centre	**33015**
127	Horsham	Abingworth Nurseries	43	43	Employment	B1c	sqm	B2	**957**
128	Horsham	Brinsbury Fields	41	41	Employment	B1	sqm	B2	**14068**
129	Horsham	Land at Brinsbury Fields	73	73	Employment	B2	sqm	B2	**3710**
130	Horsham	Dawes Farm	35	35	Employment	B1c	sqm	B2	**1930**
131	Horsham	Parsonage Way (part of Parsonage farm , North Horsham	83	83	Employment	B2	sqm	B2	**8800**
132	Horsham	Kilnwood Vale , West of Bewbush, Colgate	236	236	Employment	B1	sqm	B1	**8000**
133	Horsham	Strategic location , West of Horsham	110	110	Employment	B1	sqm	B1	**2878**
134	Horsham	Wealden Brickworks , Langhurstwood Road	109	113	Employment	B2	sqm	B2	**6695**
135	Horsham	Wealden Brickworks (units 1-5) , Langhurstwood Road North Horsham	109	113	Employment	B2	sqm	B2	**11788**
136	Horsham	Wealden Brickworks , Langhurstwood Road, North Horsham	109	113	Employment	B8	sqm	B8	**8185**
137	Horsham	Land North of Horsham	109	113	Employment	B1	sqm	B1 With Internal	**46450**
138	Horsham	Land North of Horsham	109	113	Residential	C3	Dwellings	C3 With Internal	**2550**
139	Horsham	West of Bewbush - Colgate Reserved Land	236	236	Residential	C3	Dwellings	C3	**156**
140	Horsham	Thakeham Tiles, Rock Road Storrington			Residential	C3	Dwellings	C3	**90**
141	Horsham	Land North of Downsview Avenue			Residential	C3	Dwellings	C4	**62**
142	Horsham	Sussex HouseNorth StreetHorshamWest Sussex			Residential	C3	Dwellings	C5	**20**
143	Horsham	Abingworth Farm & Nursery Storrington Road			Residential	C3	Dwellings	C6	**75**
144	Horsham	Rascals Farm Shipley Road Southwater			Residential	C3	Dwellings	C7	**100**
145	Horsham	Land at Wellcross Farm Broadbridge Heath			Residential	C3	Dwellings	C8	**141**
146	Horsham	Crosby Farm, Slinfold			Residential	C3	Dwellings	C9	**24**

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