East Sussex County Council / Balfour Beatty Living Places

IM-0095: County Wide Transport Models

Hastings Borough Council: Pre-Covid19 and Post-Covid19 Model Comparisons

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Introduction

1 Introduction

1.1.1 WSP was appointed by East Sussex County Council (ESCC) / Balfour Beatty Living Places (BBLP) to provide transport modelling services in undertaking a review of the County-Wide Transport Model (CWTM) to account for the impacts of COVID19. As part of the review, it was assessed whether the current CWTM base year model is still a valid tool to produce updated 2040 forecast year model and a 2050 forecast year model. The CWTM base year model has been validated to a base of year of 2019 and has AM peak (08:00-09:00), Inter peak (average 10:00-16:00) and PM peak (17:00-18:00) modelled peak hours.

1.1.2 The outcome of the review produced a 2023 base year transport model with AM peak hour (08:00-09:00), Inter peak (average hour 10:00-16:00) and PM peak hour (17:00-18:00). It was concluded that the 2023 base year transport model could be used as a “new base year” for creating the 2040 and 2050 forecast year transport models without any explicit COVID19 adjustments.

1.1.3 Hastings Borough Council prepared a Local Plan Transport Assessment and Mitigation Report using the CWTM i.e., 2019 base year transport model and a 2040 forecast year transport model. This was developed, by Jacobs, in 2022 and included ‘committed’ development and transport infrastructure schemes at that time. The details of the assessment are described in the report *Hastings Local Plan Transport Assessment and Mitigation Report, (Jacobs, May 2023)*

1.1.4 Two development scenarios were produced for a 2039 forecast year which included increasing housing and employment growth in line with the Hastings Local Plan proposal. These development scenarios included a Do Minimum and a Do Something i.e., without and with proposed Local Plan developments.

1.1.5 This work was undertaken before COVID19 and therefore does not take any of the impacts on traffic levels seen post-COVID19.

1.1.6 Hastings BC want to understand if the work undertaken to support their Local Plan and produce the Local Plan Transport Assessment and Mitigation Report is still robust and will stand up to scrutiny at any forthcoming Examination in Public (EiP). To support Hastings BC, WSP have produced a technical report that summarises the model input and output data which will be included alongside their existing evidence base.

1.2 Purpose of the report

1.2.1 The purpose of this Technical Report is to summarise the following model inputs and output data:

- Comparison of the CWTM 2019 base year model i.e., Pre-COVID19 and the CWTM 2023 base year transport model i.e. post-COVID19
- Comparison of the CWTM 2040 forecast year model i.e., Pre-COVID19 and the CWTM 2040 forecast year transport model i.e. post-COVID19
- Compare National Trip End Model (NTEM) version 7.2 household and jobs growth with NTEM version 8.0 households and jobs growth

1.3 Structure of the report

1.3.1 The assessment of the above model data analysis is illustrated in the following chapters, which are structured as follows:

- Section 2: Comparison of base year models
- Section 3: Comparison of forecast year models
- Section 4: Comparison of NTEM Growth
- Section 5: Comparison of Summary Model Network Statistics
- Section 6: Hastings Borough Council - Local Plan
- Section 7: Conclusion.

2

Comparison of Base Year Models

2 Comparison of Base Year Models

2.1 Introduction

2.1.1 The CWTM base year model has been validated to a base of year of 2019 and has AM peak (08:00-09:00), Inter peak (average 10:00-16:00) and PM peak (17:00-18:00) modelled peak hours. As part of a review of the County-Wide Transport Model (CWTM) to account for the impacts of COVID19 a 2023 base year transport model was produced for an AM peak hour (08:00-09:00), Inter peak (average hour 10:00-16:00) and PM peak hour (17:00-18:00).

2.1.2 The review of the 2019 and 2023 base year transport model concluded that the 2023 base year transport model could be used as a “new base year” for creating the 2040 and 2050 forecast year transport models without any explicit COVID19 adjustments.

2.2 Comparison of Base Year Models

2.2.1 The 2019 and 2023 base year transport models for CWTM for both scenarios i.e., Pre-COVID19 (2019) and Post-COVID19 (2023) have been compared for key strategic model metrics to understand the impact of COVID19 traffic level changes on the surrounding highway network particularly the Strategic Road Network (SRN) routes within Hastings.

2.2.2 The key statistics compared are listed below:

- Link actual flow (passenger car units)
- Average link delays, seconds
- Volume over capacity (V/C), %
- Select Link Analysis (SLA) on the main SRN routes into/out of the Hastings area (A259 and A21).

Link Actual Flow (passenger car units)

2.2.3 Actual flows differences in passenger car units (pcu) for the Pre-COVID19 (2019) and Post-COVID (2023) base models for the three modelled peak hours are shown Figure 2-1 to Figure 2-3.

Figure 2-1: Actual Flow Difference (AM)

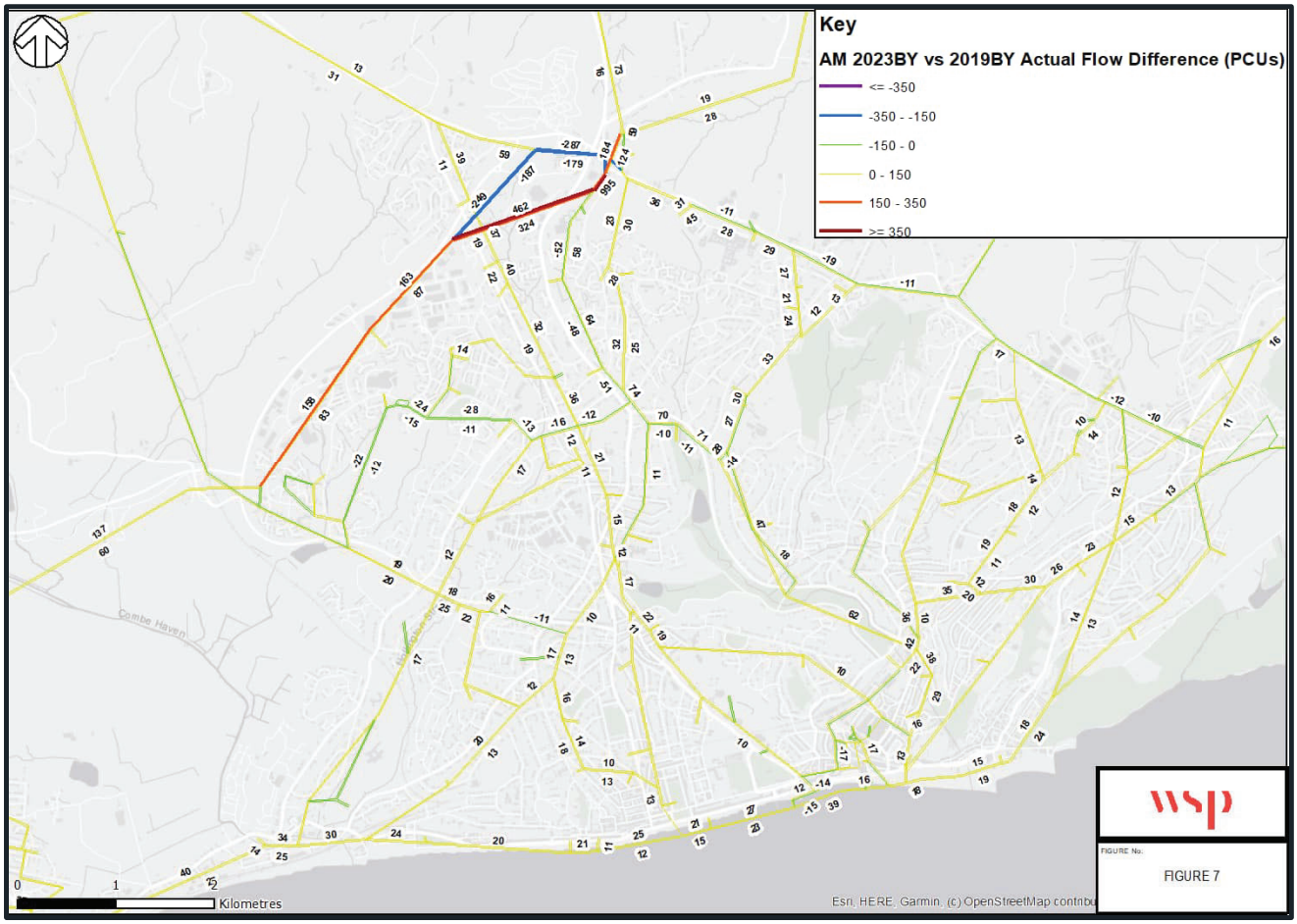


Figure 2-2: Actual Flow Difference (IP)

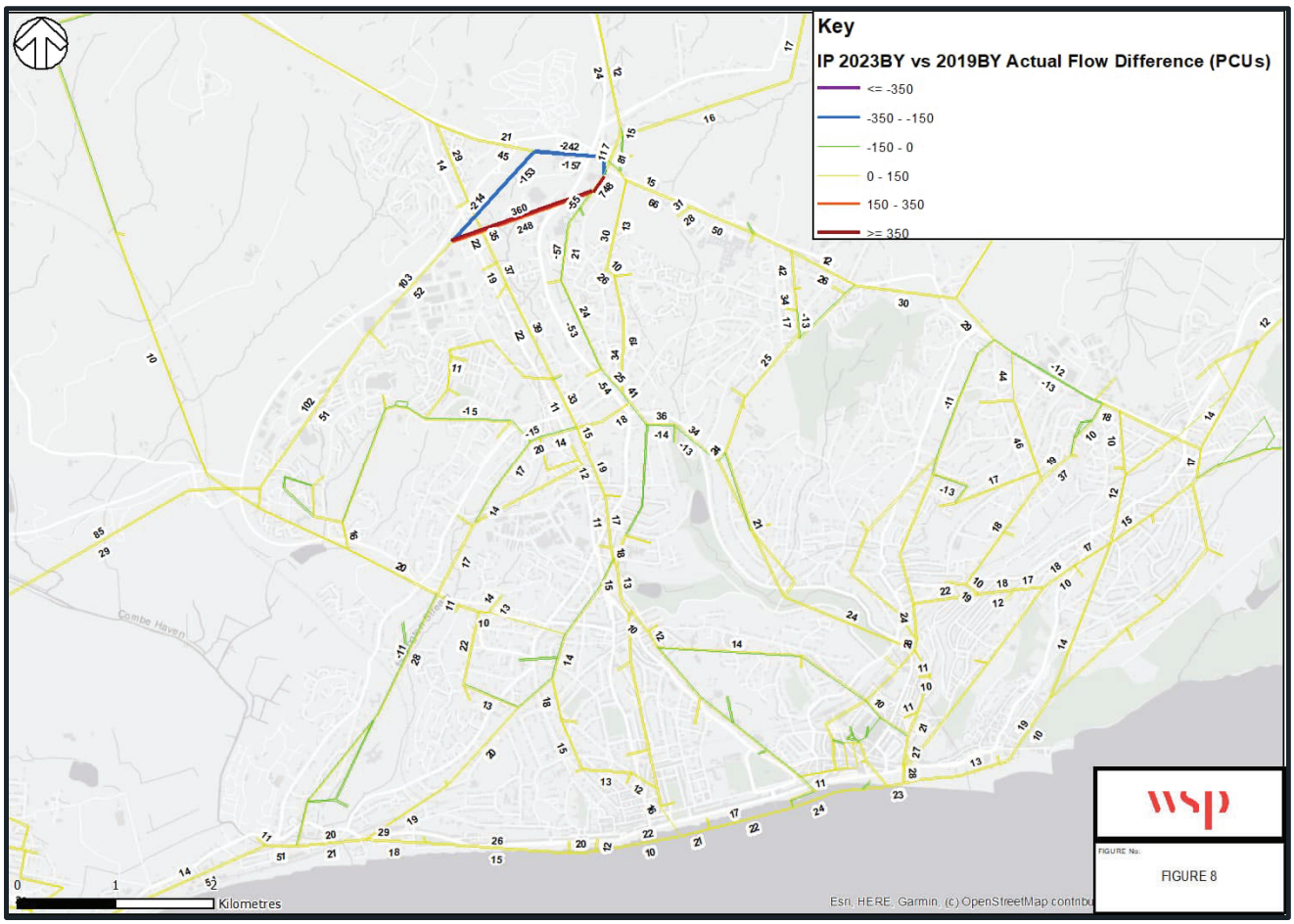
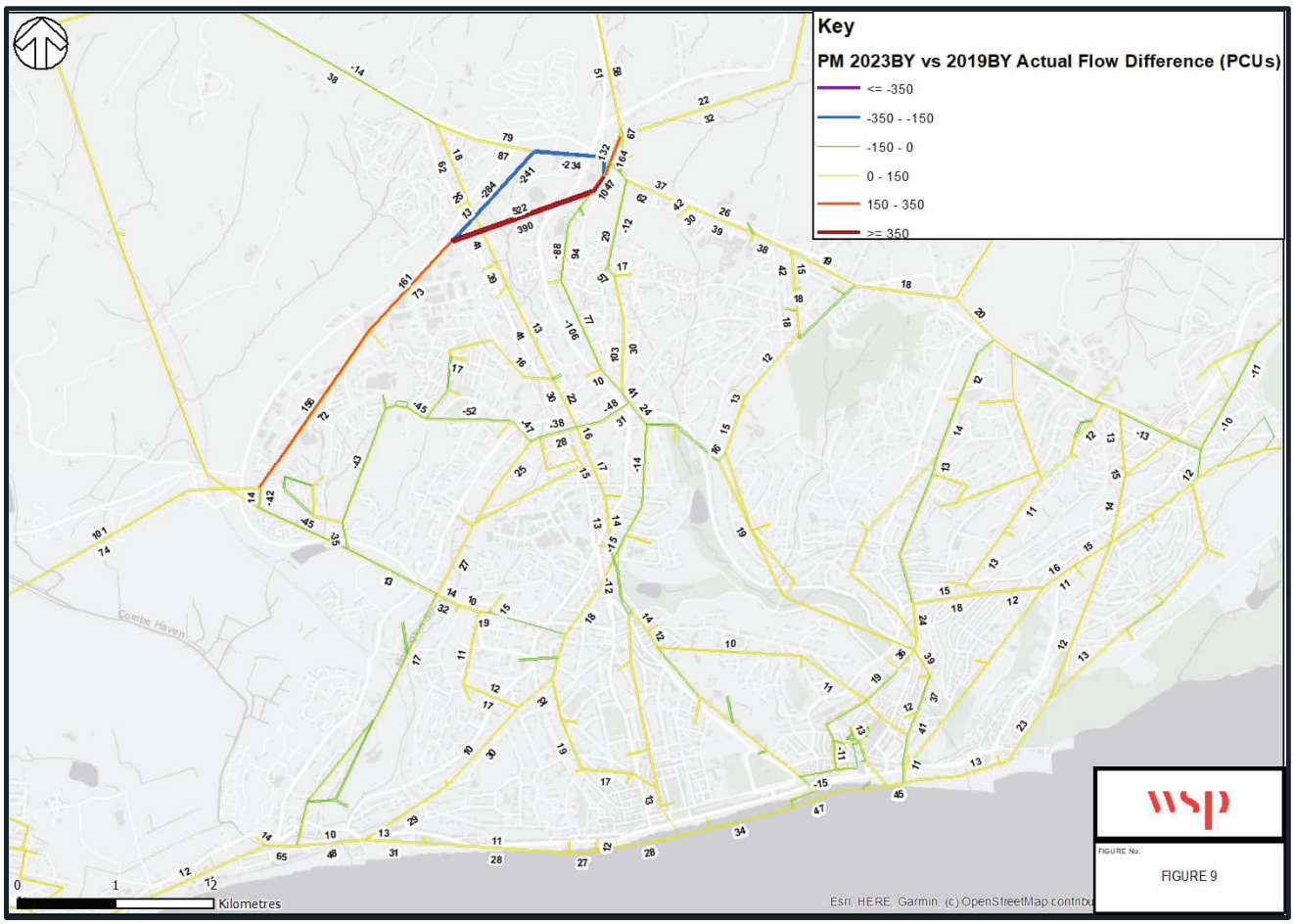


Figure 2-3: Actual Flow Difference (PM)



2.2.4 The flow difference results show that there are minor changes in traffic levels in general between Pre-COVID19 (2019) and Post-COVID19 (2023), due to minimal traffic growth between 2019 and 2023. Where noticeable flow differences are observed, they are attributed to route choice due to network improvements or network edits (development led edits e.g. access to site):

- AM peak hour shows:
  - Reduction in traffic of up to 287 pcu eastbound and 179 pcu westbound on the A2100 The Ridge West
  - Increase of 163 pcu northbound and 87 pcu southbound on the A2690 Queensway.
- Inter peak hour shows:
  - Reduction in traffic of up to 242 pcu eastbound and 157 pcu westbound on the A2100 The Ridge West
  - Increase of 103 pcu northbound and 52 pcu southbound on the A2690 Queensway
- PM peak hours shows:
  - Reduction in traffic of up to 284 pcu eastbound and 234 pcu westbound on the A2100 The Ridge West
  - Increase of 161 pcu northbound and 73 pcu southbound on the A2690 Queensway.

Average link delays (seconds)

2.2.5 Differences in delays (seconds) are plotted for the three modelled peak hours and are shown in Figure 2-4 to Figure 2-6.

Figure 2-4: Delay Difference (AM)

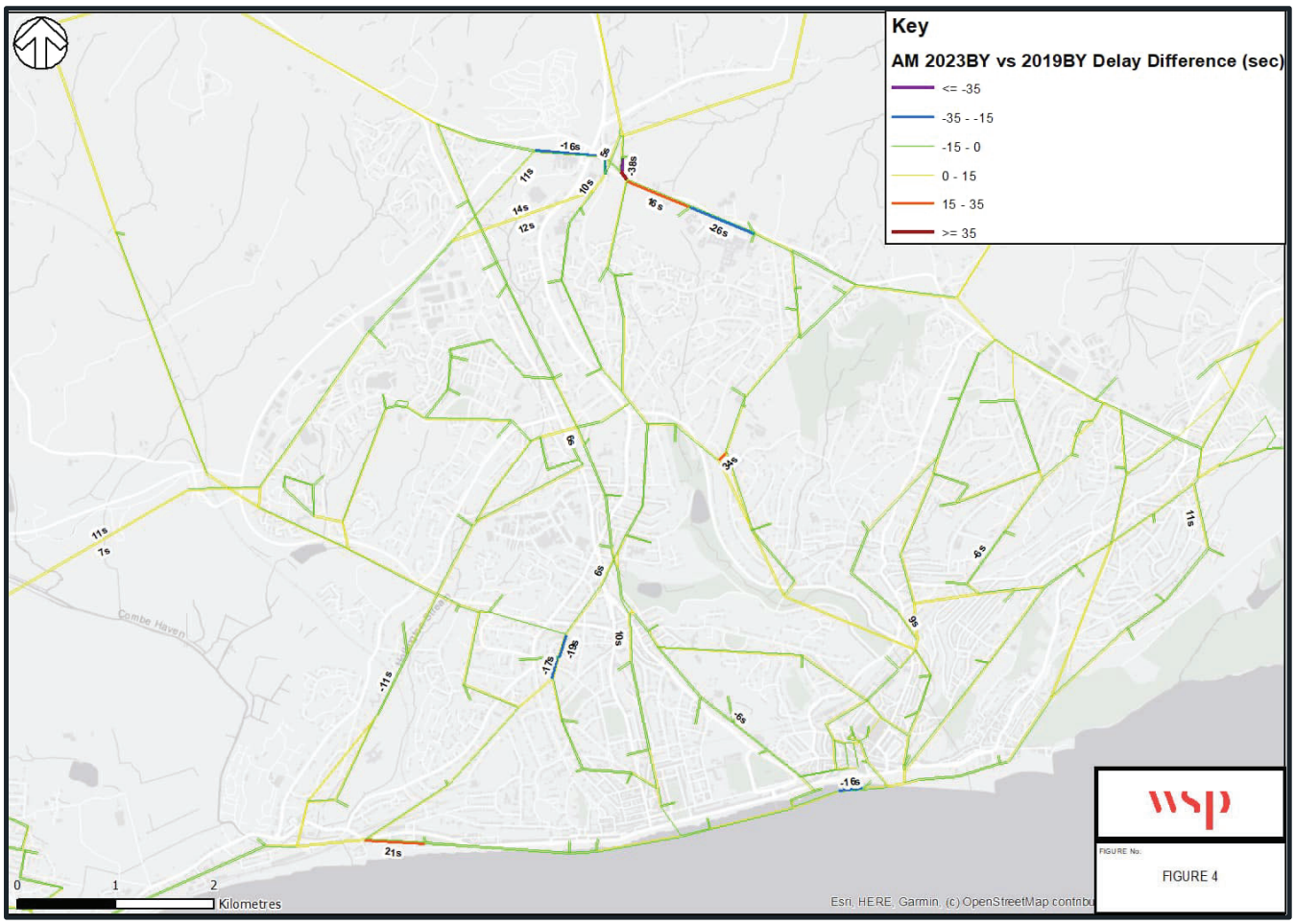
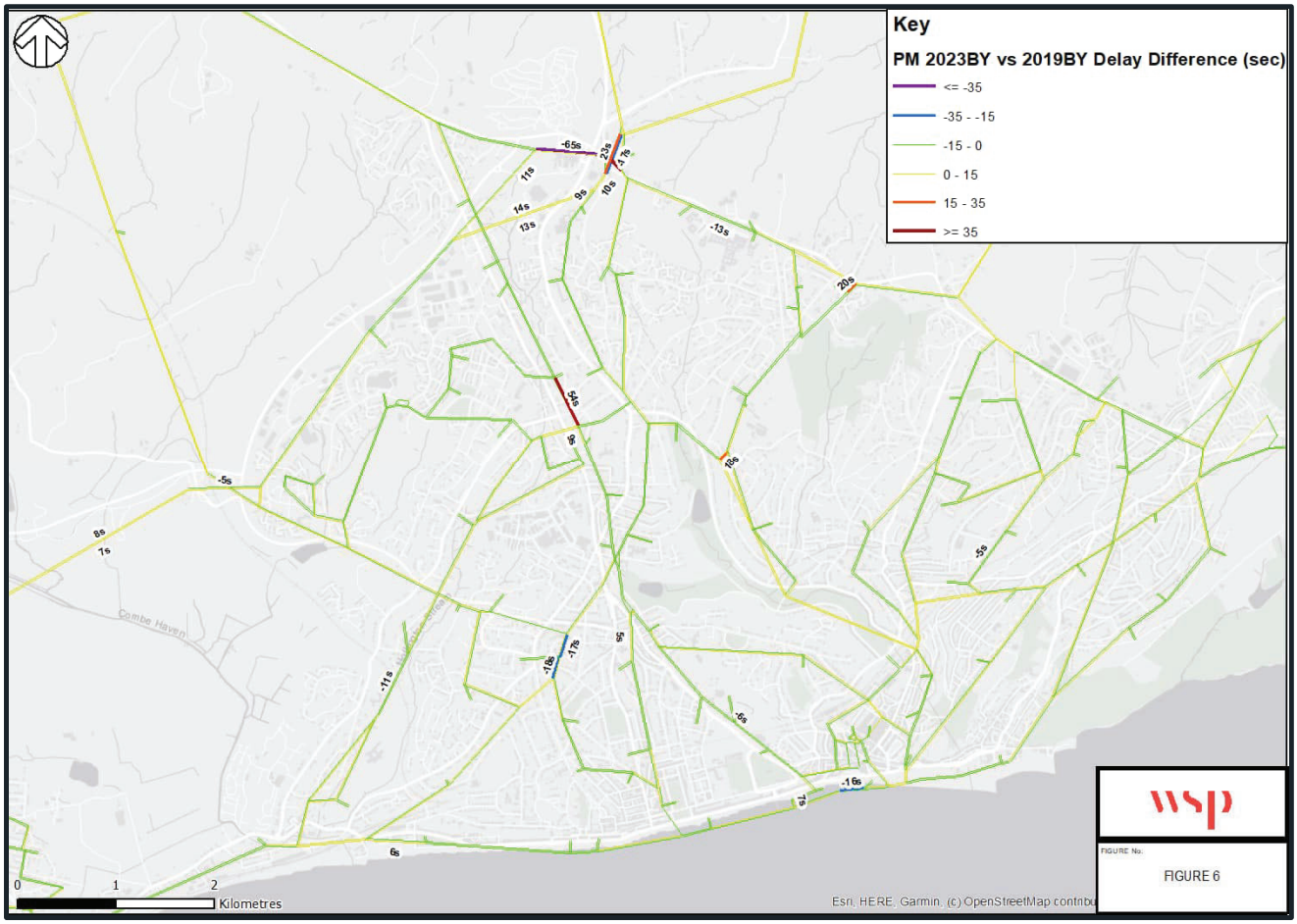


Figure 2-5: Delay Difference (IP)

Figure 2-6: Delay Difference (PM)



2.2.6 In AM peak hour, delay differences between Pre-COVID19 (2019) and Post-COVID19 (2023) are in the range of ±16 seconds on A2690 and A2100. The biggest change in delay is observed on a section of the B2093 with an increase of 38 seconds.

2.2.7 The average inter peak hour has the highest delay difference of 112 seconds on Ashbrooke Road which is a local impact.

2.2.8 The PM peak hour shows a difference in delay of 65 seconds are observed on A2100 The Ridge West.

Volume over capacity (%)

2.2.9 Figure 2-7 to Figure 2-9 show the Volume over Capacity (VoC) differences between the Pre-COVID19 (2019) and Post-COVID19 (2023) base year transport models for the three modelled peak hours.

Figure 2-7: V/C Difference (AM)

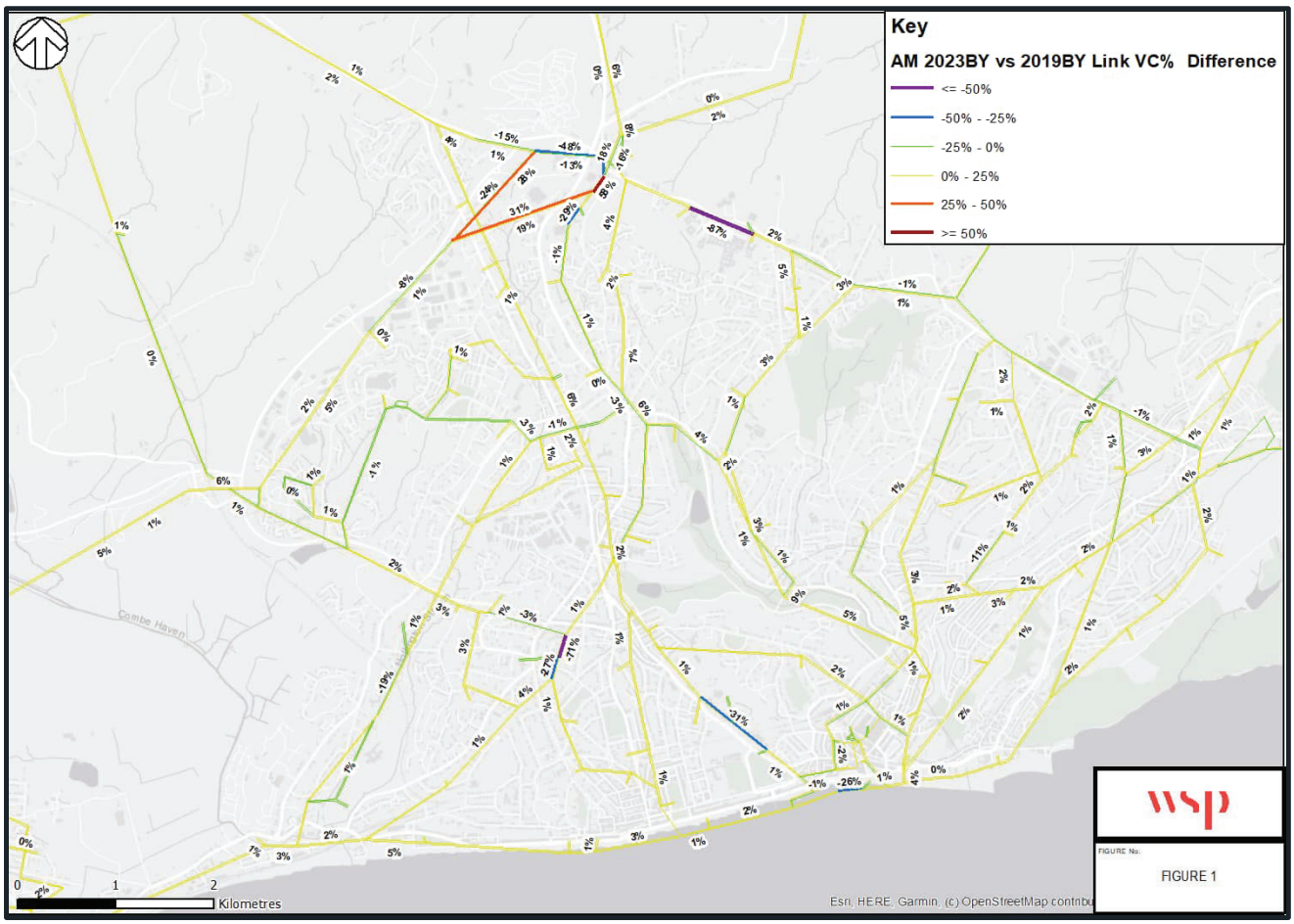


Figure 2-8: V/C Difference (IP)

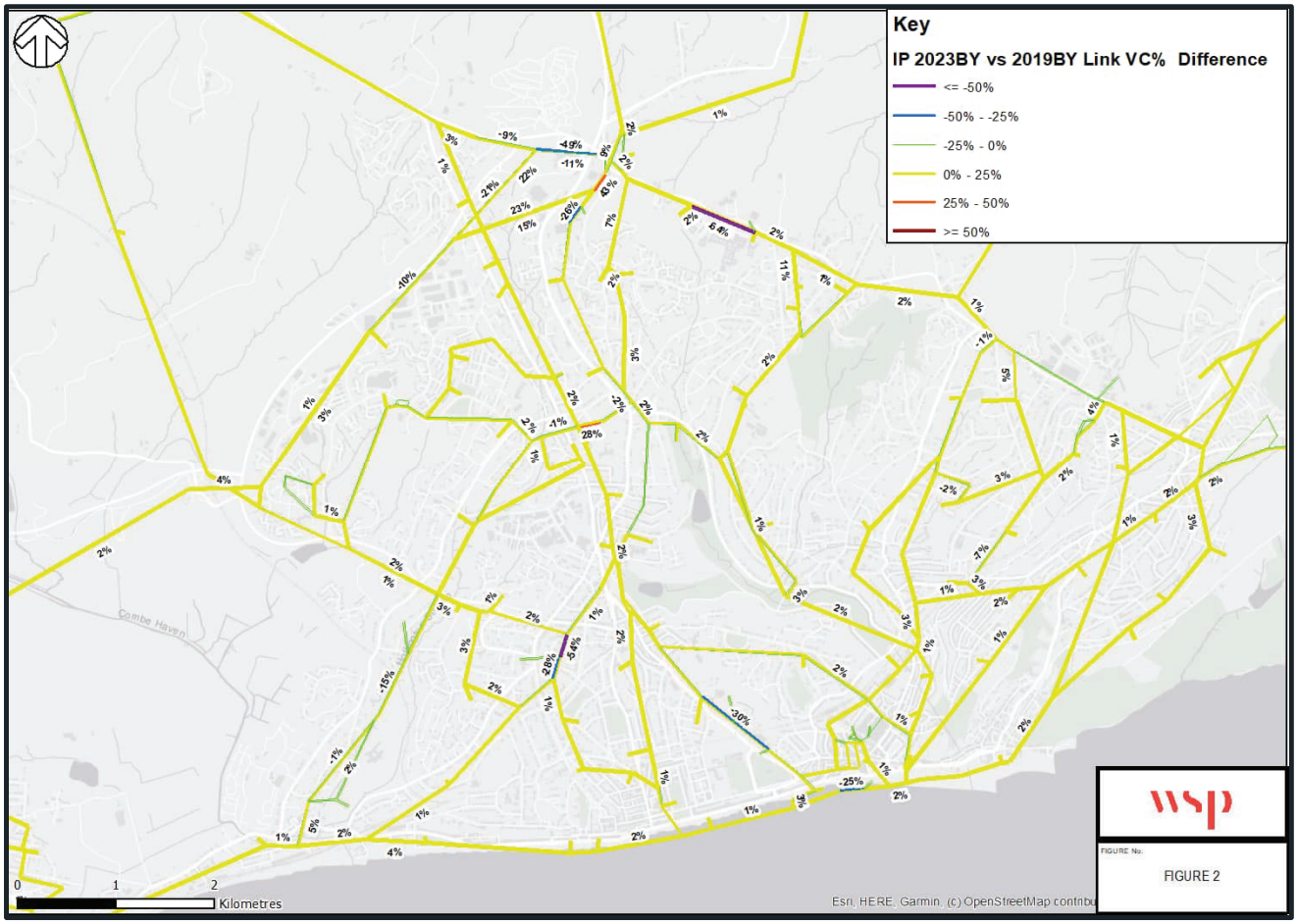
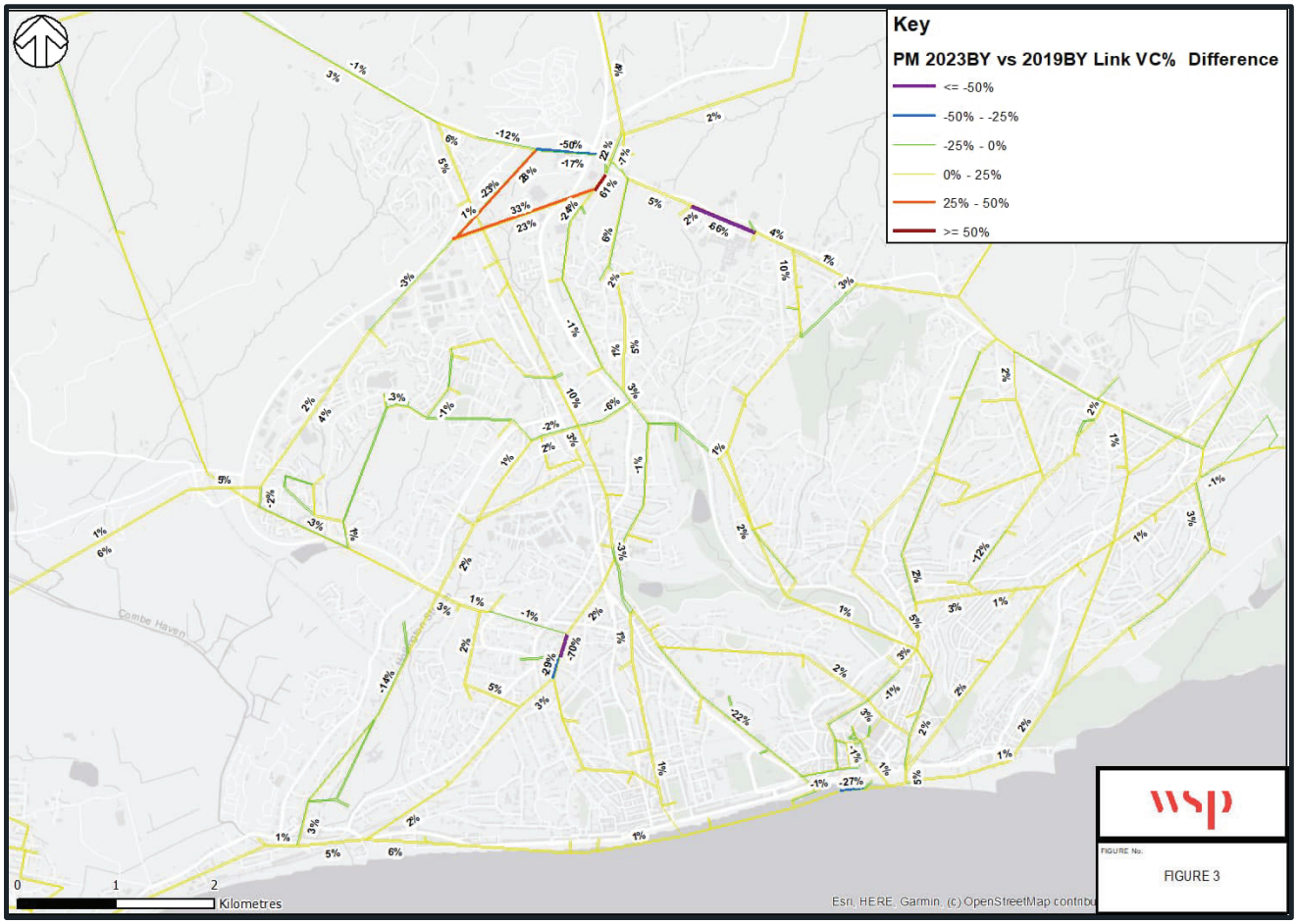


Figure 2-9: V/C Difference (PM)



2.2.10 The results shown in Figure 2-7 to Figure 2-9 show that differences in VoC have varying ranges especially around the A2690 Queensway and the B2093 The Ridge West between the Pre-COVID19 (2019) and Post-COVID19 (2023) base year transport models for the three modelled peak hours. There are some impact of post COVID19 traffic levels on the highway network within the main Hastings urban area.

Select Link Analysis (SLA) on the main SRN routes into/out of the Hastings area (A259 and A21)

2.2.10 Select Link Analysis (SLA) were carried out on the main Strategic Route Network (SRN) routes into and out of the Hastings area (A259 and A21) to assess the flow differences that occur between the model networks.

2.2.11 The links selected for the screenline SLA assessment are shown in Figure 2-10. The screenline SLA has been produced for traffic into the Hastings area (Inbound) and traffic out of the Hastings area (Outbound).

Figure 2-10: Links for the SLA Screenline

2.2.12 Figure 2-11 to Figure 2-16 show the inbound SLA plots for the 2019 and 2023 models.

2.2.13 Routing choice and level of traffic on main SRN routes remains similar between 2023 and 2019.

Figure 2-11: Inbound SLA for 2019 AM Pre-COVID19 Model

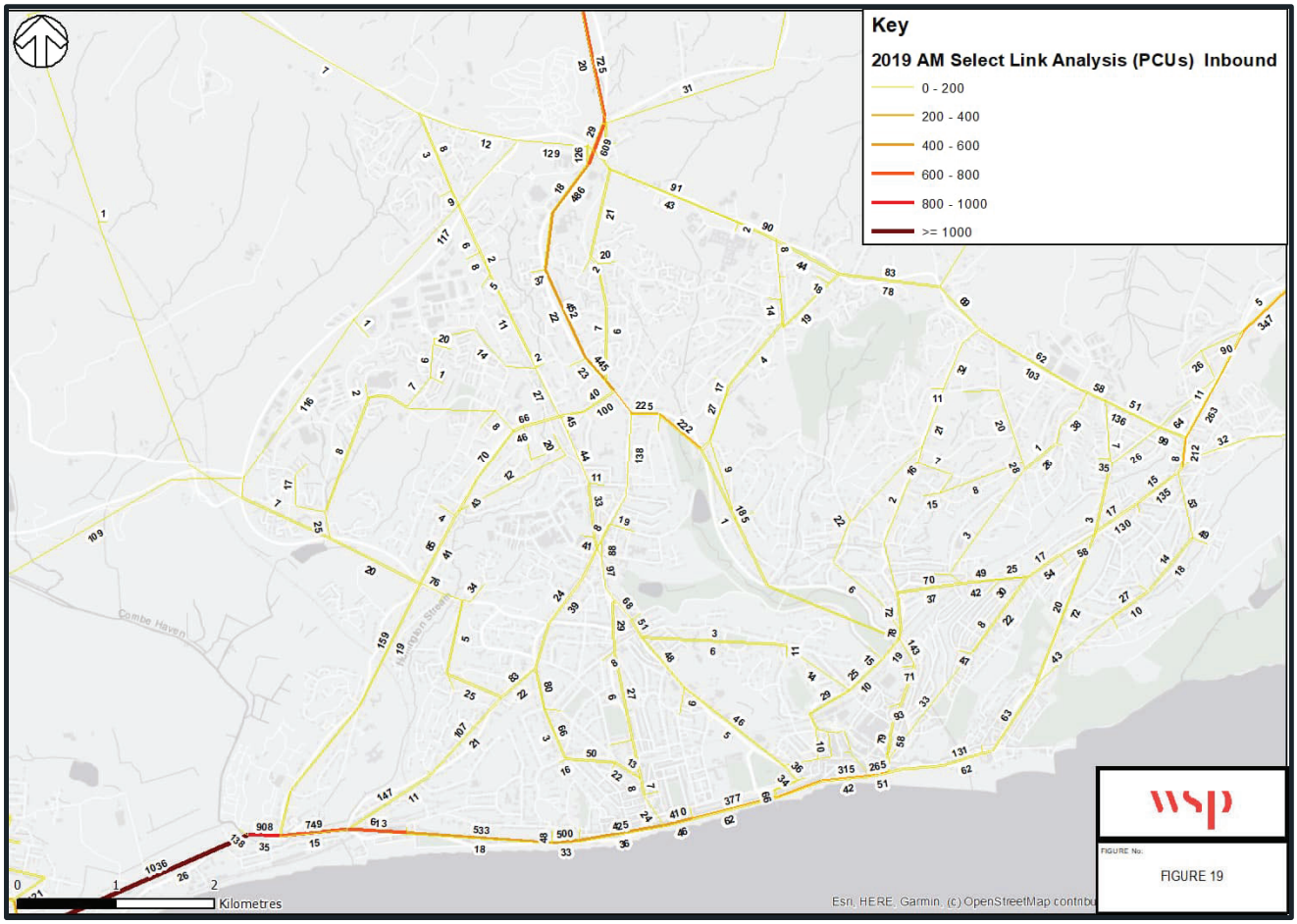


Figure 2-12: Inbound SLA for 2019 IP Pre-COVID19 Model

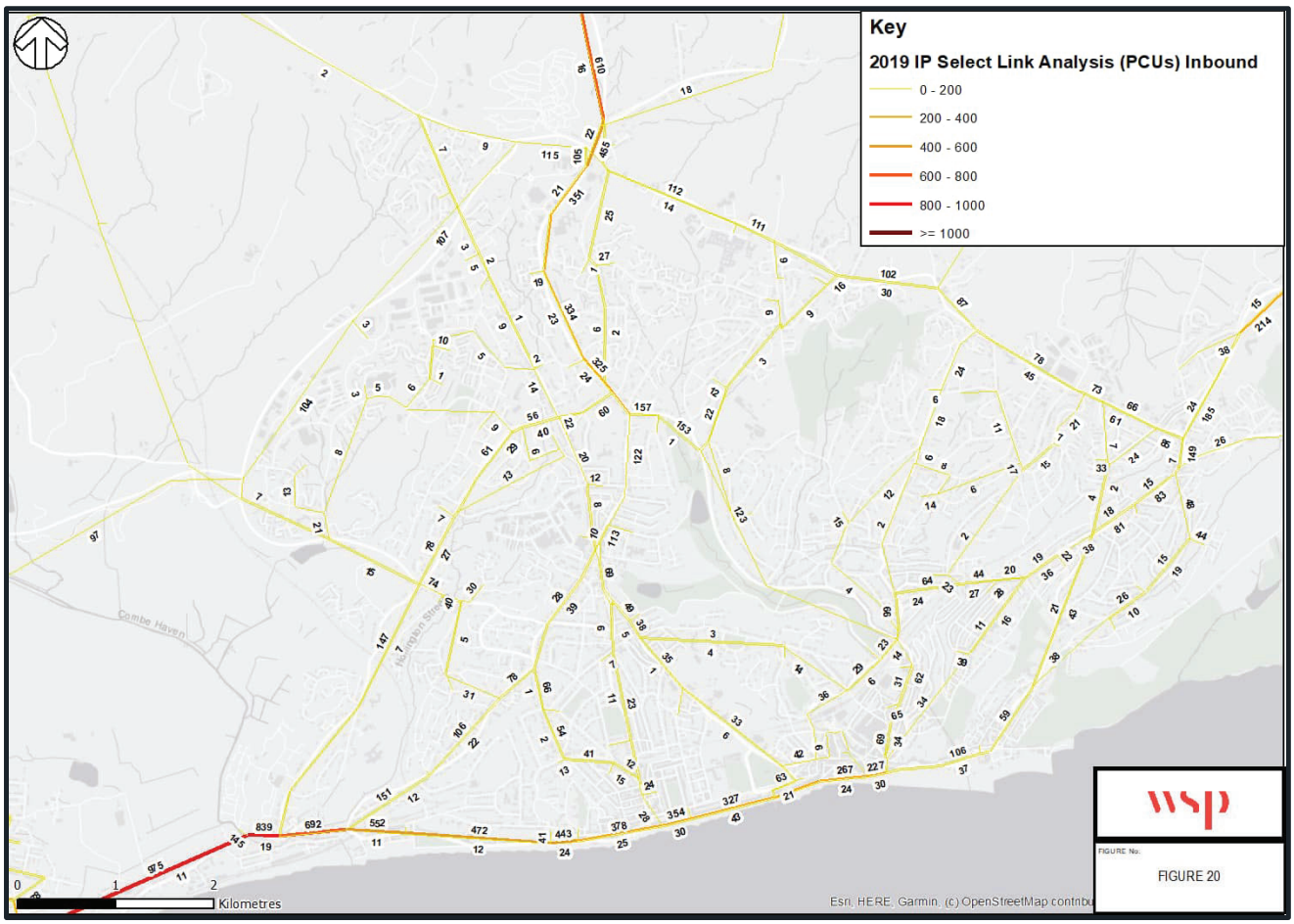


Figure 2-13: Inbound SLA for PM Pre-COVID19 Model

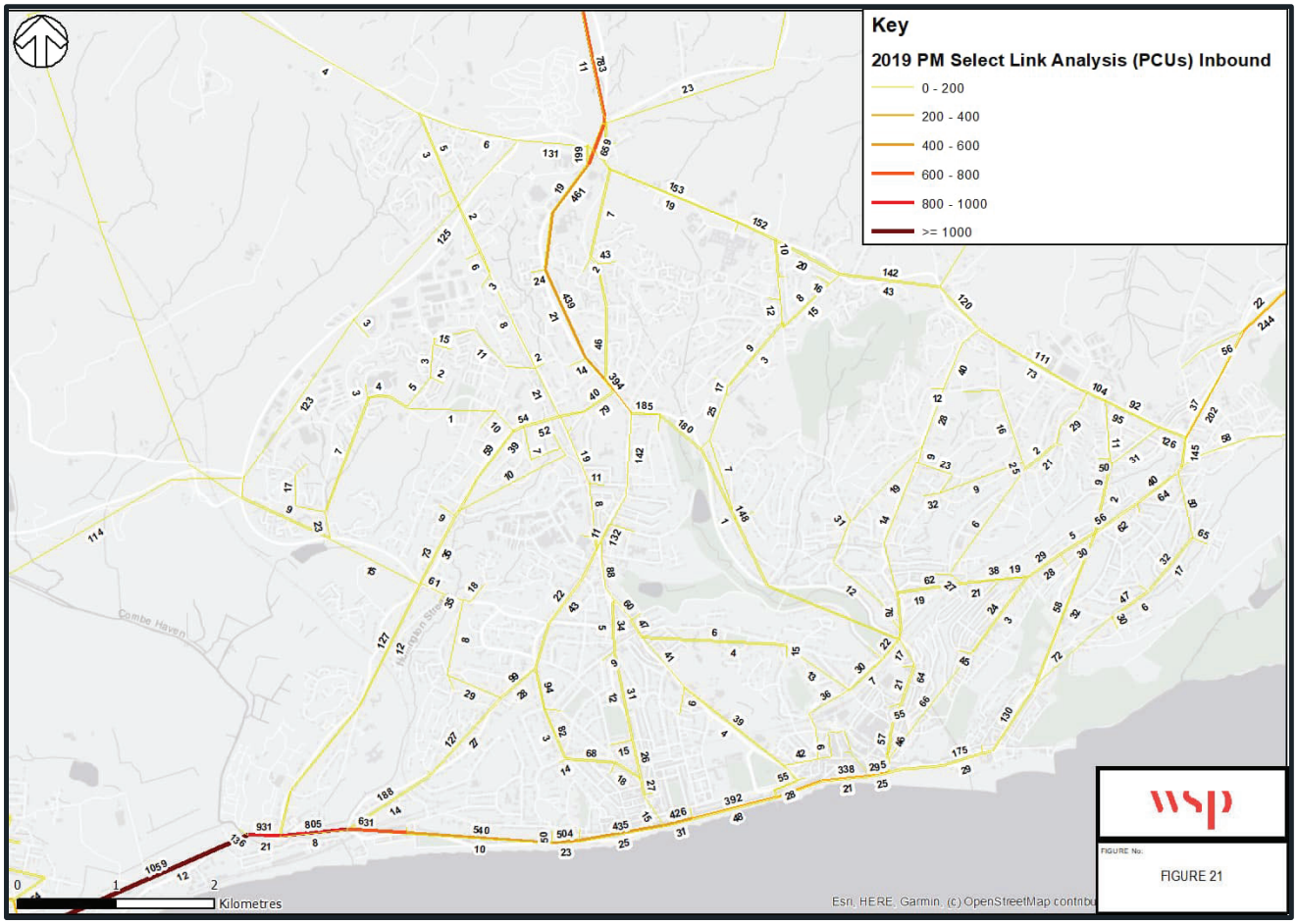


Figure 2-14: Inbound SLA for 2023 AM Post-COVID19 Model

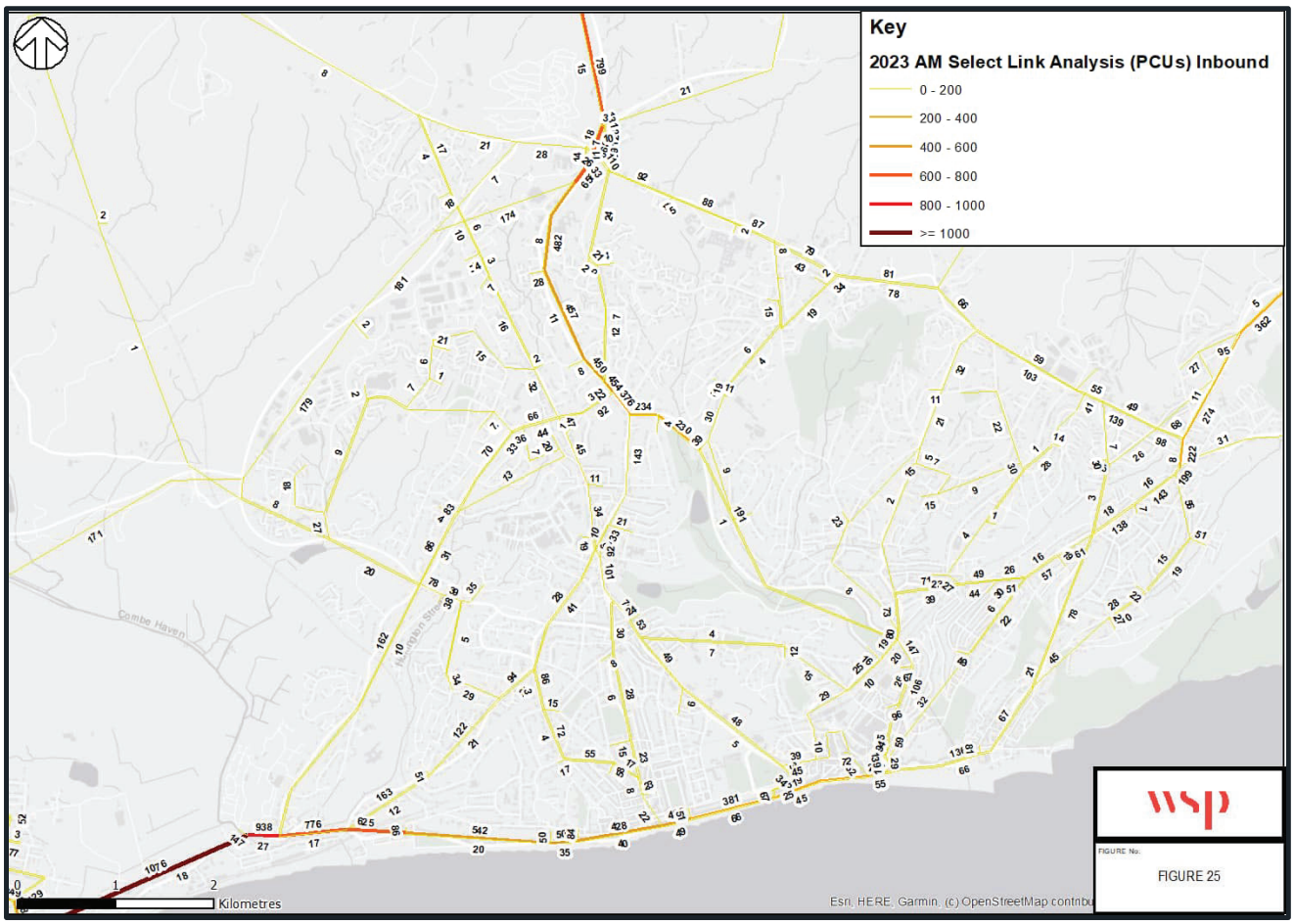


Figure 2-15: Inbound SLA for 2023 IP Post-COVID19 Model

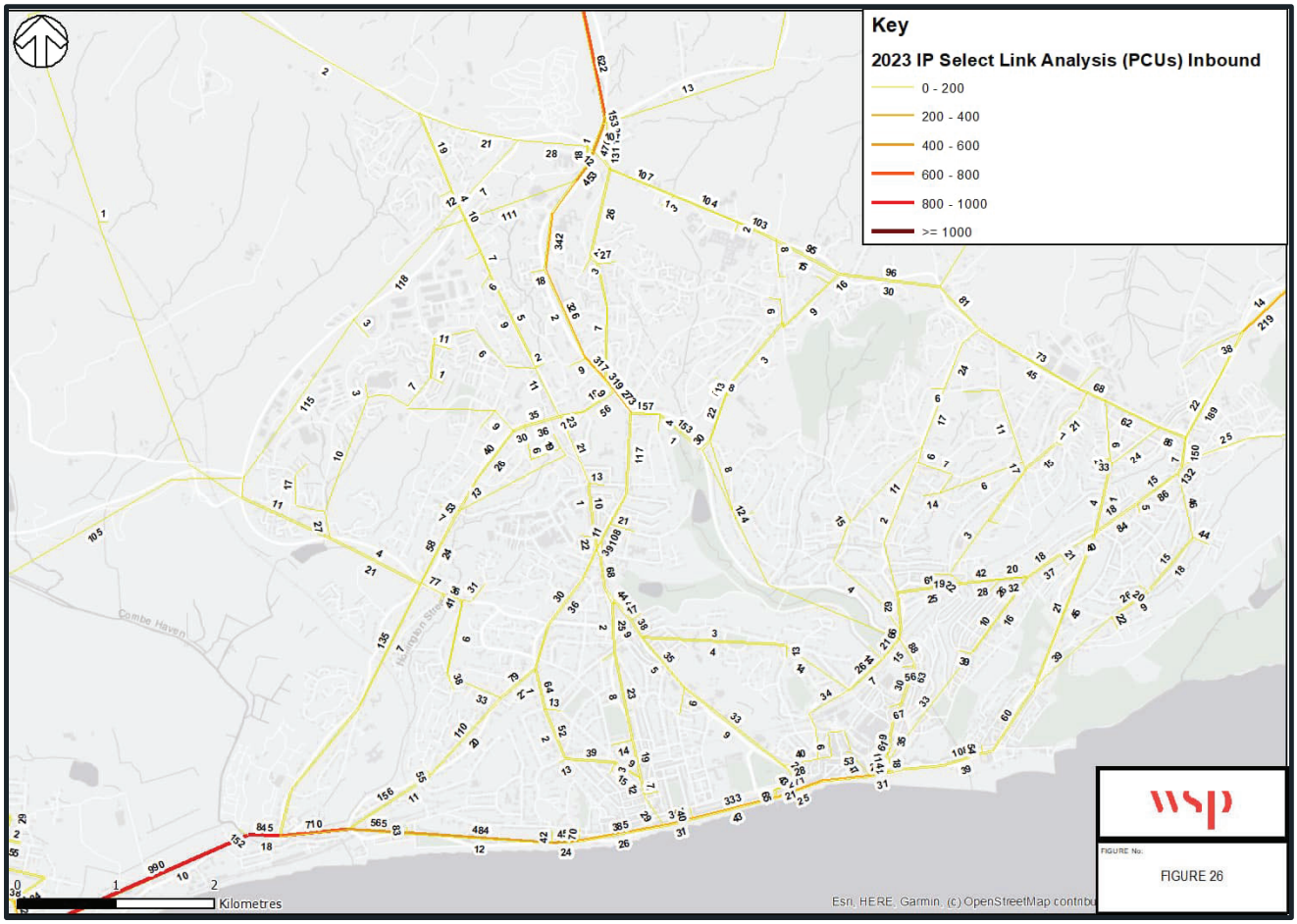
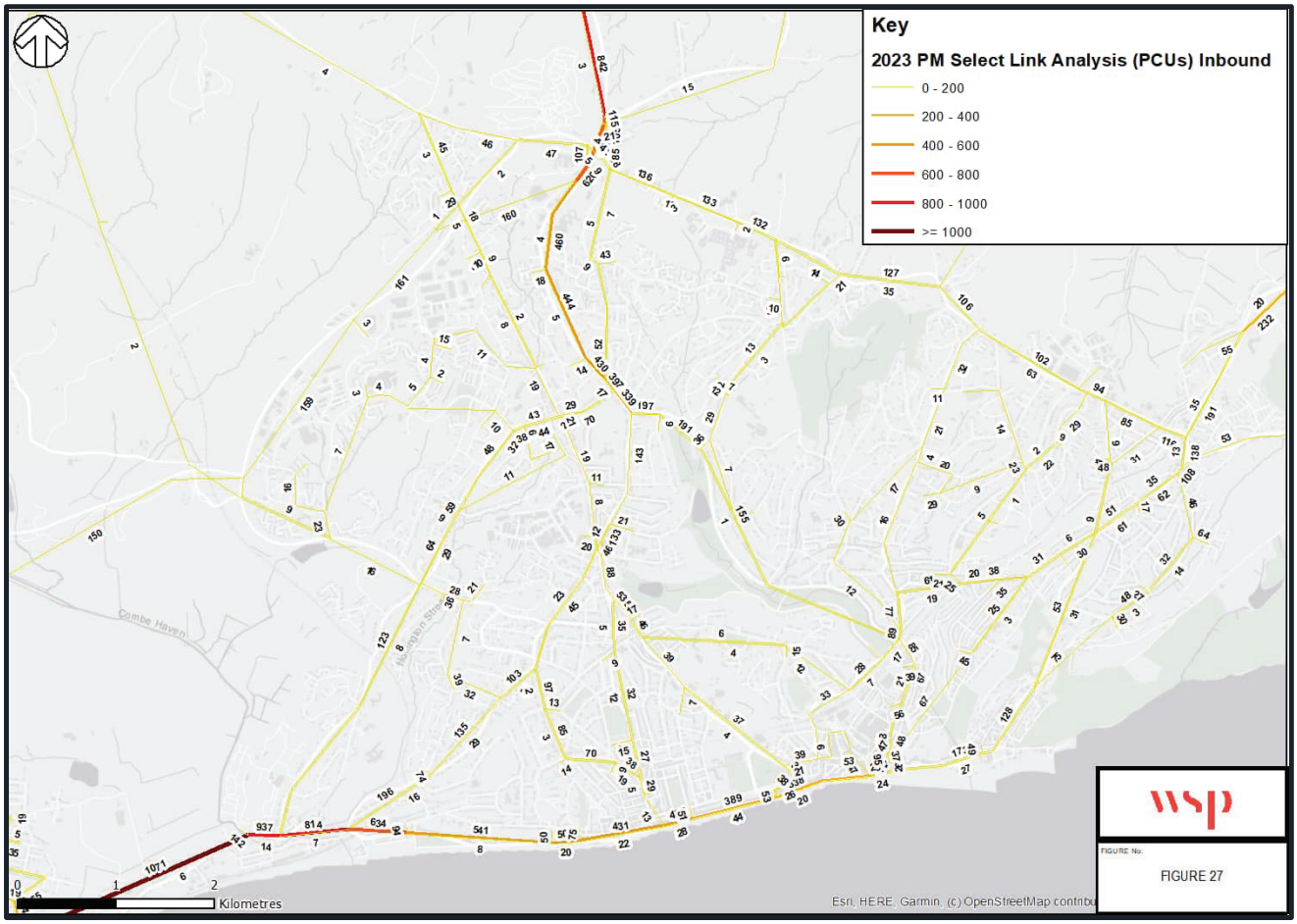


Figure 2-16: Inbound SLA for 2023 PM Post-Covid19 Model



2.2.15 Figure 2-17 to Figure 2-22 show the SLA traffic out of the Hastings area for the Pre-COVID19 (2019) and Post-COVID19 (2023) models.

Figure 2-17: Outbound SLA for 2019 AM Pre-COVID19 Model

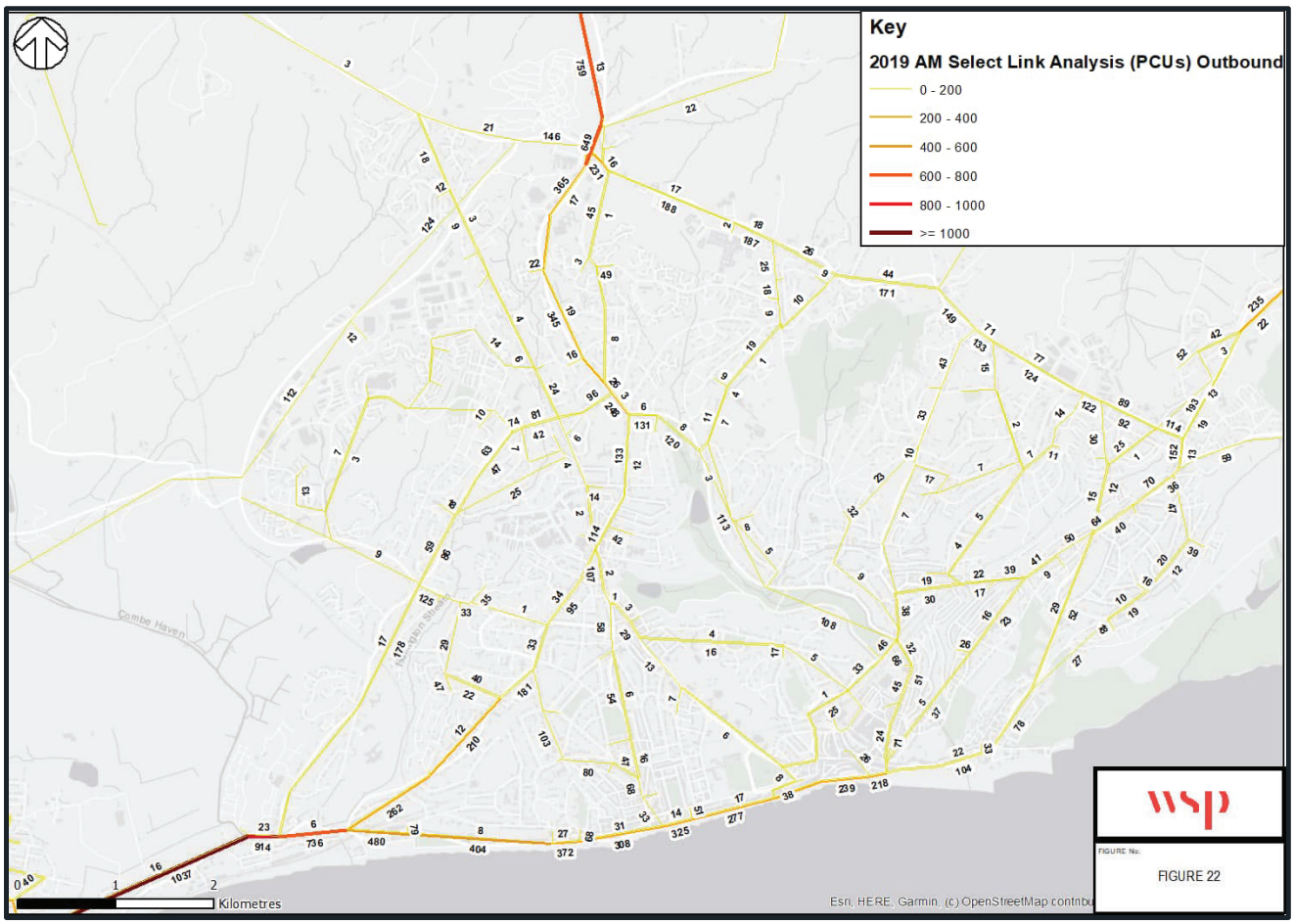


Figure 2-18: Outbound SLA for 2019 IP Pre-COVID19 Model

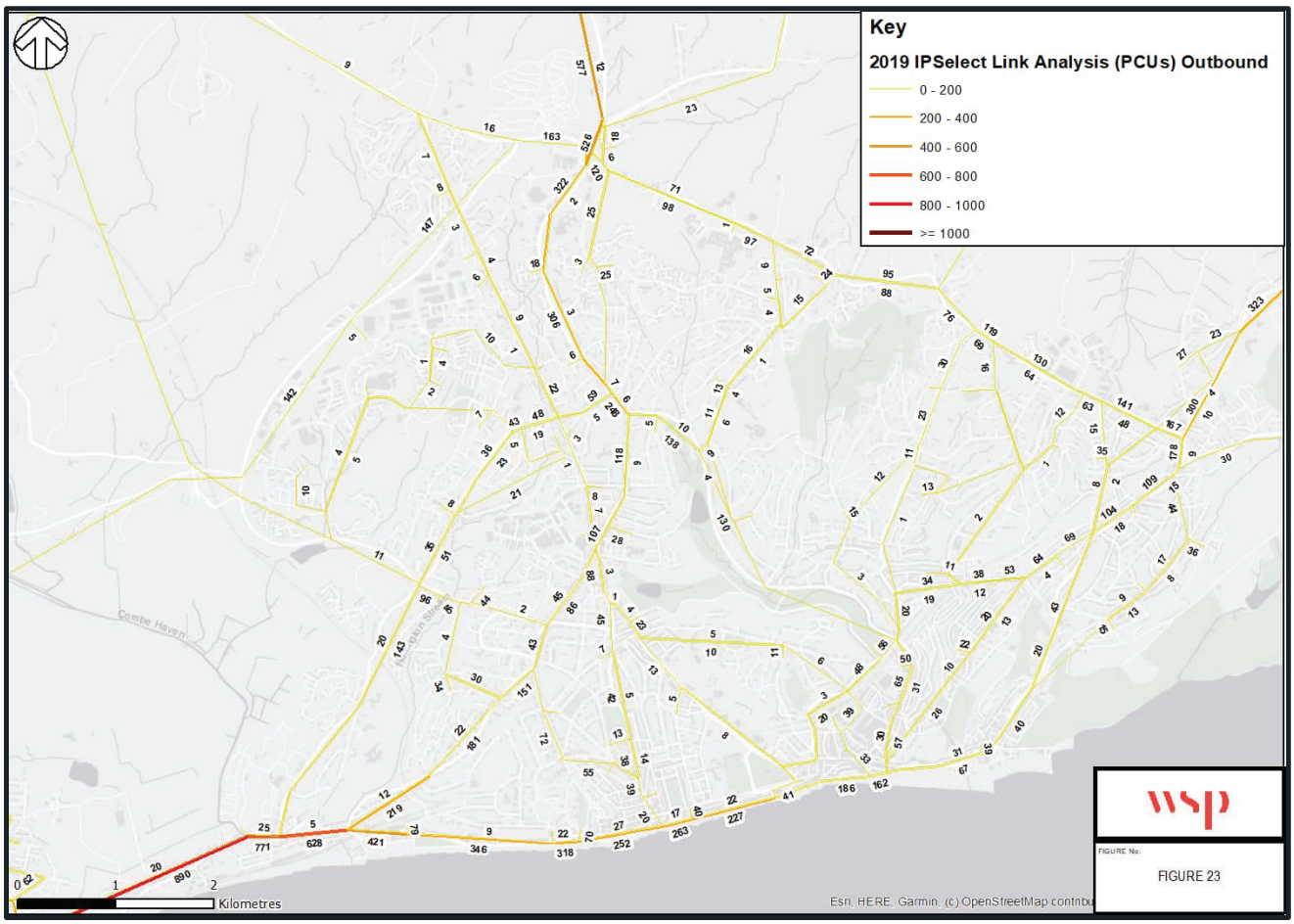


Figure 2-19: Outbound SLA for 2019 PM Pre-COVID19 Model

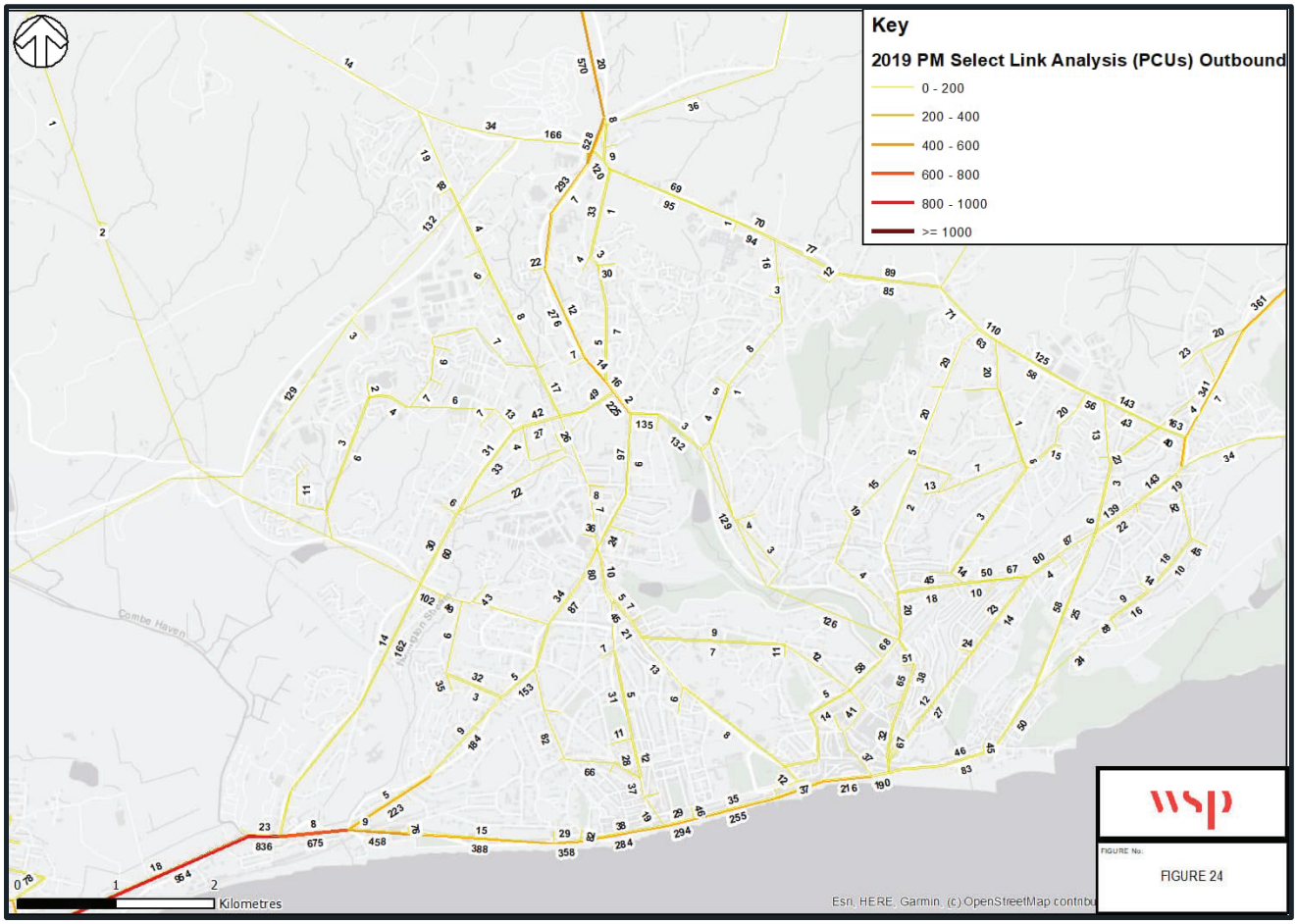


Figure 2-20: Outbound SLA for 2023 AM Post-COVID19 Model

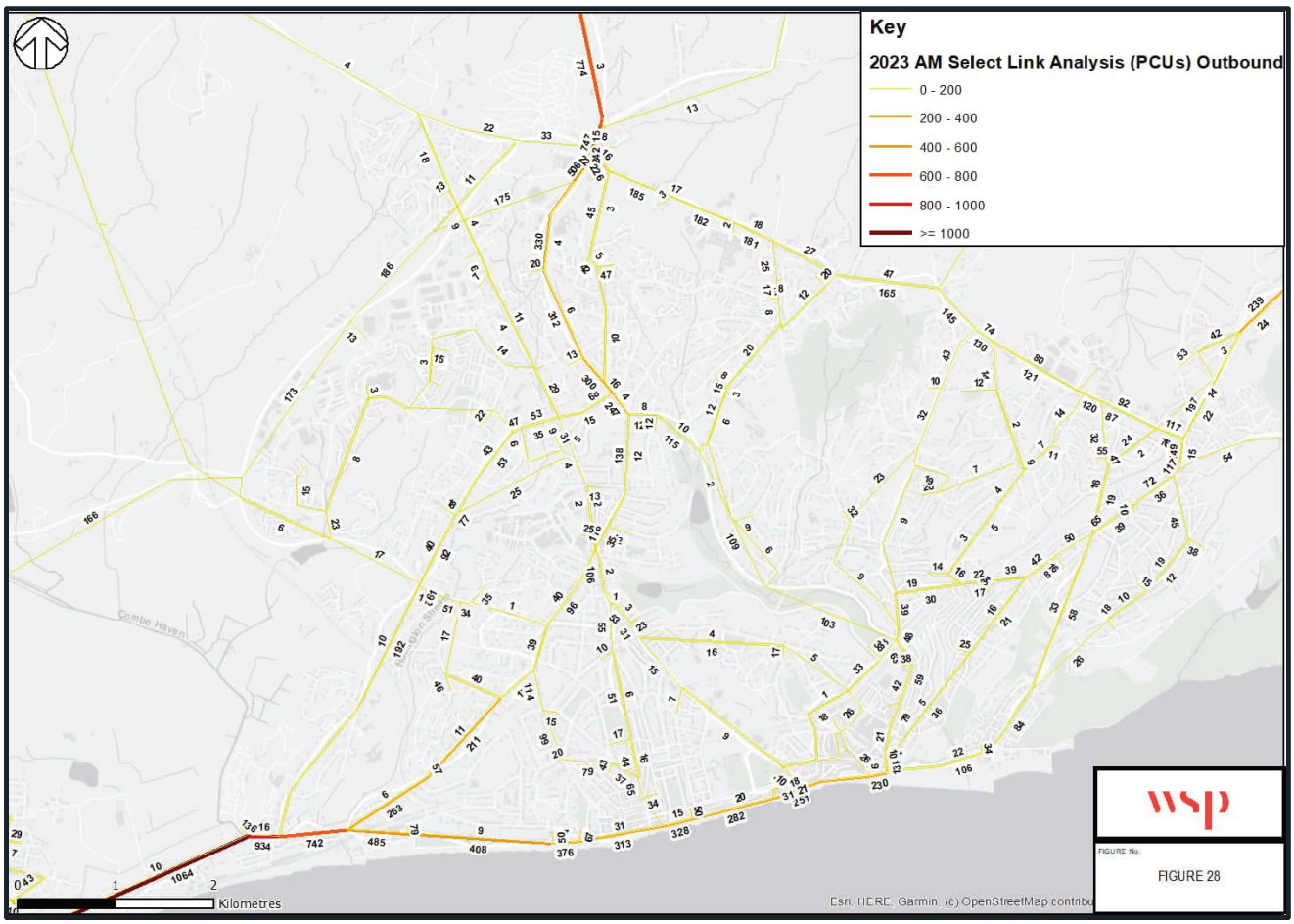


Figure 2-21: Outbound SLA for 2023 IP Post-COVID19 Model

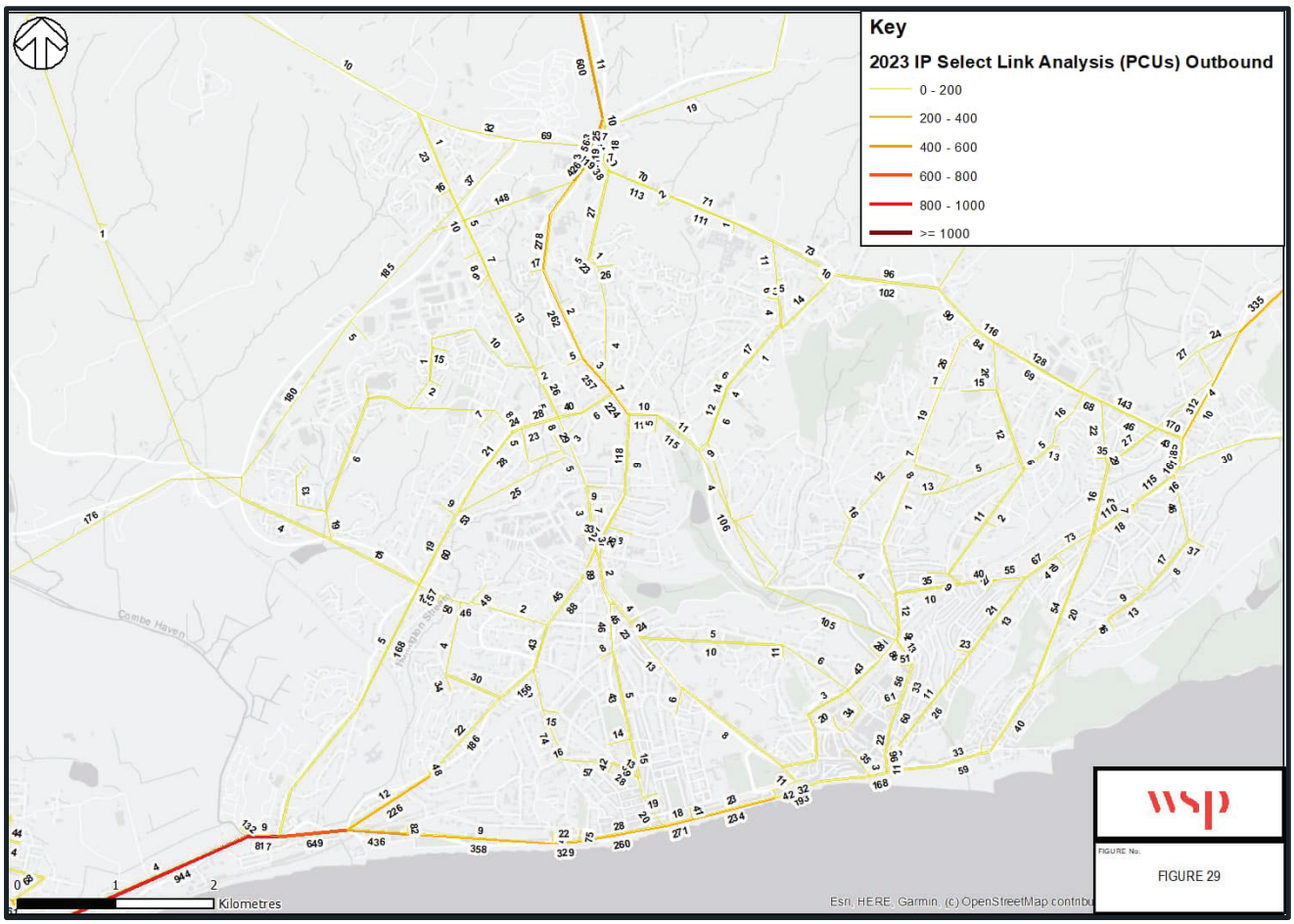
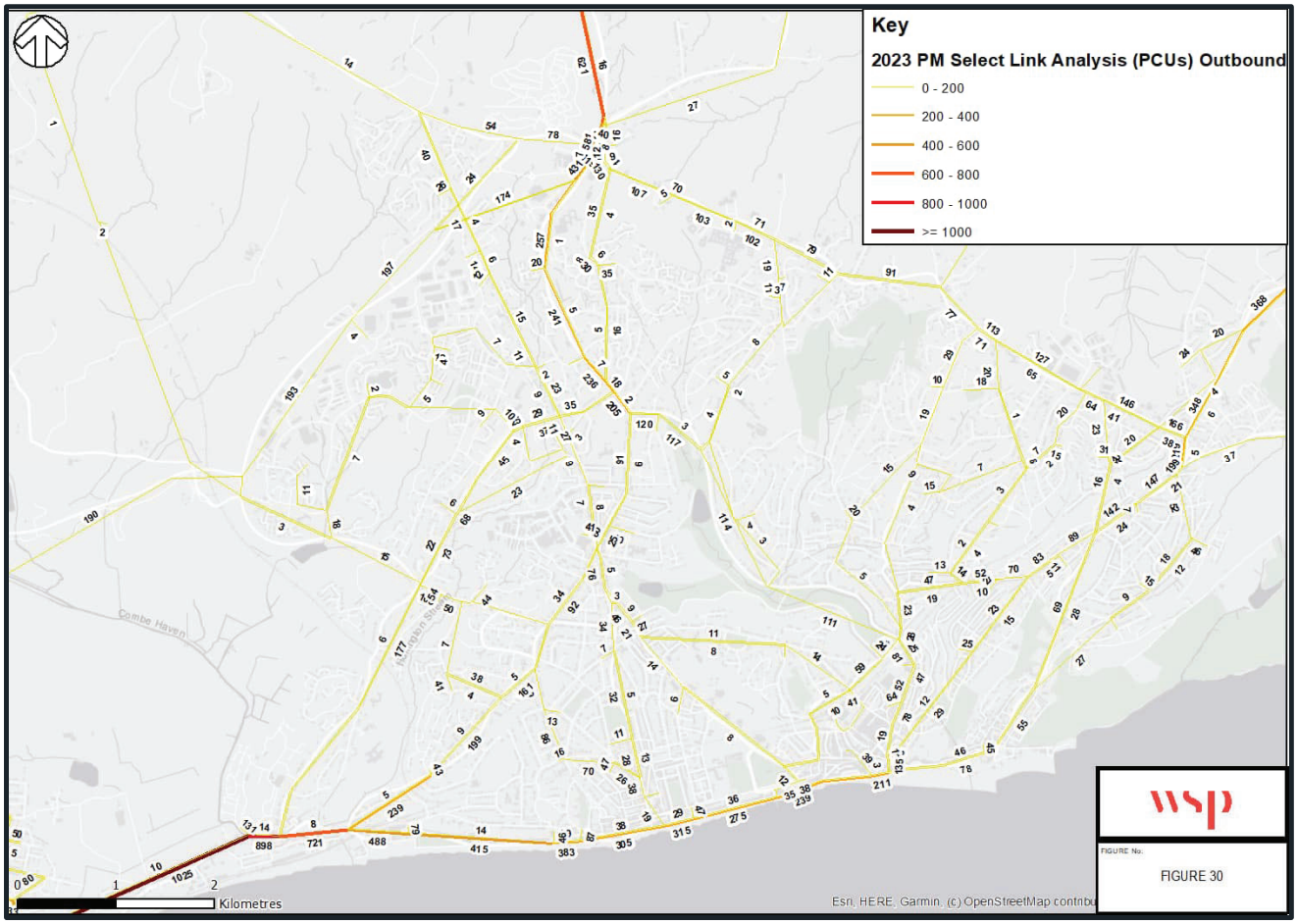


Figure 2-22: Outbound SLA for 2023 PM Post-COVID19 Model



2.3 Summary

2.3.1 The review of the 2019 and 2023 base year transport model concluded that the 2023 base year transport model could be used as a “new base year” for creating the 2040 and 2050 forecast year transport models without any explicit COVID19 adjustments.

2.3.2 All metrics (flow differences, delays differences, volume over capacity differences and select link analysis for the SRN routing and demand) suggest that there are no major/widespread differences between the 2019 and 2023 models.

2.3.3 At locations where a few differences were highlighted is due to highway schemes being introduced in the models between 2019-2023. These differences are localised and are not predicted to significantly impact on the wider road network.

3

Comparison of Future Year Models

3 Comparison of Future Year Models

3.1 Introduction

3.1.1 The review of the 2019 and 2023 base year transport model concluded that the 2023 base year transport model could be used as a “new base year” for creating the 2040 and 2050 forecast year transport models without any explicit COVID19 adjustments.

3.1.2 The following sections compare the 2040 Local Plan forecast year transport model and the updated 2040 forecast year transport model.

3.2 Comparison of Future Year Models

3.2.1 To further assess the robustness of the Local Plan assessment work undertaken before COVID19, CWTM 2040 forecast year transport models based on Pre-COVID19 (2019) and Post-COVID19 (2023) comparisons have been extracted for key strategic model metrics. The key statistics for the highway network particularly the Strategic Road Network (SRN) routes within Hastings compared are:

- Link actual flow (passenger car units)
- Average link delays, seconds
- Volume over capacity (V/C), %
- Select Link Analysis (SLA) on the main SRN routes into/out of the Hastings area (A259 and A21).

Link actual flow (passenger car units)

3.2.2 Actual flow difference plots in passenger car units (pcu) for the CWTM 2040 Pre-COVID19 and Post-COVID19 for the modelled peak hours are shown in Figure 3-1 to Figure 3-3.

Figure 3-1: Actual Flow Difference (AM)

Figure 3-2: Actual Flow Difference (IP)

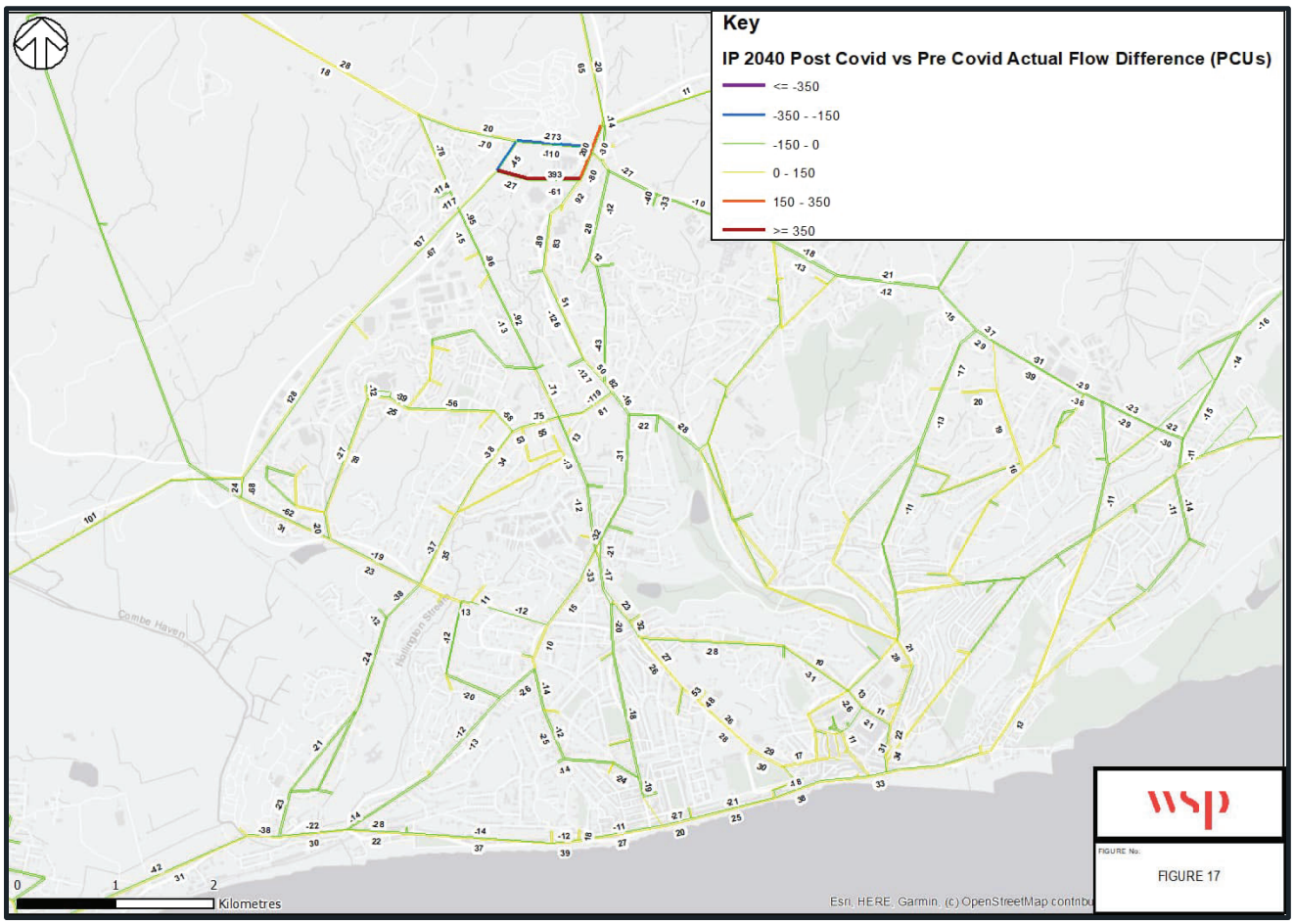


Figure 3-3: Actual Flow Difference (PM)

3.2.3 The differences in actual traffic flow between the Pre-COVID19 and Post-COVID19 forecast 2040 models follow the same patterns as the base year transport model versions.

3.2.4 The AM peak hour show low actual flow differences between Pre-COVID19 and Post-COVID19. The flow differences in the area around Whitworth Road, are caused by the absence of the demand related to sites (Land at junction of The Ridge West and Queensway and Land in Whitworth Road) included in the pre-Covid 2040 model but not in the post-Covid. Simultaneously the demand route choice, shifting to Whitworth Road instead of the Ridge W road in the updated 2040 model which is more visible in the IP and PM models.

3.2.5 A significant reduction in delays for the IP and PM (see Figure 3-5 & Figure 3-6) models is predicted at the Ridge W road junctions, since traffic is predicted to reroute, emphasising the shift in route choice.

3.2.6 It is worth noting that the Queensway Gateway scheme, suggests that the existing section of the Junction Road between the A2100 and the A21 will close when the scheme is completed, but in both pre and post Covid 2040 scenarios the road would be open to traffic. Closure of the Junction Road will potentially shift even more traffic from the A2100 to Whitworth Road.

Average link delays (seconds)

3.2.7 Difference in delays (seconds) between the forecast year models for the three peaks are shown in Figure 3-4 to Figure 3-6. As with the base year transport models, the forecast year transport models show difference in link delays in the north of Hastings due to changes in the network. Localised changes in delays are also observed near the junction of B2159/ Blackman Avenue/Ashbrooke Road due to signal timing differences at this junction.

Figure 3-4: Delay Difference (AM)

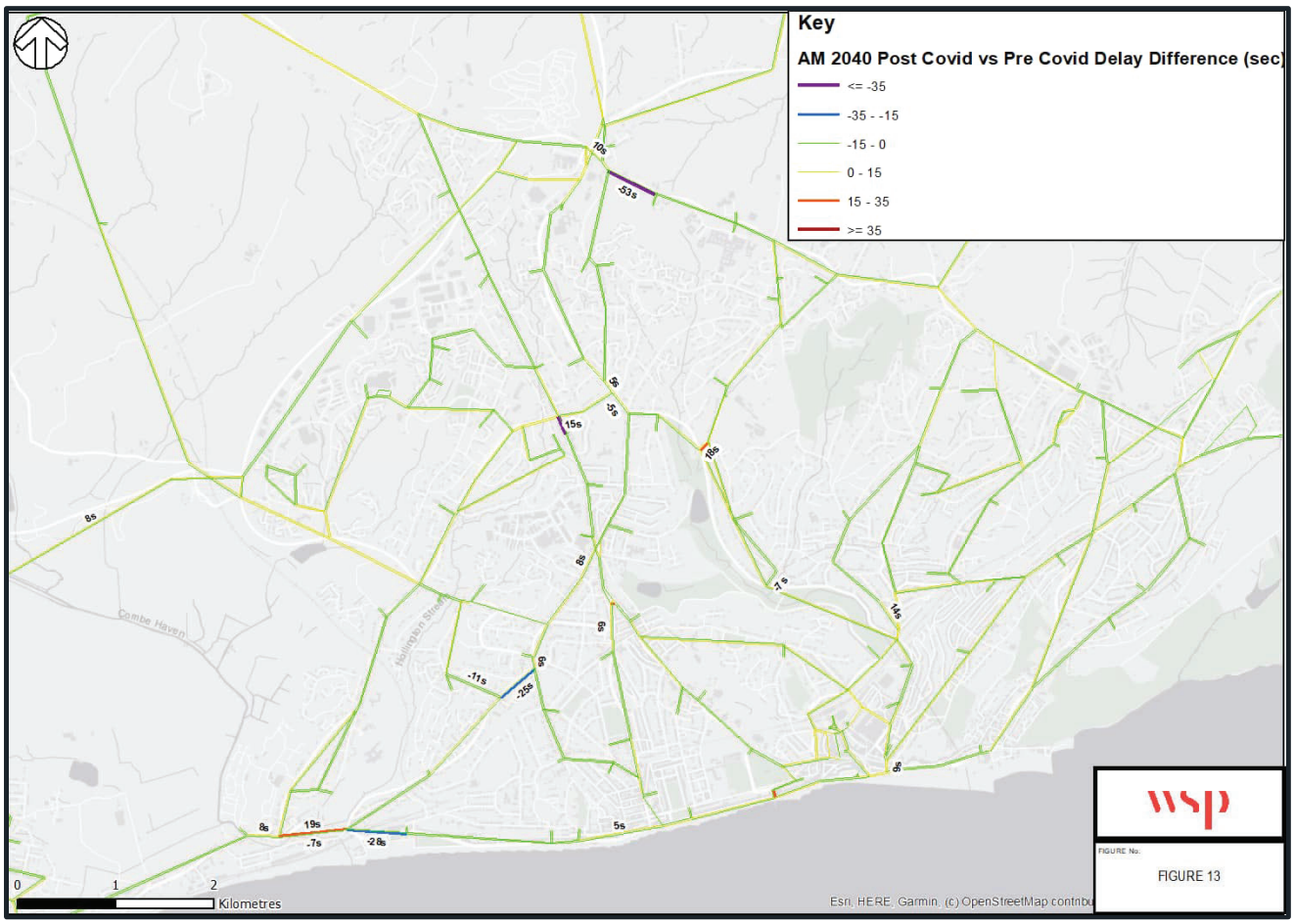


Figure 3-5: Delay Difference (IP)

Figure 3-6: Delay Difference (PM)

Volume over capacity (%)

3.2.8 Volume over Capacity (VoC) difference plots are shown in Figure 3-7 to Figure 3-9. As explained in the Link actual flow (passenger car units) section, there is a shift of traffic from the Ridge W road to Whitworth Road in the Post-Covid 2040 models, which is predicted to result in lower volume over capacity (%) at Ridge W road (more capacity remains at the road compared to the Pre-Covid 2040), and higher volume over capacity (%) at Whitworth road (less capacity left at the road compared to the Pre-Covid 2040).

Figure 3-7: V/C Difference (AM)

Figure 3-8: V/C Difference (IP)

Figure 3-9: V/C Difference (PM)

Select Link Analysis (SLA) on the main SRN routes into/out of the Hastings area (A259 and A21)

3.2.9 Select Link Analysis (SLA) was also carried out for the same set of screen lines used for the SLA of the base year transport models. The screenline SLA has been produced for traffic into the Hastings area (Inbound) and traffic out of the Hastings area (Outbound).

3.2.10 The inbound SLA plots are shown in Figure 3-10 to Figure 3-13 for the 2040 (Pre-COVID19) models and Figure 3-13 to Figure 3-15 for 2040 (Post-COVID19) models.

Figure 3-10: Inbound SLA for 2040 AM Pre-COVID19 Model

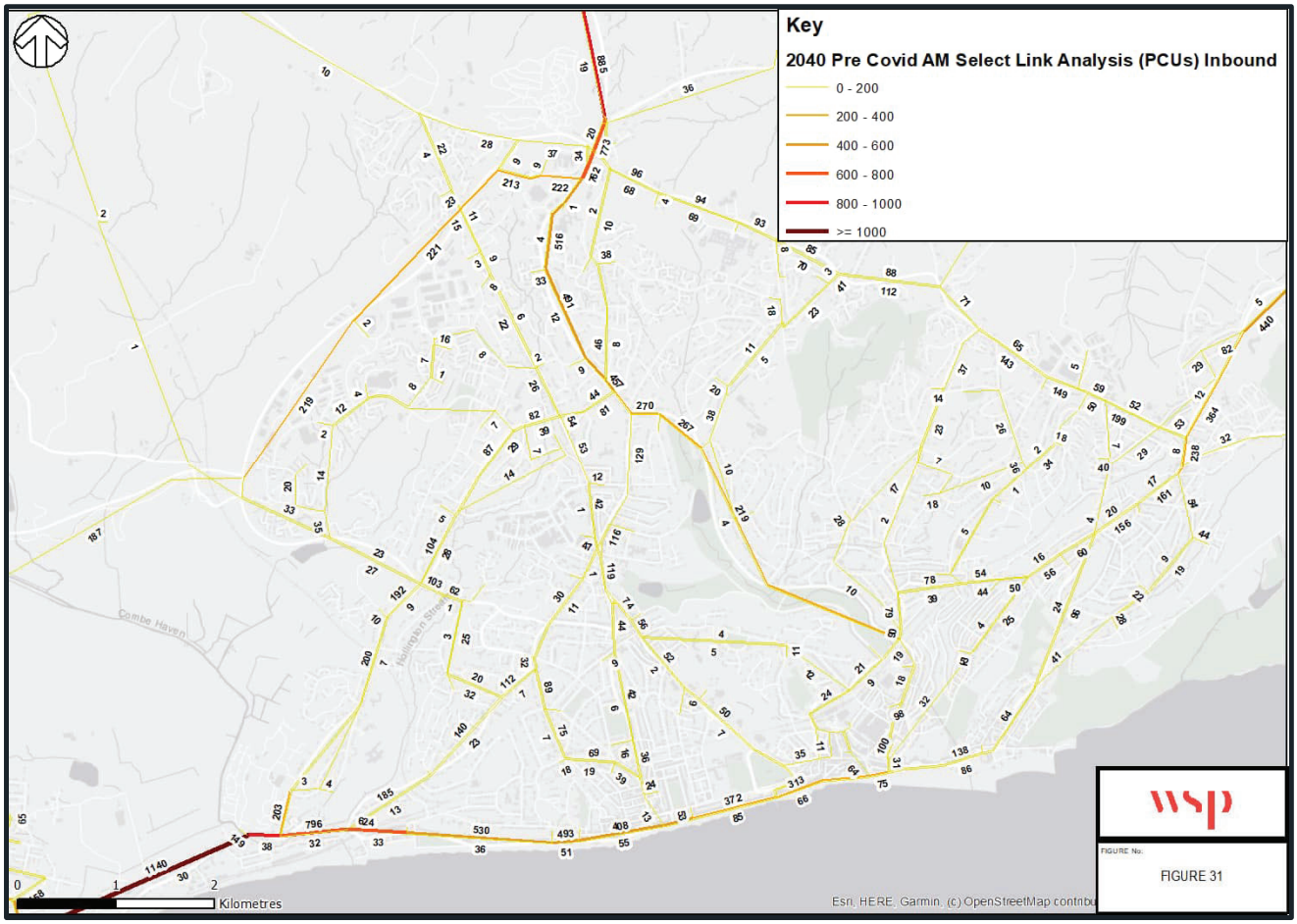


Figure 3-11: Inbound SLA for 2040 IP Pre-COVID19 Model

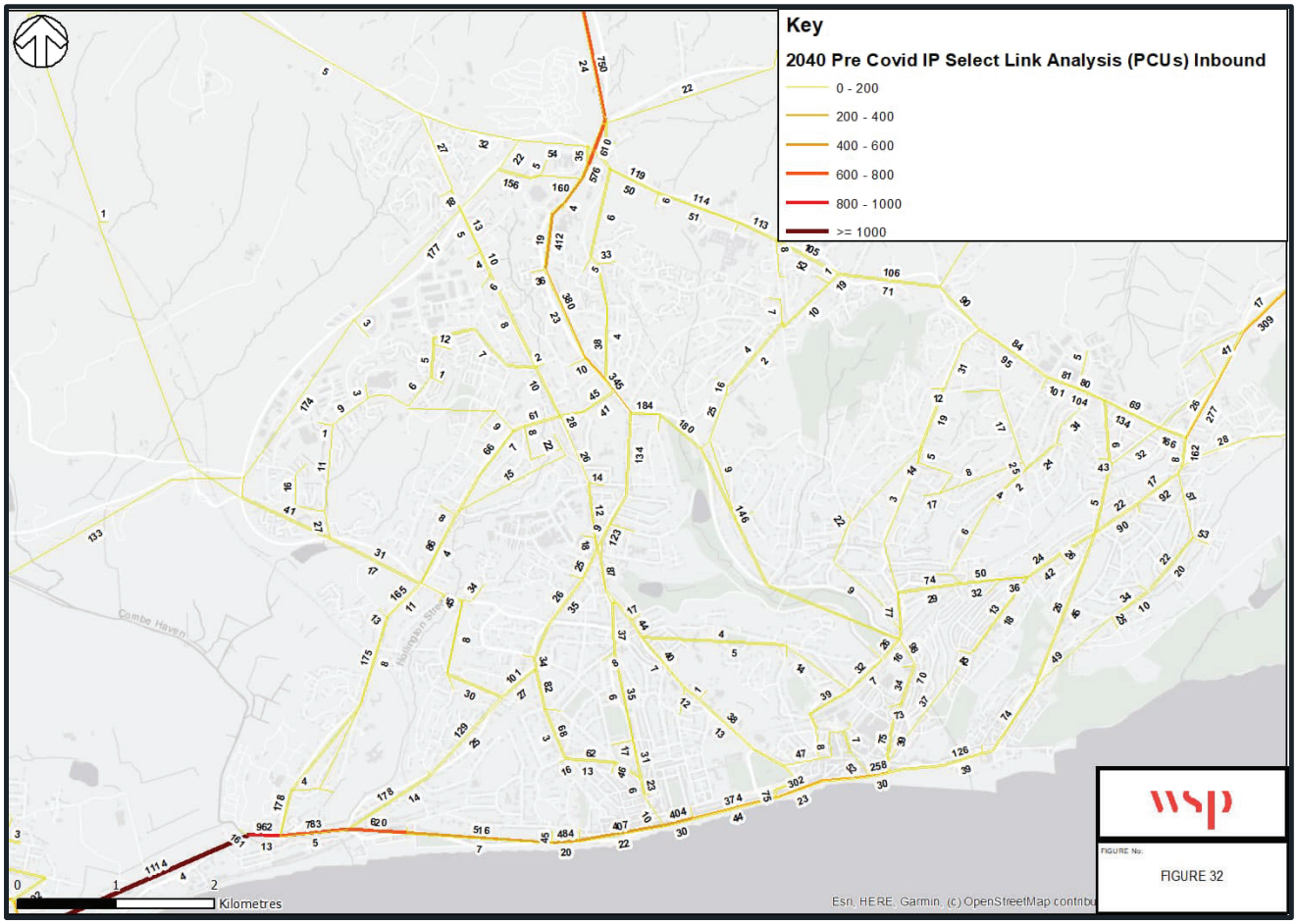


Figure 3-12: Inbound SLA for 2040 PM Pre-COVID19 Model

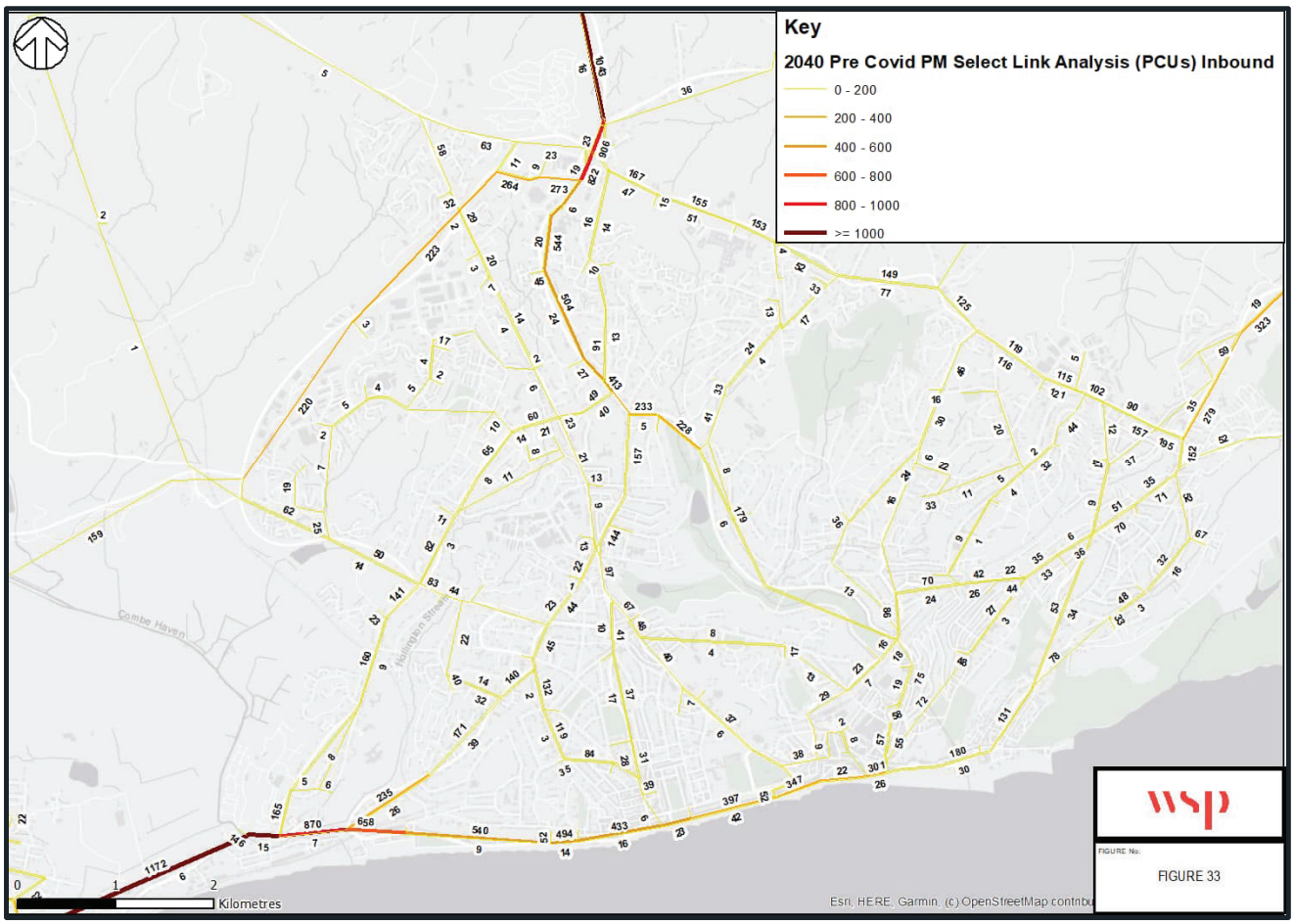


Figure 3-13: Inbound SLA for 2040 AM Post-COVID19 Model

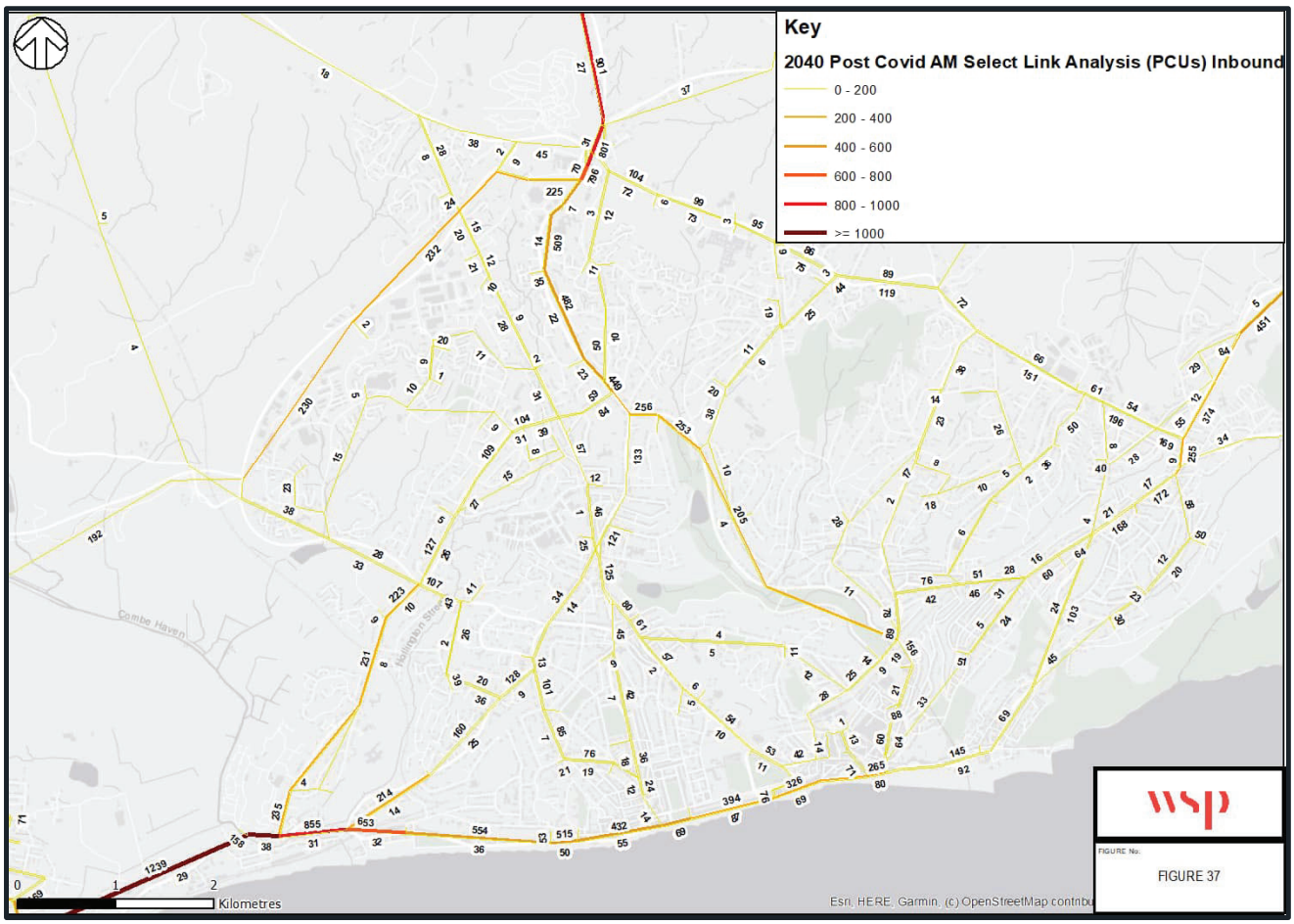


Figure 3-14: Inbound SLA for 2040 IP Post-COVID19 Model

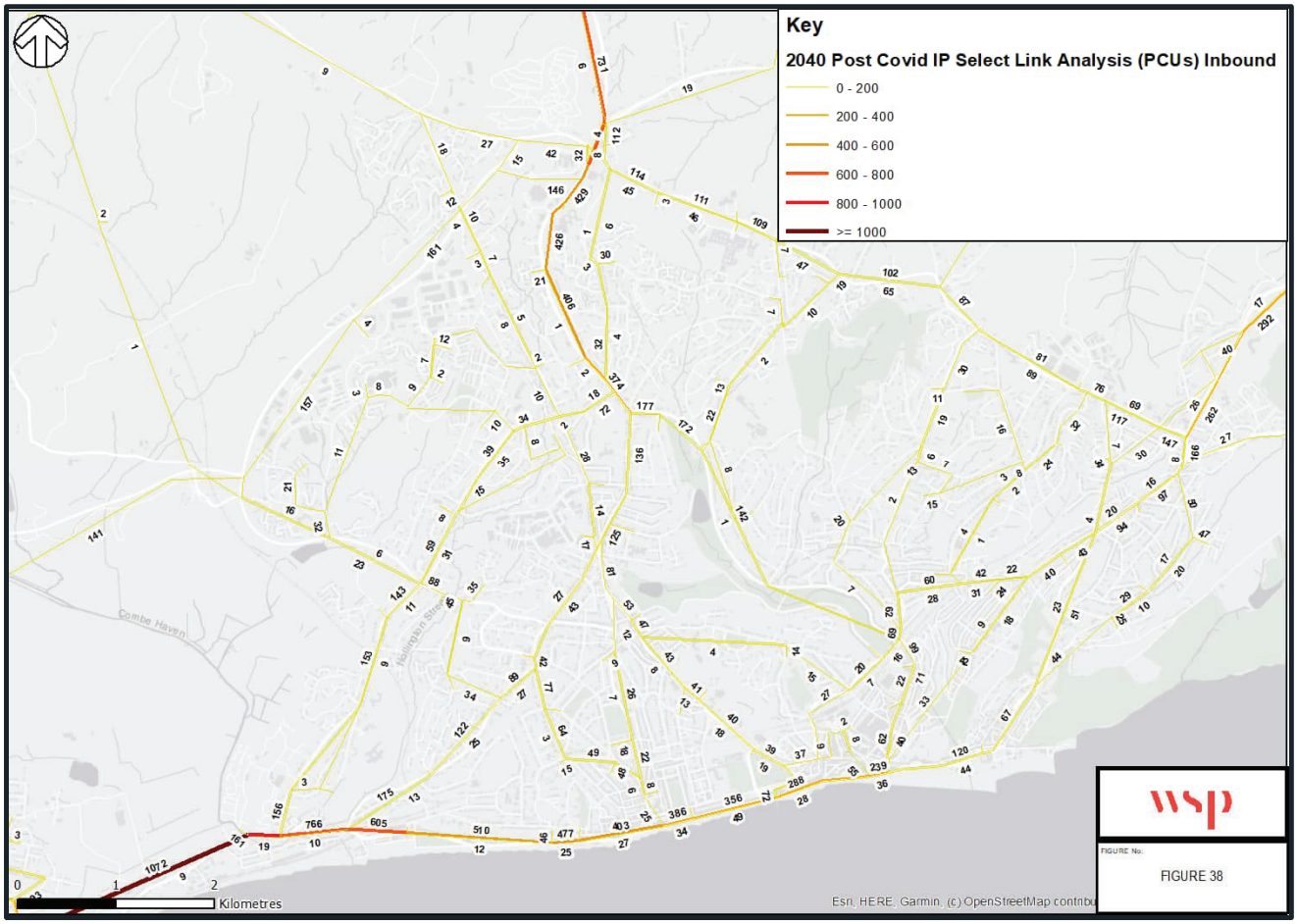
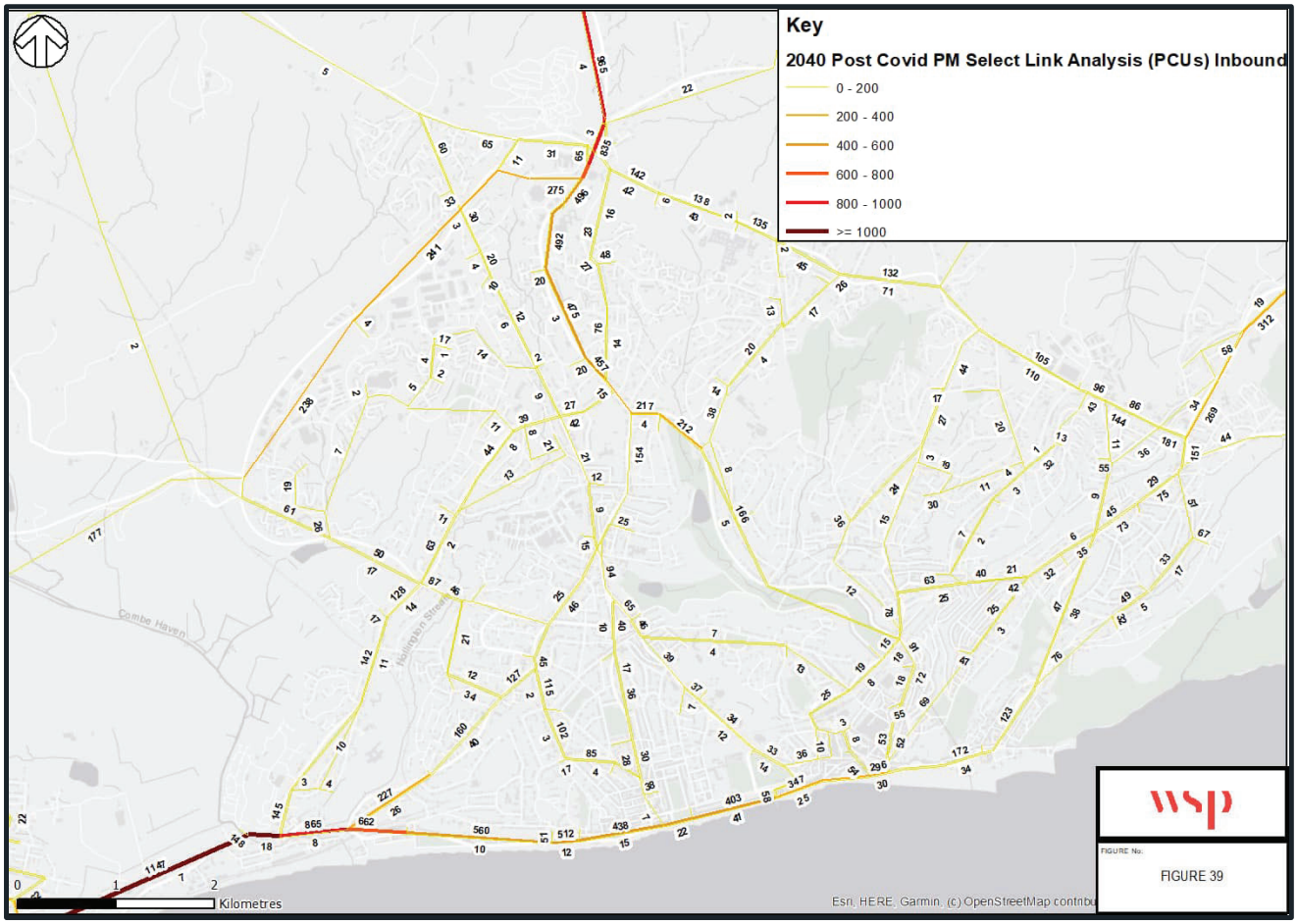


Figure 3-15: Inbound SLA for 2040 PM Post-COVID19 Model



3.2.11 Figure 3-16 to Figure 3-18 show the SLA traffic out of the Hastings area for 2040 (Pre-COVID19) and Figure 3-19 to Figure 3-21 for 2040 (Post-COVID19).

Figure 3-16: Outbound SLA for 2040 AM Pre-COVID19 Model

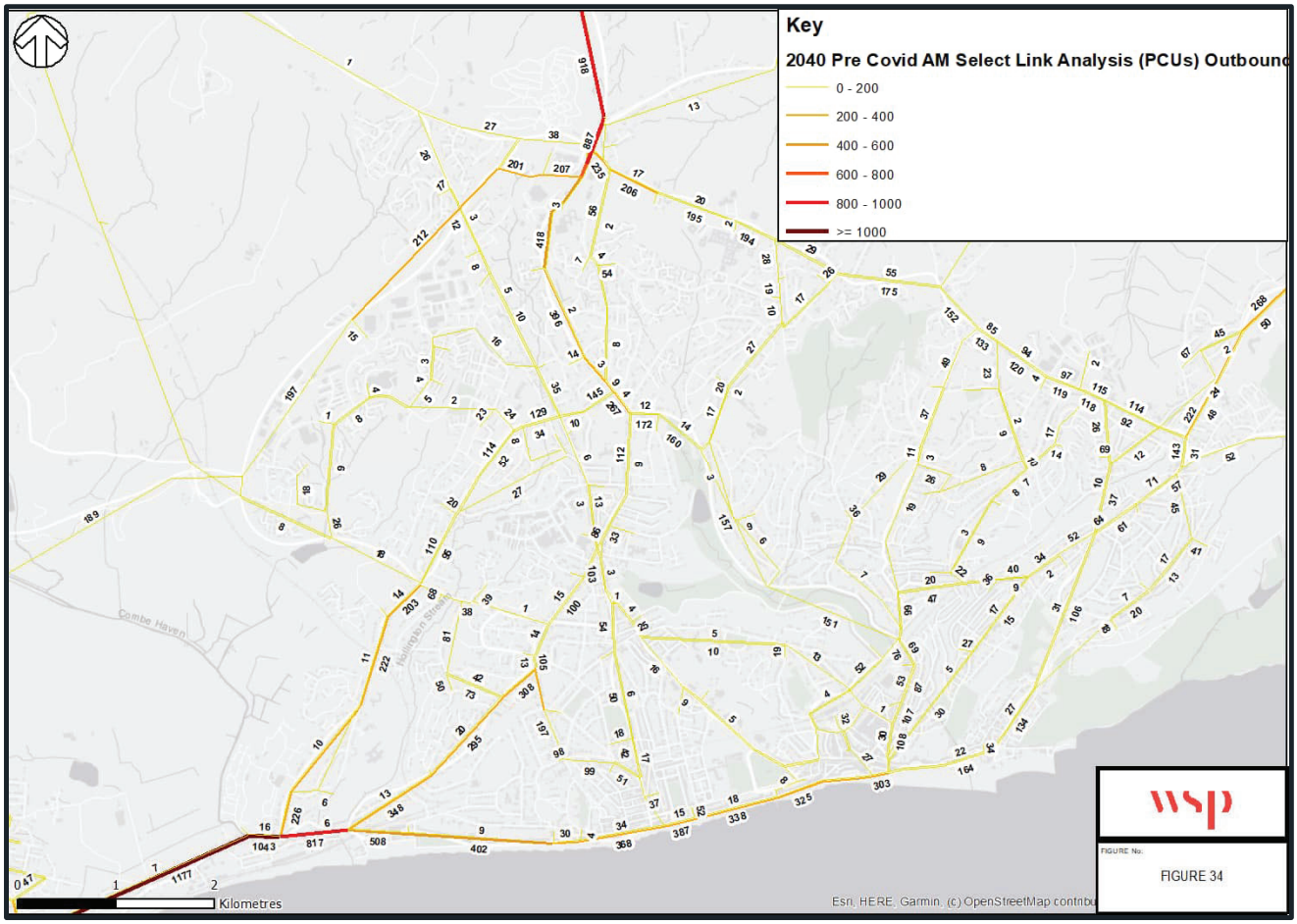


Figure 3-17: Outbound SLA for 2040 IP Pre-COVID19 Model

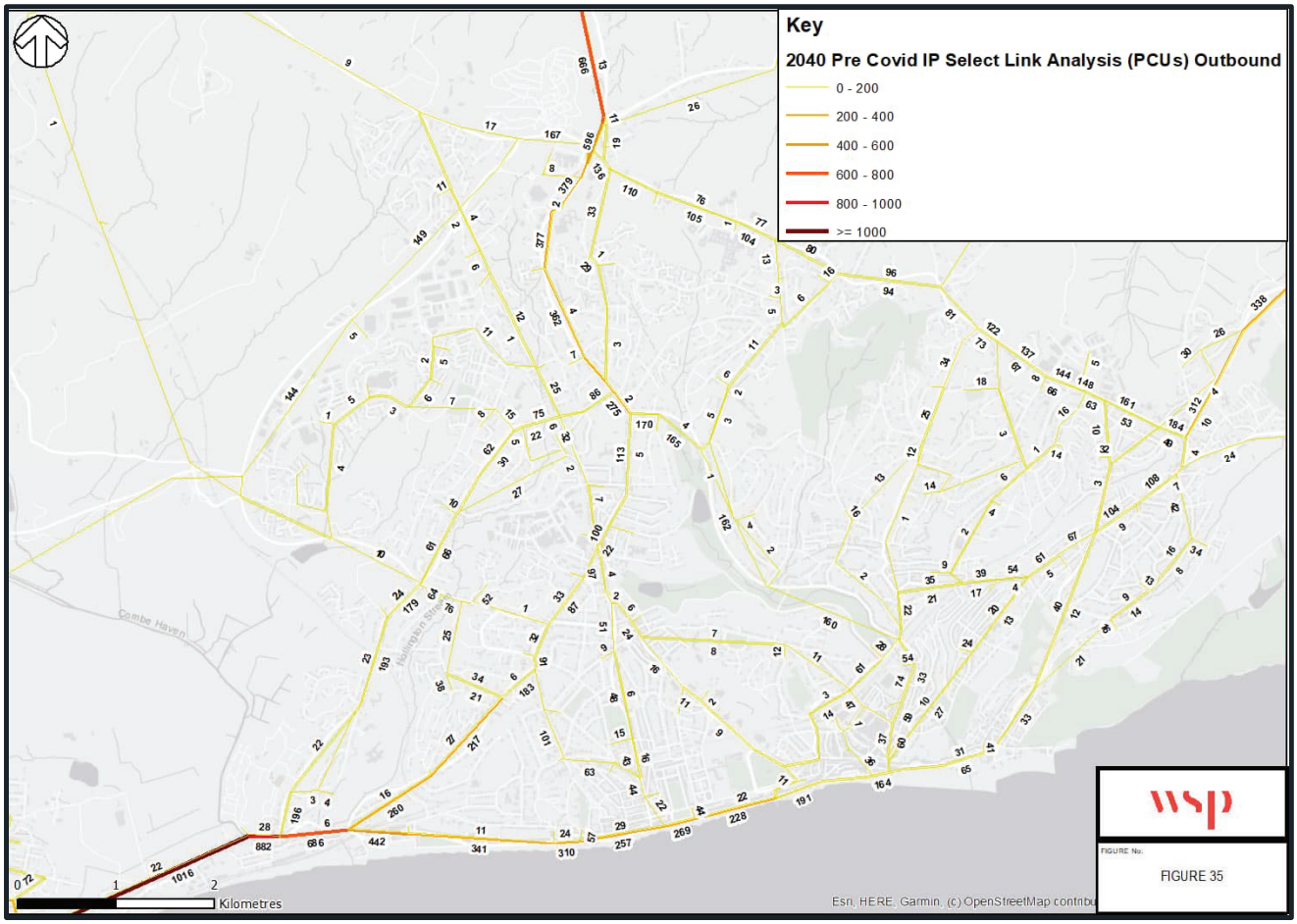


Figure 3-18: Outbound SLA for 2040 PM Pre-COVID19 Model

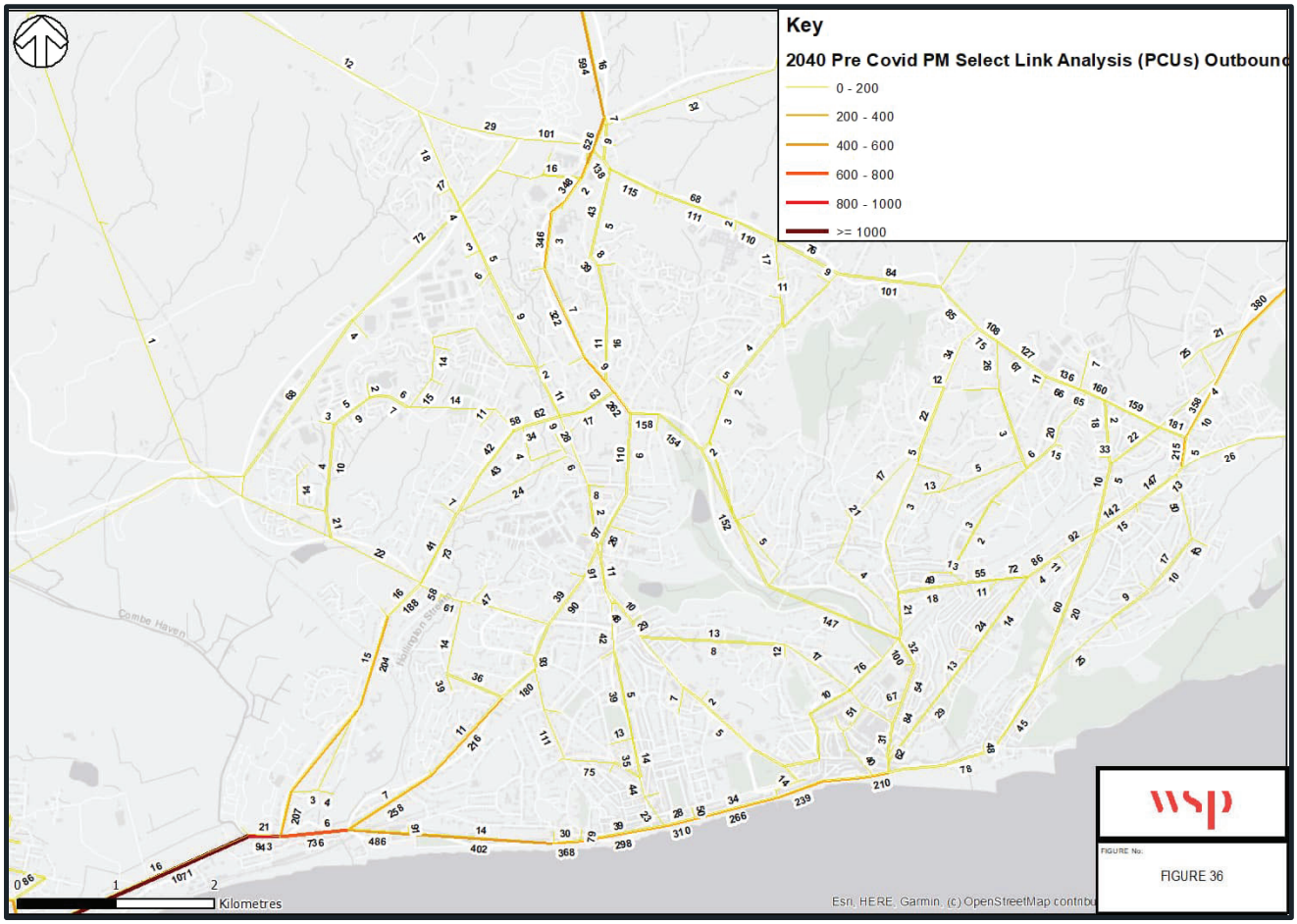


Figure 3-19: Outbound SLA for 2040 AM Post-COVID19 Model

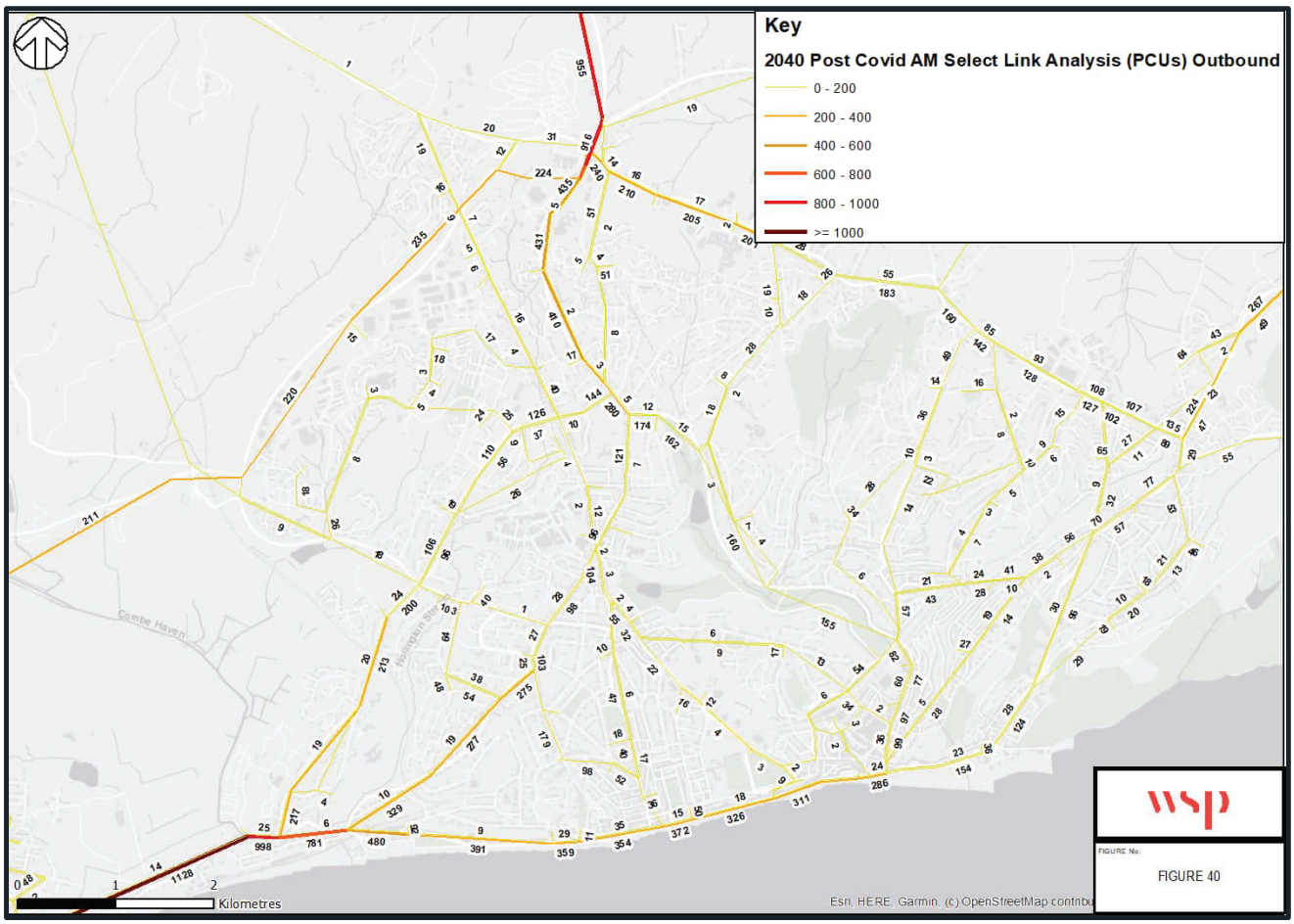


Figure 3-20: Outbound SLA for 2040 IP Post-COVID19 Model

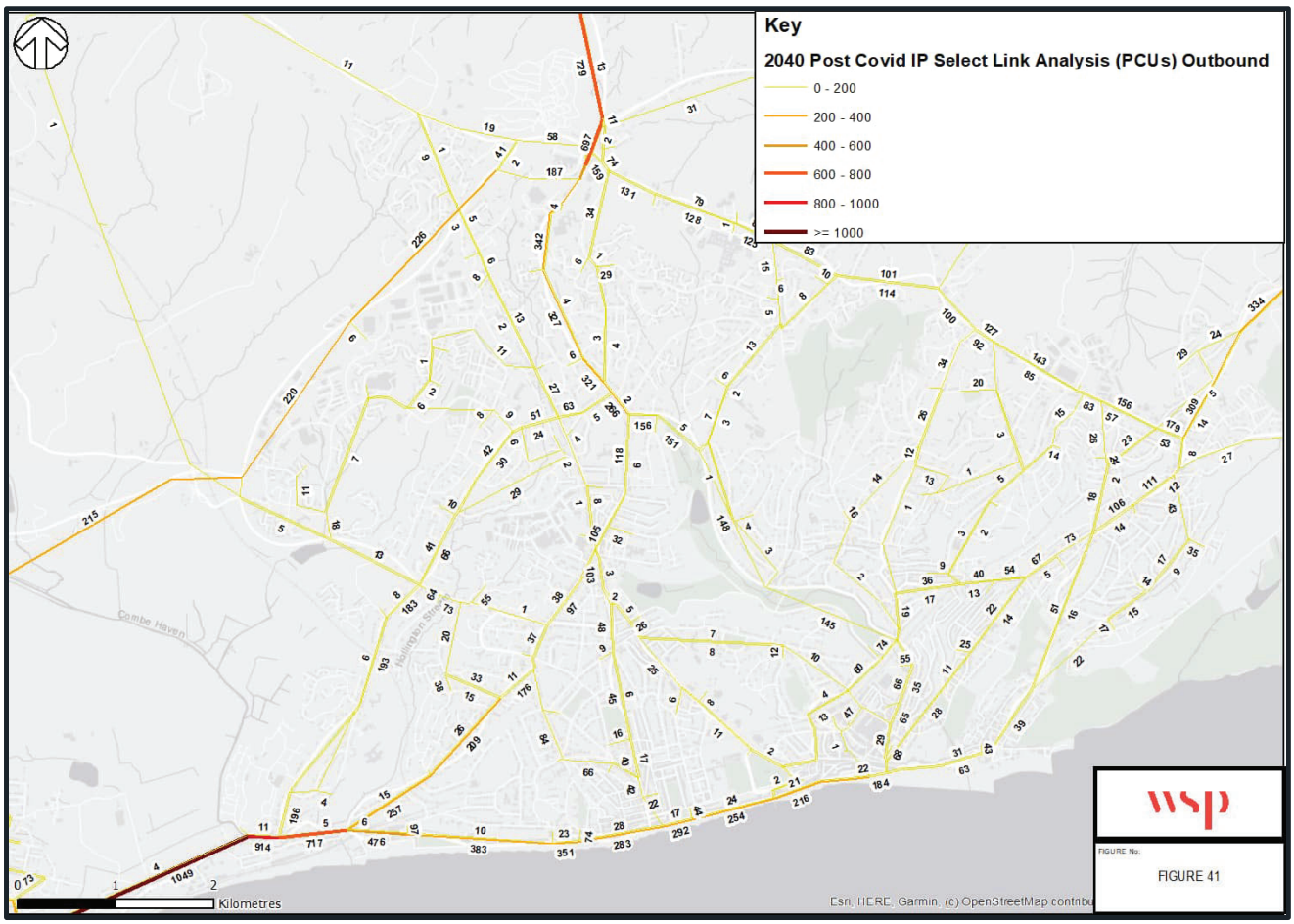
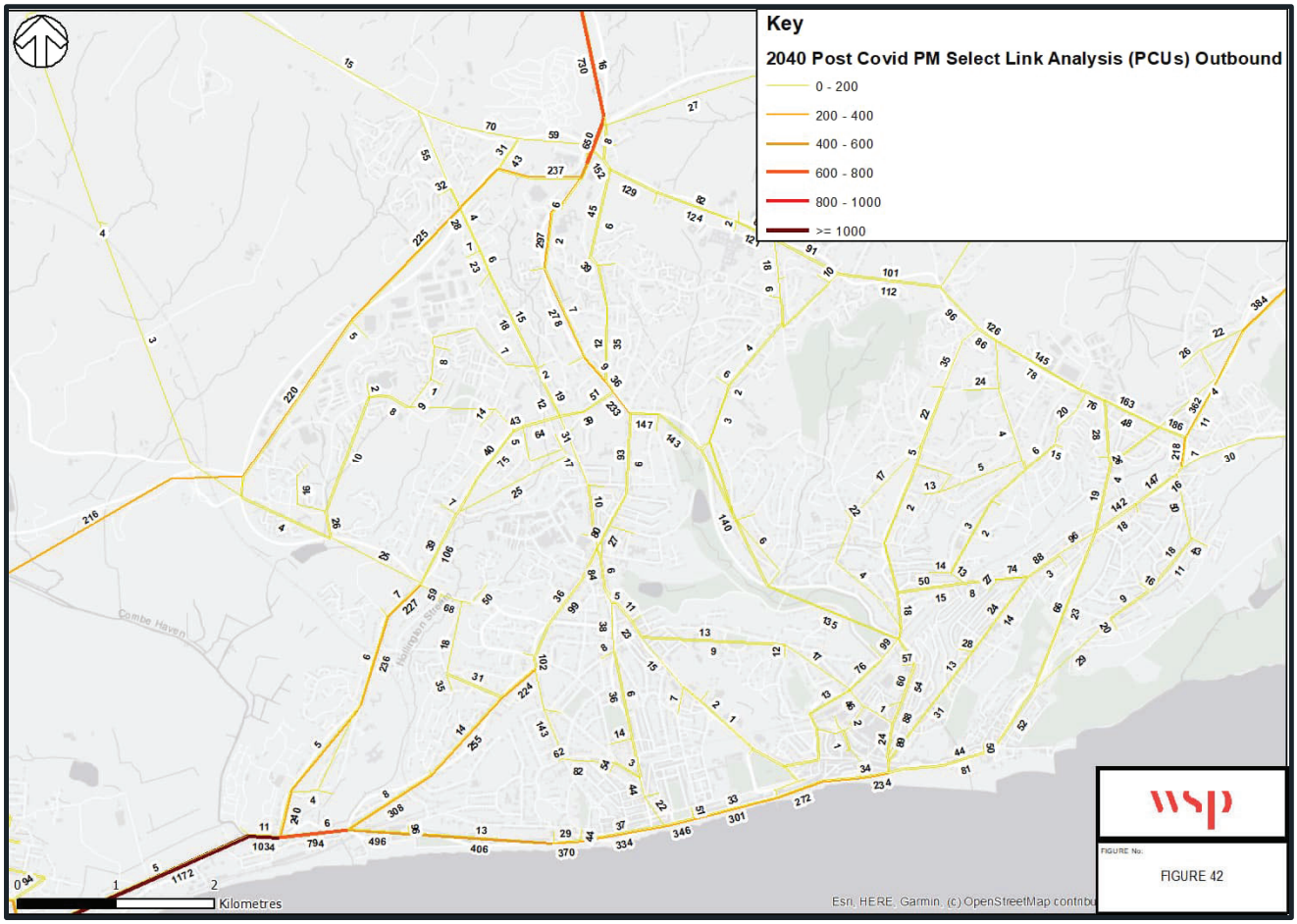


Figure 3-21: Outbound SLA for 2040 PM Post-COVID19 Model



3.3 Summary

3.3.1 The review of the 2040 Pre and Post COVID19 forecast year transport model concluded that the Post-COVID19 transport model would be a suitable forecasting tool for testing the impact of the potential Hastings Local Plan developments on the wider road network.

3.3.2 The forecast transport modelling metrics displayed in section Comparison of Future Year Models (flow differences, delays differences, volume over capacity differences and select link analysis for the SRN routing and demand), show that there are no major/widespread differences between the Pre and Post COVID19 models.

3.3.3 At locations where a few differences were highlighted, these changes are localised and are not predicted to significantly impact on the wider road network.

4

Comparison of NTEM Growth

4 Comparison of NTEM Growth

4.1 Introduction

4.1.1 The National Trip End Model (NTEM) and the Trip End Model Presentation Program (TEMPro) are closely related tools used in transport planning and forecasting in the UK. They are:

- NTEM: This model forecasts the growth in trip origin-destinations (or productions-attractions) up to 2061. It considers factors like population, employment, housing, car ownership, and trip rates
- TEMPro: This is the software used to view and analyse the NTEM data. It allows users to explore forecasts of trip ends by geographical area, transport mode, time of day, purpose of journey, and more.

4.1.2 These tools are essential for understanding and planning for future transport needs.

4.2 Comparison of NTEM growth

4.2.1 The household and employment data for the Pre-COVID19 scenario was extracted from National Trip End Model (NTEM) accessed via the TEMPRo software at the Middle Super Output Area (MSOA) levels.

4.2.2 NTEM version 7.2 household and jobs growth data has been used to represent Pre-COVID19 while NTEM version 8.0 households and jobs growth data has been used to represent Post-COVID19.

4.2.3 The data obtained from both the versions were compared by obtaining the household growth in Figure 4-1 and job growth in Figure 4-2 between NTEM version 8.0 and NTEM version 7.2 for the period between 2019 and 2040.

4.2.4 Negative labels at MSOAs, along with more intense red colouring, indicate less growth (either household or jobs) compared to the rest of the MSOAs covering Hastings.

Figure 4-1: NTEM Household Growth

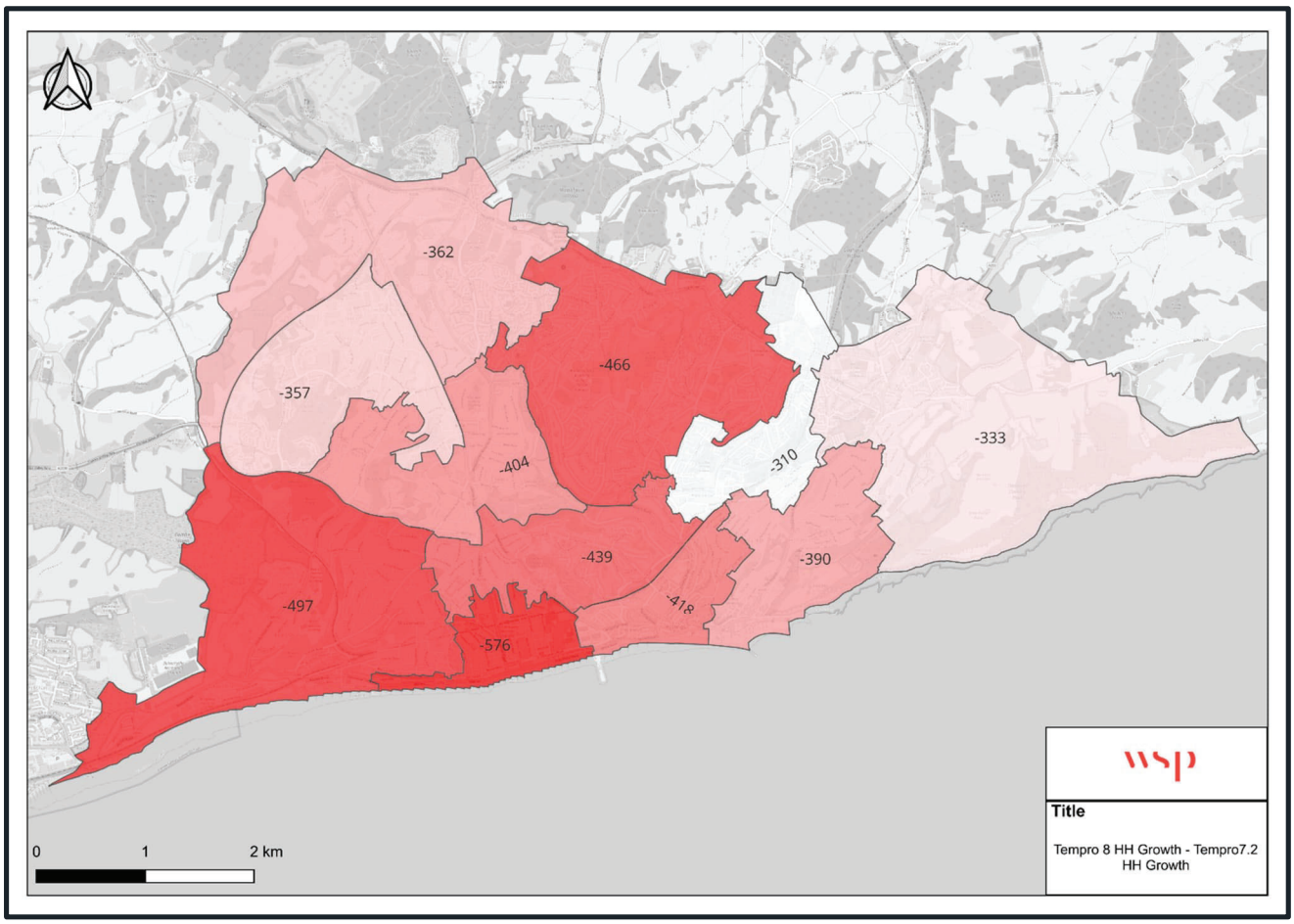
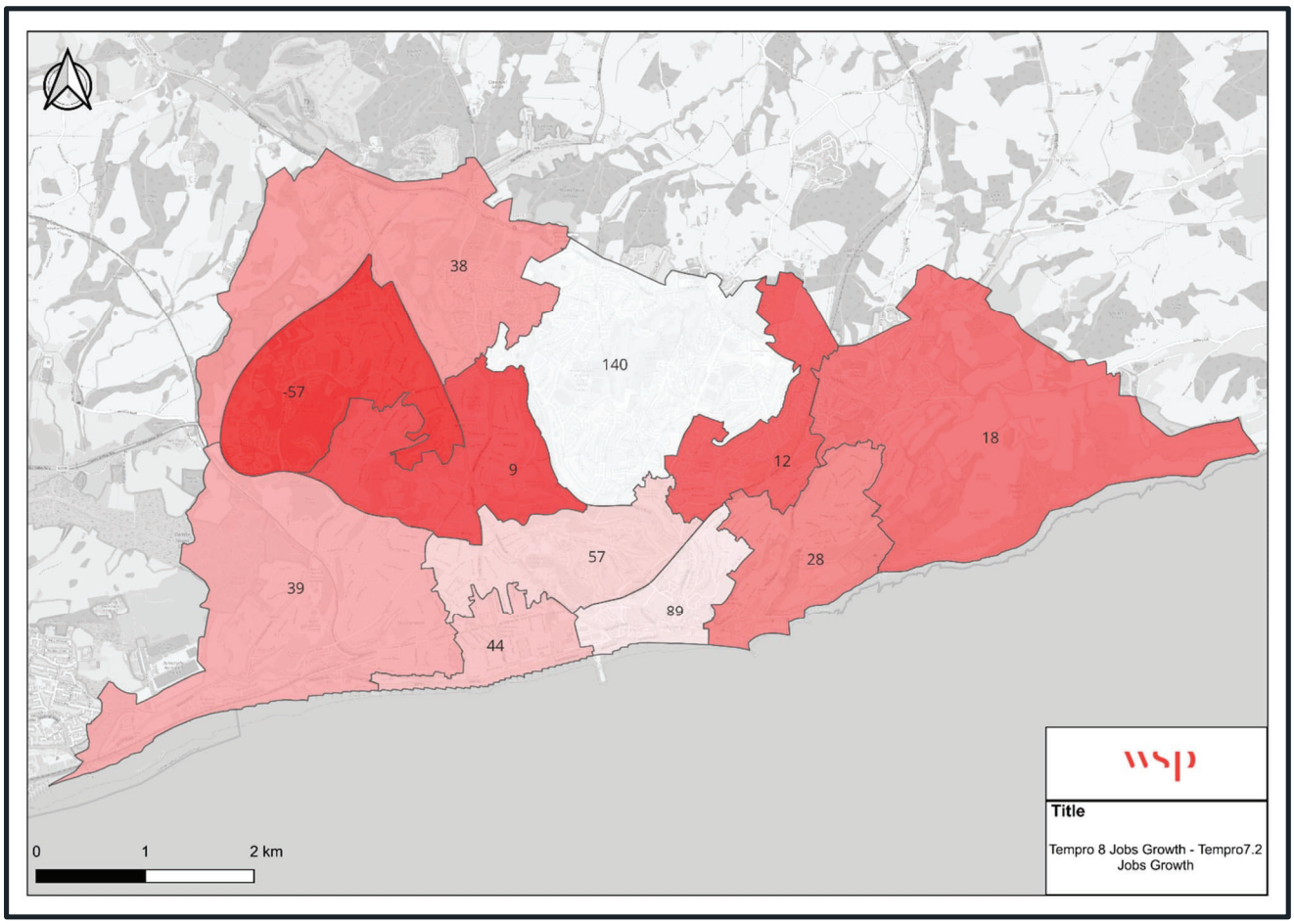


Figure 4-2: NTEM Job Growth



4.2.5 To further understand input data and background growth changes between the model versions, the NTEM version 7.2 and NTEM version 8.0 household and job growth has been tabulated as shown in Table 4-1.

4.2.6 The comparisons show that NTEM version 8 has a reduction of 77% (-4,556 households across all MSOA) in households in all the MSOA. Jobs growth varies between -16% to 35% (415 more jobs across all MSOAs) against NTEM version 7.2 for the period between 2019-2040.

Table 4-1: NTEM 8 vs NTEM 7.2 Household and Job Growth 2040-2019 Comparison

MSOA	NTEM 8 2040-2019 Growth		NTEM 7.2 2040-2019 Growth		Difference		% Difference	
	HHs	Jobs	HHs	Jobs	HHs	Jobs	HHs	Jobs
E02004368	106	332	468	293	-362	38	-77%	13%
E02004369	137	538	604	399	-467	139	-77%	35%
E02004370	106	302	463	359	-357	-57	-77%	-16%
E02004371	98	132	432	114	-334	18	-77%	16%
E02004372	92	97	402	85	-310	12	-77%	14%
E02004373	119	258	523	249	-404	8	-77%	3%
E02004374	116	207	507	179	-391	28	-77%	16%
E02004375	131	283	570	227	-439	57	-77%	25%
E02004376	126	649	544	560	-418	89	-77%	16%
E02004377	147	300	644	261	-497	39	-77%	15%
E02004378	176	279	752	235	-577	44	-77%	19%
Total	**1,354**	**3,377**	**5,909**	**2,961**	**-4,556**	**415**	**-77%**	**14%**

4.3 Summary

4.3.1 The comparison of NTEM version 8 (latest version) to NTEM version 7.2 (version used for the Local Plan Modelling contained in the 2039 CWTM produced by Jacobs), shows higher growth in jobs when compared to NTEM version 7.2. The reduction in Households masks this increase, suggesting a significant smaller background demand growth in the area in the Post-Covid19 2040 model compared to the Pre-Covid 2040 models.

5

Comparison of Summary Model Network Statistics

5 Comparison of Summary Model Network Statistics

5.1.1 Summary network statistics for all pre and post COVID19 models are extracted and presented in Table 5-1 and Table 5-2.

Table 5-1: Summary Network Statistics of Pre-COVID19 Models

Year	Time Period	Transient Queues (PCU - Hrs)	Over-capacity Queues (PCU - Hrs)	Link Cruise Time (PCU - Hrs)	Total Travel Time (PCU - Hrs)	Total Travel Distance (PCU - Hrs)	Average Speed (kph)	Overall Demand (PCUs)	Delay (PCU - Hrs)
2019	AM	3,471	786	31,819	36,075	18,88,415	52.3	3,14,412	4,407
2019	IP	2,060	54	22,881	24,995	14,09,616	56.4	2,58,584	2,120
2019	PM	3,315	896	29,998	34,209	17,86,316	52.2	2,62,632	4,383
2040	AM	4,998	2,914	36,894	44,805	21,44,791	47.9	3,71,999	8,699
2040	IP	2,912	310	27,547	30,769	16,74,630	54.4	3,07,780	3,263
2040	PM	4,476	2,094	34,821	41,391	20,37,897	49.2	3,10,856	7,048

Table 5-2: Summary Network Statistics of Post-COVID19 Models

Year	Time Period	Transient Queues (PCU - Hrs)	Over-capacity Queues (PCU - Hrs)	Link Cruise Time (PCU - Hrs)	Total Travel Time (PCU - Hrs)	Total Travel Distance (PCU - Hrs)	Average Speed (kph)	Overall Demand (PCUs)	Delay (PCU - Hrs)
2023	AM	3,735	960	32,688	37,383	19,27,509	51.6	3,31,999	4,885
2023	IP	2,178	80	23,460	25,718	14,36,555	55.9	2,72,758	2,266
2023	PM	3,490	987	30,659	35,137	18,15,785	51.7	2,77,159	4,669
2040	AM	5,234	3,002	37,246	45,483	21,64,900	47.6	3,74,958	9,038
2040	IP	2,813	239	27,474	30,526	16,79,198	55.0	3,08,791	3,085
2040	PM	4,558	1,992	35,121	41,671	20,63,475	49.5	3,13,107	6,996

5.1.2 Table 5-3 shows the absolute and percentage differences in the network statistics between Pre-COVID19 and Post-COVID19 models for the base year models and forecast year models.

Table 5-3: Difference between Pre and Post COVID19 Model Summary Statistics

Year	Time Period	Transient Queues (PCU - Hrs)	Over-capacity Queues (PCU - Hrs)	Link Cruise Time (PCU - Hrs)	Total Travel Time (PCU - Hrs)	Total Travel Distance (PCU - Hrs)	Average Speed (kph)	Overall Demand (PCUs)	Delay (PCU - Hrs)
Base Years 2023 vs 2019	AM	8%	22%	3%	4%	2%	-2%	6%	11%
	IP	6%	48%	3%	3%	2%	-1%	5%	7%
	PM	5%	10%	2%	3%	2%	-1%	6%	7%
Forecast Year 2040 Post vs 2040 Pre	AM	5%	3%	1%	2%	1%	-1%	1%	4%
	IP	-3%	-23%	0%	-1%	0%	1%	0%	-5%
	PM	2%	-5%	1%	1%	1%	1%	1%	-1%

5.1.3 Overall, the 2023 models have an average 8% higher demand compared to the 2019 models, which results in a higher increase in Over-Capacity Queues as a percentage difference but overall, the absolute values remain low. The rest of the metrics do not show any network variations

5.1.4 The 2040 Post-Covid models have on average 1% higher demand compared to the 2040 Pre-Covid models, and as with the 2023-2019 comparison, the only metric that is highly noticeable is the Over-Capacity Queues as percentage difference, but again overall as absolute values the metric remains low.

6

Hastings Borough Council - Local Plan

6 Hastings Borough Council - Local Plan

6.1 Introduction

6.1.1 As part of the evidence base for the Hastings Borough Council (HBC) Local Plan a total of 21 sites were identified which would have potential for future growth in the area. These potential sites are in addition to the existing committed developments i.e., developments which have already secured planning permission or are already adopted in an existing local plan as contained in the 2039 CWTM produced by Jacobs.

6.1.2 The potential development sites have the dynamic to have a significant impact on the performance of the local transport system. Jacobs were commissioned to forecast and evaluate the future impacts of the Local Plan developments on the road network within and surrounding the Borough using the Countywide Transport Model (CWTM).

6.1.3 Table 3-4 of the Hastings Local Plan Forecasting Report (Jacobs, October 2022) provides a summary of the total household and jobs growth for each of the Do Minimum and Do Something 2039 forecast scenarios. The table also includes base year 2019 and forecast year 2039 NTEM v7.2 growth figures for comparison purposes. This table has been replicated in Figure 6-1.

Figure 6-1: Hastings Local Plan Forecasting Report HH & Jobs Growth Comparisons

Hastings	2019 NTEM		2039 NTEM		2039 DM		2039 DS	
	HH	Jobs	HH	Jobs	HH	Jobs	HH	Jobs
Total Figures	43985	43391	49562	46126	46501	44474	48011	45308
Absolute change 2019-2039			5577	2735	2606	1083	4116	1917
% change 2019-2039			13%	6%	6%	2%	9%	4%

Table 3-4 2039 Total growth scenario comparisons

6.1.14 To enable comparison of the Do Minimum (without the Local Plan) scenario and Do Something (with Local Plan) scenario, a similar analysis has been undertaken for the total households and jobs growth figures using NTEM version 8.0 in Table 6-1.

Table 6-1: Total HH & Jobs Growth Local Plan (Pre-Covid19) and NTEM 8 Comparisons

Hastings	2019 NTEM 8		2040 NTEM 8		Do Minimum (without LP)		Do Something (with LP)	
	HHs	Jobs	HHs	Jobs	HHs	Jobs	HHs	Jobs
Total Figures	42,933	43,254	44,286	46,631	46,501	44,474	48,011	45,308
Absolute change 2019-2040	-	-	1,353	3,377	2,606*	1,083*	4,116*	1,917*
% change 2019-2040	-	-	3%	8%	6%*	2%*	9%*	4%*

*Values sourced from Figure 6-1 , and they are not comparison against NTEM 8, 2019 metrics.

6.1.4 Comparing the NTEM version 8 totals against the Hastings Forecasting Local Plan development scenarios shows that DS scenario has total housing growth levels greater than that of NTEM version 8 while total jobs growth is below the levels of NTEM version 8.

6.1.5 The DM development scenario shows a similar pattern.

7

Conclusion

7 Conclusion

7.1.1 The comparisons between the Pre-COVID19 and Post-COVID19 transport models input, and output data undertaken show that there are minor differences between the scenarios.

7.1.2 In instances where there are greater differences in traffic flow, and delays, the changes are localised and are not shown to be materially different in scale than what was assessed in the previous Local Plan work.

7.1.3 The NTEM version 8 and NTEM version 7.2 comparison in Table 4-1 shows that households growth across Hastings Borough will be lower by 77% (-4,456 households) in NTEM 8 compared to NTEM 7.2, the version used in the Local Plan modelling work. The Local Plan work is forecasting more trips which is a 'worst-case scenario'. The jobs growth increase is around 14% which accounts for just over 415 jobs within Hastings Borough.

7.1.4 The key conclusion reached within this comparison report is that the work undertaken to date appears to be robust enough to support the submission version of the Hastings Local Plan.

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