

TECHNICAL NOTE



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Land to the East of Castle Avenue

Job Number: J323916

Date: 22 February 2019

Client: Persimmon Homes (South Coast)

Prepared By: COR

Approved By: CH

Modelling of the A27 Roundabouts

1 Overview

- 1.1 This Technical Note (TN) has been prepared by mode transport planning (mode) on behalf of Persimmon Homes (South Coast). This TN provides further detail on the potential impact of development traffic from the proposed residential development at Land to the East of Castle Avenue on the A27 Emsworth Road / Havant Road roundabouts and the adjacent Emsworth Road / Castle Avenue T junction.
- 1.2 A planning application for the proposed 69-unit residential scheme at Land to the East of Castle Avenue is currently with Havant Borough Council (HBC) for determination, planning reference APP/18/01033. Included with the submitted documentation was a Transport Assessment (TA) which considered the transport impact of the proposed development on the local highway network.
- 1.3 The TA assessed the impact of the development on the A27 Emsworth Road / Havant Road roundabouts to be negligible, due to the low number of additional vehicle trips and the nature of the observed queuing on approach to the Emsworth Road roundabout. In the AM peak (08:00-09:00) an additional 37 two-way trips are predicted at the roundabout. In the PM (17:00-18:00) peak 34 additional two-way trips are predicted. Analysis of observed queueing on the Emsworth Road approach arm suggested up to 2 additional vehicles could join the queue. Considering the queue survey showed observed queues clearing within the surveyed 5-minute windows, a potential 2 additional vehicles is unlikely to impact the observed queues.
- 1.4 Although not raised in HBC's initial comments, further information has since been sought by Hampshire County Council (HCC) on the impact of the proposed development on the A27 Emsworth Road / Havant Road roundabouts and adjacent T junction. Of particular focus is the Emsworth Road approach arm and the impact of right turning vehicles into or from the Emsworth Road / Castle Avenue junction on this approach arm. This TN seeks to address HCC's request for further information.

2 Background to the Junction Model

- 2.1 The two A27 roundabouts and the Emsworth Road / Castle Avenue T junction are three separate junctions in their own right. Nevertheless, due to their close proximity to each other vehicle movements at one can affect the other. To model the interaction between the junctions a linked junction model using lane

simulation has been created. This 3-junction linked model enables the assessment of Castle Avenue development traffic on the potential queueing and delay between the 3 junctions. The linking of junctions and lane simulation within the model is similar to the assessment process used to assess the impact of development traffic (and mitigation measures) for a separate residential development to the east of the A27 which also impacts the A27 roundabouts. This consented development to the east of the A27 is for 148 residential units and is known as Land North of Havant Road (application ref: App/16/00774).

- 2.2 As part of the Land North of Havant Road planning consent, the development proposed off-site highway mitigation works on the local highway including at the A27 roundabouts. A model of the mitigation works at the roundabouts has been provided in the Addendum Transport Assessment (March 2017) produced by Paul Basham Associates. Mitigation measures for the A27 junctions are principally focused at the Havant Road roundabout although the measures will also affect the operation of the Emsworth Road roundabout. As a consequence, and at the request of HCC, the Land North of Havant Road mitigation model has been built as a linked junction model using Junctions 9 software. Lane simulation had also been utilised in the mitigation model.
- 2.3 The 3-junction linked model prepared for this TN incorporates the mitigation measures from the Land North of Havant Road application in addition to testing potential mitigation measures to the Emsworth Road approach arm and T junction. Further details are provided in [Section 4](#).

3 Background Future Growth

- 3.1 In its request for further information, HCC noted the impact of development traffic from the Castle Avenue scheme should be considered in light of future growth and emerging allocations within HBC's Local Plan. The emerging Local Plan includes potential site allocations in the surrounding area for approximately 2,400 additional residential units (including the Castle Avenue development) by 2036. Flows within the Land North of Havant Road 2026 future year mitigation model includes background TEMPRO growth rates which assume approximately 4,006 additional households up to 2026 within the Havant borough.
- 3.2 Not all of the 2,400 residential units will be allocated or indeed built by 2026 therefore, the estimated 4,006 households assumed for in the 2026 model is considered to provide a robust assessment of future growth and emerging allocations.
- 3.3 A 'without development' and a 'with development' scenario have been tested within the 3-junction linked model for both the AM and PM peak. The 'without development' scenario takes the 2026 future year flows from the Land North of Havant Road mitigation model and removes the Castle Avenue development flows from the appropriate arms. Through flows at the T junction are taken from the entry and exit flows at the Emsworth Road roundabout (adjusted for development traffic). The 'with development' scenario flows are the 2026 future year flows, which contain within it the Castle Avenue development flows. As noted above, growth applied to the 2026 future year flows had assumed the forecasted growth within Havant borough.

4 Junction Assessments

- 4.1 Development traffic from the Castle Avenue application has been distributed on the local highway network as detailed in the submitted TA. Development traffic accessing the A27 or east towards Emsworth is distributed onto Emsworth Road at the Emsworth Road / Castle Avenue T junction. There are other possible routes (avoiding Castle Avenue) to Emsworth Road for development traffic also available in the locality. In post application discussions with the HCC, potential mitigation measures on the Emsworth Road approach arm were discussed, including ones suggested by Paul Basham Associates in the context of the Land North of Havant Road consented scheme.
- 4.2 To fully test the Castle Avenue development traffic impact, consider the mitigation measures consented and also those suggested, 4 options have been tested. These are as follows:
- Option 1 Do Nothing – Models the 3 linked junctions, allowing all movements at the T junction and includes the committed Land North of Havant Road application mitigation measures at the A27 roundabouts;
 - Option 2 Increase Flare Length – Similar to option 1 but offers an improved flare length of 28m at the Emsworth Road approach arm (as per a sketched scheme provided by Paul Bas);
 - Option 3 Remove Right Turn – This option removes the right turn into / out of Castle Avenue onto Emsworth Road but keeps the increased flare length from Option 2;
 - Option 4 Dual Lane – This option provides two lanes on the Emsworth Road approach arm and removes any movements into or out of Castle Avenue (the T junction is effectively stopped-up).
- 4.3 The without and with development scenarios have been tested for each of the four options during the AM (08:00-09:00) and PM (17:00-18:00) peak hour periods. The Junctions 9 output files are contained in [Appendix A - D](#) respectively.
- 4.4 The Option 1 model indicates the A27 roundabouts will generally operate well in either scenario. The inclusion of development flows adds up to 3 additional vehicles to the model queue on certain arms, although the T junction will experience congestion in either scenario, particularly for exiting traffic on Castle Avenue.
- 4.5 The without development scenario for Options 2 and 3 show similar results to Option 1 for the two roundabouts. The addition of the extended flare results in improvements at the T junction. With the addition of development flows, modelled queues rise by up to 4 vehicles and up to 20 seconds on certain arms.
- 4.6 Option 1 and 2 include right turns into and from Castle Avenue onto Emsworth Road. The Council noted in post application discussions that these movements could lead to a potential safety hazard for traffic coming off the A27 Emsworth Road roundabout, if right turns were to queue back onto the roundabout exit. The modelled queues for option 1 and 2 show less than 1 vehicle queueing to undertake this manoeuvre.
- 4.7 Option 4 which removes all movements at the T junction and duals the Emsworth Road approach arm has similar results to the other options. When the additional Castle Avenue development traffic is modelled,

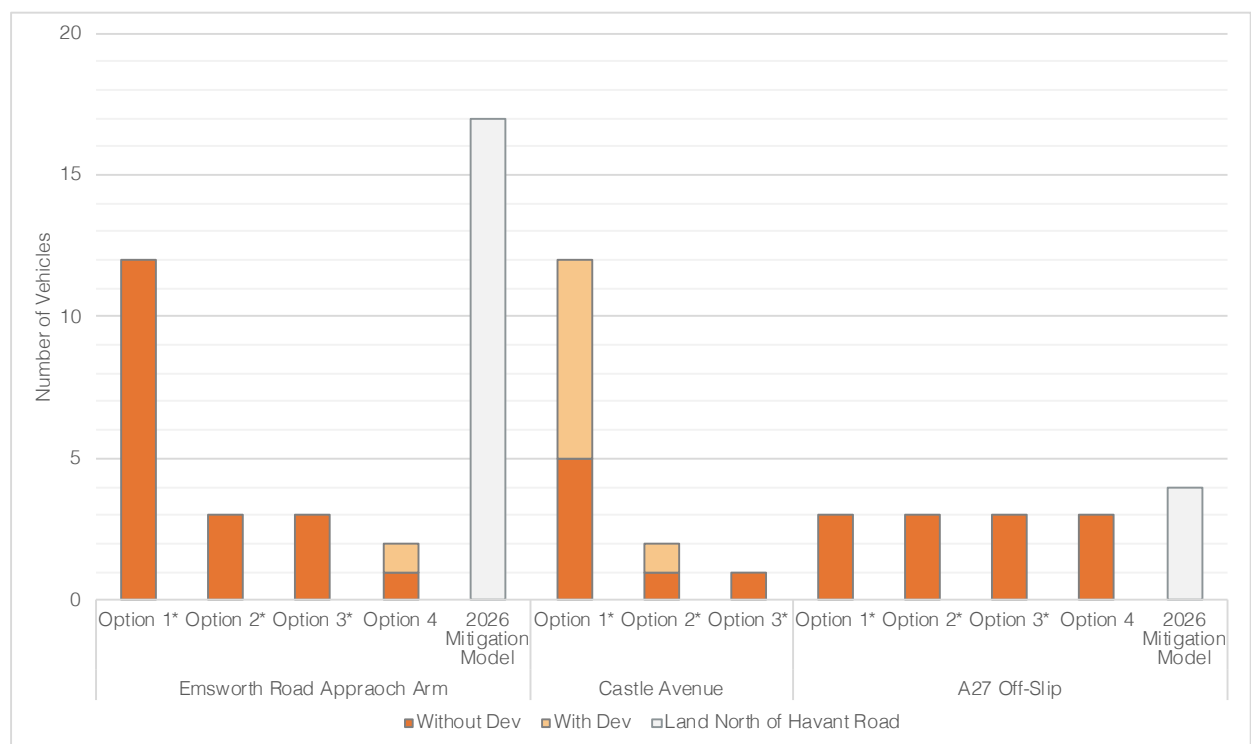
the greatest impact is noted on the A27 Off-Slip with an increase of 4 vehicles queueing and an additional 8 second delay.

- 4.8 On-going discussions with HCC have noted particular attention to the potential impact of development traffic on the Emsworth Road / Castle Avenue junction and the Emsworth Road approach arm. Further analysis is provided of these particular junction arms.

5 Detailed Analysis of Relevant Arms

- 5.1 The modelling results find no relevant changes to most arms of the linked arrangement, beyond the northern of the A27 roundabouts where this TN and assessment has focused. Detailed analysis of queuing and delay of the relevant Emsworth Road, A27 off-slip and Castle Avenue approaches has been undertaken further on this basis.
- 5.2 **Figure 5.1** illustrates the modelled queues for the Emsworth Road Approach arm, Castle Avenue and the A27 Off-Slip (Emsworth Road roundabout) for the without and with development scenarios for the four options during the AM peak. The figure also indicates the equivalent modelled queue from the Land North of Havant Road mitigation model. **Figure 5.2** illustrates the PM peaks.

Figure 5.1 – AM Peak Modelled Queues (Vehicles) for Options 1 to 4

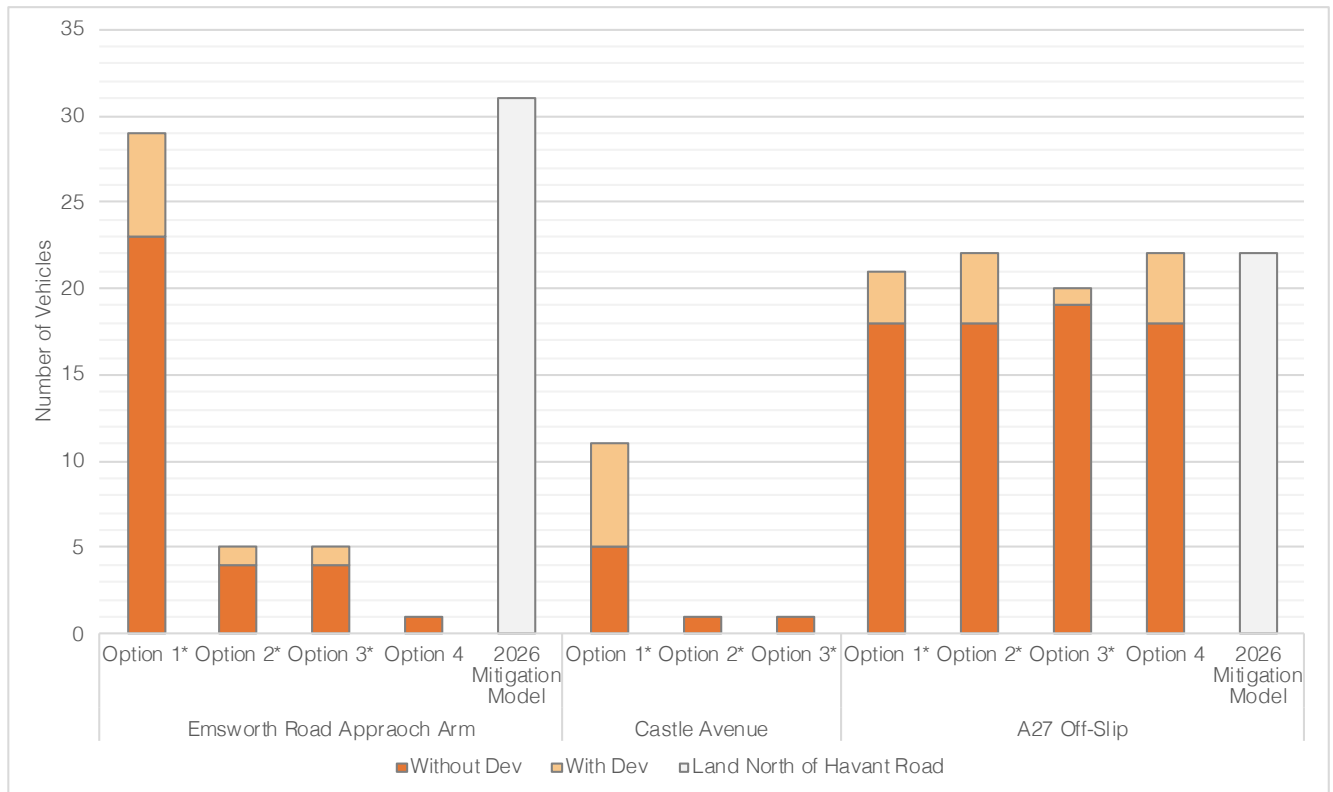


*Emsworth Road Approach Arm combined queues of J1 arm 4 and J3 arm A.

- 5.3 **Figure 5.1** illustrates there is little difference in the modelled queues when development is added between options 2, 3 and 4 which model the different potential mitigation measures on Emsworth Road. The results

from Option 1 show that if no mitigation is included on Emsworth Road the results are still below those of the Land North of Havant Road mitigation model.

Figure 5.2 – PM Peak Modelled Queues (Vehicles) for Options 1 to 4



*Emsworth Road Approach Arm combined queues of J1 arm 4 and J3 arm A.

5.4 Similar to the AM peak, **Figure 5.2** illustrates that in the PM peak with the addition of development flows there is little difference in results between options 2, 3 and 4. In the with development scenario, Option 2 and 3 add one additional vehicle to the queue on Emsworth Road Approach arm and between 3 to 4 vehicles to the queue on the A27 Off-Slip. In the majority of cases, the modelled queues are less than those of the Land North of Havant Road mitigation model.

5.5 **Figure 5.3** and **Figure 5.4** illustrate modelled delay in seconds for the AM and PM peaks respectively.

Figure 5.3 – AM Peak Modelled Delay (Seconds) for Options 1 to 4

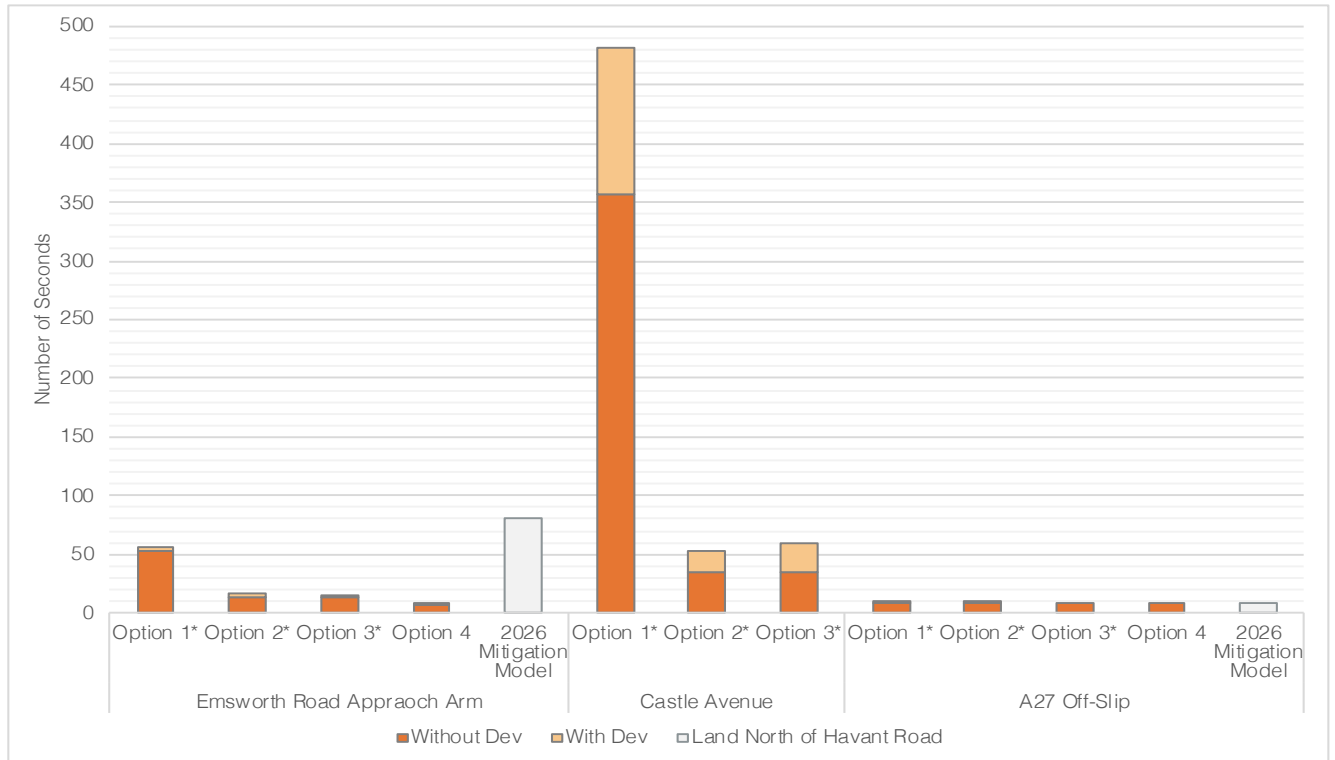
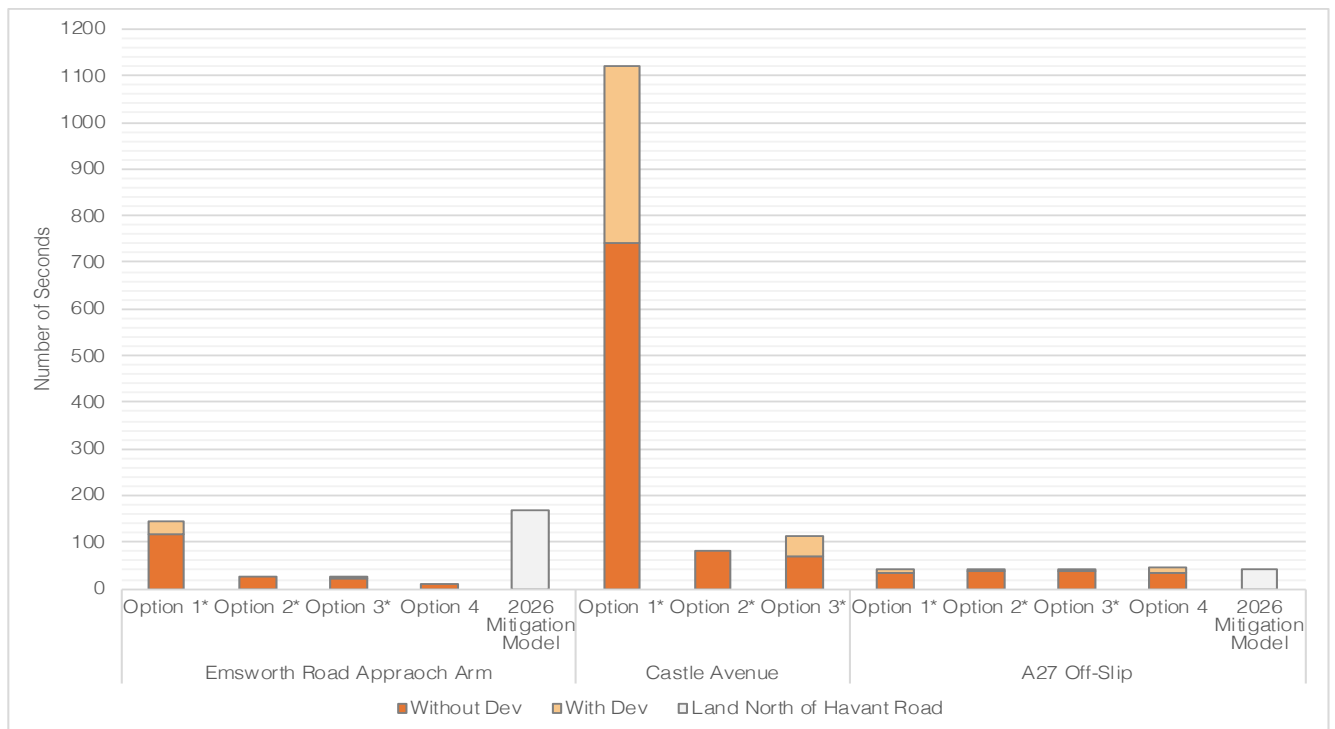


Figure 5.4 – PM Peak Modelled Delay (Seconds) for Options 1 to 4



*Emsworth Road Approach Arm combined queues of J1 arm 4 and J3 arm A, both figures.

- 5.6 **Figures 5.3** and **5.4** indicate modelled delays are similar for the without and with development scenarios in either peak with the exception of Castle Avenue in Option 1. In the AM peak generally speaking the model indicates a delay of a minute or less. In the PM the delay increases slightly to just over 2 minutes. In the AM and PM peak, modelled delays are similar to those of the Land North of Havant Lane mitigation model.
- 5.7 The model indicates Castle Avenue experiences congestion under Option 1 in either peak. With the addition of development flows, the AM peak delay on Castle Avenue increases by 2 minutes to 8 minutes compared to the without development scenario. In the PM, the delay increases by 6 minutes to 19 minutes compared to the without development scenario.
- 5.8 These results should be considered as a very worst case and unlikely to actually be this severe in reality. The linked junction model includes a substantial amount of background growth (double the standard 5 years background growth) and does not account for driver behaviour at the junction. As noted in the TA, the observed queue on the Emsworth Road Approach Arm is a rolling queue. Drivers are likely to leave a gap at the junction bellmouth to let drivers exit/entre Emsworth Road. In addition, drivers have more than one option avoiding Castle Avenue to access Emsworth Road.
- 5.9 The assessment has shown when the Castle Avenue development traffic is modelled at the A27 roundabouts and the adjacent T junction the impact of the additional movements is negligible. Overall the A27 roundabouts generally work well with the addition of development traffic in the AM and PM peak period for the four modelled options. Option 1 shows localised congestion at the T junction however, the model result are a worst case. The removal of the right turn into or out of Castle Avenue (Option 3 or 4) does not offer a substantial improvement in results over Option 2.

6 Summary and Conclusion

- 6.1 This TN has been prepared by mode on behalf of Persimmon Homes (South Coast) to address a request for further information on the impact of the development traffic from Land East of Castle Avenue development onto the A27 Emsworth Road / Havant Road roundabouts and adjacent Emsworth Road / Castle Avenue T junction.
- 6.2 A future year assessment of the junctions has been undertaken. The 2026 future year accounts for a substantial level of background growth including the Castle Avenue development itself. Mitigation measures from the Land at Havant Road application planned for the A27 roundabouts have been incorporated into the 3-junction linked model prepared for this TN.
- 6.3 The assessment has considered four possible options, Option 1 a do-nothing option and 3 possible mitigation options centred around the Emsworth Road approach arm and the adjacent T junction. The mitigation options had been selected following discussion with HCC.
- 6.4 The modelling has shown that overall no one option offers a significant improvement over another option. Option 1 shows the T junction could be expected to experience congestion in the future year. However, this is more likely due to the queue of vehicles on the Emsworth Road approach arm than the capacity of the T junction itself. Option 2 which increases the flare length on the Emsworth Road Approach Arm, reduces the impact on queueing and delay at Castle Avenue and the approach arm. In comparison,

Options 3 and 4 which remove the right turn into and out of Castle Avenue among other measures, do not significantly improve the modelling results over option 2.

- 6.5 Given the information above, it is considered the Castle Avenue development traffic has a negligible impact on the A27 roundabouts.
- 6.6 It is nevertheless recognised that in view of more strategic Local Plan mitigation proposals in Havant, a proportionate contribution towards an improvement on the Emsworth Road arm of the A27 roundabout (which may include a change to Castle Avenue) could reasonably be asked from HCC.
- 6.7 Given the Option 2 for an increased flare length on the Emsworth Road arm, alone provides significant improvement to forecast queuing and delay on both this arm and the Castle Avenue arm, it is suggested that should a contribution be sought it is in proportion to works required for the scope of such an improvement, rather than the more significant works required for Options 3 and particular 4.

Appendix A – Option 1 Junctions 9 Output

Junctions 9			
ARCADY 9 - Roundabout Module PICADY 9 - Priority Intersection Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk			
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename: Base A27 2026 T Jcn.j9

Path: D:\Dropbox (mode)\Project\Reading\1. Projects\J323916 Persimmon Havant\4. Data\Junction Models\Feb '19\3 Jcns Linked

Report generation date: 20/02/2019 08:43:11

- »2026 Selangor Ave less CA Dev, AM
- »2026 Selangor Ave less CA Dev, PM
- »2026 Selangor Ave (inc. CA Dev), AM
- »2026 Selangor Ave (inc. CA Dev), PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
[Lane Simulation] - 2026 Selangor Ave less CA Dev								
1 - A27 Emsworth Road - 2 - Emsworth Road (S)	0.5	5.66		A	0.6	5.64		A
1 - A27 Emsworth Road - 3 - A27 Off-Slip	3.0	8.31		A	18.4	34.16		D
1 - A27 Emsworth Road - 4 - Emsworth Road	2.7	13.84		B	2.9	18.82		C
2 - A27 / Church Lane - 1 - A27 Off-Slip	0.1	4.81		A	0.3	6.52		A
2 - A27 / Church Lane - 2 - Havant Road	9.0	22.24		C	2.2	6.57		A
2 - A27 / Church Lane - 3 - Church Lane	0.0	0.00		A	0.0	0.00		A
2 - A27 / Church Lane - 5 - Emsworth Road	3.6	8.67		A	5.2	12.00		B
3 - Castle Ave - A - Emsworth Road	8.6	39.35		E	19.5	99.63		F
3 - Castle Ave - B - Castle Ave	5.4	356.94		F	5.3	743.06		F
3 - Castle Ave - C - Emsworth Road (S)	0.0	0.05		A	0.0	0.09		A
[Lane Simulation] - 2026 Selangor Ave (inc. CA Dev)								
1 - A27 Emsworth Road - 2 - Emsworth Road (S)	0.4	5.55		A	0.6	5.54		A
1 - A27 Emsworth Road - 3 - A27 Off-Slip	3.4	8.52		A	20.5	41.27		E
1 - A27 Emsworth Road - 4 - Emsworth Road	2.8	13.93		B	3.0	19.21		C
2 - A27 / Church Lane - 1 - A27 Off-Slip	0.1	4.95		A	0.3	6.95		A
2 - A27 / Church Lane - 2 - Havant Road	12.1	26.19		D	1.8	6.65		A
2 - A27 / Church Lane - 3 - Church Lane	0.0	0.00		A	0.0	0.00		A
2 - A27 / Church Lane - 5 - Emsworth Road	3.7	9.39		A	5.5	11.22		B
3 - Castle Ave - A - Emsworth Road	9.1	41.66		E	25.7	125.62		F
3 - Castle Ave - B - Castle Ave	11.7	481.56		F	11.4	1121.13		F
3 - Castle Ave - C - Emsworth Road (S)	0.0	0.14		A	0.1	0.31		A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	15/02/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-CE95GQ\IModelT
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			1397494162	262	84.56

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Selangor Ave less CA Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Selangor Ave less CA Dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Selangor Ave (inc. CA Dev)	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Selangor Ave (inc. CA Dev)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AL	✓	✓	100.000	100.000

2026 Selangor Ave less CA Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	3 - Castle Ave - C - Emsworth Road (S) - Lane level 1 - Lane 1	Blocking back into Junction 3 may occur for some time segments due to queued vehicles trying to exit on Arm C. Treat capacities at downstream junctions with caution.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	9.67	A
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	15.19	C
3	Castle Ave	T-Junction	Two-way			31.17	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description	Arm type
1 - A27 Emsworth Road	1	A27 On Slip		
	2	Emsworth Road (S)		
	3	A27 Off-Slip		
	4	Emsworth Road		
2 - A27 / Church Lane	1	A27 Off-Slip		
	2	Havant Road		
	3	Church Lane		
	4	A27 On-Slip		
	5	Emsworth Road		
3 - Castle Ave	A	Emsworth Road		Major
	B	Castle Ave		Minor
	C	Emsworth Road (S)		Major

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 Emsworth Road	1 - A27 On Slip							✓
	2 - Emsworth Road (S)	3.70	3.70	0.0	12.2	35.0	53.0	
	3 - A27 Off-Slip	7.30	7.30	0.0	24.3	35.0	49.0	
	4 - Emsworth Road	4.17	5.20	0.5	23.6	35.0	46.0	
2 - A27 / Church Lane	1 - A27 Off-Slip	6.08	6.08	0.0	19.0	40.0	27.1	
	2 - Havant Road	6.00	7.00	24.0	13.0	40.0	26.5	
	3 - Church Lane	3.14	6.18	4.0	12.0	40.0	46.0	
	4 - A27 On-Slip							✓
	5 - Emsworth Road	6.00	8.00	12.0	15.0	40.0	48.9	

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
3 - Castle Ave	C - Emsworth Road (S)	9.20		✓	3.00	80.0	✓	2.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Junction	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
3 - Castle Ave	B - Castle Ave	One lane	3.10	25	55

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1 - A27 Emsworth Road	1 - A27 On Slip		
	2 - Emsworth Road (S)	0.475	997
	3 - A27 Off-Slip	0.712	2085
	4 - Emsworth Road	0.544	1242
2 - A27 / Church Lane	1 - A27 Off-Slip	0.675	1856
	2 - Havant Road	0.709	2056
	3 - Church Lane	0.498	1112
	4 - A27 On-Slip		
	5 - Emsworth Road	0.683	2032

The slope and intercept shown above include any corrections and adjustments.

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
3	B-A	518	0.081	0.205	0.129	0.293
3	B-C	665	0.088	0.222	-	-
3	C-B	674	0.225	0.225	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Arm Capacity Adjustments

Junction	Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
1 - A27 Emsworth Road	3 - A27 Off-Slip	Direct		-7
	4 - Emsworth Road	Direct		6

Lane Simulation: Arm options

Junction	Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A27 Emsworth Road	1 - A27 On Slip	Evenly split	10.00
	2 - Emsworth Road (S)	Evenly split	10.00
	3 - A27 Off-Slip	Evenly split	10.00
	4 - Emsworth Road	Evenly split	10.00
2 - A27 / Church Lane	1 - A27 Off-Slip	Evenly split	10.00
	2 - Havant Road	Evenly split	10.00
	3 - Church Lane	Evenly split	10.00
	4 - A27 On-Slip	Evenly split	10.00
	5 - Emsworth Road	Evenly split	10.00
3 - Castle Ave	A - Emsworth Road		
	B - Castle Ave		
	C - Emsworth Road (S)		

Lanes

Junction	Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	✓	7.00		0	99999	
	3 - A27 Off-Slip	1	1	1, 2, 4	✓	58.00		0	99999	
			2	1, 2, 4	✓	58.00		0	99999	
		4 - Emsworth Road	1	1	(1, 2, 3, 4)		Infinity			
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5		Infinity		0	99999	
	2 - Havant Road	1	1	2, 3, 4, 5	✓	10.43		0	99999	
			2	2, 3, 4, 5	✓	9.57		0	99999	
		2	1	(1, 2, 3, 4, 5)		Infinity				
	3 - Church Lane	1	1	2, 3, 4, 5		Infinity		0	99999	
	5 - Emsworth Road	1	1	2, 3, 4, 5	✓	13.00		0	99999	
2			2, 3, 4, 5	✓	13.00		0	99999		
3 - Castle Ave	A - Emsworth Road	1	1	B, C		Infinity		0	99999	
	B - Castle Ave	1	1	A, C		Infinity		0	99999	
	C - Emsworth Road (S)	1	1	A	✓	2.00		0	99999	
			2	B	✓	2.00		0	99999	
		2	1	(A, B)	✓	4.00				

Entry Lane slope and intercept

Junction	Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	0.475	997
	3 - A27 Off-Slip	1	1	0.356	1043
			2	0.356	1043
	4 - Emsworth Road	1	1	0.544	1242
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	0.675	1856
	2 - Havant Road	1	1	0.354	1028
			2	0.354	1028
	3 - Church Lane	1	1	0.498	1112
	5 - Emsworth Road	1	1	0.342	1016
			2	0.342	1016

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm			
				A27 On Slip	Emsworth Road (S)	A27 Off-Slip	Emsworth Road
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	✓	✓		✓
	3 - A27 Off-Slip	1	1	✓	✓		✓
			2	✓	✓		✓
	4 - Emsworth Road	1	1	✓	✓	✓	✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm				
				A27 Off-Slip	Havant Road	Church Lane	A27 On-Slip	Emsworth Road
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1		✓	✓	✓	✓
	2 - Havant Road	1	1		✓	✓	✓	✓
			2		✓	✓	✓	✓
	2	1	✓	✓	✓	✓	✓	✓
	3 - Church Lane	1	1		✓	✓	✓	✓
	5 - Emsworth Road	1	1		✓	✓	✓	✓
			2		✓	✓	✓	✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm		
				Emsworth Road	Castle Ave	Emsworth Road (S)
3 - Castle Ave	A - Emsworth Road	1	1		✓	✓
	B - Castle Ave	1	1	✓		✓
	C - Emsworth Road (S)	1	1	✓		
			2		✓	
		2	1	✓	✓	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Selangor Ave less CA Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1100	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	77	100.000
	2 - Havant Road		ONE HOUR	✓	1351	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	615	100.000
	B - Castle Ave		ONE HOUR	✓	40	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	30	0	0	291
	3 - A27 Off-Slip	2	770	0	328
	4 - Emsworth Road	48	562	0	1

Proportions

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	E
From	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.09	0.00	0.00	
	3 - A27 Off-Slip	0.00	0.70	0.00	
	4 - Emsworth Road	0.08	0.92	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	34	0	2	41
	2 - Havant Road	0	2	1	1107	241
	3 - Church Lane	0	0	0	3	1
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	942	4	378	0

Proportions

	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
From	1 - A27 Off-Slip	0.00	0.44	0.00	0.03
	2 - Havant Road	0.00	0.00	0.00	0.82
	3 - Church Lane	0.00	0.00	0.00	0.75
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.71	0.00	0.29

Demand (Veh/hr)

3 -
Castle
Ave

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0	5	610
	B - Castle Ave	13	0	27
	C - Emsworth Road (S)	620	4	0

Proportions

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0.00	0.01	0.99
	B - Castle Ave	0.33	0.00	0.68
	C - Emsworth Road (S)	0.99	0.01	0.00

Vehicle Mix

Heavy Vehicle Percentages

1 - A27
Emsworth
Road

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	5	0	0	2
	3 - A27 Off-Slip	50	4	0	3
	4 - Emsworth Road	4	3	0	0

Average PCU Per Veh

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	1.050	1.000	1.000	
	3 - A27 Off-Slip	1.500	1.040	1.000	
	4 - Emsworth Road	1.040	1.030	1.000	

Heavy Vehicle Percentages

2 -
A27 /
Church
Lane

	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	0	0	0	0
	2 - Havant Road	0	0	0	3	2
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	2	0	2	0

Average PCU Per Veh

	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
From	1 - A27 Off-Slip	1.000	1.000	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.030
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.020	1.000	1.020

Heavy Vehicle Percentages

3 -
Castle
Ave

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	247
		3 - A27 Off-Slip	828	859
		4 - Emsworth Road	460	474
	2 - A27 / Church Lane	1 - A27 Off-Slip	58	58
		2 - Havant Road	1017	1046
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	997	1017
		A - Emsworth Road	463	463
		B - Castle Ave	30	30
		C - Emsworth Road (S)	470	470
08:00-08:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	295
		3 - A27 Off-Slip	989	1026
		4 - Emsworth Road	549	566
	2 - A27 / Church Lane	1 - A27 Off-Slip	69	69
		2 - Havant Road	1215	1249
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1190	1214
	3 - Castle Ave	A - Emsworth Road	553	553
		B - Castle Ave	36	36
		C - Emsworth Road (S)	561	561
08:15-08:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	353	361
		3 - A27 Off-Slip	1211	1257
		4 - Emsworth Road	673	693
	2 - A27 / Church Lane	1 - A27 Off-Slip	85	85
		2 - Havant Road	1487	1529
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1458	1487
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	44	44
		C - Emsworth Road (S)	687	687
08:30-08:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	353	361
		3 - A27 Off-Slip	1211	1257
		4 - Emsworth Road	673	693
	2 - A27 / Church Lane	1 - A27 Off-Slip	85	85
		2 - Havant Road	1487	1529
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1458	1487
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	44	44
		C - Emsworth Road (S)	687	687
08:45-09:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	295
		3 - A27 Off-Slip	989	1026
		4 - Emsworth Road	549	566
	2 - A27 / Church Lane	1 - A27 Off-Slip	69	69
		2 - Havant Road	1215	1249
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1190	1214
	3 - Castle Ave	A - Emsworth Road	553	553
		B - Castle Ave	36	36
		C - Emsworth Road (S)	561	561
	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	247
		3 - A27 Off-Slip	828	859
		4 - Emsworth Road	460	474
		1 - A27 Off-Slip	58	58

09:00-09:15	2 - A27 / Church Lane	2 - Havant Road	1017	1046
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	997	1017
	3 - Castle Ave	A - Emsworth Road	463	463
		B - Castle Ave	30	30
		C - Emsworth Road (S)	470	470

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.66	0.5	A	257	385
	3 - A27 Off-Slip	8.31	3.0	A	1013	1519
	4 - Emsworth Road	13.84	2.7	B	578	866
2 - A27 / Church Lane	1 - A27 Off-Slip	4.81	0.1	A	71	107
	2 - Havant Road	22.24	9.0	C	1239	1858
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	8.67	3.6	A	1239	1858
3 - Castle Ave	A - Emsworth Road	39.35	8.6	E	563	845
	B - Castle Ave	356.94	5.4	F	37	56
	C - Emsworth Road (S)	0.05	0.0	A	536	803

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			59				
	2 - Emsworth Road (S)	213	53	0.41	213	219	1020	0.0	0.3	4.771	A
	3 - A27 Off-Slip	832	208	213	828	857	0	0.0	1.5	5.240	A
	4 - Emsworth Road	475	119	605	474	487	437	0.0	1.1	7.363	A
2 - A27 / Church Lane	1 - A27 Off-Slip	55	14	1022	55	60	0	0.0	0.0	3.231	A
	2 - Havant Road	1016	254	329	1016	1042	748	0.0	1.8	6.592	A
	3 - Church Lane	0	0	1340	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1126				
	5 - Emsworth Road	1020	255	1	1021	1028	213	0.0	1.6	5.251	A
3 - Castle Ave	A - Emsworth Road	459	115		459	460	443	0.0	0.0	0.258	A
	B - Castle Ave	31	8		31	33	7	0.0	0.1	9.010	A
	C - Emsworth Road (S)	437	109		437	440	475	0.0	0.0	0.044	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			71				
	2 - Emsworth Road (S)	253	63	0.96	252	256	1212	0.3	0.4	5.009	A
	3 - A27 Off-Slip	980	245	253	980	1021	0	1.5	1.7	6.019	A
	4 - Emsworth Road	573	143	710	574	584	523	1.1	1.4	9.223	A
2 - A27 / Church Lane	1 - A27 Off-Slip	71	18	1213	71	68	0	0.0	0.1	3.754	A
	2 - Havant Road	1214	303	387	1211	1238	897	1.8	3.1	8.700	A
	3 - Church Lane	0	0	1594	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1339				
	5 - Emsworth Road	1212	303	2	1211	1231	253	1.6	2.2	6.135	A
3 - Castle Ave	A - Emsworth Road	550	138		552	550	532	0.0	0.2	1.719	A
	B - Castle Ave	36	9		36	35	7	0.1	0.2	16.089	C
	C - Emsworth Road (S)	523	131		523	522	573	0.0	0.0	0.039	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			84				
	2 - Emsworth Road (S)	303	76	0.96	302	311	1471	0.4	0.5	5.374	A
	3 - A27 Off-Slip	1226	307	303	1223	1256	0	1.7	2.9	7.945	A
	4 - Emsworth Road	673	168	886	670	681	641	1.4	2.6	12.572	B
2 - A27 / Church Lane	1 - A27 Off-Slip	85	21	1472	85	82	0	0.1	0.1	4.604	A
	2 - Havant Road	1480	370	466	1473	1506	1091	3.1	8.9	18.595	C
	3 - Church Lane	0	0	1934	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1629				
	5 - Emsworth Road	1471	368	2	1470	1479	303	2.2	3.6	8.406	A
3 - Castle Ave	A - Emsworth Road	677	169		660	656	647	0.2	5.6	17.909	C
	B - Castle Ave	44	11		31	34	10	0.2	2.5	235.588	F
	C - Emsworth Road (S)	641	160		641	636	673	0.0	0.0	0.042	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			85				
	2 - Emsworth Road (S)	309	77	1	309	316	1482	0.5	0.5	5.663	A
	3 - A27 Off-Slip	1222	305	310	1220	1261	0	2.9	2.9	8.311	A
	4 - Emsworth Road	682	170	886	682	707	644	2.6	2.7	13.842	B
2 - A27 / Church Lane	1 - A27 Off-Slip	88	22	1482	88	86	0	0.1	0.1	4.811	A
	2 - Havant Road	1486	371	471	1492	1528	1099	8.9	8.8	22.243	C
	3 - Church Lane	0	0	1958	0	0	6	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1647				
	5 - Emsworth Road	1482	370	2	1480	1512	309	3.6	3.5	8.670	A
3 - Castle Ave	A - Emsworth Road	681	170		665	669	651	5.6	8.6	39.352	E
	B - Castle Ave	44	11		33	33	8	2.5	5.4	356.935	F
	C - Emsworth Road (S)	644	161		644	642	682	0.0	0.0	0.043	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			72				
	2 - Emsworth Road (S)	254	64	2	255	265	1224	0.5	0.3	4.959	A
	3 - A27 Off-Slip	989	247	256	988	1034	0	2.9	1.8	6.274	A
	4 - Emsworth Road	583	146	712	585	650	532	2.7	1.4	10.903	B
2 - A27 / Church Lane	1 - A27 Off-Slip	68	17	1227	68	70	0	0.1	0.1	4.239	A
	2 - Havant Road	1219	305	390	1222	1277	905	8.8	2.9	10.618	B
	3 - Church Lane	0	0	1608	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1352				
	5 - Emsworth Road	1224	306	2	1225	1308	254	3.5	2.0	6.800	A
3 - Castle Ave	A - Emsworth Road	550	137		555	586	543	8.6	0.2	12.098	B
	B - Castle Ave	35	9		45	55	9	5.4	0.7	88.340	F
	C - Emsworth Road (S)	532	133		532	535	583	0.0	0.0	0.048	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			59				
	2 - Emsworth Road (S)	210	52	1	210	218	1025	0.3	0.3	4.745	A
	3 - A27 Off-Slip	829	207	211	831	866	0	1.8	1.1	5.257	A
	4 - Emsworth Road	481	120	605	480	503	437	1.4	1.0	7.526	A
2 - A27 / Church Lane	1 - A27 Off-Slip	61	15	1029	61	59	0	0.1	0.1	3.373	A
	2 - Havant Road	1018	254	330	1018	1050	759	2.9	1.8	6.731	A
	3 - Church Lane	0	0	1344	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1132				
	5 - Emsworth Road	1025	256	2	1027	1056	210	2.0	1.5	5.361	A
3 - Castle Ave	A - Emsworth Road	463	116		463	465	444	0.2	0.1	0.412	A
	B - Castle Ave	33	8		32	35	7	0.7	0.1	9.579	A
	C - Emsworth Road (S)	437	109		437	442	480	0.0	0.0	0.033	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign leve serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	213	972	0.219	213	219	0.0	0.3	4.771	A
	3 - A27 Off-Slip	1	1	1, 2, 4	418	920	0.454	416	431	0.0	0.8	5.215	A
			2	1, 2, 4	414	923	0.448	413	426	0.0	0.7	5.266	A
		2	1	(1, 2, 3, 4)	832			832	863	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	475	877	0.541	474	487	0.0	1.1	7.363	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	55	1154	0.048	55	60	0.0	0.0	3.231	A
	2 - Havant Road	1	1	2, 3, 4, 5	511	886	0.576	511	523	0.0	0.9	6.547	A
			2	2, 3, 4, 5	505	886	0.569	505	519	0.0	0.9	6.636	A
		2	1	(1, 2, 3, 4, 5)	1016			1016	1049	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	429	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	511	997	0.513	511	513	0.0	0.8	5.279	A
			2	2, 3, 4, 5	509	999	0.510	510	515	0.0	0.8	5.223	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	459			459	460	0.0	0.0	0.258	A
	B - Castle Ave	1	1	A, C	31			31	33	0.0	0.1	9.010	A
	C - Emsworth Road (S)	1	1	A	433			433	437	0.0	0.0	0.000	A
			2	B	3			3	3	0.0	0.0	6.405	A
			2	1	(A, B)	437			437	440	0.0	0.0	0.000

08:00 - 08:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	253	975	0.260	252	256	0.3	0.4	5.009	
	3 - A27 Off-Slip	1	1	1, 2, 4	489	911	0.537	488	511	0.8	0.8	6.007	
			2	1, 2, 4	491	910	0.539	491	510	0.7	0.8	6.031	
			2	1	(1, 2, 3, 4)	980			980	1022	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	573	819	0.700	574	584	1.1	1.4	9.223	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	71	1021	0.069	71	68	0.0	0.1	3.754	
	2 - Havant Road	1	1	2, 3, 4, 5	607	865	0.702	606	620	0.9	1.6	8.666	
			2	2, 3, 4, 5	607	865	0.702	605	618	0.9	1.5	8.715	
		2	1	(1, 2, 3, 4, 5)	1214			1214	1243	0.0	0.0	0.008	
	3 - Church Lane	1	1	2, 3, 4, 5	0	299	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	611	996	0.613	611	618	0.8	1.1	6.103	
2			2, 3, 4, 5	601	995	0.604	600	613	0.8	1.1	6.167		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	550			552	550	0.0	0.2	1.719	
	B - Castle Ave	1	1	A, C	36			36	35	0.1	0.2	16.089	
	C - Emsworth Road (S)	1	1	A	520			520	519	0.0	0.0	0.000	
			2	B	3			3	3	0.0	0.0	6.413	
		2	1	(A, B)	523			523	522	0.0	0.0	0.000	

08:15 - 08:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	303	976	0.311	302	311	0.4	0.5	5.374	
	3 - A27 Off-Slip	1	1	1, 2, 4	618	893	0.693	617	630	0.8	1.4	7.912	
			2	1, 2, 4	608	891	0.682	606	626	0.8	1.5	7.978	
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1226			1226	1261	0.0	0.0	0.000	
			1	1, 2, 4	673	724	0.929	670	681	1.4	2.6	12.572	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	85	842	0.101	85	82	0.1	0.1	4.604	
	2 - Havant Road	1	1	2, 3, 4, 5	739	836	0.885	737	752	1.6	4.1	17.381	
			2	2, 3, 4, 5	740	836	0.885	737	753	1.5	3.9	16.821	
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1480			1479	1526	0.0	0.9	1.439	
			1	2, 3, 4, 5	0	125	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	739	995	0.742	739	741	1.1	1.7	8.408	
			2	2, 3, 4, 5	732	996	0.735	731	738	1.1	1.8	8.404	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	677			660	656	0.2	5.6	17.909	
	B - Castle Ave	1	1	A, C	44			31	34	0.2	2.5	235.588	
	C - Emsworth Road (S)	1	1	A	636			636	632	0.0	0.0	0.000	
			2	B	5			5	4	0.0	0.0	6.116	
		2	1	(A, B)	641			641	636	0.0	0.0	0.000	

08:30 - 08:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	309	975	0.316	309	316	0.5	0.5	5.663	
	3 - A27 Off-Slip	1	1	1, 2, 4	614	890	0.690	612	631	1.4	1.5	8.307	
			2	1, 2, 4	608	888	0.685	608	630	1.5	1.5	8.316	
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1222			1222	1261	0.0	0.0	0.000	
			1	1, 2, 4	682	724	0.943	682	707	2.6	2.7	13.842	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	88	837	0.106	88	86	0.1	0.1	4.811	
	2 - Havant Road	1	1	2, 3, 4, 5	738	835	0.885	741	760	4.1	4.0	20.379	
			2	2, 3, 4, 5	749	835	0.897	751	769	3.9	3.8	19.360	
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1486			1487	1528	0.9	1.0	2.379	
			1	2, 3, 4, 5	0	114	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	741	998	0.742	740	754	1.7	1.8	8.714	
			2	2, 3, 4, 5	741	996	0.744	740	758	1.8	1.8	8.626	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	681			665	669	5.6	8.6	39.352	
	B - Castle Ave	1	1	A, C	44			33	33	2.5	5.4	356.935	
	C - Emsworth Road (S)	1	1	A	640			640	638	0.0	0.0	0.000	
			2	B	4			4	4	0.0	0.0	7.138	
		2	1	(A, B)	644			644	642	0.0	0.0	0.000	

08:45 - 09:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	254	974	0.261	255	265	0.5	0.3	4.959	
	3 - A27 Off-Slip	1	1	1, 2, 4	496	908	0.546	495	519	1.5	0.9	6.250	
			2	1, 2, 4	493	906	0.544	492	515	1.5	0.9	6.299	
		2	1	(1, 2, 3, 4)	989			989	1029	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	583	820	0.710	585	650	2.7	1.4	10.903	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	68	1011	0.067	68	70	0.1	0.1	4.239	
	2 - Havant Road	1	1	2, 3, 4, 5	614	863	0.712	615	641	4.0	1.5	10.482	
			2	2, 3, 4, 5	605	861	0.702	608	636	3.8	1.4	10.428	
		2	1	(1, 2, 3, 4, 5)	1219			1219	1257	1.0	0.0	0.249	
	3 - Church Lane	1	1	2, 3, 4, 5	0	288	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	609	997	0.611	610	652	1.8	1.0	6.846	
			2	2, 3, 4, 5	614	995	0.618	615	656	1.8	1.0	6.754	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	550			555	586	8.6	0.2	12.098	
	B - Castle Ave	1	1	A, C	35			45	55	5.4	0.7	88.340	
	C - Emsworth Road (S)	1	1	A	528			528	531	0.0	0.0	0.000	
			2	B	4			4	4	0.0	0.0	7.310	
		2	1	(A, B)	532			532	535	0.0	0.0	0.000	

09:00 - 09:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	210	972	0.216	210	218	0.3	0.3	4.745	A
	3 - A27 Off-Slip	1	1	1, 2, 4	410	923	0.444	410	431	0.9	0.6	5.283	A
			2	1, 2, 4	418	923	0.453	421	435	0.9	0.5	5.232	A
		2	1	(1, 2, 3, 4)	829			829	863	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	481	878	0.547	480	503	1.4	1.0	7.526	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	61	1146	0.053	61	59	0.1	0.1	3.373	A
	2 - Havant Road	1	1	2, 3, 4, 5	513	883	0.581	514	528	1.5	0.9	6.678	A
			2	2, 3, 4, 5	505	881	0.573	505	522	1.4	1.0	6.783	A
		2	1	(1, 2, 3, 4, 5)	1018			1018	1045	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	425	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	515	994	0.518	516	530	1.0	0.8	5.354	A
			2	2, 3, 4, 5	510	994	0.513	511	526	1.0	0.8	5.368	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	463			463	465	0.2	0.1	0.412	A
	B - Castle Ave	1	1	A, C	33			32	35	0.7	0.1	9.579	A
	C - Emsworth Road (S)	1	1	A	434			434	439	0.0	0.0	0.000	A
			2	B	3			3	3	0.0	0.0	5.165	A
		2	1	(A, B)	437			437	442	0.0	0.0	0.000	A

2026 Selangor Ave less CA Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	3 - Castle Ave - C - Emsworth Road (S) - Lane level 1 - Lane 1	Blocking back into Junction 3 may occur for some time segments due to queued vehicles trying to exit on Arm C. Treat capacities at downstream junctions with caution.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	27.19	D
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	9.79	A
3	Castle Ave	T-Junction	Two-way			55.11	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026 Selangor Ave less CA Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1567	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	133	100.000
	2 - Havant Road		ONE HOUR	✓	915	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	534	100.000
	B - Castle Ave		ONE HOUR	✓	23	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	36	0	0	286
	3 - A27 Off-Slip	10	1101	0	456
	4 - Emsworth Road	75	446	0	1

Proportions

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	E
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.11	0.00	0.00	
	3 - A27 Off-Slip	0.01	0.70	0.00	
	4 - Emsworth Road	0.14	0.85	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	48	0	0	85
	2 - Havant Road	0	2	0	705	208
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1310	2	239	1

Proportions

	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
From	1 - A27 Off-Slip	0.00	0.36	0.00	0.00
	2 - Havant Road	0.00	0.00	0.00	0.77
	3 - Church Lane	0.20	0.20	0.20	0.20
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.84	0.00	0.15

Demand (Veh/hr)

3 - Castle Ave

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	11	523
	B - Castle Ave	6	0	17
	C - Emsworth Road (S)	739	9	0

Proportions

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0.00	0.02	0.98
	B - Castle Ave	0.26	0.00	0.74
	C - Emsworth Road (S)	0.99	0.01	0.00

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	4	0	0	2
	3 - A27 Off-Slip	0	1	0	1
	4 - Emsworth Road	0	2	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	1.040	1.000	1.000	1.000
	3 - A27 Off-Slip	1.000	1.010	1.000	1.000
	4 - Emsworth Road	1.000	1.020	1.000	1.000

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	3	0	0	4
	2 - Havant Road	0	0	0	2	3
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1	0	1	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.030	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.020
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.010	1.000	1.010

3 - Castle Ave

Heavy Vehicle Percentages

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	248
		3 - A27 Off-Slip	1180	1191
		4 - Emsworth Road	393	400
	2 - A27 / Church Lane	1 - A27 Off-Slip	100	104
		2 - Havant Road	689	704
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1168	1180
	3 - Castle Ave	A - Emsworth Road	402	402
		B - Castle Ave	17	17
		C - Emsworth Road (S)	563	563
17:00-17:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	296
		3 - A27 Off-Slip	1409	1423
		4 - Emsworth Road	469	477
	2 - A27 / Church Lane	1 - A27 Off-Slip	120	124
		2 - Havant Road	823	841
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	1395	1409
		A - Emsworth Road	480	480
		B - Castle Ave	21	21
		C - Emsworth Road (S)	672	672
17:15-17:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	355	362
		3 - A27 Off-Slip	1725	1742
		4 - Emsworth Road	575	585
	2 - A27 / Church Lane	1 - A27 Off-Slip	146	152
		2 - Havant Road	1007	1030
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1709	1726
	3 - Castle Ave	A - Emsworth Road	588	588
		B - Castle Ave	25	25
		C - Emsworth Road (S)	824	824
17:30-17:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	355	362
		3 - A27 Off-Slip	1725	1742
		4 - Emsworth Road	575	585
	2 - A27 / Church Lane	1 - A27 Off-Slip	146	152
		2 - Havant Road	1007	1030
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1709	1726
	3 - Castle Ave	A - Emsworth Road	588	588
		B - Castle Ave	25	25
		C - Emsworth Road (S)	824	824
17:45-18:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	296
		3 - A27 Off-Slip	1409	1423
		4 - Emsworth Road	469	477
	2 - A27 / Church Lane	1 - A27 Off-Slip	120	124
		2 - Havant Road	823	841
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1395	1409
	3 - Castle Ave	A - Emsworth Road	480	480
		B - Castle Ave	21	21
		C - Emsworth Road (S)	672	672
18:00-18:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	248
		3 - A27 Off-Slip	1180	1191
		4 - Emsworth Road	393	400
	2 - A27 / Church Lane	1 - A27 Off-Slip	100	104
		2 - Havant Road	689	704
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1168	1180
	3 - Castle Ave	A - Emsworth Road	402	402
		B - Castle Ave	17	17
		C - Emsworth Road (S)	563	563

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.64	0.6	A	271	407
	3 - A27 Off-Slip	34.16	18.4	D	1439	2159
	4 - Emsworth Road	18.82	2.9	C	488	732
2 - A27 / Church Lane	1 - A27 Off-Slip	6.52	0.3	A	121	182
	2 - Havant Road	6.57	2.2	A	841	1262
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	12.00	5.2	B	1423	2135
3 - Castle Ave	A - Emsworth Road	99.63	19.5	F	490	735
	B - Castle Ave	743.06	5.3	F	21	31
	C - Emsworth Road (S)	0.09	0.0	A	656	984

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			90				
	2 - Emsworth Road (S)	225	56	0.63	225	225	1183	0.0	0.3	4.725	A
	3 - A27 Off-Slip	1177	294	226	1178	1184	0	0.0	1.9	6.681	A
	4 - Emsworth Road	400	100	873	400	410	531	0.0	0.9	8.339	A
2 - A27 / Church Lane	1 - A27 Off-Slip	101	25	1182	101	105	0	0.0	0.1	3.759	A
	2 - Havant Road	692	173	249	693	702	1034	0.0	0.9	4.909	A
	3 - Church Lane	0	0	940	0	0	1	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			714				
	5 - Emsworth Road	1183	296	1	1181	1173	225	0.0	1.9	5.699	A
3 - Castle Ave	A - Emsworth Road	393	98		394	401	529	0.0	0.0	0.310	A
	B - Castle Ave	17	4		18	19	14	0.0	0.0	8.683	A
	C - Emsworth Road (S)	531	133		531	534	400	0.0	0.0	0.065	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			110				
	2 - Emsworth Road (S)	263	66	1	263	270	1400	0.3	0.3	5.120	A
	3 - A27 Off-Slip	1417	354	264	1412	1418	0	1.9	3.9	9.725	A
	4 - Emsworth Road	490	123	1023	488	483	653	0.9	1.8	11.454	B
2 - A27 / Church Lane	1 - A27 Off-Slip	116	29	1406	116	123	0	0.1	0.1	4.821	A
	2 - Havant Road	824	206	294	824	836	1229	0.9	1.3	5.324	A
	3 - Church Lane	0	0	1115	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			852				
	5 - Emsworth Road	1400	350	1	1405	1400	263	1.9	2.9	7.545	A
3 - Castle Ave	A - Emsworth Road	484	121		486	477	651	0.0	0.4	2.444	A
	B - Castle Ave	20	5		20	20	17	0.0	0.1	16.134	C
	C - Emsworth Road (S)	653	163		653	648	490	0.0	0.0	0.066	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			120				
	2 - Emsworth Road (S)	319	80	1	319	330	1662	0.3	0.6	5.642	A
	3 - A27 Off-Slip	1737	434	320	1720	1689	0	3.9	16.2	26.091	D
	4 - Emsworth Road	531	133	1255	529	538	786	1.8	2.8	16.740	C
2 - A27 / Church Lane	1 - A27 Off-Slip	145	36	1662	144	150	0	0.1	0.3	6.115	A
	2 - Havant Road	1011	253	349	1009	1032	1457	1.3	2.2	6.568	A
	3 - Church Lane	0	0	1355	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1034				
	5 - Emsworth Road	1662	415	2	1660	1638	319	2.9	5.1	10.602	B
3 - Castle Ave	A - Emsworth Road	583	146		537	540	780	0.4	10.1	34.419	D
	B - Castle Ave	26	6		14	15	21	0.1	2.0	535.586	F
	C - Emsworth Road (S)	786	196		786	770	531	0.0	0.0	0.082	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			127				
	2 - Emsworth Road (S)	332	83	1	331	330	1661	0.6	0.6	5.594	A
	3 - A27 Off-Slip	1725	431	332	1692	1725	0	16.2	18.4	34.159	D
	4 - Emsworth Road	552	138	1237	552	551	787	2.8	2.9	18.817	C
2 - A27 / Church Lane	1 - A27 Off-Slip	147	37	1667	147	149	0	0.3	0.3	6.516	A
	2 - Havant Road	1014	254	349	1015	1035	1464	2.2	1.8	6.559	A
	3 - Church Lane	0	0	1362	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1028				
	5 - Emsworth Road	1661	415	2	1664	1676	332	5.1	5.1	11.997	B
3 - Castle Ave	A - Emsworth Road	597	149		556	547	781	10.1	19.5	99.633	F
	B - Castle Ave	24	6		10	10	21	2.0	5.3	743.062	F
	C - Emsworth Road (S)	787	197		787	788	552	0.0	0.0	0.087	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			118				
	2 - Emsworth Road (S)	265	66	1	264	270	1455	0.6	0.4	5.023	A
	3 - A27 Off-Slip	1407	352	265	1406	1477	0	18.4	4.1	14.694	B
	4 - Emsworth Road	551	138	1022	553	575	649	2.9	2.1	15.499	C
2 - A27 / Church Lane	1 - A27 Off-Slip	118	30	1460	119	124	0	0.3	0.1	5.858	A
	2 - Havant Road	827	207	301	825	837	1278	1.8	1.3	5.512	A
	3 - Church Lane	0	0	1125	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			857				
	5 - Emsworth Road	1455	364	2	1458	1533	265	5.1	3.1	9.164	A
3 - Castle Ave	A - Emsworth Road	485	121		528	544	651	19.5	3.8	66.897	F
	B - Castle Ave	21	5		38	31	17	5.3	3.2	319.576	F
	C - Emsworth Road (S)	649	162		649	664	551	0.0	0.0	0.087	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			93				
	2 - Emsworth Road (S)	222	56	1	221	228	1177	0.4	0.3	4.925	A
	3 - A27 Off-Slip	1173	293	223	1175	1194	0	4.1	2.2	6.983	A
	4 - Emsworth Road	406	101	865	407	446	533	2.1	0.9	9.905	A
2 - A27 / Church Lane	1 - A27 Off-Slip	100	25	1179	100	104	0	0.1	0.1	4.282	A
	2 - Havant Road	680	170	244	681	703	1035	1.3	0.9	4.797	A
	3 - Church Lane	0	0	922	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			698				
	5 - Emsworth Road	1177	294	2	1177	1228	222	3.1	1.8	5.998	A
3 - Castle Ave	A - Emsworth Road	396	99		397	416	531	3.8	0.0	4.624	A
	B - Castle Ave	17	4		20	30	15	3.2	0.2	27.377	D
	C - Emsworth Road (S)	533	133		533	538	406	0.0	0.0	0.082	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	225	972	0.231	225	225	0.0	0.3	4.725	A
	3 - A27 Off-Slip	1	1	1, 2, 4	591	945	0.626	592	595	0.0	0.9	6.629	A
			2	1, 2, 4	586	943	0.622	587	589	0.0	0.9	6.733	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1177			1177	1192	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	101	1015	0.100	101	105	0.0	0.1	3.759	A
	2 - Havant Road	1	1	2, 3, 4, 5	350	918	0.381	350	351	0.0	0.5	4.843	A
			2	2, 3, 4, 5	342	913	0.375	343	350	0.0	0.5	4.976	A
	3 - Church Lane	2	1	(1, 2, 3, 4, 5)	692			692	705	0.0	0.0	0.000	A
			1	2, 3, 4, 5	0	633	0.000	0	0	0.0	0.0	0.000	A
			1	2, 3, 4, 5	589	1006	0.586	589	585	0.0	0.9	5.696	A
3 - Castle Ave	5 - Emsworth Road	1	2	2, 3, 4, 5	593	1006	0.590	592	588	0.0	0.9	5.702	A
	A - Emsworth Road		1	B, C	393			394	401	0.0	0.0	0.310	A
	B - Castle Ave	1	1	A, C	17			18	19	0.0	0.0	8.683	A
	C - Emsworth Road (S)	1	1	A	525			525	528	0.0	0.0	0.000	A
			2	B	6			6	6	0.0	0.0	5.887	A
		2	1	(A, B)	531			531	534	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	263	976	0.269	263	270	0.3	0.3	5.120	
	3 - A27 Off-Slip	1	1	1, 2, 4	714	933	0.766	712	712	0.9	1.9	9.669	
			2	1, 2, 4	703	931	0.755	700	707	0.9	2.0	9.782	
		2	1	(1, 2, 3, 4)	1417			1417	1426	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	490	675	0.727	488	483	0.9	1.8	11.454		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	116	856	0.136	116	123	0.1	0.1	4.821	
	2 - Havant Road	1	1	2, 3, 4, 5	413	902	0.457	413	418	0.5	0.7	5.331	
			2	2, 3, 4, 5	411	901	0.456	410	418	0.5	0.7	5.317	
	2	1	(1, 2, 3, 4, 5)	824			824	837	0.0	0.0	0.000		
	3 - Church Lane	1	1	2, 3, 4, 5	0	545	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	695	1004	0.693	697	701	0.9	1.4	7.524	
2			2, 3, 4, 5	705	1007	0.701	708	698	0.9	1.4	7.565		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	484			486	477	0.0	0.4	2.444	
	B - Castle Ave	1	1	A, C	20			20	20	0.0	0.1	16.134	
	C - Emsworth Road (S)	1	1	A	645			645	641	0.0	0.0	0.000	
			2	B	8			8	8	0.0	0.0	5.648	
		2	1	(A, B)	653			653	648	0.0	0.0	0.000	

17:15 - 17:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig lev se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	319	974	0.328	319	330	0.3	0.6	5.642	
	3 - A27 Off-Slip	1	1	1, 2, 4	868	910	0.954	859	843	1.9	8.1	26.071	
			2	1, 2, 4	869	910	0.955	861	846	2.0	8.1	26.112	
			2	1	(1, 2, 3, 4)	1737			1737	1739	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	531	548	0.969	529	538	1.8	2.8	16.740	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	145	696	0.208	144	150	0.1	0.3	6.115	
	2 - Havant Road	1	1	2, 3, 4, 5	504	883	0.570	503	512	0.7	1.1	6.620	
			2	2, 3, 4, 5	507	882	0.575	506	519	0.7	1.2	6.510	
		2	1	(1, 2, 3, 4, 5)	1011			1011	1035	0.0	0.0	0.003	
	3 - Church Lane	1	1	2, 3, 4, 5	0	423	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	827	1004	0.823	825	817	1.4	2.6	10.629	
2			2, 3, 4, 5	835	1006	0.831	835	821	1.4	2.5	10.575		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	583			537	540	0.4	10.1	34.419	
	B - Castle Ave	1	1	A, C	26			14	15	0.1	2.0	535.586	
	C - Emsworth Road (S)	1	1	A	776			776	761	0.0	0.0	0.000	
			2	B	9			9	10	0.0	0.0	6.578	
		2	1	(A, B)	786			786	770	0.0	0.0	0.000	

17:30 - 17:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig lev se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	332	974	0.342	331	330	0.6	0.6	5.594	
	3 - A27 Off-Slip	1	1	1, 2, 4	863	906	0.952	846	864	8.1	9.2	34.168	
			2	1, 2, 4	862	906	0.951	845	861	8.1	9.2	34.150	
		2	1	(1, 2, 3, 4)	1725			1725	1734	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	552	559	0.986	552	551	2.8	2.9	18.817	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	147	699	0.210	147	149	0.3	0.3	6.516	
	2 - Havant Road	1	1	2, 3, 4, 5	506	884	0.573	506	517	1.1	0.9	6.584	
			2	2, 3, 4, 5	508	881	0.576	509	518	1.2	0.9	6.535	
		2	1	(1, 2, 3, 4, 5)	1014			1014	1033	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	420	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	831	1006	0.826	834	837	2.6	2.5	11.993	
			2	2, 3, 4, 5	829	1006	0.825	831	840	2.5	2.6	12.000	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	597			556	547	10.1	19.5	99.633	
	B - Castle Ave	1	1	A, C	24			10	10	2.0	5.3	743.062	
	C - Emsworth Road (S)	1	1	A	778			778	778	0.0	0.0	0.000	
			2	B	9			9	10	0.0	0.0	6.754	
		2	1	(A, B)	787			787	788	0.0	0.0	0.000	

17:45 - 18:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig lev se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	265	974	0.273	264	270	0.6	0.4	5.023	
	3 - A27 Off-Slip	1	1	1, 2, 4	698	930	0.751	697	736	9.2	2.0	14.746	
			2	1, 2, 4	710	930	0.763	709	741	9.2	2.1	14.642	
			2	1	(1, 2, 3, 4)	1407			1407	1420	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	551	674	0.817	553	575	2.9	2.1	15.499	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	118	828	0.143	119	124	0.3	0.1	5.858	
	2 - Havant Road	1	1	2, 3, 4, 5	413	899	0.460	413	421	0.9	0.7	5.447	
			2	2, 3, 4, 5	413	901	0.459	412	416	0.9	0.7	5.578	
		2	1	(1, 2, 3, 4, 5)	827			827	835	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	541	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	733	1006	0.728	735	770	2.5	1.5	9.100	
2			2, 3, 4, 5	723	1006	0.719	723	762	2.6	1.6	9.229		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	485			528	544	19.5	3.8	66.897	
	B - Castle Ave	1	1	A, C	21			38	31	5.3	3.2	319.576	
	C - Emsworth Road (S)	1	1	A	641			641	656	0.0	0.0	0.000	
			2	B	8			8	8	0.0	0.0	7.031	
		2	1	(A, B)	649			649	664	0.0	0.0	0.000	

18:00 - 18:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig leve ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	222	976	0.228	221	228	0.4	0.3	4.925	
	3 - A27 Off-Slip	1	1	1, 2, 4	594	946	0.628	596	601	2.0	1.0	6.889	
			2	1, 2, 4	579	945	0.612	579	593	2.1	1.1	7.079	
		2	1	(1, 2, 3, 4)	1173			1173	1187	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	406	759	0.535	407	446	2.1	0.9	9.905	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	100	1016	0.098	100	104	0.1	0.1	4.282	
	2 - Havant Road	1	1	2, 3, 4, 5	341	923	0.370	342	352	0.7	0.4	4.791	
			2	2, 3, 4, 5	338	917	0.369	339	352	0.7	0.5	4.804	
		2	1	(1, 2, 3, 4, 5)	680			680	702	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	644	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	590	1005	0.587	590	616	1.5	0.9	5.953	
			2	2, 3, 4, 5	587	1006	0.584	587	612	1.6	0.9	6.043	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	396			397	416	3.8	0.0	4.624	
	B - Castle Ave	1	1	A, C	17			20	30	3.2	0.2	27.377	
	C - Emsworth Road (S)	1	1	A	526			526	532	0.0	0.0	0.000	
			2	B	7			7	6	0.0	0.0	6.852	
		2	1	(A, B)	533			533	538	0.0	0.0	0.000	

2026 Selangor Ave (inc. CA Dev), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	3 - Castle Ave - C - Emsworth Road (S) - Lane level 1 - Lane 1	Blocking back into Junction 3 may occur for some time segments due to queued vehicles trying to exit on Arm C. Treat capacities at downstream junctions with caution.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	9.85	A
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	17.39	C
3	Castle Ave	T-Junction	Two-way			45.32	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Selangor Ave (inc. CA Dev)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1106	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	78	100.000
	2 - Havant Road		ONE HOUR	✓	1352	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	615	100.000
	B - Castle Ave		ONE HOUR	✓	69	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	30	0	0	293
	3 - A27 Off-Slip	2	770	0	334
	4 - Emsworth Road	53	585	0	1

Proportions

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	E
From	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.09	0.00	0.00	
	3 - A27 Off-Slip	0.00	0.70	0.00	
	4 - Emsworth Road	0.08	0.92	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	34	0	2	42
	2 - Havant Road	0	2	1	1107	242
	3 - Church Lane	0	0	0	3	1
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	943	4	400	1

Proportions

	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
From	1 - A27 Off-Slip	0.00	0.44	0.00	0.03
	2 - Havant Road	0.00	0.00	0.00	0.82
	3 - Church Lane	0.00	0.00	0.00	0.75
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.70	0.00	0.30

Demand (Veh/hr)

3 - Castle Ave

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0	5	610
	B - Castle Ave	13	0	56
	C - Emsworth Road (S)	620	12	0

Proportions

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0.00	0.01	0.99
	B - Castle Ave	0.19	0.00	0.81
	C - Emsworth Road (S)	0.98	0.02	0.00

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	5	0	0	2
	3 - A27 Off-Slip	50	4	0	3
	4 - Emsworth Road	4	3	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	1.050	1.000	1.000	
	3 - A27 Off-Slip	1.500	1.040	1.000	
	4 - Emsworth Road	1.040	1.030	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	0	0	0	0
	2 - Havant Road	0	0	0	3	2
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	2	0	2	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.000	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.030
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.020	1.000	1.020

3 - Castle Ave

Heavy Vehicle Percentages

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	833	864
		4 - Emsworth Road	481	496
	2 - A27 / Church Lane	1 - A27 Off-Slip	59	59
		2 - Havant Road	1018	1047
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1015	1035
	3 - Castle Ave	A - Emsworth Road	463	463
		B - Castle Ave	52	52
		C - Emsworth Road (S)	476	476
08:00-08:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	994	1032
		4 - Emsworth Road	574	592
	2 - A27 / Church Lane	1 - A27 Off-Slip	70	70
		2 - Havant Road	1215	1250
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	1212	1236
		A - Emsworth Road	553	553
		B - Castle Ave	62	62
		C - Emsworth Road (S)	568	568
08:15-08:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1218	1264
		4 - Emsworth Road	704	725
	2 - A27 / Church Lane	1 - A27 Off-Slip	86	86
		2 - Havant Road	1489	1530
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1484	1514
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	76	76
		C - Emsworth Road (S)	696	696
08:30-08:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1218	1264
		4 - Emsworth Road	704	725
	2 - A27 / Church Lane	1 - A27 Off-Slip	86	86
		2 - Havant Road	1489	1530
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1484	1514
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	76	76
		C - Emsworth Road (S)	696	696
08:45-09:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	994	1032
		4 - Emsworth Road	574	592
	2 - A27 / Church Lane	1 - A27 Off-Slip	70	70
		2 - Havant Road	1215	1250
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1212	1236
	3 - Castle Ave	A - Emsworth Road	553	553
		B - Castle Ave	62	62
		C - Emsworth Road (S)	568	568
09:00-09:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	833	864
		4 - Emsworth Road	481	496
	2 - A27 / Church Lane	1 - A27 Off-Slip	59	59
		2 - Havant Road	1018	1047
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1015	1035
	3 - Castle Ave	A - Emsworth Road	463	463
		B - Castle Ave	52	52
		C - Emsworth Road (S)	476	476

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.55	0.4	A	262	393
	3 - A27 Off-Slip	8.52	3.4	A	1019	1528
	4 - Emsworth Road	13.93	2.8	B	605	908
2 - A27 / Church Lane	1 - A27 Off-Slip	4.95	0.1	A	73	109
	2 - Havant Road	26.19	12.1	D	1241	1862
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	9.39	3.7	A	1267	1900
3 - Castle Ave	A - Emsworth Road	41.66	9.1	E	568	852
	B - Castle Ave	481.56	11.7	F	61	92
	C - Emsworth Road (S)	0.14	0.0	A	546	818

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			61				
	2 - Emsworth Road (S)	217	54	0.99	216	215	1030	0.0	0.4	4.649	A
	3 - A27 Off-Slip	840	210	217	838	862	0	0.0	1.4	5.176	A
	4 - Emsworth Road	492	123	601	491	512	454	0.0	1.0	7.651	A
2 - A27 / Church Lane	1 - A27 Off-Slip	57	14	1030	57	60	0	0.0	0.0	3.301	A
	2 - Havant Road	1004	251	334	1000	1035	753	0.0	2.0	6.629	A
	3 - Church Lane	0	0	1331	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1113				
	5 - Emsworth Road	1030	258	1	1028	1045	217	0.0	1.7	5.352	A
3 - Castle Ave	A - Emsworth Road	454	113		453	461	455	0.0	0.0	0.219	A
	B - Castle Ave	51	13		51	54	12	0.0	0.1	8.675	A
	C - Emsworth Road (S)	454	114		454	444	492	0.0	0.0	0.101	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			73				
	2 - Emsworth Road (S)	252	63	2	252	258	1256	0.4	0.4	5.012	A
	3 - A27 Off-Slip	1006	251	254	1005	1029	0	1.4	1.5	6.046	A
	4 - Emsworth Road	592	148	737	593	600	521	1.0	1.8	9.405	A
2 - A27 / Church Lane	1 - A27 Off-Slip	72	18	1255	73	71	0	0.0	0.1	3.796	A
	2 - Havant Road	1216	304	409	1215	1241	919	2.0	3.4	8.991	A
	3 - Church Lane	0	0	1620	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1367				
	5 - Emsworth Road	1256	314	1	1254	1248	252	1.7	2.3	6.195	A
3 - Castle Ave	A - Emsworth Road	550	138		551	543	524	0.0	0.4	1.775	A
	B - Castle Ave	62	16		60	61	14	0.1	0.5	18.953	C
	C - Emsworth Road (S)	521	130		521	529	592	0.0	0.0	0.119	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			82				
	2 - Emsworth Road (S)	310	77	2	310	318	1487	0.4	0.4	5.555	A
	3 - A27 Off-Slip	1217	304	311	1211	1253	0	1.5	3.2	8.204	A
	4 - Emsworth Road	704	176	868	701	703	654	1.8	2.8	13.044	B
2 - A27 / Church Lane	1 - A27 Off-Slip	86	21	1488	86	84	0	0.1	0.1	4.680	A
	2 - Havant Road	1487	372	495	1469	1497	1079	3.4	9.5	18.911	C
	3 - Church Lane	0	0	1959	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1648				
	5 - Emsworth Road	1487	372	2	1486	1491	310	2.3	3.6	8.174	A
3 - Castle Ave	A - Emsworth Road	693	173		676	655	652	0.4	6.2	20.858	C
	B - Castle Ave	75	19		45	54	18	0.5	5.9	323.472	F
	C - Emsworth Road (S)	654	164		654	649	704	0.0	0.0	0.141	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			92				
	2 - Emsworth Road (S)	313	78	0.90	314	321	1486	0.4	0.4	5.344	A
	3 - A27 Off-Slip	1205	301	315	1214	1277	0	3.2	2.7	8.522	A
	4 - Emsworth Road	694	173	884	695	723	644	2.8	2.7	13.934	B
2 - A27 / Church Lane	1 - A27 Off-Slip	88	22	1490	89	87	0	0.1	0.1	4.952	A
	2 - Havant Road	1490	372	503	1477	1518	1076	9.5	12.0	26.189	D
	3 - Church Lane	0	0	1972	0	0	8	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1656				
	5 - Emsworth Road	1486	372	3	1488	1531	313	3.6	3.5	9.391	A
3 - Castle Ave	A - Emsworth Road	679	170		656	664	644	6.2	9.1	41.665	E
	B - Castle Ave	74	18		54	54	17	5.9	11.7	481.562	F
	C - Emsworth Road (S)	644	161		645	657	694	0.0	0.0	0.123	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			79				
	2 - Emsworth Road (S)	267	67	0.81	267	275	1292	0.4	0.4	5.046	A
	3 - A27 Off-Slip	1008	252	268	1007	1047	0	2.7	2.1	6.305	A
	4 - Emsworth Road	640	160	727	644	695	548	2.7	1.6	11.618	B
2 - A27 / Church Lane	1 - A27 Off-Slip	74	19	1289	74	73	0	0.1	0.1	4.226	A
	2 - Havant Road	1225	306	429	1229	1295	934	12.0	3.0	12.903	B
	3 - Church Lane	0	0	1653	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1383				
	5 - Emsworth Road	1292	323	3	1286	1352	267	3.5	2.7	6.974	A
3 - Castle Ave	A - Emsworth Road	560	140		570	591	556	9.1	0.9	17.474	C
	B - Castle Ave	55	14		91	95	16	11.7	2.9	175.405	F
	C - Emsworth Road (S)	548	137		548	549	640	0.0	0.0	0.139	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			64				
	2 - Emsworth Road (S)	215	54	0.36	214	224	1049	0.4	0.3	4.713	A
	3 - A27 Off-Slip	836	209	215	837	866	0	2.1	1.1	5.325	A
	4 - Emsworth Road	512	128	600	513	539	452	1.6	1.1	8.128	A
2 - A27 / Church Lane	1 - A27 Off-Slip	58	14	1053	58	59	0	0.1	0.1	3.593	A
	2 - Havant Road	1023	256	357	1026	1060	753	3.0	1.9	6.953	A
	3 - Church Lane	0	0	1379	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1162				
	5 - Emsworth Road	1049	262	2	1052	1086	215	2.7	1.4	5.603	A
3 - Castle Ave	A - Emsworth Road	473	118		473	470	452	0.9	0.0	1.163	A
	B - Castle Ave	51	13		51	63	13	2.9	0.1	16.412	C
	C - Emsworth Road (S)	452	113		452	452	512	0.0	0.0	0.130	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	217	973	0.223	216	215	0.0	0.4	4.649	A
	3 - A27 Off-Slip	1	1	1, 2, 4	419	921	0.455	417	431	0.0	0.7	5.179	A
			2	1, 2, 4	422	925	0.456	420	431	0.0	0.7	5.174	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	840			840	868	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	57	1149	0.050	57	60	0.0	0.0	3.301	A
	2 - Havant Road	1	1	2, 3, 4, 5	504	884	0.569	502	517	0.0	1.0	6.654	A
			2	2, 3, 4, 5	500	883	0.566	499	518	0.0	1.0	6.604	A
		2	1	(1, 2, 3, 4, 5)	1004			1004	1043	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	434	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	512	999	0.512	510	519	0.0	0.9	5.415	A
			2	2, 3, 4, 5	519	998	0.520	518	526	0.0	0.9	5.291	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	454			453	461	0.0	0.0	0.219	A
	B - Castle Ave	1	1	A, C	51			51	54	0.0	0.1	8.675	A
	C - Emsworth Road (S)	1	1	A	446			446	436	0.0	0.0	0.000	A
			2	B	8			9	8	0.0	0.0	5.528	A
			2	(A, B)	454			454	444	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	252	971	0.259	252	258	0.4	0.4	5.012	
	3 - A27 Off-Slip	1	1	1, 2, 4	505	907	0.556	505	512	0.7	0.8	6.046	
			2	1, 2, 4	501	909	0.551	500	517	0.7	0.8	6.045	
		2	1	(1, 2, 3, 4)	1006			1006	1030	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	592	803	0.738	593	600	1.0	1.8	9.405		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	72	991	0.073	73	71	0.0	0.1	3.796	
	2 - Havant Road	1	1	2, 3, 4, 5	606	856	0.708	605	617	1.0	1.7	9.042	
			2	2, 3, 4, 5	610	856	0.713	609	624	1.0	1.7	8.916	
	2	1	(1, 2, 3, 4, 5)	1216			1216	1247	0.0	0.0	0.012		
	3 - Church Lane	1	1	2, 3, 4, 5	0	285	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	630	996	0.632	629	624	0.9	1.1	6.209	
2			2, 3, 4, 5	626	996	0.629	625	624	0.9	1.2	6.181		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	550			551	543	0.0	0.4	1.775	
	B - Castle Ave	1	1	A, C	62			60	61	0.1	0.5	18.953	
	C - Emsworth Road (S)	1	1	A	512			512	520	0.0	0.0	0.000	
			2	B	9			9	9	0.0	0.0	6.700	
		2	1	(A, B)	521			521	529	0.0	0.0	0.000	

08:15 - 08:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig lev se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	310	972	0.319	310	318	0.4	0.4	5.555	
	3 - A27 Off-Slip	1	1	1, 2, 4	608	884	0.688	604	628	0.8	1.7	8.193	
			2	1, 2, 4	609	886	0.687	607	624	0.8	1.6	8.216	
			2	1	(1, 2, 3, 4)	1217			1217	1260	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	704	732	0.961	701	703	1.8	2.8	13.044	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	86	830	0.103	86	84	0.1	0.1	4.680	
	2 - Havant Road	1	1	2, 3, 4, 5	745	827	0.902	736	748	1.7	4.4	17.591	
			2	2, 3, 4, 5	738	829	0.891	733	748	1.7	4.0	16.953	
		2	1	(1, 2, 3, 4, 5)	1487			1484	1517	0.0	1.1	1.570	
	3 - Church Lane	1	1	2, 3, 4, 5	0	116	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	746	996	0.749	746	747	1.1	1.8	8.126	
2			2, 3, 4, 5	741	994	0.746	740	744	1.2	1.8	8.222		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	693			676	655	0.4	6.2	20.858	
	B - Castle Ave	1	1	A, C	75			45	54	0.5	5.9	323.472	
	C - Emsworth Road (S)	1	1	A	642			642	636	0.0	0.0	0.000	
			2	B	12			12	13	0.0	0.0	7.075	
		2	1	(A, B)	654			654	649	0.0	0.0	0.000	

08:30 - 08:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig lev se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	313	973	0.322	314	321	0.4	0.4	5.344	
	3 - A27 Off-Slip	1	1	1, 2, 4	597	886	0.674	602	635	1.7	1.4	8.599	
			2	1, 2, 4	608	887	0.685	612	643	1.6	1.3	8.446	
			2	1	(1, 2, 3, 4)	1205			1205	1275	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	694	724	0.958	695	723	2.8	2.7	13.934	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	88	830	0.106	89	87	0.1	0.1	4.952	
	2 - Havant Road	1	1	2, 3, 4, 5	743	825	0.902	739	759	4.4	4.6	21.407	
			2	2, 3, 4, 5	745	825	0.905	738	759	4.0	4.5	20.358	
		2	1	(1, 2, 3, 4, 5)	1490			1489	1521	1.1	2.9	5.217	
	3 - Church Lane	1	1	2, 3, 4, 5	0	106	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	744	996	0.746	745	764	1.8	1.7	9.427	
2			2, 3, 4, 5	742	996	0.746	742	767	1.8	1.8	9.355		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	679			656	664	6.2	9.1	41.665	
	B - Castle Ave	1	1	A, C	74			54	54	5.9	11.7	481.562	
	C - Emsworth Road (S)	1	1	A	633			633	645	0.0	0.0	0.000	
			2	B	11			11	12	0.0	0.0	6.729	
		2	1	(A, B)	644			644	657	0.0	0.0	0.000	

08:45 - 09:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig lev se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	267	978	0.274	267	275	0.4	0.4	5.046	
	3 - A27 Off-Slip	1	1	1, 2, 4	509	905	0.562	508	526	1.4	1.0	6.266	
			2	1, 2, 4	500	901	0.555	499	521	1.3	1.0	6.345	
			2	1	(1, 2, 3, 4)	1008			1008	1045	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	640	811	0.788	644	695	2.7	1.6	11.618	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	74	968	0.077	74	73	0.1	0.1	4.226	
	2 - Havant Road	1	1	2, 3, 4, 5	609	850	0.717	612	646	4.6	1.5	11.922	
			2	2, 3, 4, 5	616	846	0.727	617	649	4.5	1.5	11.727	
		2	1	(1, 2, 3, 4, 5)	1225			1225	1269	2.9	0.0	1.343	
	3 - Church Lane	1	1	2, 3, 4, 5	0	265	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	641	993	0.645	640	676	1.7	1.2	6.950	
2			2, 3, 4, 5	651	997	0.653	646	676	1.8	1.4	6.998		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	560			570	591	9.1	0.9	17.474	
	B - Castle Ave	1	1	A, C	55			91	95	11.7	2.9	175.405	
	C - Emsworth Road (S)	1	1	A	537			537	538	0.0	0.0	0.000	
			2	B	11			11	11	0.0	0.0	6.791	
		2	1	(A, B)	548			548	549	0.0	0.0	0.000	

09:00 - 09:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig leve ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	215	975	0.221	214	224	0.4	0.3	4.713	
	3 - A27 Off-Slip	1	1	1, 2, 4	418	928	0.451	418	433	1.0	0.6	5.297	
			2	1, 2, 4	418	924	0.452	419	433	1.0	0.5	5.354	
		2	1	(1, 2, 3, 4)	836			836	862	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	512	881	0.581	513	539	1.6	1.1	8.128	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	58	1131	0.051	58	59	0.1	0.1	3.593	
	2 - Havant Road	1	1	2, 3, 4, 5	513	875	0.586	514	529	1.5	1.0	6.982	
			2	2, 3, 4, 5	511	873	0.585	512	531	1.5	0.9	6.915	
		2	1	(1, 2, 3, 4, 5)	1023			1023	1056	0.0	0.0	0.005	
	3 - Church Lane	1	1	2, 3, 4, 5	0	408	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	518	997	0.520	520	541	1.2	0.7	5.658	
2			2, 3, 4, 5	531	994	0.534	532	545	1.4	0.7	5.548		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	473			473	470	0.9	0.0	1.163	
	B - Castle Ave	1	1	A, C	51			51	63	2.9	0.1	16.412	
	C - Emsworth Road (S)	1	1	A	444			444	443	0.0	0.0	0.000	
			2	B	9			9	9	0.0	0.0	6.233	
		2	1	(A, B)	452			452	452	0.0	0.0	0.000	

2026 Selangor Ave (inc. CA Dev), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	3 - Castle Ave - C - Emsworth Road (S) - Lane level 1 - Lane 1	Blocking back into Junction 3 may occur for some time segments due to queued vehicles trying to exit on Arm C. Treat capacities at downstream junctions with caution.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	31.79	D
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	9.38	A
3	Castle Ave	T-Junction	Two-way			81.58	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Selangor Ave (inc. CA Dev)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1585	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	137	100.000
	2 - Havant Road		ONE HOUR	✓	918	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	545	100.000
	B - Castle Ave		ONE HOUR	✓	34	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	36	0	0	287
	3 - A27 Off-Slip	10	1101	0	474
	4 - Emsworth Road	77	456	0	1

Proportions

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	E
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.11	0.00	0.00	
	3 - A27 Off-Slip	0.01	0.69	0.00	
	4 - Emsworth Road	0.14	0.85	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	48	0	0	89
	2 - Havant Road	0	2	2	705	209
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1311	2	248	1

Proportions

	To				
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	0.00	0.35	0.00	0.00
	2 - Havant Road	0.00	0.00	0.00	0.77
	3 - Church Lane	0.20	0.20	0.20	0.20
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.84	0.00	0.16

Demand (Veh/hr)

3 - Castle Ave

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	11	534
	B - Castle Ave	6	0	28
	C - Emsworth Road (S)	762	32	0

Proportions

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0.00	0.02	0.98
	B - Castle Ave	0.18	0.00	0.82
	C - Emsworth Road (S)	0.96	0.04	0.00

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	4	0	0	2
	3 - A27 Off-Slip	0	1	0	1
	4 - Emsworth Road	0	2	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	
	2 - Emsworth Road (S)	1.040	1.000	1.000	
	3 - A27 Off-Slip	1.000	1.010	1.000	
	4 - Emsworth Road	1.000	1.020	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	3	0	0	4
	2 - Havant Road	0	0	0	2	3
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1	0	1	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.030	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.020
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.010	1.000	1.010

3 - Castle Ave

Heavy Vehicle Percentages

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	1193	1205
		4 - Emsworth Road	402	409
	2 - A27 / Church Lane	1 - A27 Off-Slip	103	107
		2 - Havant Road	691	706
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1176	1188
	3 - Castle Ave	A - Emsworth Road	410	410
		B - Castle Ave	26	26
		C - Emsworth Road (S)	598	598
17:00-17:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	1425	1439
		4 - Emsworth Road	480	488
	2 - A27 / Church Lane	1 - A27 Off-Slip	123	128
		2 - Havant Road	825	844
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	1404	1418
		A - Emsworth Road	490	490
		B - Castle Ave	31	31
		C - Emsworth Road (S)	714	714
17:15-17:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1745	1762
		4 - Emsworth Road	588	598
	2 - A27 / Church Lane	1 - A27 Off-Slip	151	156
		2 - Havant Road	1011	1033
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1720	1737
	3 - Castle Ave	A - Emsworth Road	600	600
		B - Castle Ave	37	37
		C - Emsworth Road (S)	874	874
17:30-17:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1745	1762
		4 - Emsworth Road	588	598
	2 - A27 / Church Lane	1 - A27 Off-Slip	151	156
		2 - Havant Road	1011	1033
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1720	1737
	3 - Castle Ave	A - Emsworth Road	600	600
		B - Castle Ave	37	37
		C - Emsworth Road (S)	874	874
17:45-18:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	1425	1439
		4 - Emsworth Road	480	488
	2 - A27 / Church Lane	1 - A27 Off-Slip	123	128
		2 - Havant Road	825	844
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1404	1418
	3 - Castle Ave	A - Emsworth Road	490	490
		B - Castle Ave	31	31
		C - Emsworth Road (S)	714	714
		1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
18:00-18:15	2 - A27 / Church Lane	4 - Emsworth Road	402	409
		1 - A27 Off-Slip	103	107
		2 - Havant Road	691	706
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1176	1188
	3 - Castle Ave	A - Emsworth Road	410	410
		B - Castle Ave	26	26
		C - Emsworth Road (S)	598	598

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.54	0.6	A	275	413
	3 - A27 Off-Slip	41.27	20.5	E	1449	2174
	4 - Emsworth Road	19.21	3.0	C	508	762
2 - A27 / Church Lane	1 - A27 Off-Slip	6.95	0.3	A	126	189
	2 - Havant Road	6.65	1.8	A	844	1266
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	11.22	5.5	B	1443	2164
3 - Castle Ave	A - Emsworth Road	125.62	25.7	F	500	749
	B - Castle Ave	1121.13	11.4	F	32	48
	C - Emsworth Road (S)	0.31	0.1	A	677	1016

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			97				
	2 - Emsworth Road (S)	232	58	0.67	233	234	1191	0.0	0.3	4.928	A
	3 - A27 Off-Slip	1176	294	233	1179	1193	0	0.0	2.3	6.925	A
	4 - Emsworth Road	432	108	857	432	431	555	0.0	1.1	8.738	A
2 - A27 / Church Lane	1 - A27 Off-Slip	104	26	1192	104	110	0	0.0	0.1	3.956	A
	2 - Havant Road	702	175	260	702	708	1036	0.0	0.9	4.790	A
	3 - Church Lane	0	0	958	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			724				
	5 - Emsworth Road	1191	298	2	1191	1188	232	0.0	1.8	5.809	A
3 - Castle Ave	A - Emsworth Road	418	105		418	415	537	0.0	0.1	0.444	A
	B - Castle Ave	28	7		29	27	32	0.0	0.0	8.968	A
	C - Emsworth Road (S)	555	139		555	557	432	0.0	0.0	0.274	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			110				
	2 - Emsworth Road (S)	272	68	0.53	271	279	1424	0.3	0.4	5.244	A
	3 - A27 Off-Slip	1431	358	271	1427	1433	0	2.3	4.1	10.030	B
	4 - Emsworth Road	499	125	1039	496	502	659	1.1	1.8	11.770	B
2 - A27 / Church Lane	1 - A27 Off-Slip	124	31	1426	123	127	0	0.1	0.2	4.767	A
	2 - Havant Road	823	206	311	828	845	1238	0.9	1.2	5.501	A
	3 - Church Lane	0	0	1135	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			861				
	5 - Emsworth Road	1424	356	1	1424	1419	272	1.8	2.8	7.531	A
3 - Castle Ave	A - Emsworth Road	491	123		487	484	638	0.1	0.7	2.798	A
	B - Castle Ave	29	7		29	31	36	0.0	0.2	30.169	D
	C - Emsworth Road (S)	659	165		659	666	499	0.0	0.0	0.285	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			127				
	2 - Emsworth Road (S)	326	81	0.87	325	333	1654	0.4	0.6	5.372	A
	3 - A27 Off-Slip	1722	431	325	1714	1710	0	4.1	16.9	28.157	D
	4 - Emsworth Road	545	136	1237	545	549	802	1.8	2.8	17.238	C
2 - A27 / Church Lane	1 - A27 Off-Slip	149	37	1653	148	154	0	0.2	0.3	6.325	A
	2 - Havant Road	1009	252	361	1008	1029	1440	1.2	1.8	6.445	A
	3 - Church Lane	0	0	1365	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1037				
	5 - Emsworth Road	1654	413	2	1651	1643	326	2.8	5.5	10.975	B
3 - Castle Ave	A - Emsworth Road	591	148		544	547	771	0.7	12.4	43.123	E
	B - Castle Ave	39	10		14	20	43	0.2	4.2	802.580	F
	C - Emsworth Road (S)	802	201		802	795	545	0.0	0.1	0.267	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			123				
	2 - Emsworth Road (S)	328	82	2	328	339	1665	0.6	0.5	5.537	A
	3 - A27 Off-Slip	1737	434	329	1745	1756	0	16.9	20.4	41.268	E
	4 - Emsworth Road	542	136	1247	542	550	827	2.8	3.0	19.208	C
2 - A27 / Church Lane	1 - A27 Off-Slip	150	37	1670	149	155	0	0.3	0.3	6.949	A
	2 - Havant Road	1018	254	360	1017	1039	1459	1.8	1.8	6.646	A
	3 - Church Lane	0	0	1373	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1043				
	5 - Emsworth Road	1665	416	2	1668	1690	328	5.5	4.8	11.223	B
3 - Castle Ave	A - Emsworth Road	604	151		547	546	793	12.4	25.7	125.616	F
	B - Castle Ave	38	10		8	10	47	4.2	11.4	1121.126	F
	C - Emsworth Road (S)	827	207		827	819	542	0.1	0.1	0.306	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			126				
	2 - Emsworth Road (S)	266	67	0.67	267	275	1520	0.5	0.3	4.949	A
	3 - A27 Off-Slip	1432	358	268	1438	1513	0	20.4	4.4	16.928	C
	4 - Emsworth Road	598	150	1045	601	605	661	3.0	2.4	16.311	C
2 - A27 / Church Lane	1 - A27 Off-Slip	124	31	1520	124	129	0	0.3	0.2	5.982	A
	2 - Havant Road	821	205	318	823	843	1326	1.8	1.3	5.522	A
	3 - Church Lane	0	0	1139	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			870				
	5 - Emsworth Road	1520	380	2	1518	1571	266	4.8	4.0	9.560	A
3 - Castle Ave	A - Emsworth Road	489	122		552	569	645	25.7	6.8	95.918	F
	B - Castle Ave	30	8		65	38	38	11.4	9.6	517.275	F
	C - Emsworth Road (S)	661	165		661	684	598	0.1	0.0	0.276	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			96				
	2 - Emsworth Road (S)	229	57	0.67	228	233	1203	0.3	0.4	4.769	A
	3 - A27 Off-Slip	1195	299	228	1194	1220	0	4.4	2.4	6.844	A
	4 - Emsworth Road	431	108	863	436	501	559	2.4	0.9	11.002	B
2 - A27 / Church Lane	1 - A27 Off-Slip	103	26	1211	103	109	0	0.2	0.1	4.529	A
	2 - Havant Road	693	173	260	692	712	1054	1.3	1.0	5.006	A
	3 - Church Lane	0	0	949	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			719				
	5 - Emsworth Road	1203	301	1	1210	1280	229	4.0	1.8	6.630	A
3 - Castle Ave	A - Emsworth Road	405	101		407	435	545	6.8	0.1	9.011	A
	B - Castle Ave	27	7		38	64	30	9.6	0.4	73.106	F
	C - Emsworth Road (S)	559	140		559	564	431	0.0	0.0	0.261	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	232	977	0.237	233	234	0.0	0.3	4.928	A
	3 - A27 Off-Slip	1	1	1, 2, 4	591	943	0.627	591	598	0.0	1.1	6.893	A
			2	1, 2, 4	585	942	0.621	587	595	0.0	1.1	6.956	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1176			1176	1202	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	104	1010	0.103	104	110	0.0	0.1	3.956	A
	2 - Havant Road	1	1	2, 3, 4, 5	349	913	0.382	349	353	0.0	0.5	4.781	A
			2	2, 3, 4, 5	353	914	0.386	352	354	0.0	0.5	4.799	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	702			702	712	0.0	0.0	0.000	A
			1	2, 3, 4, 5	0	625	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	599	1006	0.595	599	595	0.0	0.9	5.789	A
			2	2, 3, 4, 5	592	1004	0.590	592	594	0.0	1.0	5.828	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	418			418	415	0.0	0.1	0.444	A
	B - Castle Ave	1	1	A, C	28			29	27	0.0	0.0	8.968	A
	C - Emsworth Road (S)	1	1	A	532			532	534	0.0	0.0	0.000	A
			2	B	23			23	23	0.0	0.0	6.597	A
		2	1	(A, B)	555			555	557	0.0	0.0	0.002	A

17:00 - 17:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	272	970	0.280	271	279	0.3	0.4	5.244	
	3 - A27 Off-Slip	1	1	1, 2, 4	717	927	0.773	714	712	1.1	2.1	10.095	
			2	1, 2, 4	714	926	0.772	712	721	1.1	2.0	9.965	
		2	1	(1, 2, 3, 4)	1431			1431	1441	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	499	664	0.751	496	502	1.1	1.8	11.770		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	124	851	0.146	123	127	0.1	0.2	4.767	
	2 - Havant Road	1	1	2, 3, 4, 5	414	898	0.461	416	423	0.5	0.7	5.485	
			2	2, 3, 4, 5	409	895	0.457	412	422	0.5	0.5	5.519	
	2	1	(1, 2, 3, 4, 5)	823			823	846	0.0	0.0	0.000		
	3 - Church Lane	1	1	2, 3, 4, 5	0	536	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	711	1006	0.707	712	709	0.9	1.4	7.550	
2			2, 3, 4, 5	713	1007	0.708	713	711	1.0	1.5	7.513		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	491			487	484	0.1	0.7	2.798	
	B - Castle Ave	1	1	A, C	29			29	31	0.0	0.2	30.169	
	C - Emsworth Road (S)	1	1	A	633			633	640	0.0	0.0	0.000	
			2	B	26			26	26	0.0	0.0	7.183	
		2	1	(A, B)	659			659	666	0.0	0.0	0.003	

17:15 - 17:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig lev se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	326	977	0.333	325	333	0.4	0.6	5.372	
	3 - A27 Off-Slip	1	1	1, 2, 4	869	908	0.957	865	861	2.1	8.4	28.001	
			2	1, 2, 4	853	909	0.939	849	849	2.0	8.5	28.315	
		2	1	(1, 2, 3, 4)	1722			1722	1762	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	545	560	0.974	545	549	1.8	2.8	17.238		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	149	702	0.212	148	154	0.2	0.3	6.325	
	2 - Havant Road	1	1	2, 3, 4, 5	505	879	0.575	505	516	0.7	0.9	6.438	
			2	2, 3, 4, 5	504	877	0.574	503	513	0.5	0.9	6.451	
	2	1	(1, 2, 3, 4, 5)	1009			1009	1031	0.0	0.0	0.000		
	3 - Church Lane	1	1	2, 3, 4, 5	0	418	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	821	1005	0.817	821	822	1.4	2.7	10.995	
2			2, 3, 4, 5	833	1006	0.829	830	822	1.5	2.8	10.956		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	591			544	547	0.7	12.4	43.123	
	B - Castle Ave	1	1	A, C	39			14	20	0.2	4.2	802.580	
	C - Emsworth Road (S)	1	1	A	770			770	764	0.0	0.0	0.000	
			2	B	32			33	31	0.0	0.1	6.667	
		2	1	(A, B)	802			802	795	0.0	0.0	0.002	

17:30 - 17:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	328	975	0.336	328	339	0.6	0.5	5.537	
	3 - A27 Off-Slip	1	1	1, 2, 4	870	907	0.960	875	882	8.4	10.2	40.973	
			2	1, 2, 4	867	906	0.957	871	874	8.5	10.3	41.542	
		2	1	(1, 2, 3, 4)	1737			1737	1770	0.0	0.0	0.012	
	4 - Emsworth Road	1	1	1, 2, 4	542	553	0.981	542	550	2.8	3.0	19.208	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	150	697	0.215	149	155	0.3	0.3	6.949	
	2 - Havant Road	1	1	2, 3, 4, 5	511	878	0.582	510	518	0.9	0.9	6.669	
			2	2, 3, 4, 5	507	879	0.577	507	520	0.9	1.0	6.624	
		2	1	(1, 2, 3, 4, 5)	1018			1018	1039	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	414	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	829	1005	0.824	829	842	2.7	2.4	11.255	
			2	2, 3, 4, 5	836	1006	0.831	839	848	2.8	2.4	11.190	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	604			547	546	12.4	25.7	125.616	
	B - Castle Ave	1	1	A, C	38			8	10	4.2	11.4	1121.126	
	C - Emsworth Road (S)	1	1	A	792			792	785	0.0	0.0	0.000	
			2	B	35			35	34	0.1	0.1	7.382	
		2	1	(A, B)	827			827	819	0.0	0.0	0.001	

17:45 - 18:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig lev se
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	266	977	0.273	267	275	0.5	0.3	4.949	
	3 - A27 Off-Slip	1	1	1, 2, 4	711	930	0.764	713	757	10.2	2.2	16.883	
			2	1, 2, 4	721	927	0.777	725	756	10.3	2.2	16.973	
			2	1	(1, 2, 3, 4)	1432			1432	1448	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	598	662	0.904	601	605	3.0	2.4	16.311	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	124	787	0.158	124	129	0.3	0.2	5.982	
	2 - Havant Road	1	1	2, 3, 4, 5	419	898	0.467	420	425	0.9	0.6	5.482	
			2	2, 3, 4, 5	403	893	0.451	403	417	1.0	0.7	5.562	
		2	1	(1, 2, 3, 4, 5)	821			821	840	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	534	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	761	1005	0.757	761	786	2.4	2.0	9.546	
2			2, 3, 4, 5	759	1005	0.755	757	785	2.4	2.0	9.573		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	489			552	569	25.7	6.8	95.918	
	B - Castle Ave	1	1	A, C	30			65	38	11.4	9.6	517.275	
	C - Emsworth Road (S)	1	1	A	634			634	656	0.0	0.0	0.000	
			2	B	26			27	28	0.1	0.0	6.805	
		2	1	(A, B)	661			661	684	0.0	0.0	0.000	

18:00 - 18:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	229	974	0.235	228	233	0.3	0.4	4.769	
	3 - A27 Off-Slip	1	1	1, 2, 4	603	943	0.639	601	609	2.2	1.3	6.844	
			2	1, 2, 4	593	942	0.629	593	612	2.2	1.2	6.843	
		2	1	(1, 2, 3, 4)	1195			1195	1212	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	431	761	0.567	436	501	2.4	0.9	11.002	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	103	994	0.104	103	109	0.2	0.1	4.529	
	2 - Havant Road	1	1	2, 3, 4, 5	346	914	0.379	347	354	0.6	0.5	4.987	
			2	2, 3, 4, 5	347	914	0.380	345	357	0.7	0.6	5.026	
		2	1	(1, 2, 3, 4, 5)	693			693	711	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	630	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	606	1007	0.602	610	642	2.0	0.9	6.588	
			2	2, 3, 4, 5	596	1008	0.592	600	638	2.0	0.9	6.673	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	405			407	435	6.8	0.1	9.011	
	B - Castle Ave	1	1	A, C	27			38	64	9.6	0.4	73.106	
	C - Emsworth Road (S)	1	1	A	538			538	542	0.0	0.0	0.000	
			2	B	21			21	22	0.0	0.0	6.579	
		2	1	(A, B)	559			559	564	0.0	0.0	0.003	



Appendix B – Option 2 Junctions 9 Output

Junctions 9			
ARCADY 9 - Roundabout Module PICADY 9 - Priority Intersection Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
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Filename: Base A27 2026 T Jcn Flare.j9

Path: D:\Dropbox (mode)\Project\Reading\1. Projects\J323916 Persimmon Havant\4. Data\Junction Models\Feb '19\3 Jcns Linked

Report generation date: 20/02/2019 08:51:46

- »2026 Selangor Ave less CA Dev, AM
- »2026 Selangor Ave less CA Dev, PM
- »2026 Selangor Ave (inc. CA Dev), AM
- »2026 Selangor Ave (inc. CA Dev), PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
[Lane Simulation] - 2026 Selangor Ave less CA Dev								
1 - A27 Emsworth Road - 2 - Emsworth Road (S)	0.6	5.65		A	0.5	5.50		A
1 - A27 Emsworth Road - 3 - A27 Off-Slip	2.8	8.37		A	18.4	37.14		E
1 - A27 Emsworth Road - 4 - Emsworth Road	1.8	9.27		A	2.2	12.79		B
2 - A27 / Church Lane - 1 - A27 Off-Slip	0.1	4.85		A	0.4	7.27		A
2 - A27 / Church Lane - 2 - Havant Road	9.1	21.87		C	2.0	6.61		A
2 - A27 / Church Lane - 3 - Church Lane	0.0	0.00		A	0.0	0.00		A
2 - A27 / Church Lane - 5 - Emsworth Road	3.9	8.97		A	6.6	12.99		B
3 - Castle Ave - A - Emsworth Road	0.9	4.46		A	2.0	13.42		B
3 - Castle Ave - B - Castle Ave	0.4	35.01		E	0.7	81.23		F
3 - Castle Ave - C - Emsworth Road (S)	0.0	0.06		A	0.0	0.09		A
[Lane Simulation] - 2026 Selangor Ave (inc. CA Dev)								
1 - A27 Emsworth Road - 2 - Emsworth Road (S)	0.6	5.50		A	0.6	5.74		A
1 - A27 Emsworth Road - 3 - A27 Off-Slip	3.3	8.55		A	21.5	40.70		E
1 - A27 Emsworth Road - 4 - Emsworth Road	2.2	9.78		A	2.3	12.88		B
2 - A27 / Church Lane - 1 - A27 Off-Slip	0.1	5.08		A	0.3	6.90		A
2 - A27 / Church Lane - 2 - Havant Road	11.5	29.02		D	2.0	6.71		A
2 - A27 / Church Lane - 3 - Church Lane	0.0	0.00		A	0.0	0.00		A
2 - A27 / Church Lane - 5 - Emsworth Road	4.0	9.15		A	6.5	12.43		B
3 - Castle Ave - A - Emsworth Road	1.2	5.86		A	2.5	11.39		B
3 - Castle Ave - B - Castle Ave	1.5	53.82		F	0.9	81.24		F
3 - Castle Ave - C - Emsworth Road (S)	0.0	0.13		A	0.1	0.29		A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	15/02/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-CE95GQ\IModeT
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			841593033	101	32.48

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Selangor Ave less CA Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Selangor Ave less CA Dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Selangor Ave (inc. CA Dev)	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Selangor Ave (inc. CA Dev)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AL	✓	✓	100.000	100.000

2026 Selangor Ave less CA Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	8.27	A
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	15.16	C
3	Castle Ave	T-Junction	Two-way			3.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description	Arm type
1 - A27 Emsworth Road	1	A27 On Slip		
	2	Emsworth Road (S)		
	3	A27 Off-Slip		
	4	Emsworth Road		
2 - A27 / Church Lane	1	A27 Off-Slip		
	2	Havant Road		
	3	Church Lane		
	4	A27 On-Slip		
	5	Emsworth Road		
3 - Castle Ave	A	Emsworth Road		Major
	B	Castle Ave		Minor
	C	Emsworth Road (S)		Major

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 Emsworth Road	1 - A27 On Slip							✓
	2 - Emsworth Road (S)	3.70	3.70	0.0	12.2	35.0	53.0	
	3 - A27 Off-Slip	7.30	7.30	0.0	24.3	35.0	49.0	
	4 - Emsworth Road	4.17	5.20	28.0	23.6	35.0	46.0	
2 - A27 / Church Lane	1 - A27 Off-Slip	6.08	6.08	0.0	19.0	40.0	27.1	
	2 - Havant Road	6.00	7.00	24.0	13.0	40.0	26.5	
	3 - Church Lane	3.14	6.18	4.0	12.0	40.0	46.0	
	4 - A27 On-Slip							✓
	5 - Emsworth Road	6.00	8.00	12.0	15.0	40.0	48.9	

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
3 - Castle Ave	C - Emsworth Road (S)	8.20		✓	3.20	80.0	✓	2.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Junction	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
3 - Castle Ave	B - Castle Ave	One lane	3.10	25	55

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1 - A27 Emsworth Road	1 - A27 On Slip		
	2 - Emsworth Road (S)	0.475	997
	3 - A27 Off-Slip	0.712	2085
	4 - Emsworth Road	0.590	1469
2 - A27 / Church Lane	1 - A27 Off-Slip	0.675	1856
	2 - Havant Road	0.709	2056
	3 - Church Lane	0.498	1112
	4 - A27 On-Slip		
	5 - Emsworth Road	0.683	2032

The slope and intercept shown above include any corrections and adjustments.

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
3	B-A	518	0.085	0.216	0.136	0.308
3	B-C	665	0.092	0.233	-	-
3	C-B	688	0.241	0.241	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Arm Capacity Adjustments

Junction	Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
1 - A27 Emsworth Road	3 - A27 Off-Slip	Direct		-7
	4 - Emsworth Road	Direct		6

Lane Simulation: Arm options

Junction	Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A27 Emsworth Road	1 - A27 On Slip	Evenly split	10.00
	2 - Emsworth Road (S)	Evenly split	10.00
	3 - A27 Off-Slip	Evenly split	10.00
	4 - Emsworth Road	Evenly split	10.00
2 - A27 / Church Lane	1 - A27 Off-Slip	Evenly split	10.00
	2 - Havant Road	Evenly split	10.00
	3 - Church Lane	Evenly split	10.00
	4 - A27 On-Slip	Evenly split	10.00
	5 - Emsworth Road	Evenly split	10.00
3 - Castle Ave	A - Emsworth Road		
	B - Castle Ave		
	C - Emsworth Road (S)		

Lanes

Junction	Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	✓	7.00		0	99999	
	3 - A27 Off-Slip	1	1	1, 2, 4	✓	58.00		0	99999	
			2	1, 2, 4	✓	58.00		0	99999	
	4 - Emsworth Road	1	1	(1, 2, 3, 4)		Infinity				
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5		Infinity		0	99999	
	2 - Havant Road	1	1	2, 3, 4, 5	✓	10.43		0	99999	
			2	2, 3, 4, 5	✓	9.57		0	99999	
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)		Infinity				
			1	2, 3, 4, 5		Infinity		0	99999	
			1	2, 3, 4, 5	✓	13.00		0	99999	
			2	2, 3, 4, 5	✓	13.00		0	99999	
3 - Castle Ave	A - Emsworth Road	1	1	B, C		Infinity		0	99999	
	B - Castle Ave	1	1	A, C		Infinity		0	99999	
	C - Emsworth Road (S)	1	1	A	✓	2.00		0	99999	
			2	B	✓	2.00		0	99999	
		2	1	(A, B)	✓	4.00				

Entry Lane slope and intercept

Junction	Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	0.475	997
	3 - A27 Off-Slip	1	1	0.356	1043
			2	0.356	1043
	4 - Emsworth Road	1	1	0.590	1469
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	0.675	1856
	2 - Havant Road	1	1	0.354	1028
			2	0.354	1028
	3 - Church Lane	1	1	0.498	1112
	5 - Emsworth Road	1	1	0.342	1016
			2	0.342	1016

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm			
				A27 On Slip	Emsworth Road (S)	A27 Off-Slip	Emsworth Road
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	✓	✓		✓
	3 - A27 Off-Slip	1	1	✓	✓		✓
			2	✓	✓		✓
	4 - Emsworth Road	1	1	✓	✓	✓	✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm				
				A27 Off-Slip	Havant Road	Church Lane	A27 On-Slip	Emsworth Road
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1		✓	✓	✓	✓
	2 - Havant Road	1	1		✓	✓	✓	✓
			2		✓	✓	✓	✓
	2	1	✓	✓	✓	✓	✓	✓
	3 - Church Lane	1	1		✓	✓	✓	✓
	5 - Emsworth Road	1	1		✓	✓	✓	✓
			2		✓	✓	✓	✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm		
				Emsworth Road	Castle Ave	Emsworth Road (S)
3 - Castle Ave	A - Emsworth Road	1	1		✓	✓
	B - Castle Ave	1	1	✓		✓
	C - Emsworth Road (S)	1	1	✓		
			2		✓	
		2	1	✓	✓	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Selangor Ave less CA Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1100	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	77	100.000
	2 - Havant Road		ONE HOUR	✓	1351	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	615	100.000
	B - Castle Ave		ONE HOUR	✓	40	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	30	0	0	291
	3 - A27 Off-Slip	2	770	0	328
	4 - Emsworth Road	48	562	0	1

Proportions

	To				
From		1 - A27 On Slip	2 - Emsworth Road (\$)	3 - A27 Off- Slip	E
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (\$)	0.09	0.00	0.00	
	3 - A27 Off-Slip	0.00	0.70	0.00	
	4 - Emsworth Road	0.08	0.92	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	34	0	2	41
	2 - Havant Road	0	2	1	1107	241
	3 - Church Lane	0	0	0	3	1
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	942	4	378	0

Proportions

	To				
From		1 - A27 Off- Slip	2 - Havant Road	3 - Church Lane	4 - A27 On- Slip
	1 - A27 Off-Slip	0.00	0.44	0.00	0.03
	2 - Havant Road	0.00	0.00	0.00	0.82
	3 - Church Lane	0.00	0.00	0.00	0.75
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.71	0.00	0.29

Demand (Veh/hr)

3 -
Castle
Ave

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0	5	610
	B - Castle Ave	13	0	27
	C - Emsworth Road (S)	620	4	0

Proportions

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0.00	0.01	0.99
	B - Castle Ave	0.33	0.00	0.68
	C - Emsworth Road (S)	0.99	0.01	0.00

Vehicle Mix

Heavy Vehicle Percentages

1 - A27
Emsworth
Road

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	5	0	0	2
	3 - A27 Off-Slip	50	4	0	3
	4 - Emsworth Road	4	3	0	0

Average PCU Per Veh

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	1.050	1.000	1.000	1.000
	3 - A27 Off-Slip	1.500	1.040	1.000	1.000
	4 - Emsworth Road	1.040	1.030	1.000	1.000

Heavy Vehicle Percentages

2 -
A27 /
Church
Lane

	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	0	0	0	0
	2 - Havant Road	0	0	0	3	2
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	2	0	2	0

Average PCU Per Veh

	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
From	1 - A27 Off-Slip	1.000	1.000	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.030
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.020	1.000	1.020

Heavy Vehicle Percentages

3 -
Castle
Ave

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	247
		3 - A27 Off-Slip	828	859
		4 - Emsworth Road	460	474
	2 - A27 / Church Lane	1 - A27 Off-Slip	58	58
		2 - Havant Road	1017	1046
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	997	1017
		A - Emsworth Road	463	463
		B - Castle Ave	30	30
		C - Emsworth Road (S)	470	470
08:00-08:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	295
		3 - A27 Off-Slip	989	1026
		4 - Emsworth Road	549	566
	2 - A27 / Church Lane	1 - A27 Off-Slip	69	69
		2 - Havant Road	1215	1249
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1190	1214
	3 - Castle Ave	A - Emsworth Road	553	553
		B - Castle Ave	36	36
		C - Emsworth Road (S)	561	561
08:15-08:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	353	361
		3 - A27 Off-Slip	1211	1257
		4 - Emsworth Road	673	693
	2 - A27 / Church Lane	1 - A27 Off-Slip	85	85
		2 - Havant Road	1487	1529
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1458	1487
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	44	44
		C - Emsworth Road (S)	687	687
08:30-08:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	353	361
		3 - A27 Off-Slip	1211	1257
		4 - Emsworth Road	673	693
	2 - A27 / Church Lane	1 - A27 Off-Slip	85	85
		2 - Havant Road	1487	1529
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1458	1487
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	44	44
		C - Emsworth Road (S)	687	687
08:45-09:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	295
		3 - A27 Off-Slip	989	1026
		4 - Emsworth Road	549	566
	2 - A27 / Church Lane	1 - A27 Off-Slip	69	69
		2 - Havant Road	1215	1249
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1190	1214
	3 - Castle Ave	A - Emsworth Road	553	553
		B - Castle Ave	36	36
		C - Emsworth Road (S)	561	561
	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	247
		3 - A27 Off-Slip	828	859
		4 - Emsworth Road	460	474
		1 - A27 Off-Slip	58	58

09:00-09:15	2 - A27 / Church Lane	2 - Havant Road	1017	1046
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	997	1017
	3 - Castle Ave	A - Emsworth Road	463	463
		B - Castle Ave	30	30
		C - Emsworth Road (S)	470	470

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.65	0.6	A	259	388
	3 - A27 Off-Slip	8.37	2.8	A	998	1498
	4 - Emsworth Road	9.27	1.8	A	579	868
2 - A27 / Church Lane	1 - A27 Off-Slip	4.85	0.1	A	71	106
	2 - Havant Road	21.87	9.1	C	1236	1854
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	8.97	3.9	A	1238	1856
3 - Castle Ave	A - Emsworth Road	4.46	0.9	A	559	838
	B - Castle Ave	35.01	0.4	E	36	54
	C - Emsworth Road (S)	0.06	0.0	A	527	790

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			54				
	2 - Emsworth Road (S)	215	54	0.48	214	209	1007	0.0	0.3	4.757	A
	3 - A27 Off-Slip	809	202	214	811	849	0	0.0	0.9	5.116	A
	4 - Emsworth Road	465	116	597	465	495	429	0.0	0.7	5.454	A
2 - A27 / Church Lane	1 - A27 Off-Slip	61	15	1007	60	59	0	0.0	0.1	3.377	A
	2 - Havant Road	1014	254	320	1019	1035	747	0.0	1.6	6.389	A
	3 - Church Lane	0	0	1334	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1118				
	5 - Emsworth Road	1007	252	1	1006	1035	216	0.0	1.5	5.236	A
3 - Castle Ave	A - Emsworth Road	449	112		449	468	435	0.0	0.0	0.117	A
	B - Castle Ave	29	7		29	30	7	0.0	0.0	8.550	A
	C - Emsworth Road (S)	429	107		429	427	465	0.0	0.0	0.044	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			74				
	2 - Emsworth Road (S)	248	62	0.24	250	254	1219	0.3	0.2	4.883	A
	3 - A27 Off-Slip	985	246	250	986	1016	0	0.9	1.8	5.795	A
	4 - Emsworth Road	577	144	716	577	584	520	0.7	1.2	6.496	A
2 - A27 / Church Lane	1 - A27 Off-Slip	69	17	1224	69	68	0	0.1	0.1	3.573	A
	2 - Havant Road	1205	301	390	1209	1239	904	1.6	2.7	8.991	A
	3 - Church Lane	0	0	1595	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1345				
	5 - Emsworth Road	1219	305	2	1223	1230	248	1.5	1.8	6.051	A
3 - Castle Ave	A - Emsworth Road	556	139		556	550	528	0.0	0.0	0.208	A
	B - Castle Ave	37	9		38	34	9	0.0	0.1	9.729	A
	C - Emsworth Road (S)	520	130		520	514	577	0.0	0.0	0.043	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			86				
	2 - Emsworth Road (S)	309	77	2	310	312	1498	0.2	0.5	5.583	A
	3 - A27 Off-Slip	1206	301	312	1208	1241	0	1.8	2.8	8.370	A
	4 - Emsworth Road	698	174	888	698	717	633	1.2	1.8	8.639	A
2 - A27 / Church Lane	1 - A27 Off-Slip	88	22	1499	87	87	0	0.1	0.1	4.743	A
	2 - Havant Road	1483	371	476	1482	1499	1111	2.7	9.1	18.911	C
	3 - Church Lane	0	0	1952	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1640				
	5 - Emsworth Road	1498	374	3	1497	1506	309	1.8	3.8	8.962	A
3 - Castle Ave	A - Emsworth Road	683	171		679	678	644	0.0	0.9	2.851	A
	B - Castle Ave	42	11		42	42	9	0.1	0.4	23.919	C
	C - Emsworth Road (S)	633	158		632	627	698	0.0	0.0	0.050	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			88				
	2 - Emsworth Road (S)	316	79	0.36	314	320	1495	0.5	0.6	5.645	A
	3 - A27 Off-Slip	1188	297	315	1183	1254	0	2.8	2.8	8.333	A
	4 - Emsworth Road	709	177	873	710	729	625	1.8	1.7	9.271	A
2 - A27 / Church Lane	1 - A27 Off-Slip	82	20	1502	81	82	0	0.1	0.1	4.849	A
	2 - Havant Road	1482	371	482	1494	1531	1101	9.1	8.1	21.868	C
	3 - Church Lane	0	0	1972	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1653				
	5 - Emsworth Road	1495	374	3	1499	1534	316	3.8	3.1	8.972	A
3 - Castle Ave	A - Emsworth Road	680	170		683	684	633	0.9	0.8	4.460	A
	B - Castle Ave	40	10		42	42	11	0.4	0.3	35.015	E
	C - Emsworth Road (S)	625	156		625	643	709	0.0	0.0	0.055	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			70				
	2 - Emsworth Road (S)	251	63	0.71	253	267	1212	0.6	0.3	5.064	A
	3 - A27 Off-Slip	985	246	254	983	1032	0	2.8	1.8	6.203	A
	4 - Emsworth Road	563	141	720	563	598	517	1.7	1.0	7.221	A
2 - A27 / Church Lane	1 - A27 Off-Slip	71	18	1214	72	70	0	0.1	0.0	4.070	A
	2 - Havant Road	1221	305	391	1227	1275	895	8.1	2.6	10.994	B
	3 - Church Lane	0	0	1614	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1361				
	5 - Emsworth Road	1212	303	2	1212	1257	252	3.1	2.0	6.296	A
3 - Castle Ave	A - Emsworth Road	539	135		540	552	527	0.8	0.0	0.899	A
	B - Castle Ave	38	10		39	39	7	0.3	0.0	13.149	B
	C - Emsworth Road (S)	517	129		517	534	563	0.0	0.0	0.043	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			58				
	2 - Emsworth Road (S)	212	53	0.59	211	220	996	0.3	0.3	4.617	A
	3 - A27 Off-Slip	821	205	212	819	861	0	1.8	1.3	5.195	A
	4 - Emsworth Road	462	116	594	461	495	437	1.0	0.8	5.617	A
2 - A27 / Church Lane	1 - A27 Off-Slip	55	14	997	55	59	0	0.0	0.0	3.301	A
	2 - Havant Road	1010	252	320	1005	1051	732	2.6	1.8	6.653	A
	3 - Church Lane	0	0	1321	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1108				
	5 - Emsworth Road	996	249	1	996	1044	212	2.0	1.4	5.264	A
3 - Castle Ave	A - Emsworth Road	447	112		447	462	443	0.0	0.0	0.117	A
	B - Castle Ave	28	7		28	30	7	0.0	0.1	8.695	A
	C - Emsworth Road (S)	437	109		438	445	462	0.0	0.0	0.034	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign leve serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	215	976	0.221	214	209	0.0	0.3	4.757	A
	3 - A27 Off-Slip	1	1	1, 2, 4	406	920	0.442	407	427	0.0	0.5	5.114	A
			2	1, 2, 4	402	928	0.433	404	423	0.0	0.4	5.117	A
		2	1	(1, 2, 3, 4)	809			809	853	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	465	1076	0.432	465	495	0.0	0.7	5.454	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	61	1162	0.052	60	59	0.0	0.1	3.377	A
	2 - Havant Road	1	1	2, 3, 4, 5	503	885	0.569	506	514	0.0	0.8	6.421	A
			2	2, 3, 4, 5	511	887	0.577	513	521	0.0	0.8	6.358	A
		2	1	(1, 2, 3, 4, 5)	1014			1014	1041	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	430	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	503	995	0.506	503	519	0.0	0.7	5.266	A
			2	2, 3, 4, 5	505	997	0.506	504	516	0.0	0.7	5.206	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	449			449	468	0.0	0.0	0.117	A
	B - Castle Ave	1	1	A, C	29			29	30	0.0	0.0	8.550	A
	C - Emsworth Road (S)	1	1	A	426			426	424	0.0	0.0	0.000	A
			2	B	2			2	3	0.0	0.0	6.608	A
			2	1	(A, B)	429			429	427	0.0	0.0	0.000

08:00 - 08:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	248	977	0.254	250	254	0.3	0.2	4.883	A
	3 - A27 Off-Slip	1	1	1, 2, 4	486	911	0.533	486	506	0.5	0.9	5.825	A
			2	1, 2, 4	499	910	0.548	500	510	0.4	0.9	5.766	A
		2	1	(1, 2, 3, 4)	985			985	1020	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	577	1001	0.576	577	584	0.7	1.2	6.496	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	69	1013	0.069	69	68	0.1	0.1	3.573	A
	2 - Havant Road	1	1	2, 3, 4, 5	609	866	0.705	612	624	0.8	1.3	8.933	A
			2	2, 3, 4, 5	596	865	0.689	597	616	0.8	1.4	9.015	A
		2	1	(1, 2, 3, 4, 5)	1205			1205	1245	0.0	0.0	0.014	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	300	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	611	997	0.613	612	612	0.7	0.9	6.069	A
			2	2, 3, 4, 5	608	995	0.611	611	617	0.7	0.9	6.034	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	556			556	550	0.0	0.0	0.208	A
	B - Castle Ave	1	1	A, C	37			38	34	0.0	0.1	9.729	A
	C - Emsworth Road (S)	1	1	A	516			516	511	0.0	0.0	0.000	A
			2	B	4			4	3	0.0	0.0	6.789	A
		2	1	(A, B)	520			520	514	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	309	972	0.318	310	312	0.2	0.5	5.583	
	3 - A27 Off-Slip	1	1	1, 2, 4	600	887	0.675	601	621	0.9	1.4	8.332	
			2	1, 2, 4	606	889	0.680	608	620	0.9	1.3	8.408	
		2	1	(1, 2, 3, 4)	1206			1206	1245	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	698	899	0.775	698	717	1.2	1.8	8.639		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	88	825	0.106	87	87	0.1	0.1	4.743	
	2 - Havant Road	1	1	2, 3, 4, 5	725	834	0.869	727	744	1.3	4.0	17.851	
			2	2, 3, 4, 5	755	833	0.906	755	755	1.4	3.9	17.045	
	2	1	(1, 2, 3, 4, 5)	1483			1480	1520	0.0	1.2	1.406		
	3 - Church Lane	1	1	2, 3, 4, 5	0	120	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	757	998	0.759	756	753	0.9	1.9	8.909	
2			2, 3, 4, 5	741	996	0.744	740	753	0.9	1.9	9.015		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	683			679	678	0.0	0.9	2.851	
	B - Castle Ave	1	1	A, C	42			42	42	0.1	0.4	23.919	
	C - Emsworth Road (S)	1	1	A	629			629	623	0.0	0.0	0.000	
			2	B	3			3	4	0.0	0.0	7.249	
		2	1	(A, B)	633			633	628	0.0	0.0	0.000	

08:30 - 08:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	316	977	0.324	314	320	0.5	0.6	5.645	
	3 - A27 Off-Slip	1	1	1, 2, 4	591	886	0.668	588	626	1.4	1.3	8.410	
			2	1, 2, 4	596	890	0.670	595	628	1.3	1.4	8.256	
			2	1	(1, 2, 3, 4)	1188			1188	1254	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	709	911	0.777	710	729	1.8	1.7	9.271	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	82	821	0.099	81	82	0.1	0.1	4.849	
	2 - Havant Road	1	1	2, 3, 4, 5	748	829	0.902	752	774	4.0	3.6	19.202	
			2	2, 3, 4, 5	740	829	0.892	742	757	3.9	3.7	18.903	
		2	1	(1, 2, 3, 4, 5)	1482			1488	1528	1.2	0.8	2.823	
	3 - Church Lane	1	1	2, 3, 4, 5	0	108	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	749	994	0.753	750	768	1.9	1.6	8.939	
2			2, 3, 4, 5	746	995	0.749	749	766	1.9	1.6	9.005		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	680			683	684	0.9	0.8	4.460	
	B - Castle Ave	1	1	A, C	40			42	42	0.4	0.3	35.015	
	C - Emsworth Road (S)	1	1	A	620			620	639	0.0	0.0	0.000	
			2	B	5			5	5	0.0	0.0	7.863	
		2	1	(A, B)	625			625	643	0.0	0.0	0.000	

08:45 - 09:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	251	975	0.258	253	267	0.6	0.3	5.064	
	3 - A27 Off-Slip	1	1	1, 2, 4	497	905	0.550	498	519	1.3	0.9	6.157	
			2	1, 2, 4	487	911	0.535	485	513	1.4	1.0	6.249	
		2	1	(1, 2, 3, 4)	985			985	1028	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	563	1002	0.562	563	598	1.7	1.0	7.221	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	71	1022	0.070	72	70	0.1	0.0	4.070	
	2 - Havant Road	1	1	2, 3, 4, 5	609	863	0.706	612	640	3.6	1.3	10.714	
			2	2, 3, 4, 5	612	862	0.710	616	635	3.7	1.3	10.681	
		2	1	(1, 2, 3, 4, 5)	1221			1221	1255	0.8	0.0	0.376	
	3 - Church Lane	1	1	2, 3, 4, 5	0	281	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	607	997	0.610	609	622	1.6	0.9	6.415	
			2	2, 3, 4, 5	604	999	0.605	603	635	1.6	1.0	6.180	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	539			540	552	0.8	0.0	0.899	
	B - Castle Ave	1	1	A, C	38			39	39	0.3	0.0	13.149	
	C - Emsworth Road (S)	1	1	A	515			515	530	0.0	0.0	0.000	
			2	B	2			3	3	0.0	0.0	7.454	
		2	1	(A, B)	517			517	534	0.0	0.0	0.000	

09:00 - 09:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	212	977	0.217	211	220	0.3	0.3	4.617	A
	3 - A27 Off-Slip	1	1	1, 2, 4	410	927	0.442	410	429	0.9	0.6	5.229	A
			2	1, 2, 4	411	925	0.444	409	432	1.0	0.7	5.162	A
		2	1	(1, 2, 3, 4)	821			821	858	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	462	1082	0.427	461	495	1.0	0.8	5.617	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	55	1170	0.047	55	59	0.0	0.0	3.301	A
	2 - Havant Road	1	1	2, 3, 4, 5	506	888	0.570	503	526	1.3	1.0	6.666	A
			2	2, 3, 4, 5	504	889	0.566	502	526	1.3	0.8	6.638	A
		2	1	(1, 2, 3, 4, 5)	1010			1010	1048	0.0	0.0	0.001	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	438	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	493	995	0.496	494	521	0.9	0.7	5.348	A
			2	2, 3, 4, 5	503	998	0.503	502	523	1.0	0.8	5.181	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	447			447	462	0.0	0.0	0.117	A
	B - Castle Ave	1	1	A, C	28			28	30	0.0	0.1	8.695	A
	C - Emsworth Road (S)	1	1	A	435			435	442	0.0	0.0	0.000	A
			2	B	3			3	3	0.0	0.0	5.459	A
		2	1	(A, B)	437			437	445	0.0	0.0	0.000	A

2026 Selangor Ave less CA Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	27.75	D
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	10.45	B
3	Castle Ave	T-Junction	Two-way			7.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026 Selangor Ave less CA Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1567	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	133	100.000
	2 - Havant Road		ONE HOUR	✓	915	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	534	100.000
	B - Castle Ave		ONE HOUR	✓	23	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	36	0	0	286
	3 - A27 Off-Slip	10	1101	0	456
	4 - Emsworth Road	75	446	0	1

Proportions

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	E
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.11	0.00	0.00	
	3 - A27 Off-Slip	0.01	0.70	0.00	
	4 - Emsworth Road	0.14	0.85	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	48	0	0	85
	2 - Havant Road	0	2	0	705	208
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1310	2	239	1

Proportions

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	0.00	0.36	0.00	0.00
	2 - Havant Road	0.00	0.00	0.00	0.77
	3 - Church Lane	0.20	0.20	0.20	0.20
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.84	0.00	0.15

Demand (Veh/hr)

3 - Castle Ave

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	11	523
	B - Castle Ave	6	0	17
	C - Emsworth Road (S)	739	9	0

Proportions

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0.00	0.02	0.98
	B - Castle Ave	0.26	0.00	0.74
	C - Emsworth Road (S)	0.99	0.01	0.00

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	4	0	0	2
	3 - A27 Off-Slip	0	1	0	1
	4 - Emsworth Road	0	2	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	
	2 - Emsworth Road (S)	1.040	1.000	1.000	
	3 - A27 Off-Slip	1.000	1.010	1.000	
	4 - Emsworth Road	1.000	1.020	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	3	0	0	4
	2 - Havant Road	0	0	0	2	3
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1	0	1	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.030	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.020
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.010	1.000	1.010

3 - Castle Ave

Heavy Vehicle Percentages

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	248
		3 - A27 Off-Slip	1180	1191
		4 - Emsworth Road	393	400
	2 - A27 / Church Lane	1 - A27 Off-Slip	100	104
		2 - Havant Road	689	704
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1168	1180
	3 - Castle Ave	A - Emsworth Road	402	402
		B - Castle Ave	17	17
		C - Emsworth Road (S)	563	563
17:00-17:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	296
		3 - A27 Off-Slip	1409	1423
		4 - Emsworth Road	469	477
	2 - A27 / Church Lane	1 - A27 Off-Slip	120	124
		2 - Havant Road	823	841
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	1395	1409
		A - Emsworth Road	480	480
		B - Castle Ave	21	21
		C - Emsworth Road (S)	672	672
17:15-17:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	355	362
		3 - A27 Off-Slip	1725	1742
		4 - Emsworth Road	575	585
	2 - A27 / Church Lane	1 - A27 Off-Slip	146	152
		2 - Havant Road	1007	1030
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1709	1726
	3 - Castle Ave	A - Emsworth Road	588	588
		B - Castle Ave	25	25
		C - Emsworth Road (S)	824	824
17:30-17:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	355	362
		3 - A27 Off-Slip	1725	1742
		4 - Emsworth Road	575	585
	2 - A27 / Church Lane	1 - A27 Off-Slip	146	152
		2 - Havant Road	1007	1030
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1709	1726
	3 - Castle Ave	A - Emsworth Road	588	588
		B - Castle Ave	25	25
		C - Emsworth Road (S)	824	824
17:45-18:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	296
		3 - A27 Off-Slip	1409	1423
		4 - Emsworth Road	469	477
	2 - A27 / Church Lane	1 - A27 Off-Slip	120	124
		2 - Havant Road	823	841
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1395	1409
	3 - Castle Ave	A - Emsworth Road	480	480
		B - Castle Ave	21	21
		C - Emsworth Road (S)	672	672
18:00-18:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	248
		3 - A27 Off-Slip	1180	1191
		4 - Emsworth Road	393	400
	2 - A27 / Church Lane	1 - A27 Off-Slip	100	104
		2 - Havant Road	689	704
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1168	1180
	3 - Castle Ave	A - Emsworth Road	402	402
		B - Castle Ave	17	17
		C - Emsworth Road (S)	563	563

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.50	0.5	A	267	400
	3 - A27 Off-Slip	37.14	18.4	E	1435	2152
	4 - Emsworth Road	12.79	2.2	B	494	741
2 - A27 / Church Lane	1 - A27 Off-Slip	7.27	0.4	A	119	178
	2 - Havant Road	6.61	2.0	A	837	1256
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	12.99	6.6	B	1431	2147
3 - Castle Ave	A - Emsworth Road	13.42	2.0	B	491	736
	B - Castle Ave	81.23	0.7	F	21	31
	C - Emsworth Road (S)	0.09	0.0	A	655	982

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			92				
	2 - Emsworth Road (S)	221	55	0.71	221	223	1175	0.0	0.3	4.678	A
	3 - A27 Off-Slip	1185	296	222	1178	1184	0	0.0	2.5	6.620	A
	4 - Emsworth Road	401	100	868	399	411	532	0.0	0.9	6.158	A
2 - A27 / Church Lane	1 - A27 Off-Slip	100	25	1177	100	105	0	0.0	0.1	3.884	A
	2 - Havant Road	688	172	243	689	702	1034	0.0	0.9	4.749	A
	3 - Church Lane	0	0	930	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			707				
	5 - Emsworth Road	1175	294	2	1175	1174	221	0.0	1.9	5.741	A
3 - Castle Ave	A - Emsworth Road	397	99		397	402	529	0.0	0.0	0.056	A
	B - Castle Ave	17	4		17	19	16	0.0	0.0	8.160	A
	C - Emsworth Road (S)	532	133		532	533	401	0.0	0.0	0.074	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			107				
	2 - Emsworth Road (S)	260	65	0.43	259	263	1413	0.3	0.4	4.949	A
	3 - A27 Off-Slip	1412	353	259	1413	1418	0	2.5	3.9	9.300	A
	4 - Emsworth Road	486	122	1035	486	491	638	0.9	1.1	7.769	A
2 - A27 / Church Lane	1 - A27 Off-Slip	119	30	1417	119	122	0	0.1	0.2	4.650	A
	2 - Havant Road	802	201	294	801	829	1242	0.9	1.2	5.277	A
	3 - Church Lane	0	0	1093	0	0	1	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			832				
	5 - Emsworth Road	1413	353	2	1415	1410	260	1.9	2.7	7.121	A
3 - Castle Ave	A - Emsworth Road	483	121		483	481	633	0.0	0.0	0.269	A
	B - Castle Ave	18	5		19	19	21	0.0	0.0	8.989	A
	C - Emsworth Road (S)	638	159		638	639	486	0.0	0.0	0.086	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			132				
	2 - Emsworth Road (S)	317	79	1	317	325	1704	0.4	0.5	5.462	A
	3 - A27 Off-Slip	1718	429	318	1713	1689	0	3.9	15.4	26.269	D
	4 - Emsworth Road	586	147	1252	585	590	778	1.1	2.1	11.602	B
2 - A27 / Church Lane	1 - A27 Off-Slip	141	35	1701	140	150	0	0.2	0.4	6.287	A
	2 - Havant Road	1001	250	358	999	1017	1483	1.2	2.0	6.238	A
	3 - Church Lane	0	0	1355	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1037				
	5 - Emsworth Road	1704	426	2	1700	1670	317	2.7	6.0	11.760	B
3 - Castle Ave	A - Emsworth Road	592	148		583	582	777	0.0	2.0	6.888	A
	B - Castle Ave	26	7		25	24	22	0.0	0.4	50.261	F
	C - Emsworth Road (S)	779	195		779	771	587	0.0	0.0	0.076	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			129				
	2 - Emsworth Road (S)	320	80	1	320	330	1713	0.5	0.5	5.505	A
	3 - A27 Off-Slip	1715	429	321	1716	1730	0	15.4	18.4	37.138	E
	4 - Emsworth Road	601	150	1244	600	606	793	2.1	2.2	12.791	B
2 - A27 / Church Lane	1 - A27 Off-Slip	146	36	1705	146	153	0	0.4	0.3	7.268	A
	2 - Havant Road	1015	254	360	1011	1033	1492	2.0	2.0	6.613	A
	3 - Church Lane	0	0	1369	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1046				
	5 - Emsworth Road	1713	428	3	1703	1729	320	6.0	6.6	12.993	B
3 - Castle Ave	A - Emsworth Road	592	148		596	590	789	2.0	2.0	13.417	B
	B - Castle Ave	24	6		25	24	22	0.4	0.7	81.228	F
	C - Emsworth Road (S)	793	198		793	786	601	0.0	0.0	0.093	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			115				
	2 - Emsworth Road (S)	269	67	0.71	271	275	1421	0.5	0.4	5.274	A
	3 - A27 Off-Slip	1410	352	271	1429	1490	0	18.4	3.2	15.515	C
	4 - Emsworth Road	489	122	1046	490	514	653	2.2	1.1	9.553	A
2 - A27 / Church Lane	1 - A27 Off-Slip	115	29	1424	116	124	0	0.3	0.2	5.489	A
	2 - Havant Road	825	206	300	825	846	1240	2.0	1.3	5.477	A
	3 - Church Lane	0	0	1123	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			852				
	5 - Emsworth Road	1421	355	2	1421	1494	269	6.6	3.1	9.167	A
3 - Castle Ave	A - Emsworth Road	485	121		484	489	652	2.0	0.3	2.998	A
	B - Castle Ave	20	5		20	23	17	0.7	0.1	20.590	C
	C - Emsworth Road (S)	654	163		654	668	489	0.0	0.0	0.076	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			93				
	2 - Emsworth Road (S)	214	54	0.43	215	227	1163	0.4	0.2	4.777	A
	3 - A27 Off-Slip	1170	292	215	1174	1197	0	3.2	2.1	6.920	A
	4 - Emsworth Road	401	100	854	402	417	535	1.1	0.6	6.461	A
2 - A27 / Church Lane	1 - A27 Off-Slip	92	23	1168	93	102	0	0.2	0.1	3.979	A
	2 - Havant Road	693	173	242	691	702	1019	1.3	0.9	4.715	A
	3 - Church Lane	0	0	931	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			715				
	5 - Emsworth Road	1163	291	2	1166	1197	214	3.1	1.8	5.888	A
3 - Castle Ave	A - Emsworth Road	396	99		396	401	532	0.3	0.0	0.105	A
	B - Castle Ave	17	4		17	18	15	0.1	0.0	7.889	A
	C - Emsworth Road (S)	535	134		535	541	401	0.0	0.0	0.071	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	221	975	0.226	221	223	0.0	0.3	4.678	A
	3 - A27 Off-Slip	1	1	1, 2, 4	594	945	0.628	590	591	0.0	1.3	6.629	A
			2	1, 2, 4	591	947	0.625	588	593	0.0	1.3	6.611	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1185			1185	1194	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	100	1024	0.098	100	105	0.0	0.1	3.884	A
	2 - Havant Road	1	1	2, 3, 4, 5	343	922	0.372	343	352	0.0	0.5	4.748	A
			2	2, 3, 4, 5	345	922	0.374	346	350	0.0	0.4	4.749	A
	3 - Church Lane	2	1	(1, 2, 3, 4, 5)	688			688	706	0.0	0.0	0.000	A
			1	2, 3, 4, 5	0	641	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	588	1005	0.585	588	587	0.0	0.9	5.746	A
3 - Castle Ave	5 - Emsworth Road	1	1	2, 3, 4, 5	587	1005	0.584	587	587	0.0	1.0	5.736	A
	A - Emsworth Road	1	1	B, C	397			397	402	0.0	0.0	0.056	A
	B - Castle Ave	1	1	A, C	17			17	19	0.0	0.0	8.160	A
	C - Emsworth Road (S)	1	1	A	524			524	527	0.0	0.0	0.000	A
			2	B	8			7	6	0.0	0.0	6.188	A
			2	(A, B)	532			532	534	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	260	974	0.267	259	263	0.3	0.4	4.949	A
	3 - A27 Off-Slip	1	1	1, 2, 4	707	930	0.760	707	711	1.3	2.0	9.249	A
			2	1, 2, 4	705	933	0.756	706	707	1.3	1.9	9.350	A
		2	1	(1, 2, 3, 4)	1412			1412	1424	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	486	842	0.577	486	491	0.9	1.1	7.769	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	119	854	0.140	119	122	0.1	0.2	4.650	A
	2 - Havant Road	1	1	2, 3, 4, 5	403	903	0.446	402	413	0.5	0.6	5.323	A
			2	2, 3, 4, 5	399	899	0.444	399	416	0.4	0.6	5.232	A
		2	1	(1, 2, 3, 4, 5)	802			802	830	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	556	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	699	1005	0.696	700	702	0.9	1.4	7.163	A
			2	2, 3, 4, 5	714	1005	0.711	715	708	1.0	1.3	7.080	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	483			483	481	0.0	0.0	0.269	A
	B - Castle Ave	1	1	A, C	18			19	19	0.0	0.0	8.989	A
	C - Emsworth Road (S)	1	1	A	628			628	630	0.0	0.0	0.000	A
			2	B	10			10	8	0.0	0.0	6.634	A
		2	1	(A, B)	638			638	639	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	317	975	0.326	317	325	0.4	0.5	5.462	
	3 - A27 Off-Slip	1	1	1, 2, 4	857	911	0.940	854	844	2.0	7.7	26.328	
			2	1, 2, 4	861	911	0.946	859	845	1.9	7.8	26.210	
		2	1	(1, 2, 3, 4)	1718			1718	1736	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	586	715	0.820	585	590	1.1	2.1	11.602	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	141	668	0.210	140	150	0.2	0.4	6.287	
	2 - Havant Road	1	1	2, 3, 4, 5	499	879	0.567	498	512	0.6	1.0	6.234	
			2	2, 3, 4, 5	502	878	0.572	501	506	0.6	1.0	6.242	
		2	1	(1, 2, 3, 4, 5)	1001			1001	1021	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	423	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	848	1005	0.844	845	834	1.4	3.1	11.781	
			2	2, 3, 4, 5	856	1004	0.852	855	836	1.3	3.0	11.739	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	592			583	582	0.0	2.0	6.888	
	B - Castle Ave	1	1	A, C	26			25	24	0.0	0.4	50.261	
	C - Emsworth Road (S)	1	1	A	769			769	762	0.0	0.0	0.000	
			2	B	9			9	9	0.0	0.0	6.623	
		2	1	(A, B)	779			779	771	0.0	0.0	0.000	

17:30 - 17:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	320	974	0.329	320	330	0.5	0.5	5.505	
	3 - A27 Off-Slip	1	1	1, 2, 4	861	910	0.946	862	864	7.7	9.2	37.191	
			2	1, 2, 4	854	911	0.937	854	866	7.8	9.2	37.084	
		2	1	(1, 2, 3, 4)	1715			1715	1742	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	601	721	0.833	600	606	2.1	2.2	12.791		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	146	669	0.218	146	153	0.4	0.3	7.268	
	2 - Havant Road	1	1	2, 3, 4, 5	507	877	0.579	507	518	1.0	0.9	6.576	
			2	2, 3, 4, 5	507	878	0.577	504	515	1.0	1.0	6.649	
	2	1	(1, 2, 3, 4, 5)	1015			1015	1033	0.0	0.0	0.000		
	3 - Church Lane	1	1	2, 3, 4, 5	0	416	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	852	1006	0.847	848	863	3.1	3.2	13.017	
2			2, 3, 4, 5	861	1006	0.856	855	866	3.0	3.4	12.969		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	592			596	590	2.0	2.0	13.417	
	B - Castle Ave	1	1	A, C	24			25	24	0.4	0.7	81.228	
	C - Emsworth Road (S)	1	1	A	783			783	776	0.0	0.0	0.000	
			2	B	10			10	10	0.0	0.0	7.445	
		2	1	(A, B)	793			793	786	0.0	0.0	0.000	

17:45 - 18:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	269	974	0.276	271	275	0.5	0.4	5.274	
	3 - A27 Off-Slip	1	1	1, 2, 4	702	928	0.756	712	740	9.2	1.6	15.629	
			2	1, 2, 4	708	928	0.763	717	750	9.2	1.6	15.402	
			2	1	(1, 2, 3, 4)	1410			1410	1429	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	489	836	0.585	490	514	2.2	1.1	9.553	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	115	854	0.135	116	124	0.3	0.2	5.489	
	2 - Havant Road	1	1	2, 3, 4, 5	411	897	0.458	411	420	0.9	0.7	5.501	
			2	2, 3, 4, 5	414	901	0.459	415	425	1.0	0.6	5.453	
		2	1	(1, 2, 3, 4, 5)	825			825	843	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	541	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	709	1006	0.705	708	747	3.2	1.6	9.191	
2			2, 3, 4, 5	712	1006	0.707	713	748	3.4	1.5	9.143		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	485			484	489	2.0	0.3	2.998	
	B - Castle Ave	1	1	A, C	20			20	23	0.7	0.1	20.590	
	C - Emsworth Road (S)	1	1	A	647			647	660	0.0	0.0	0.000	
			2	B	7			7	8	0.0	0.0	6.671	
		2	1	(A, B)	654			654	668	0.0	0.0	0.002	

18:00 - 18:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign leve serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	214	972	0.221	215	227	0.4	0.2	4.777	A
	3 - A27 Off-Slip	1	1	1, 2, 4	583	948	0.615	587	600	1.6	1.0	6.898	A
			2	1, 2, 4	586	946	0.620	587	597	1.6	1.1	6.943	A
		2	1	(1, 2, 3, 4)	1170			1170	1192	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	401	949	0.423	402	417	1.1	0.6	6.461	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	92	1022	0.090	93	102	0.2	0.1	3.979	A
	2 - Havant Road	1	1	2, 3, 4, 5	345	919	0.376	345	350	0.7	0.4	4.754	A
			2	2, 3, 4, 5	348	922	0.377	346	351	0.6	0.5	4.677	A
		2	1	(1, 2, 3, 4, 5)	693			693	700	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	639	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	580	1005	0.577	581	596	1.6	0.9	5.908	A
2			2, 3, 4, 5	583	1003	0.581	585	601	1.5	0.9	5.868	A	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	396			396	401	0.3	0.0	0.105	A
	B - Castle Ave	1	1	A, C	17			17	18	0.1	0.0	7.889	A
	C - Emsworth Road (S)	1	1	A	528			528	535	0.0	0.0	0.000	A
			2	B	7			7	7	0.0	0.0	5.760	A
		2	1	(A, B)	535			535	541	0.0	0.0	0.000	A

2026 Selangor Ave (inc. CA Dev), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	8.52	A
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	18.67	C
3	Castle Ave	T-Junction	Two-way			5.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Selangor Ave (inc. CA Dev)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1106	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	78	100.000
	2 - Havant Road		ONE HOUR	✓	1352	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	615	100.000
	B - Castle Ave		ONE HOUR	✓	69	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	30	0	0	293
	3 - A27 Off-Slip	2	770	0	334
	4 - Emsworth Road	53	585	0	1

Proportions

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	E
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.09	0.00	0.00	
	3 - A27 Off-Slip	0.00	0.70	0.00	
	4 - Emsworth Road	0.08	0.92	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	34	0	2	42
	2 - Havant Road	0	2	1	1107	242
	3 - Church Lane	0	0	0	3	1
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	943	4	400	1

Proportions

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	0.00	0.44	0.00	0.03
	2 - Havant Road	0.00	0.00	0.00	0.82
	3 - Church Lane	0.00	0.00	0.00	0.75
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.70	0.00	0.30

Demand (Veh/hr)

3 - Castle Ave

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	5	610
	B - Castle Ave	13	0	56
	C - Emsworth Road (S)	620	12	0

Proportions

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0.00	0.01	0.99
	B - Castle Ave	0.19	0.00	0.81
	C - Emsworth Road (S)	0.98	0.02	0.00

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	5	0	0	2
	3 - A27 Off-Slip	50	4	0	3
	4 - Emsworth Road	4	3	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	
	2 - Emsworth Road (S)	1.050	1.000	1.000	
	3 - A27 Off-Slip	1.500	1.040	1.000	
	4 - Emsworth Road	1.040	1.030	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	0	0	0	0
	2 - Havant Road	0	0	0	3	2
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	2	0	2	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.000	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.030
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.020	1.000	1.020

3 - Castle Ave

Heavy Vehicle Percentages

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	833	864
		4 - Emsworth Road	481	496
	2 - A27 / Church Lane	1 - A27 Off-Slip	59	59
		2 - Havant Road	1018	1047
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1015	1035
	3 - Castle Ave	A - Emsworth Road	463	463
		B - Castle Ave	52	52
		C - Emsworth Road (S)	476	476
08:00-08:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	994	1032
		4 - Emsworth Road	574	592
	2 - A27 / Church Lane	1 - A27 Off-Slip	70	70
		2 - Havant Road	1215	1250
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	1212	1236
		A - Emsworth Road	553	553
		B - Castle Ave	62	62
		C - Emsworth Road (S)	568	568
08:15-08:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1218	1264
		4 - Emsworth Road	704	725
	2 - A27 / Church Lane	1 - A27 Off-Slip	86	86
		2 - Havant Road	1489	1530
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1484	1514
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	76	76
		C - Emsworth Road (S)	696	696
08:30-08:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1218	1264
		4 - Emsworth Road	704	725
	2 - A27 / Church Lane	1 - A27 Off-Slip	86	86
		2 - Havant Road	1489	1530
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1484	1514
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	76	76
		C - Emsworth Road (S)	696	696
08:45-09:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	994	1032
		4 - Emsworth Road	574	592
	2 - A27 / Church Lane	1 - A27 Off-Slip	70	70
		2 - Havant Road	1215	1250
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1212	1236
	3 - Castle Ave	A - Emsworth Road	553	553
		B - Castle Ave	62	62
		C - Emsworth Road (S)	568	568
09:00-09:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	833	864
		4 - Emsworth Road	481	496
	2 - A27 / Church Lane	1 - A27 Off-Slip	59	59
		2 - Havant Road	1018	1047
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1015	1035
	3 - Castle Ave	A - Emsworth Road	463	463
		B - Castle Ave	52	52
		C - Emsworth Road (S)	476	476

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.50	0.6	A	265	397
	3 - A27 Off-Slip	8.55	3.3	A	1017	1525
	4 - Emsworth Road	9.78	2.2	A	611	916
2 - A27 / Church Lane	1 - A27 Off-Slip	5.08	0.1	A	72	107
	2 - Havant Road	29.02	11.5	D	1243	1865
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	9.15	4.0	A	1265	1897
3 - Castle Ave	A - Emsworth Road	5.86	1.2	A	565	847
	B - Castle Ave	53.82	1.5	F	64	96
	C - Emsworth Road (S)	0.13	0.0	A	546	819

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			65				
	2 - Emsworth Road (S)	213	53	0.86	213	214	1032	0.0	0.3	4.803	A
	3 - A27 Off-Slip	823	206	214	824	858	0	0.0	1.1	5.091	A
	4 - Emsworth Road	501	125	597	501	518	442	0.0	0.8	5.676	A
2 - A27 / Church Lane	1 - A27 Off-Slip	55	14	1035	56	59	0	0.0	0.0	3.238	A
	2 - Havant Road	1026	256	344	1025	1037	747	0.0	2.1	6.516	A
	3 - Church Lane	0	0	1364	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1150				
	5 - Emsworth Road	1032	258	1	1034	1054	213	0.0	1.5	5.346	A
3 - Castle Ave	A - Emsworth Road	463	116		463	467	445	0.0	0.0	0.124	A
	B - Castle Ave	53	13		52	54	11	0.0	0.2	8.280	A
	C - Emsworth Road (S)	442	110		442	438	501	0.0	0.0	0.122	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			78				
	2 - Emsworth Road (S)	262	66	1	262	262	1252	0.3	0.4	4.950	A
	3 - A27 Off-Slip	1001	250	263	1000	1025	0	1.1	1.9	6.190	A
	4 - Emsworth Road	606	152	726	604	616	536	0.8	1.2	6.733	A
2 - A27 / Church Lane	1 - A27 Off-Slip	70	18	1256	71	70	0	0.0	0.1	3.812	A
	2 - Havant Road	1225	306	411	1225	1257	916	2.1	2.9	9.178	A
	3 - Church Lane	0	0	1632	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1367				
	5 - Emsworth Road	1252	313	2	1253	1258	262	1.5	2.2	6.474	A
3 - Castle Ave	A - Emsworth Road	557	139		557	553	537	0.0	0.1	0.441	A
	B - Castle Ave	63	16		64	62	14	0.2	0.2	10.753	B
	C - Emsworth Road (S)	536	134		536	531	606	0.0	0.0	0.114	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			92				
	2 - Emsworth Road (S)	315	79	1	314	316	1517	0.4	0.6	5.495	A
	3 - A27 Off-Slip	1227	307	315	1226	1268	0	1.9	3.2	8.546	A
	4 - Emsworth Road	730	182	882	727	742	658	1.2	2.1	9.236	A
2 - A27 / Church Lane	1 - A27 Off-Slip	85	21	1521	84	85	0	0.1	0.1	4.708	A
	2 - Havant Road	1478	369	505	1474	1495	1101	2.9	9.5	19.397	C
	3 - Church Lane	0	0	1973	0	0	6	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1656				
	5 - Emsworth Road	1517	379	2	1520	1536	315	2.2	3.6	8.685	A
3 - Castle Ave	A - Emsworth Road	679	170		675	674	658	0.1	1.0	3.536	A
	B - Castle Ave	76	19		73	73	19	0.2	0.9	34.171	D
	C - Emsworth Road (S)	658	165		658	648	730	0.0	0.0	0.133	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			89				
	2 - Emsworth Road (S)	324	81	0.86	322	321	1511	0.6	0.5	5.444	A
	3 - A27 Off-Slip	1212	303	323	1210	1260	0	3.2	2.9	8.287	A
	4 - Emsworth Road	722	180	880	721	748	653	2.1	2.0	9.784	A
2 - A27 / Church Lane	1 - A27 Off-Slip	88	22	1509	88	88	0	0.1	0.1	5.083	A
	2 - Havant Road	1498	374	520	1510	1530	1078	9.5	11.4	29.023	D
	3 - Church Lane	0	0	2025	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1699				
	5 - Emsworth Road	1511	378	2	1507	1545	324	3.6	4.0	9.150	A
3 - Castle Ave	A - Emsworth Road	675	169		672	672	654	1.0	1.2	5.856	A
	B - Castle Ave	77	19		71	74	17	0.9	1.5	53.816	F
	C - Emsworth Road (S)	653	163		653	649	722	0.0	0.0	0.130	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			76				
	2 - Emsworth Road (S)	254	64	0.62	252	265	1232	0.5	0.5	5.094	A
	3 - A27 Off-Slip	1000	250	253	997	1037	0	2.9	1.7	6.363	A
	4 - Emsworth Road	595	149	714	595	636	536	2.0	1.2	7.418	A
2 - A27 / Church Lane	1 - A27 Off-Slip	72	18	1238	71	69	0	0.1	0.1	4.071	A
	2 - Havant Road	1208	302	417	1208	1285	892	11.4	2.9	12.284	B
	3 - Church Lane	0	0	1621	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1365				
	5 - Emsworth Road	1233	308	2	1237	1293	254	4.0	2.1	6.605	A
3 - Castle Ave	A - Emsworth Road	546	137		547	557	538	1.2	0.1	1.184	A
	B - Castle Ave	64	16		64	69	16	1.5	0.2	16.405	C
	C - Emsworth Road (S)	536	134		536	540	595	0.0	0.0	0.126	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			67				
	2 - Emsworth Road (S)	219	55	0.62	219	226	1045	0.5	0.2	4.698	A
	3 - A27 Off-Slip	836	209	220	838	866	0	1.7	1.2	5.203	A
	4 - Emsworth Road	508	127	606	506	520	451	1.2	0.9	5.855	A
2 - A27 / Church Lane	1 - A27 Off-Slip	59	15	1046	60	62	0	0.1	0.1	3.444	A
	2 - Havant Road	1024	256	342	1025	1054	764	2.9	1.8	6.759	A
	3 - Church Lane	0	0	1363	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1143				
	5 - Emsworth Road	1045	261	2	1044	1067	219	2.1	1.6	5.435	A
3 - Castle Ave	A - Emsworth Road	470	117		470	463	453	0.1	0.0	0.094	A
	B - Castle Ave	53	13		53	53	12	0.2	0.1	8.466	A
	C - Emsworth Road (S)	451	113		451	452	508	0.0	0.0	0.112	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	213	976	0.218	213	214	0.0	0.3	4.803	A
	3 - A27 Off-Slip	1	1	1, 2, 4	409	923	0.444	410	428	0.0	0.5	5.127	A
			2	1, 2, 4	414	924	0.448	414	429	0.0	0.6	5.055	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	823			823	862	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	55	1144	0.048	56	59	0.0	0.0	3.238	A
	2 - Havant Road	1	1	2, 3, 4, 5	513	880	0.583	513	520	0.0	1.1	6.491	A
			2	2, 3, 4, 5	513	880	0.582	512	517	0.0	1.1	6.541	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1026			1026	1046	0.0	0.0	0.000	A
			1	2, 3, 4, 5	0	416	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	517	996	0.519	518	525	0.0	0.8	5.414	A
			2	2, 3, 4, 5	515	997	0.517	516	529	0.0	0.7	5.278	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	463			463	467	0.0	0.0	0.124	A
	B - Castle Ave	1	1	A, C	53			52	54	0.0	0.2	8.280	A
	C - Emsworth Road (S)	1	1	A	433			433	430	0.0	0.0	0.000	A
			2	B	8			8	8	0.0	0.0	6.540	A
		2	1	(A, B)	442			442	439	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	262	973	0.270	262	262	0.3	0.4	4.950	
	3 - A27 Off-Slip	1	1	1, 2, 4	503	906	0.555	502	513	0.5	0.9	6.205	
			2	1, 2, 4	498	907	0.549	498	512	0.6	1.0	6.175	
		2	1	(1, 2, 3, 4)	1001			1001	1029	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	606	998	0.608	604	616	0.8	1.2	6.733		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	70	992	0.071	71	70	0.0	0.1	3.812	
	2 - Havant Road	1	1	2, 3, 4, 5	609	854	0.714	609	624	1.1	1.5	9.233	
			2	2, 3, 4, 5	616	852	0.724	617	633	1.1	1.4	9.108	
		2	1	(1, 2, 3, 4, 5)	1225			1225	1260	0.0	0.0	0.008	
	3 - Church Lane	1	1	2, 3, 4, 5	0	277	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	627	998	0.628	628	629	0.8	1.2	6.469	
2			2, 3, 4, 5	625	996	0.627	626	629	0.7	1.1	6.479		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	557			557	553	0.0	0.1	0.441	
	B - Castle Ave	1	1	A, C	63			64	62	0.2	0.2	10.753	
	C - Emsworth Road (S)	1	1	A	527			527	521	0.0	0.0	0.000	
			2	B	10			10	10	0.0	0.0	6.310	
		2	1	(A, B)	536			536	531	0.0	0.0	0.000	

08:15 - 08:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	315	972	0.324	314	316	0.4	0.6	5.495	
	3 - A27 Off-Slip	1	1	1, 2, 4	607	885	0.686	606	631	0.9	1.6	8.587	
			2	1, 2, 4	620	887	0.700	620	636	1.0	1.6	8.505	
			2	1	(1, 2, 3, 4)	1227			1227	1273	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	730	905	0.807	727	742	1.2	2.1	9.236	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	85	807	0.105	84	85	0.1	0.1	4.708	
	2 - Havant Road	1	1	2, 3, 4, 5	740	823	0.900	738	749	1.5	4.3	18.215	
			2	2, 3, 4, 5	738	823	0.896	736	747	1.4	4.1	17.631	
		2	1	(1, 2, 3, 4, 5)	1478			1478	1518	0.0	1.0	1.411	
	3 - Church Lane	1	1	2, 3, 4, 5	0	108	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	753	995	0.757	754	764	1.2	1.9	8.752	
2			2, 3, 4, 5	764	995	0.767	766	772	1.1	1.7	8.619		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	679			675	674	0.1	1.0	3.536	
	B - Castle Ave	1	1	A, C	76			73	73	0.2	0.9	34.171	
	C - Emsworth Road (S)	1	1	A	645			645	635	0.0	0.0	0.000	
			2	B	14			13	13	0.0	0.0	6.755	
		2	1	(A, B)	658			658	648	0.0	0.0	0.000	

08:30 - 08:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	324	975	0.333	322	321	0.6	0.5	5.444	
	3 - A27 Off-Slip	1	1	1, 2, 4	607	885	0.686	606	628	1.6	1.5	8.287	
			2	1, 2, 4	605	888	0.681	605	632	1.6	1.4	8.288	
		2	1	(1, 2, 3, 4)	1212			1212	1258	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	722	908	0.795	721	748	2.1	2.0	9.784		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	88	816	0.108	88	88	0.1	0.1	5.083	
	2 - Havant Road	1	1	2, 3, 4, 5	752	816	0.923	754	765	4.3	4.7	23.520	
			2	2, 3, 4, 5	755	819	0.924	756	765	4.1	4.5	22.242	
	2	1	(1, 2, 3, 4, 5)	1498			1508	1533	1.0	2.2	6.077		
	3 - Church Lane	1	1	2, 3, 4, 5	0	82	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	752	994	0.757	750	774	1.9	2.0	9.098	
2			2, 3, 4, 5	759	996	0.762	757	772	1.7	2.0	9.202		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	675			672	672	1.0	1.2	5.856	
	B - Castle Ave	1	1	A, C	77			71	74	0.9	1.5	53.816	
	C - Emsworth Road (S)	1	1	A	641			641	636	0.0	0.0	0.000	
			2	B	12			12	12	0.0	0.0	6.927	
		2	1	(A, B)	653			653	649	0.0	0.0	0.000	

08:45 - 09:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	254	977	0.260	252	265	0.5	0.5	5.094	
	3 - A27 Off-Slip	1	1	1, 2, 4	510	914	0.557	508	522	1.5	0.9	6.298	
			2	1, 2, 4	491	908	0.540	490	515	1.4	0.8	6.429	
		2	1	(1, 2, 3, 4)	1000			1000	1031	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	595	1009	0.590	595	636	2.0	1.2	7.418	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	72	1003	0.071	71	69	0.1	0.1	4.071	
	2 - Havant Road	1	1	2, 3, 4, 5	600	853	0.704	601	642	4.7	1.4	11.590	
			2	2, 3, 4, 5	608	855	0.711	607	643	4.5	1.5	11.364	
		2	1	(1, 2, 3, 4, 5)	1208			1208	1259	2.2	0.0	1.028	
	3 - Church Lane	1	1	2, 3, 4, 5	0	279	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	619	995	0.622	620	643	2.0	1.1	6.662	
2			2, 3, 4, 5	614	996	0.616	617	650	2.0	1.0	6.549		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	546			547	557	1.2	0.1	1.184	
	B - Castle Ave	1	1	A, C	64			64	69	1.5	0.2	16.405	
	C - Emsworth Road (S)	1	1	A	526			526	530	0.0	0.0	0.000	
			2	B	11			11	10	0.0	0.0	7.056	
		2	1	(A, B)	536			536	540	0.0	0.0	0.000	

09:00 - 09:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	219	973	0.225	219	226	0.5	0.2	4.698	A
	3 - A27 Off-Slip	1	1	1, 2, 4	419	921	0.455	419	434	0.9	0.6	5.191	A
			2	1, 2, 4	417	921	0.452	419	432	0.8	0.6	5.215	A
		2	1	(1, 2, 3, 4)	836			836	864	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	508	1066	0.477	506	520	1.2	0.9	5.855	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	59	1137	0.052	60	62	0.1	0.1	3.444	A
	2 - Havant Road	1	1	2, 3, 4, 5	508	879	0.578	509	522	1.4	0.9	6.825	A
			2	2, 3, 4, 5	515	878	0.587	516	532	1.5	0.9	6.696	A
		2	1	(1, 2, 3, 4, 5)	1024			1024	1050	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	416	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	526	998	0.527	525	533	1.1	0.8	5.458	A
2			2, 3, 4, 5	519	997	0.521	519	534	1.0	0.7	5.413	A	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	470			470	463	0.1	0.0	0.094	A
	B - Castle Ave	1	1	A, C	53			53	53	0.2	0.1	8.466	A
	C - Emsworth Road (S)	1	1	A	443			443	444	0.0	0.0	0.000	A
			2	B	8			8	8	0.0	0.0	6.318	A
		2	1	(A, B)	451			451	452	0.0	0.0	0.000	A

2026 Selangor Ave (inc. CA Dev), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	30.01	D
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	10.12	B
3	Castle Ave	T-Junction	Two-way			6.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Selangor Ave (inc. CA Dev)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1585	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	137	100.000
	2 - Havant Road		ONE HOUR	✓	918	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	545	100.000
	B - Castle Ave		ONE HOUR	✓	34	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	36	0	0	287
	3 - A27 Off-Slip	10	1101	0	474
	4 - Emsworth Road	77	456	0	1

Proportions

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	E
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.11	0.00	0.00	
	3 - A27 Off-Slip	0.01	0.69	0.00	
	4 - Emsworth Road	0.14	0.85	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	48	0	0	89
	2 - Havant Road	0	2	2	705	209
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1311	2	248	1

Proportions

	To				
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	0.00	0.35	0.00	0.00
	2 - Havant Road	0.00	0.00	0.00	0.77
	3 - Church Lane	0.20	0.20	0.20	0.20
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.84	0.00	0.16

Demand (Veh/hr)

3 - Castle Ave

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	11	534
	B - Castle Ave	6	0	28
	C - Emsworth Road (S)	762	32	0

Proportions

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0.00	0.02	0.98
	B - Castle Ave	0.18	0.00	0.82
	C - Emsworth Road (S)	0.96	0.04	0.00

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	4	0	0	2
	3 - A27 Off-Slip	0	1	0	1
	4 - Emsworth Road	0	2	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	
	2 - Emsworth Road (S)	1.040	1.000	1.000	
	3 - A27 Off-Slip	1.000	1.010	1.000	
	4 - Emsworth Road	1.000	1.020	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	3	0	0	4
	2 - Havant Road	0	0	0	2	3
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1	0	1	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.030	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.020
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.010	1.000	1.010

3 - Castle Ave

Heavy Vehicle Percentages

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	1193	1205
		4 - Emsworth Road	402	409
	2 - A27 / Church Lane	1 - A27 Off-Slip	103	107
		2 - Havant Road	691	706
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1176	1188
	3 - Castle Ave	A - Emsworth Road	410	410
		B - Castle Ave	26	26
		C - Emsworth Road (S)	598	598
17:00-17:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	1425	1439
		4 - Emsworth Road	480	488
	2 - A27 / Church Lane	1 - A27 Off-Slip	123	128
		2 - Havant Road	825	844
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	1404	1418
		A - Emsworth Road	490	490
		B - Castle Ave	31	31
		C - Emsworth Road (S)	714	714
17:15-17:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1745	1762
		4 - Emsworth Road	588	598
	2 - A27 / Church Lane	1 - A27 Off-Slip	151	156
		2 - Havant Road	1011	1033
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1720	1737
	3 - Castle Ave	A - Emsworth Road	600	600
		B - Castle Ave	37	37
		C - Emsworth Road (S)	874	874
17:30-17:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1745	1762
		4 - Emsworth Road	588	598
	2 - A27 / Church Lane	1 - A27 Off-Slip	151	156
		2 - Havant Road	1011	1033
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1720	1737
	3 - Castle Ave	A - Emsworth Road	600	600
		B - Castle Ave	37	37
		C - Emsworth Road (S)	874	874
17:45-18:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	1425	1439
		4 - Emsworth Road	480	488
	2 - A27 / Church Lane	1 - A27 Off-Slip	123	128
		2 - Havant Road	825	844
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1404	1418
	3 - Castle Ave	A - Emsworth Road	490	490
		B - Castle Ave	31	31
		C - Emsworth Road (S)	714	714
18:00-18:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	1193	1205
		4 - Emsworth Road	402	409
	2 - A27 / Church Lane	1 - A27 Off-Slip	103	107
		2 - Havant Road	691	706
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1176	1188
	3 - Castle Ave	A - Emsworth Road	410	410
		B - Castle Ave	26	26

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.74	0.6	A	276	414
	3 - A27 Off-Slip	40.70	21.5	E	1458	2188
	4 - Emsworth Road	12.88	2.3	B	511	766
2 - A27 / Church Lane	1 - A27 Off-Slip	6.90	0.3	A	126	190
	2 - Havant Road	6.71	2.0	A	843	1265
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	12.43	6.5	B	1445	2168
3 - Castle Ave	A - Emsworth Road	11.39	2.5	B	496	744
	B - Castle Ave	81.24	0.9	F	31	47
	C - Emsworth Road (S)	0.29	0.1	A	680	1020

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			98				
	2 - Emsworth Road (S)	230	57	1	231	234	1195	0.0	0.2	4.799	A
	3 - A27 Off-Slip	1200	300	232	1202	1204	0	0.0	2.3	6.847	A
	4 - Emsworth Road	426	107	868	426	433	565	0.0	0.8	6.083	A
2 - A27 / Church Lane	1 - A27 Off-Slip	105	26	1203	105	111	0	0.0	0.1	3.996	A
	2 - Havant Road	694	173	260	690	702	1048	0.0	1.0	4.823	A
	3 - Church Lane	0	0	947	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			717				
	5 - Emsworth Road	1195	299	1	1201	1196	230	0.0	1.7	5.947	A
3 - Castle Ave	A - Emsworth Road	413	103		413	415	547	0.0	0.0	0.073	A
	B - Castle Ave	23	6		24	27	29	0.0	0.0	7.528	A
	C - Emsworth Road (S)	565	141		566	561	426	0.0	0.0	0.235	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			115				
	2 - Emsworth Road (S)	273	68	1	271	274	1419	0.2	0.5	5.033	A
	3 - A27 Off-Slip	1417	354	272	1424	1423	0	2.3	3.5	9.683	A
	4 - Emsworth Road	508	127	1025	510	511	670	0.8	1.1	7.966	A
2 - A27 / Church Lane	1 - A27 Off-Slip	124	31	1417	125	126	0	0.1	0.1	4.691	A
	2 - Havant Road	828	207	300	832	849	1242	1.0	1.1	5.428	A
	3 - Church Lane	0	0	1129	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			854				
	5 - Emsworth Road	1419	355	2	1415	1415	273	1.7	2.9	7.521	A
3 - Castle Ave	A - Emsworth Road	488	122		488	491	649	0.0	0.1	0.426	A
	B - Castle Ave	34	8		35	30	38	0.0	0.1	9.880	A
	C - Emsworth Road (S)	670	168		671	665	508	0.0	0.0	0.276	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			129				
	2 - Emsworth Road (S)	330	82	1	327	330	1717	0.5	0.6	5.661	A
	3 - A27 Off-Slip	1741	435	329	1722	1701	0	3.5	16.7	27.118	D
	4 - Emsworth Road	603	151	1244	603	605	807	1.1	2.1	11.477	B
2 - A27 / Church Lane	1 - A27 Off-Slip	150	37	1702	149	152	0	0.1	0.3	6.667	A
	2 - Havant Road	1007	252	376	1006	1026	1475	1.1	1.9	6.590	A
	3 - Church Lane	0	0	1377	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1045				
	5 - Emsworth Road	1717	429	3	1699	1678	330	2.9	6.5	11.172	B
3 - Castle Ave	A - Emsworth Road	592	148		589	587	781	0.1	1.4	5.354	A
	B - Castle Ave	38	9		33	35	45	0.1	0.7	46.583	E
	C - Emsworth Road (S)	807	202		807	796	603	0.0	0.1	0.284	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			140				
	2 - Emsworth Road (S)	330	83	2	331	337	1715	0.6	0.4	5.739	A
	3 - A27 Off-Slip	1745	436	333	1736	1738	0	16.7	21.5	40.701	E
	4 - Emsworth Road	603	151	1254	603	615	814	2.1	2.3	12.877	B
2 - A27 / Church Lane	1 - A27 Off-Slip	149	37	1707	149	156	0	0.3	0.3	6.901	A
	2 - Havant Road	1019	255	374	1017	1035	1482	1.9	2.0	6.709	A
	3 - Church Lane	0	0	1388	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1056				
	5 - Emsworth Road	1716	429	2	1705	1730	330	6.5	6.3	12.428	B
3 - Castle Ave	A - Emsworth Road	589	147		585	588	787	1.4	2.5	11.393	B
	B - Castle Ave	39	10		36	37	46	0.7	0.9	81.239	F
	C - Emsworth Road (S)	814	204		814	806	603	0.1	0.0	0.285	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			110				
	2 - Emsworth Road (S)	265	66	0.96	265	273	1437	0.4	0.3	5.182	A
	3 - A27 Off-Slip	1449	362	266	1434	1505	0	21.5	5.3	16.170	C
	4 - Emsworth Road	510	127	1038	510	540	662	2.3	1.2	10.037	B
2 - A27 / Church Lane	1 - A27 Off-Slip	127	32	1447	126	129	0	0.3	0.2	5.800	A
	2 - Havant Road	816	204	312	817	836	1262	2.0	1.1	5.484	A
	3 - Church Lane	0	0	1125	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			859				
	5 - Emsworth Road	1437	359	1	1445	1518	265	6.3	2.9	9.284	A
3 - Castle Ave	A - Emsworth Road	493	123		493	504	641	2.5	0.1	3.470	A
	B - Castle Ave	29	7		31	34	37	0.9	0.1	26.683	D
	C - Emsworth Road (S)	662	166		662	683	510	0.0	0.0	0.278	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			93				
	2 - Emsworth Road (S)	228	57	0.96	227	233	1189	0.3	0.3	4.728	A
	3 - A27 Off-Slip	1199	300	228	1202	1219	0	5.3	2.0	7.019	A
	4 - Emsworth Road	416	104	871	412	433	559	1.2	0.8	6.466	A
2 - A27 / Church Lane	1 - A27 Off-Slip	104	26	1193	104	107	0	0.2	0.1	4.097	A
	2 - Havant Road	697	174	262	694	715	1034	1.1	1.1	4.926	A
	3 - Church Lane	0	0	953	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			724				
	5 - Emsworth Road	1189	297	1	1191	1215	228	2.9	1.9	6.040	A
3 - Castle Ave	A - Emsworth Road	402	100		402	409	542	0.1	0.0	0.114	A
	B - Castle Ave	25	6		25	26	29	0.1	0.0	7.879	A
	C - Emsworth Road (S)	559	140		559	567	415	0.0	0.0	0.251	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	230	976	0.236	231	234	0.0	0.2	4.799	A
	3 - A27 Off-Slip	1	1	1, 2, 4	599	942	0.637	600	601	0.0	1.2	6.867	A
			2	1, 2, 4	601	944	0.637	601	603	0.0	1.1	6.828	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1200			1200	1213	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	105	994	0.106	105	111	0.0	0.1	3.996	A
	2 - Havant Road	1	1	2, 3, 4, 5	345	914	0.378	344	350	0.0	0.5	4.835	A
			2	2, 3, 4, 5	348	915	0.381	347	351	0.0	0.5	4.811	A
		2	1	(1, 2, 3, 4, 5)	694			694	706	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	631	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	602	1006	0.598	605	599	0.0	0.8	5.911	A
			2	2, 3, 4, 5	593	1005	0.590	596	597	0.0	0.8	5.984	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	413			413	415	0.0	0.0	0.073	A
	B - Castle Ave	1	1	A, C	23			24	27	0.0	0.0	7.528	A
	C - Emsworth Road (S)	1	1	A	544			544	539	0.0	0.0	0.000	A
			2	B	21			22	22	0.0	0.0	5.965	A
			2	(A, B)	565			565	561	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	273	972	0.281	271	274	0.2	0.5	5.033	A
	3 - A27 Off-Slip	1	1	1, 2, 4	708	927	0.763	712	713	1.2	1.7	9.660	A
			2	1, 2, 4	709	927	0.765	712	710	1.1	1.8	9.706	A
		2	1	(1, 2, 3, 4)	1417			1417	1428	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	508	848	0.599	510	511	0.8	1.1	7.966	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	124	858	0.144	125	126	0.1	0.1	4.691	A
	2 - Havant Road	1	1	2, 3, 4, 5	411	896	0.458	411	423	0.5	0.6	5.444	A
			2	2, 3, 4, 5	417	898	0.464	421	426	0.5	0.5	5.412	A
		2	1	(1, 2, 3, 4, 5)	828			828	849	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	537	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	706	1005	0.702	705	707	0.8	1.4	7.552	A
			2	2, 3, 4, 5	713	1004	0.711	710	708	0.8	1.5	7.491	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	488			488	491	0.0	0.1	0.426	A
	B - Castle Ave	1	1	A, C	34			35	30	0.0	0.1	9.880	A
	C - Emsworth Road (S)	1	1	A	643			643	638	0.0	0.0	0.000	A
			2	B	28			28	27	0.0	0.0	6.819	A
		2	1	(A, B)	670			670	665	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	330	978	0.337	327	330	0.5	0.6	5.661	
	3 - A27 Off-Slip	1	1	1, 2, 4	876	908	0.965	867	855	1.7	8.2	26.881	
			2	1, 2, 4	865	908	0.953	855	846	1.8	8.4	27.356	
		2	1	(1, 2, 3, 4)	1741			1741	1754	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	603	723	0.833	603	605	1.1	2.1	11.477	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	150	668	0.224	149	152	0.1	0.3	6.667	
	2 - Havant Road	1	1	2, 3, 4, 5	503	874	0.575	503	512	0.6	1.0	6.623	
			2	2, 3, 4, 5	504	871	0.578	503	514	0.5	0.9	6.557	
		2	1	(1, 2, 3, 4, 5)	1007			1007	1030	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	412	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	860	1006	0.854	851	842	1.4	3.3	11.105	
			2	2, 3, 4, 5	857	1004	0.853	848	836	1.5	3.3	11.239	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	592			589	587	0.1	1.4	5.354	
	B - Castle Ave	1	1	A, C	38			33	35	0.1	0.7	46.583	
	C - Emsworth Road (S)	1	1	A	775			775	764	0.0	0.0	0.000	
			2	B	32			32	32	0.0	0.1	6.944	
		2	1	(A, B)	807			807	796	0.0	0.0	0.001	

17:30 - 17:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	330	972	0.340	331	337	0.6	0.4	5.739	
	3 - A27 Off-Slip	1	1	1, 2, 4	874	906	0.965	868	871	8.2	10.8	40.623	
			2	1, 2, 4	871	903	0.963	867	867	8.4	10.7	40.780	
		2	1	(1, 2, 3, 4)	1745			1745	1757	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	603	715	0.843	603	615	2.1	2.3	12.877		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	149	665	0.225	149	156	0.3	0.3	6.901	
	2 - Havant Road	1	1	2, 3, 4, 5	506	874	0.579	505	515	1.0	1.0	6.712	
			2	2, 3, 4, 5	514	875	0.586	512	519	0.9	1.0	6.695	
	2	1	(1, 2, 3, 4, 5)	1019			1019	1035	0.0	0.0	0.006		
	3 - Church Lane	1	1	2, 3, 4, 5	0	408	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	861	1005	0.857	855	870	3.3	3.2	12.334	
2			2, 3, 4, 5	855	1006	0.849	850	860	3.3	3.1	12.522		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	589			585	588	1.4	2.5	11.393	
	B - Castle Ave	1	1	A, C	39			36	37	0.7	0.9	81.239	
	C - Emsworth Road (S)	1	1	A	781			781	773	0.0	0.0	0.000	
			2	B	33			34	33	0.1	0.0	6.994	
		2	1	(A, B)	814			814	806	0.0	0.0	0.000	

17:45 - 18:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	265	973	0.271	265	273	0.4	0.3	5.182	
	3 - A27 Off-Slip	1	1	1, 2, 4	720	929	0.775	714	753	10.8	2.5	16.257	
			2	1, 2, 4	729	930	0.784	720	752	10.7	2.7	16.083	
			2	1	(1, 2, 3, 4)	1449			1449	1439	0.0	0.0	0.000
	4 - Emsworth Road	1	1	1, 2, 4	510	840	0.607	510	540	2.3	1.2	10.037	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	127	837	0.151	126	129	0.3	0.2	5.800	
	2 - Havant Road	1	1	2, 3, 4, 5	408	894	0.456	409	418	1.0	0.6	5.554	
			2	2, 3, 4, 5	408	898	0.454	408	418	1.0	0.5	5.415	
		2	1	(1, 2, 3, 4, 5)	816			816	833	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	540	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	715	1005	0.712	722	758	3.2	1.4	9.316	
2			2, 3, 4, 5	721	1007	0.717	724	760	3.1	1.5	9.252		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	493			493	504	2.5	0.1	3.470	
	B - Castle Ave	1	1	A, C	29			31	34	0.9	0.1	26.683	
	C - Emsworth Road (S)	1	1	A	635			635	656	0.0	0.0	0.000	
			2	B	27			27	27	0.0	0.0	6.894	
		2	1	(A, B)	662			662	683	0.0	0.0	0.002	

18:00 - 18:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	228	969	0.235	227	233	0.3	0.3	4.728	A
	3 - A27 Off-Slip	1	1	1, 2, 4	601	943	0.637	603	612	2.5	1.0	7.006	A
			2	1, 2, 4	598	945	0.632	599	606	2.7	1.1	7.032	A
		2	1	(1, 2, 3, 4)	1199			1199	1206	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	416	939	0.443	412	433	1.2	0.8	6.466	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	104	1010	0.103	104	107	0.2	0.1	4.097	A
	2 - Havant Road	1	1	2, 3, 4, 5	345	912	0.378	344	356	0.6	0.6	4.984	A
			2	2, 3, 4, 5	352	912	0.386	350	359	0.5	0.5	4.869	A
		2	1	(1, 2, 3, 4, 5)	697			697	715	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	627	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	594	1008	0.589	595	606	1.4	0.9	6.046	A
			2	2, 3, 4, 5	596	1005	0.593	596	610	1.5	1.0	6.034	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	402			402	409	0.1	0.0	0.114	A
	B - Castle Ave	1	1	A, C	25			25	26	0.1	0.0	7.879	A
	C - Emsworth Road (S)	1	1	A	537			537	543	0.0	0.0	0.000	A
			2	B	21			21	24	0.0	0.0	6.055	A
		2	1	(A, B)	559			559	567	0.0	0.0	0.001	A



Appendix C – Option 3 Junctions 9 Output

Junctions 9			
ARCADY 9 - Roundabout Module PICADY 9 - Priority Intersection Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
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Filename: A27 2026 T Jcn No RT Single.j9

Path: D:\Dropbox (mode)\Project\Reading\1. Projects\J323916 Persimmon Havant\4. Data\Junction Models\Feb '19\3 Jcns Linked

Report generation date: 20/02/2019 09:00:10

- »2026 Selangor Ave less CA Dev, AM
- »2026 Selangor Ave less CA Dev, PM
- »2026 Selangor Ave (inc. CA Dev), AM
- »2026 Selangor Ave (inc. CA Dev), PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
[Lane Simulation] - 2026 Selangor Ave less CA Dev								
1 - A27 Emsworth Road - 2 - Emsworth Road (S)	0.5	5.49		A	0.6	5.55		A
1 - A27 Emsworth Road - 3 - A27 Off-Slip	2.7	8.13		A	19.2	39.19		E
1 - A27 Emsworth Road - 4 - Emsworth Road	2.0	9.22		A	2.1	12.71		B
2 - A27 / Church Lane - 1 - A27 Off-Slip	0.1	4.91		A	0.3	7.06		A
2 - A27 / Church Lane - 2 - Havant Road	10.2	23.78		C	2.2	6.73		A
2 - A27 / Church Lane - 3 - Church Lane	0.0	0.00		A	0.0	0.00		A
2 - A27 / Church Lane - 5 - Emsworth Road	4.6	8.85		A	6.8	12.48		B
3 - Castle Ave - A - Emsworth Road	1.1	4.83		A	1.6	11.20		B
3 - Castle Ave - B - Castle Ave	0.4	35.46		E	0.5	68.70		F
3 - Castle Ave - C - Emsworth Road (S)	0.0	0.00		A	0.0	0.00		A
[Lane Simulation] - 2026 Selangor Ave (inc. CA Dev)								
1 - A27 Emsworth Road - 2 - Emsworth Road (S)	0.5	5.62		A	0.5	5.53		A
1 - A27 Emsworth Road - 3 - A27 Off-Slip	2.9	8.25		A	20.4	40.26		E
1 - A27 Emsworth Road - 4 - Emsworth Road	2.1	9.88		A	2.3	13.05		B
2 - A27 / Church Lane - 1 - A27 Off-Slip	0.2	5.04		A	0.3	7.25		A
2 - A27 / Church Lane - 2 - Havant Road	10.7	25.99		D	1.9	6.77		A
2 - A27 / Church Lane - 3 - Church Lane	0.0	0.00		A	0.0	0.00		A
2 - A27 / Church Lane - 5 - Emsworth Road	4.2	9.43		A	6.7	13.67		B
3 - Castle Ave - A - Emsworth Road	1.2	6.00		A	2.8	15.39		C
3 - Castle Ave - B - Castle Ave	1.2	59.93		F	1.1	114.07		F
3 - Castle Ave - C - Emsworth Road (S)	0.0	0.00		A	0.0	0.00		A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	15/02/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-CE95GQI\ModeT
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			1514171575	153	40.15

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Selangor Ave less CA Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Selangor Ave less CA Dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Selangor Ave (inc. CA Dev)	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Selangor Ave (inc. CA Dev)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AL	✓	✓	100.000	100.000

2026 Selangor Ave less CA Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	8.11	A
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	16.05	C
3	Castle Ave	T-Junction	Two-way			3.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description	Arm type
1 - A27 Emsworth Road	1	A27 On Slip		
	2	Emsworth Road (S)		
	3	A27 Off-Slip		
	4	Emsworth Road		
2 - A27 / Church Lane	1	A27 Off-Slip		
	2	Havant Road		
	3	Church Lane		
	4	A27 On-Slip		
	5	Emsworth Road		
3 - Castle Ave	A	Emsworth Road		Major
	B	Castle Ave		Minor
	C	Emsworth Road (S)		Major

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 Emsworth Road	1 - A27 On Slip							✓
	2 - Emsworth Road (S)	3.70	3.70	0.0	12.2	35.0	53.0	
	3 - A27 Off-Slip	7.30	7.30	0.0	24.3	35.0	49.0	
	4 - Emsworth Road	4.17	5.20	28.0	23.6	35.0	46.0	
2 - A27 / Church Lane	1 - A27 Off-Slip	6.08	6.08	0.0	19.0	40.0	27.1	
	2 - Havant Road	6.00	7.00	24.0	13.0	40.0	26.5	
	3 - Church Lane	3.14	6.18	4.0	12.0	40.0	46.0	
	4 - A27 On-Slip							✓
	5 - Emsworth Road	6.00	8.00	12.0	15.0	40.0	48.9	

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
3 - Castle Ave	C - Emsworth Road (S)	9.20			80.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Junction	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
3 - Castle Ave	B - Castle Ave	One lane	3.10	25	55

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1 - A27 Emsworth Road	1 - A27 On Slip		
	2 - Emsworth Road (S)	0.475	997
	3 - A27 Off-Slip	0.712	2085
	4 - Emsworth Road	0.590	1469
2 - A27 / Church Lane	1 - A27 Off-Slip	0.675	1856
	2 - Havant Road	0.709	2056
	3 - Church Lane	0.498	1112
	4 - A27 On-Slip		
	5 - Emsworth Road	0.683	2032

The slope and intercept shown above include any corrections and adjustments.

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
3	B-A	518	0.081	0.205	0.129	0.293
3	B-C	665	0.088	0.222	-	-
3	C-B	620	0.207	0.207	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Arm Capacity Adjustments

Junction	Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
1 - A27 Emsworth Road	3 - A27 Off-Slip	Direct		-7
	4 - Emsworth Road	Direct		6

Lane Simulation: Arm options

Junction	Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A27 Emsworth Road	1 - A27 On Slip	Evenly split	10.00
	2 - Emsworth Road (S)	Evenly split	10.00
	3 - A27 Off-Slip	Evenly split	10.00
	4 - Emsworth Road	Evenly split	10.00
2 - A27 / Church Lane	1 - A27 Off-Slip	Evenly split	10.00
	2 - Havant Road	Evenly split	10.00
	3 - Church Lane	Evenly split	10.00
	4 - A27 On-Slip	Evenly split	10.00
	5 - Emsworth Road	Evenly split	10.00
3 - Castle Ave	A - Emsworth Road		
	B - Castle Ave		
	C - Emsworth Road (S)		

Lanes

Junction	Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	✓	7.00		0	99999	
	3 - A27 Off-Slip	1	1	1, 2, 4	✓	58.00		0	99999	
			2	1, 2, 4	✓	58.00		0	99999	
	4 - Emsworth Road	1	1	(1, 2, 3, 4)		Infinity				
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5		Infinity		0	99999	
	2 - Havant Road	1	1	2, 3, 4, 5	✓	10.43		0	99999	
			2	2, 3, 4, 5	✓	9.57		0	99999	
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)		Infinity				
			1	2, 3, 4, 5		Infinity		0	99999	
			1	2, 3, 4, 5	✓	13.00		0	99999	
3 - Castle Ave	A - Emsworth Road	1	1	2, 3, 4, 5	✓	13.00		0	99999	
	B - Castle Ave	1	1	B, C		Infinity		0	99999	
	C - Emsworth Road (S)	1	1	A, C		Infinity		0	99999	
		1	1	A, B	✓	4.00		0	99999	

Entry Lane slope and intercept

Junction	Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	0.475	997
	3 - A27 Off-Slip	1	1	0.356	1043
			2	0.356	1043
	4 - Emsworth Road	1	1	0.590	1469
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	0.675	1856
	2 - Havant Road	1	1	0.354	1028
			2	0.354	1028
	3 - Church Lane	1	1	0.498	1112
	5 - Emsworth Road	1	1	0.342	1016
			2	0.342	1016

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm			
				A27 On Slip	Emsworth Road (S)	A27 Off-Slip	Emsworth Road
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	✓	✓		✓
	3 - A27 Off-Slip	1	1	✓	✓		✓
			2	✓	✓		✓
	4 - Emsworth Road	1	1	✓	✓	✓	✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm				
				A27 Off-Slip	Havant Road	Church Lane	A27 On-Slip	Emsworth Road
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1		✓	✓	✓	✓
	2 - Havant Road	1	1		✓	✓	✓	✓
			2		✓	✓	✓	✓
	2	1	✓	✓	✓	✓	✓	✓
	3 - Church Lane	1	1		✓	✓	✓	✓
	5 - Emsworth Road	1	1		✓	✓	✓	✓
			2		✓	✓	✓	✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm		
				Emsworth Road	Castle Ave	Emsworth Road (S)
3 - Castle Ave	A - Emsworth Road	1	1		✓	✓
	B - Castle Ave	1	1	✓		✓
	C - Emsworth Road (S)	1	1	✓	✓	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Selangor Ave less CA Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1100	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	77	100.000
	2 - Havant Road		ONE HOUR	✓	1351	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	615	100.000
	B - Castle Ave		ONE HOUR	✓	27	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	30	0	0	291
	3 - A27 Off-Slip	2	770	0	328
	4 - Emsworth Road	48	562	0	1

Proportions

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	E
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.09	0.00	0.00	
	3 - A27 Off-Slip	0.00	0.70	0.00	
	4 - Emsworth Road	0.08	0.92	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	34	0	2	41
	2 - Havant Road	0	2	1	1107	241
	3 - Church Lane	0	0	0	3	1
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	942	4	378	0

Proportions

	To				
From		1 - A27 Off- Slip	2 - Havant Road	3 - Church Lane	4 - A27 On- Slip
	1 - A27 Off-Slip	0.00	0.44	0.00	0.03
	2 - Havant Road	0.00	0.00	0.00	0.82
	3 - Church Lane	0.00	0.00	0.00	0.75
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.71	0.00	0.29

Demand (Veh/hr)

3 -
Castle
Ave

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0	5	610
	B - Castle Ave	0	0	27
	C - Emsworth Road (S)	624	0	0

Proportions

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0.00	0.01	0.99
	B - Castle Ave	0.00	0.00	1.00
	C - Emsworth Road (S)	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

1 - A27
Emsworth
Road

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	5	0	0	2
	3 - A27 Off-Slip	50	4	0	3
	4 - Emsworth Road	4	3	0	0

Average PCU Per Veh

	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
From	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	1.050	1.000	1.000	1.000
	3 - A27 Off-Slip	1.500	1.040	1.000	1.000
	4 - Emsworth Road	1.040	1.030	1.000	1.000

Heavy Vehicle Percentages

2 -
A27 /
Church
Lane

	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	0	0	0	0
	2 - Havant Road	0	0	0	3	2
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	2	0	2	0

Average PCU Per Veh

	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
From	1 - A27 Off-Slip	1.000	1.000	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.030
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.020	1.000	1.020

Heavy Vehicle Percentages

3 -
Castle
Ave

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
From	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	247
		3 - A27 Off-Slip	828	859
		4 - Emsworth Road	460	474
	2 - A27 / Church Lane	1 - A27 Off-Slip	58	58
		2 - Havant Road	1017	1046
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	997	1017
		A - Emsworth Road	463	463
		B - Castle Ave	20	20
		C - Emsworth Road (S)	470	470
08:00-08:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	295
		3 - A27 Off-Slip	989	1026
		4 - Emsworth Road	549	566
	2 - A27 / Church Lane	1 - A27 Off-Slip	69	69
		2 - Havant Road	1215	1249
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1190	1214
	3 - Castle Ave	A - Emsworth Road	553	553
		B - Castle Ave	24	24
		C - Emsworth Road (S)	561	561
08:15-08:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	353	361
		3 - A27 Off-Slip	1211	1257
		4 - Emsworth Road	673	693
	2 - A27 / Church Lane	1 - A27 Off-Slip	85	85
		2 - Havant Road	1487	1529
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1458	1487
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	30	30
		C - Emsworth Road (S)	687	687
08:30-08:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	353	361
		3 - A27 Off-Slip	1211	1257
		4 - Emsworth Road	673	693
	2 - A27 / Church Lane	1 - A27 Off-Slip	85	85
		2 - Havant Road	1487	1529
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1458	1487
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	30	30
		C - Emsworth Road (S)	687	687
08:45-09:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	295
		3 - A27 Off-Slip	989	1026
		4 - Emsworth Road	549	566
	2 - A27 / Church Lane	1 - A27 Off-Slip	69	69
		2 - Havant Road	1215	1249
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1190	1214
	3 - Castle Ave	A - Emsworth Road	553	553
		B - Castle Ave	24	24
		C - Emsworth Road (S)	561	561
	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	247
		3 - A27 Off-Slip	828	859
		4 - Emsworth Road	460	474
		1 - A27 Off-Slip	58	58

09:00-09:15	2 - A27 / Church Lane	2 - Havant Road	1017	1046
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	997	1017
	3 - Castle Ave	A - Emsworth Road	463	463
		B - Castle Ave	20	20
		C - Emsworth Road (S)	470	470

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.49	0.5	A	257	386
	3 - A27 Off-Slip	8.13	2.7	A	1006	1509
	4 - Emsworth Road	9.22	2.0	A	584	876
2 - A27 / Church Lane	1 - A27 Off-Slip	4.91	0.1	A	73	109
	2 - Havant Road	23.78	10.2	C	1247	1871
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	8.85	4.6	A	1242	1862
3 - Castle Ave	A - Emsworth Road	4.83	1.1	A	565	847
	B - Castle Ave	35.46	0.4	E	24	36
	C - Emsworth Road (S)	0.00	0.0	A	534	801

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			56				
	2 - Emsworth Road (S)	210	53	1	211	216	1023	0.0	0.2	4.599	A
	3 - A27 Off-Slip	829	207	212	828	856	0	0.0	1.3	5.153	A
	4 - Emsworth Road	480	120	601	479	494	439	0.0	0.8	5.430	A
2 - A27 / Church Lane	1 - A27 Off-Slip	60	15	1027	60	60	0	0.0	0.1	3.262	A
	2 - Havant Road	1009	252	323	1005	1039	764	0.0	2.0	6.456	A
	3 - Church Lane	0	0	1324	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1114				
	5 - Emsworth Road	1023	256	0.63	1027	1031	210	0.0	1.3	5.219	A
3 - Castle Ave	A - Emsworth Road	466	117		466	464	439	0.0	0.0	0.069	A
	B - Castle Ave	18	4		17	21	3	0.0	0.0	6.608	A
	C - Emsworth Road (S)	439	110		439	441	480	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			70				
	2 - Emsworth Road (S)	251	63	1	251	257	1202	0.2	0.3	5.032	A
	3 - A27 Off-Slip	968	242	253	969	1023	0	1.3	1.6	6.052	A
	4 - Emsworth Road	571	143	703	570	586	518	0.8	1.0	6.594	A
2 - A27 / Church Lane	1 - A27 Off-Slip	70	18	1204	69	68	0	0.1	0.1	3.782	A
	2 - Havant Road	1211	303	383	1213	1246	890	2.0	2.6	8.546	A
	3 - Church Lane	0	0	1593	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1339				
	5 - Emsworth Road	1202	300	2	1202	1234	251	1.3	2.0	6.065	A
3 - Castle Ave	A - Emsworth Road	552	138		552	552	518	0.0	0.0	0.246	A
	B - Castle Ave	24	6		25	24	5	0.0	0.0	8.225	A
	C - Emsworth Road (S)	518	130		518	520	571	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			88				
	2 - Emsworth Road (S)	308	77	1	309	313	1487	0.3	0.4	5.271	A
	3 - A27 Off-Slip	1209	302	311	1209	1245	0	1.6	2.6	8.129	A
	4 - Emsworth Road	698	174	877	700	712	643	1.0	1.7	8.826	A
2 - A27 / Church Lane	1 - A27 Off-Slip	91	23	1485	91	88	0	0.1	0.1	4.582	A
	2 - Havant Road	1508	377	480	1488	1513	1096	2.6	9.8	19.246	C
	3 - Church Lane	0	0	1963	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1652				
	5 - Emsworth Road	1487	372	2	1483	1495	308	2.0	3.8	8.491	A
3 - Castle Ave	A - Emsworth Road	665	166		671	673	643	0.0	0.6	3.223	A
	B - Castle Ave	31	8		31	28	6	0.0	0.2	26.063	D
	C - Emsworth Road (S)	643	161		643	638	698	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			83				
	2 - Emsworth Road (S)	308	77	0.71	308	318	1504	0.4	0.4	5.493	A
	3 - A27 Off-Slip	1211	303	309	1219	1252	0	2.6	2.3	7.855	A
	4 - Emsworth Road	705	176	885	703	723	643	1.7	1.9	9.218	A
2 - A27 / Church Lane	1 - A27 Off-Slip	87	22	1495	87	84	0	0.1	0.1	4.910	A
	2 - Havant Road	1496	374	468	1489	1530	1114	9.8	10.2	23.777	C
	3 - Church Lane	0	0	1952	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1642				
	5 - Emsworth Road	1504	376	2	1493	1515	308	3.8	4.5	8.855	A
3 - Castle Ave	A - Emsworth Road	688	172		685	679	643	0.6	1.1	4.830	A
	B - Castle Ave	30	7		28	29	5	0.2	0.4	35.461	E
	C - Emsworth Road (S)	643	161		643	645	705	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			72				
	2 - Emsworth Road (S)	248	62	0.94	247	264	1218	0.4	0.5	5.110	A
	3 - A27 Off-Slip	986	247	248	984	1027	0	2.3	1.6	6.027	A
	4 - Emsworth Road	580	145	712	579	606	521	1.9	1.1	7.238	A
2 - A27 / Church Lane	1 - A27 Off-Slip	67	17	1217	67	70	0	0.1	0.1	4.107	A
	2 - Havant Road	1226	307	380	1221	1281	905	10.2	3.4	10.855	B
	3 - Church Lane	0	0	1597	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1347				
	5 - Emsworth Road	1218	305	2	1216	1269	248	4.5	2.3	6.495	A
3 - Castle Ave	A - Emsworth Road	560	140		560	560	521	1.1	0.1	1.006	A
	B - Castle Ave	23	6		24	26	4	0.4	0.1	11.715	B
	C - Emsworth Road (S)	521	130		521	528	580	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			60				
	2 - Emsworth Road (S)	217	54	1	219	221	1016	0.5	0.2	4.803	A
	3 - A27 Off-Slip	829	207	220	829	864	0	1.6	1.1	5.198	A
	4 - Emsworth Road	470	118	607	470	493	442	1.1	0.7	5.618	A
2 - A27 / Church Lane	1 - A27 Off-Slip	60	15	1019	60	60	0	0.1	0.0	3.336	A
	2 - Havant Road	1032	258	334	1036	1057	746	3.4	1.8	6.842	A
	3 - Church Lane	0	0	1366	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1147				
	5 - Emsworth Road	1016	254	2	1017	1050	217	2.3	1.5	5.341	A
3 - Castle Ave	A - Emsworth Road	456	114		456	459	442	0.1	0.0	0.098	A
	B - Castle Ave	19	5		19	21	4	0.1	0.0	6.674	A
	C - Emsworth Road (S)	442	111		442	444	471	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment
07:45 - 08:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	210	971	0.217	211	216	0.0	0.2	4.599	A
	3 - A27 Off-Slip	1	1	1, 2, 4	410	925	0.443	409	427	0.0	0.7	5.129	A
			2	1, 2, 4	419	923	0.453	419	429	0.0	0.6	5.177	A
	4 - Emsworth Road	2	1	(1, 2, 3, 4)	829			829	862	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	480	1067	0.450	479	494	0.0	0.8	5.430	A
	2 - Havant Road	1	1	2, 3, 4, 5	60	1149	0.053	60	60	0.0	0.1	3.262	A
			2	2, 3, 4, 5	506	889	0.569	506	517	0.0	0.9	6.523	A
		2	2	2, 3, 4, 5	503	882	0.571	500	521	0.0	1.1	6.391	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1009			1009	1047	0.0	0.0	0.000	A
			1	2, 3, 4, 5	0	435	0.000	0	0	0.0	0.0	0.000	A
3 - Castle Ave	5 - Emsworth Road	1	1	2, 3, 4, 5	510	997	0.512	512	517	0.0	0.7	5.210	A
			2	2, 3, 4, 5	512	996	0.514	515	515	0.0	0.6	5.228	A
	A - Emsworth Road	1	1	B, C	466			466	464	0.0	0.0	0.069	A
	B - Castle Ave	1	1	A, C	18			17	21	0.0	0.0	6.608	A
	C - Emsworth Road (S)	1	1	A, B	439			439	441	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	251	975	0.258	251	257	0.2	0.3	5.032	A
	3 - A27 Off-Slip	1	1	1, 2, 4	479	907	0.528	480	513	0.7	0.7	6.035	A
			2	1, 2, 4	489	912	0.537	489	510	0.6	0.9	6.070	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	968			968	1024	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	70	1028	0.068	69	68	0.1	0.1	3.782	A
	2 - Havant Road	1	1	2, 3, 4, 5	608	865	0.702	609	622	0.9	1.3	8.548	A
			2	2, 3, 4, 5	603	864	0.699	604	624	1.1	1.4	8.531	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1211			1211	1248	0.0	0.0	0.007	A
			2	2, 3, 4, 5	0	298	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	609	995	0.612	610	621	0.7	1.0	5.998	A
3 - Castle Ave	A - Emsworth Road	1	1	2, 3, 4, 5	592	998	0.593	592	613	0.6	1.1	6.133	A
	B - Castle Ave	1	1	B, C	552			552	552	0.0	0.0	0.246	A
	C - Emsworth Road (S)	1	1	A, C	24			25	24	0.0	0.0	8.225	A
		1	1	A, B	518			518	520	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	308	971	0.318	309	313	0.3	0.4	5.271	
	3 - A27 Off-Slip	1	1	1, 2, 4	600	889	0.675	601	623	0.7	1.2	8.119	
			2	1, 2, 4	609	889	0.685	608	622	0.9	1.4	8.139	
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1209			1209	1249	0.0	0.0	0.000	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	698	911	0.766	700	712	1.0	1.7	8.826	
	2 - Havant Road	1	1	2, 3, 4, 5	91	833	0.109	91	88	0.1	0.1	4.582	
			2	2, 3, 4, 5	750	831	0.903	743	755	1.3	4.5	18.041	
	3 - Church Lane	1	1	2, 3, 4, 5	749	830	0.903	745	758	1.4	4.1	17.401	
			2	(1, 2, 3, 4, 5)	1508			1500	1538	0.0	1.2	1.460	
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	111	0.000	0	0	0.0	0.0	0.000	
3 - Castle Ave	A - Emsworth Road	1	1	2, 3, 4, 5	746	995	0.750	743	749	1.0	1.9	8.460	
	B - Castle Ave	1	1	2, 3, 4, 5	741	996	0.744	740	746	1.1	1.9	8.522	
	C - Emsworth Road (S)	1	1	B, C	665			671	673	0.0	0.6	3.223	
		1	1	A, C	31			31	28	0.0	0.2	26.063	
		1	1	A, B	643			643	638	0.0	0.0	0.000	

08:30 - 08:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	308	975	0.316	308	318	0.4	0.4	5.493	
	3 - A27 Off-Slip	1	1	1, 2, 4	609	890	0.685	614	627	1.2	1.1	7.837	
			2	1, 2, 4	603	893	0.675	605	625	1.4	1.2	7.873	
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1211			1211	1251	0.0	0.0	0.000	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	705	900	0.784	703	723	1.7	1.9	9.218	
	2 - Havant Road	1	1	2, 3, 4, 5	87	826	0.106	87	84	0.1	0.1	4.910	
			2	2, 3, 4, 5	752	834	0.903	750	767	4.5	4.5	20.782	
			2	2, 3, 4, 5	743	836	0.889	739	763	4.1	4.4	20.056	
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1496			1495	1531	1.2	1.3	3.341	
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	116	0.000	0	0	0.0	0.0	0.000	
3 - Castle Ave	A - Emsworth Road	1	1	2, 3, 4, 5	747	996	0.751	741	758	1.9	2.3	8.849	
	B - Castle Ave	1	1	2, 3, 4, 5	757	994	0.762	752	756	1.9	2.2	8.861	
	C - Emsworth Road (S)	1	1	B, C	688			685	679	0.6	1.1	4.830	
				A, C	30			28	29	0.2	0.4	35.461	
				A, B	643			643	645	0.0	0.0	0.000	

08:45 - 09:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	248	973	0.255	247	264	0.4	0.5	5.110	
	3 - A27 Off-Slip	1	1	1, 2, 4	496	908	0.546	495	514	1.1	0.8	6.030	
			2	1, 2, 4	490	910	0.538	489	513	1.2	0.9	6.025	
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	986			986	1024	0.0	0.0	0.000	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	580	1003	0.578	579	606	1.9	1.1	7.238	
	2 - Havant Road	1	1	2, 3, 4, 5	67	1017	0.066	67	70	0.1	0.1	4.107	
			2	2, 3, 4, 5	609	866	0.704	607	637	4.5	1.7	10.658	
			2	2, 3, 4, 5	617	867	0.713	614	644	4.4	1.6	10.304	
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1226			1226	1259	1.3	0.1	0.507	
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	293	0.000	0	0	0.0	0.0	0.000	
3 - Castle Ave	A - Emsworth Road	1	1	2, 3, 4, 5	610	996	0.613	608	633	2.3	1.1	6.510	
	B - Castle Ave	1	1	2, 3, 4, 5	608	995	0.611	607	637	2.2	1.2	6.480	
	C - Emsworth Road (S)	1	1	B, C	560			560	560	1.1	0.1	1.006	
				A, C	23			24	26	0.4	0.1	11.715	
				A, B	521			521	528	0.0	0.0	0.000	

09:00 - 09:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	217	969	0.224	219	221	0.5	0.2	4.803	A
	3 - A27 Off-Slip	1	1	1, 2, 4	413	919	0.449	413	432	0.8	0.5	5.190	A
			2	1, 2, 4	416	922	0.451	415	432	0.9	0.6	5.206	A
		2	1	(1, 2, 3, 4)	829			829	862	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	470	1071	0.439	470	493	1.1	0.7	5.618	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	60	1154	0.052	60	60	0.1	0.0	3.336	A
	2 - Havant Road	1	1	2, 3, 4, 5	521	884	0.589	523	531	1.7	0.9	6.822	A
			2	2, 3, 4, 5	511	886	0.577	512	526	1.6	0.9	6.865	A
		2	1	(1, 2, 3, 4, 5)	1032			1032	1051	0.1	0.0	0.001	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	416	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	505	995	0.507	506	524	1.1	0.7	5.354	A
			2	2, 3, 4, 5	511	994	0.514	511	526	1.2	0.8	5.328	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	456			456	459	0.1	0.0	0.098	A
	B - Castle Ave	1	1	A, C	19			19	21	0.1	0.0	6.674	A
	C - Emsworth Road (S)	1	1	A, B	442			442	444	0.0	0.0	0.000	A

2026 Selangor Ave less CA Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	29.12	D
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	10.17	B
3	Castle Ave	T-Junction	Two-way			5.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026 Selangor Ave less CA Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1567	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	133	100.000
	2 - Havant Road		ONE HOUR	✓	915	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	534	100.000
	B - Castle Ave		ONE HOUR	✓	17	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

From	To			
	1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
2 - Emsworth Road (S)	36	0	0	286
3 - A27 Off-Slip	10	1101	0	456
4 - Emsworth Road	75	446	0	1

Proportions

From	To			
	1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
1 - A27 On Slip	0.25	0.25	0.25	
2 - Emsworth Road (S)	0.11	0.00	0.00	
3 - A27 Off-Slip	0.01	0.70	0.00	
4 - Emsworth Road	0.14	0.85	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

From	To				
	1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
1 - A27 Off-Slip	0	48	0	0	85
2 - Havant Road	0	2	0	705	208
3 - Church Lane	0	0	0	0	0
4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5 - Emsworth Road	0	1310	2	239	1

Proportions

From	To				
	1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
1 - A27 Off-Slip	0.00	0.36	0.00	0.00	
2 - Havant Road	0.00	0.00	0.00	0.77	
3 - Church Lane	0.20	0.20	0.20	0.20	
4 - A27 On-Slip	0.20	0.20	0.20	0.20	
5 - Emsworth Road	0.00	0.84	0.00	0.15	

Demand (Veh/hr)

3 - Castle Ave

From	To		
	A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
A - Emsworth Road	0	11	523
B - Castle Ave	0	0	17
C - Emsworth Road (S)	748	0	0

Proportions

From	To		
	A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
A - Emsworth Road	0.00	0.02	0.98
B - Castle Ave	0.00	0.00	1.00
C - Emsworth Road (S)	1.00	0.00	0.00

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	4	0	0	2
	3 - A27 Off-Slip	0	1	0	1
	4 - Emsworth Road	0	2	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	
	2 - Emsworth Road (S)	1.040	1.000	1.000	
	3 - A27 Off-Slip	1.000	1.010	1.000	
	4 - Emsworth Road	1.000	1.020	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	3	0	0	4
	2 - Havant Road	0	0	0	2	3
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1	0	1	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.030	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.020
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.010	1.000	1.010

3 - Castle Ave

Heavy Vehicle Percentages

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	248
		3 - A27 Off-Slip	1180	1191
		4 - Emsworth Road	393	400
	2 - A27 / Church Lane	1 - A27 Off-Slip	100	104
		2 - Havant Road	689	704
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1168	1180
	3 - Castle Ave	A - Emsworth Road	402	402
		B - Castle Ave	13	13
		C - Emsworth Road (S)	563	563
17:00-17:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	296
		3 - A27 Off-Slip	1409	1423
		4 - Emsworth Road	469	477
	2 - A27 / Church Lane	1 - A27 Off-Slip	120	124
		2 - Havant Road	823	841
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	1395	1409
		A - Emsworth Road	480	480
		B - Castle Ave	15	15
		C - Emsworth Road (S)	672	672
17:15-17:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	355	362
		3 - A27 Off-Slip	1725	1742
		4 - Emsworth Road	575	585
	2 - A27 / Church Lane	1 - A27 Off-Slip	146	152
		2 - Havant Road	1007	1030
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1709	1726
	3 - Castle Ave	A - Emsworth Road	588	588
		B - Castle Ave	19	19
		C - Emsworth Road (S)	824	824
17:30-17:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	355	362
		3 - A27 Off-Slip	1725	1742
		4 - Emsworth Road	575	585
	2 - A27 / Church Lane	1 - A27 Off-Slip	146	152
		2 - Havant Road	1007	1030
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1709	1726
	3 - Castle Ave	A - Emsworth Road	588	588
		B - Castle Ave	19	19
		C - Emsworth Road (S)	824	824
17:45-18:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	296
		3 - A27 Off-Slip	1409	1423
		4 - Emsworth Road	469	477
	2 - A27 / Church Lane	1 - A27 Off-Slip	120	124
		2 - Havant Road	823	841
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1395	1409
	3 - Castle Ave	A - Emsworth Road	480	480
		B - Castle Ave	15	15
		C - Emsworth Road (S)	672	672
18:00-18:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	248
		3 - A27 Off-Slip	1180	1191
		4 - Emsworth Road	393	400
	2 - A27 / Church Lane	1 - A27 Off-Slip	100	104
		2 - Havant Road	689	704
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1168	1180
	3 - Castle Ave	A - Emsworth Road	402	402
		B - Castle Ave	13	13
		C - Emsworth Road (S)	563	563

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.55	0.6	A	270	405
	3 - A27 Off-Slip	39.19	19.2	E	1440	2160
	4 - Emsworth Road	12.71	2.1	B	488	732
2 - A27 / Church Lane	1 - A27 Off-Slip	7.06	0.3	A	121	181
	2 - Havant Road	6.73	2.2	A	841	1262
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	12.48	6.8	B	1430	2145
3 - Castle Ave	A - Emsworth Road	11.20	1.6	B	484	725
	B - Castle Ave	68.70	0.5	F	16	24
	C - Emsworth Road (S)	0.00	0.0	A	662	993

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			88				
	2 - Emsworth Road (S)	221	55	0.83	224	226	1159	0.0	0.2	4.820	A
	3 - A27 Off-Slip	1171	293	225	1169	1184	0	0.0	2.2	6.726	A
	4 - Emsworth Road	388	97	860	388	409	534	0.0	0.6	6.073	A
2 - A27 / Church Lane	1 - A27 Off-Slip	100	25	1162	100	107	0	0.0	0.1	3.912	A
	2 - Havant Road	680	170	236	681	695	1026	0.0	1.0	4.834	A
	3 - Church Lane	0	0	915	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			692				
	5 - Emsworth Road	1159	290	2	1160	1169	221	0.0	1.6	5.598	A
3 - Castle Ave	A - Emsworth Road	383	96		383	399	534	0.0	0.0	0.038	A
	B - Castle Ave	13	3		13	15	9	0.0	0.0	6.576	A
	C - Emsworth Road (S)	534	134		534	541	388	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			107				
	2 - Emsworth Road (S)	267	67	1	266	269	1409	0.2	0.4	5.176	A
	3 - A27 Off-Slip	1400	350	267	1411	1412	0	2.2	3.5	9.936	A
	4 - Emsworth Road	486	122	1032	485	491	647	0.6	1.3	7.805	A
2 - A27 / Church Lane	1 - A27 Off-Slip	119	30	1408	120	127	0	0.1	0.1	4.678	A
	2 - Havant Road	827	207	299	826	847	1229	1.0	1.4	5.321	A
	3 - Church Lane	0	0	1123	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			854				
	5 - Emsworth Road	1408	352	2	1406	1407	267	1.6	2.8	7.360	A
3 - Castle Ave	A - Emsworth Road	486	121		485	482	647	0.0	0.1	0.349	A
	B - Castle Ave	14	3		14	14	12	0.0	0.0	7.228	A
	C - Emsworth Road (S)	647	162		647	643	486	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			129				
	2 - Emsworth Road (S)	324	81	1	324	332	1708	0.4	0.4	5.535	A
	3 - A27 Off-Slip	1738	435	325	1726	1698	0	3.5	17.2	28.994	D
	4 - Emsworth Road	588	147	1251	587	588	800	1.3	1.9	11.286	B
2 - A27 / Church Lane	1 - A27 Off-Slip	146	36	1707	144	147	0	0.1	0.3	6.475	A
	2 - Havant Road	1023	256	365	1017	1029	1487	1.4	2.2	6.731	A
	3 - Church Lane	0	0	1380	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1053				
	5 - Emsworth Road	1708	427	3	1704	1673	324	2.8	6.2	11.009	B
3 - Castle Ave	A - Emsworth Road	586	147		581	577	800	0.1	1.6	5.495	A
	B - Castle Ave	18	5		19	17	10	0.0	0.2	40.289	E
	C - Emsworth Road (S)	800	200		800	782	588	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			127				
	2 - Emsworth Road (S)	322	81	0.62	322	329	1720	0.4	0.6	5.552	A
	3 - A27 Off-Slip	1739	435	323	1734	1731	0	17.2	19.2	39.193	E
	4 - Emsworth Road	592	148	1258	590	596	799	1.9	2.1	12.709	B
2 - A27 / Church Lane	1 - A27 Off-Slip	137	34	1711	137	147	0	0.3	0.3	7.062	A
	2 - Havant Road	1010	252	354	1008	1025	1494	2.2	2.0	6.580	A
	3 - Church Lane	0	0	1359	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1034				
	5 - Emsworth Road	1720	430	3	1708	1719	322	6.2	6.7	12.481	B
3 - Castle Ave	A - Emsworth Road	588	147		587	582	799	1.6	1.6	11.196	B
	B - Castle Ave	19	5		17	18	11	0.2	0.5	68.702	F
	C - Emsworth Road (S)	799	200		799	790	592	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			101				
	2 - Emsworth Road (S)	262	66	1	263	271	1405	0.6	0.3	5.165	A
	3 - A27 Off-Slip	1414	353	264	1419	1492	0	19.2	4.3	15.784	C
	4 - Emsworth Road	478	119	1031	477	505	652	2.1	1.1	9.546	A
2 - A27 / Church Lane	1 - A27 Off-Slip	122	31	1404	122	128	0	0.3	0.2	5.676	A
	2 - Havant Road	820	205	297	821	843	1229	2.0	1.3	5.506	A
	3 - Church Lane	0	0	1116	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			851				
	5 - Emsworth Road	1405	351	2	1402	1492	262	6.7	2.6	8.597	A
3 - Castle Ave	A - Emsworth Road	469	117		471	479	652	1.6	0.0	2.062	A
	B - Castle Ave	16	4		16	19	10	0.5	0.0	16.919	C
	C - Emsworth Road (S)	652	163		652	668	478	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			86				
	2 - Emsworth Road (S)	222	56	1	224	230	1178	0.3	0.2	4.796	A
	3 - A27 Off-Slip	1182	295	225	1182	1203	0	4.3	2.2	6.930	A
	4 - Emsworth Road	399	100	868	398	414	540	1.1	0.7	6.283	A
2 - A27 / Church Lane	1 - A27 Off-Slip	100	25	1176	100	106	0	0.2	0.1	3.839	A
	2 - Havant Road	687	172	250	689	708	1027	1.3	0.8	4.850	A
	3 - Church Lane	0	0	938	0	0	1	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			713				
	5 - Emsworth Road	1178	295	2	1174	1201	222	2.6	2.1	5.936	A
3 - Castle Ave	A - Emsworth Road	390	97		390	399	540	0.0	0.0	0.052	A
	B - Castle Ave	14	4		15	14	7	0.0	0.0	6.672	A
	C - Emsworth Road (S)	540	135		540	547	399	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	221	974	0.226	224	226	0.0	0.2	4.820	A
	3 - A27 Off-Slip	1	1	1, 2, 4	587	946	0.620	586	589	0.0	1.1	6.765	A
			2	1, 2, 4	584	945	0.618	583	594	0.0	1.1	6.687	A
	4 - Emsworth Road	2	1	(1, 2, 3, 4)	1171			1171	1192	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	100	1009	0.099	100	107	0.0	0.1	3.912	A
	2 - Havant Road	1	1	2, 3, 4, 5	342	920	0.372	342	348	0.0	0.5	4.825	A
			2	2, 3, 4, 5	338	919	0.368	338	347	0.0	0.5	4.844	A
	3 - Church Lane	2	1	(1, 2, 3, 4, 5)	680			680	699	0.0	0.0	0.000	A
			1	2, 3, 4, 5	0	645	0.000	0	0	0.0	0.0	0.000	A
			1	2, 3, 4, 5	583	1004	0.581	584	586	0.0	0.8	5.598	A
3 - Castle Ave	5 - Emsworth Road	1	2	2, 3, 4, 5	576	1006	0.573	577	583	0.0	0.8	5.597	A
	A - Emsworth Road		1	B, C	383			383	399	0.0	0.0	0.038	A
	B - Castle Ave	1	1	A, C	13			13	15	0.0	0.0	6.576	A
	C - Emsworth Road (S)	1	1	A, B	534			534	541	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	267	979	0.273	266	269	0.2	0.4	5.176	A
	3 - A27 Off-Slip	1	1	1, 2, 4	694	930	0.746	699	705	1.1	1.8	9.944	A
			2	1, 2, 4	706	931	0.759	713	707	1.1	1.7	9.927	A
		2	1	(1, 2, 3, 4)	1400			1400	1418	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	486	843	0.576	485	491	0.6	1.3	7.805	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	119	864	0.138	120	127	0.1	0.1	4.678	A
	2 - Havant Road	1	1	2, 3, 4, 5	415	896	0.462	415	424	0.5	0.7	5.305	A
			2	2, 3, 4, 5	413	899	0.459	411	423	0.5	0.7	5.337	A
		2	1	(1, 2, 3, 4, 5)	827			827	848	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	541	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	707	1003	0.705	705	703	0.8	1.5	7.390	A
			2	2, 3, 4, 5	702	1004	0.699	701	704	0.8	1.4	7.330	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	486			485	482	0.0	0.1	0.349	A
	B - Castle Ave	1	1	A, C	14			14	14	0.0	0.0	7.228	A
	C - Emsworth Road (S)	1	1	A, B	647			647	643	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	324	976	0.332	324	332	0.4	0.4	5.535	
	3 - A27 Off-Slip	1	1	1, 2, 4	871	909	0.957	865	853	1.8	8.6	28.900	
			2	1, 2, 4	868	908	0.955	861	845	1.7	8.6	29.088	
		2	1	(1, 2, 3, 4)	1738			1738	1753	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	588	716	0.821	587	588	1.3	1.9	11.286	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	146	665	0.219	144	147	0.1	0.3	6.475	
	2 - Havant Road	1	1	2, 3, 4, 5	518	876	0.591	516	515	0.7	1.0	6.690	
			2	2, 3, 4, 5	505	877	0.576	501	514	0.7	1.2	6.773	
		2	1	(1, 2, 3, 4, 5)	1023			1023	1033	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	410	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	853	1004	0.850	852	839	1.5	3.0	10.965	
			2	2, 3, 4, 5	854	1005	0.850	852	834	1.4	3.1	11.053	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	586			581	577	0.1	1.6	5.495	
	B - Castle Ave	1	1	A, C	18			19	17	0.0	0.2	40.289	
	C - Emsworth Road (S)	1	1	A, B	800			800	782	0.0	0.0	0.000	

17:30 - 17:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	322	973	0.332	322	329	0.4	0.6	5.552	
	3 - A27 Off-Slip	1	1	1, 2, 4	873	907	0.962	871	874	8.6	9.6	38.841	
			2	1, 2, 4	865	910	0.951	864	858	8.6	9.6	39.553	
		2	1	(1, 2, 3, 4)	1739			1739	1739	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	592	710	0.833	590	596	1.9	2.1	12.709	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	137	667	0.206	137	147	0.3	0.3	7.062	
	2 - Havant Road	1	1	2, 3, 4, 5	501	880	0.570	500	516	1.0	1.0	6.485	
			2	2, 3, 4, 5	509	883	0.577	508	509	1.2	1.0	6.676	
		2	1	(1, 2, 3, 4, 5)	1010			1010	1025	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	422	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	855	1004	0.852	852	860	3.0	3.3	12.423	
			2	2, 3, 4, 5	865	1004	0.862	856	859	3.1	3.4	12.540	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	588			587	582	1.6	1.6	11.196	
	B - Castle Ave	1	1	A, C	19			17	18	0.2	0.5	68.702	
	C - Emsworth Road (S)	1	1	A, B	799			799	790	0.0	0.0	0.000	

17:45 - 18:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	262	975	0.269	263	271	0.6	0.3	5.165	
	3 - A27 Off-Slip	1	1	1, 2, 4	708	928	0.763	711	745	9.6	2.1	15.711	
			2	1, 2, 4	705	929	0.758	707	747	9.6	2.2	15.857	
		2	1	(1, 2, 3, 4)	1414			1414	1432	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	478	843	0.567	477	505	2.1	1.1	9.546	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	122	868	0.141	122	128	0.3	0.2	5.676	
	2 - Havant Road	1	1	2, 3, 4, 5	408	906	0.451	408	419	1.0	0.6	5.542	
			2	2, 3, 4, 5	412	904	0.456	413	424	1.0	0.7	5.470	
		2	1	(1, 2, 3, 4, 5)	820			820	840	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	547	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	701	1006	0.697	700	745	3.3	1.3	8.608	
			2	2, 3, 4, 5	704	1004	0.701	703	747	3.4	1.3	8.586	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	469			471	479	1.6	0.0	2.062	
	B - Castle Ave	1	1	A, C	16			16	19	0.5	0.0	16.919	
	C - Emsworth Road (S)	1	1	A, B	652			652	668	0.0	0.0	0.000	

18:00 - 18:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	222	972	0.229	224	230	0.3	0.2	4.796	A
	3 - A27 Off-Slip	1	1	1, 2, 4	588	943	0.623	587	598	2.1	1.1	6.979	A
			2	1, 2, 4	594	943	0.630	594	605	2.2	1.1	6.881	A
		2	1	(1, 2, 3, 4)	1182			1182	1195	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	399	940	0.424	398	414	1.1	0.7	6.283	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	100	1014	0.099	100	106	0.2	0.1	3.839	A
	2 - Havant Road	1	1	2, 3, 4, 5	338	916	0.369	340	351	0.6	0.4	4.860	A
			2	2, 3, 4, 5	348	918	0.380	349	357	0.7	0.4	4.840	A
		2	1	(1, 2, 3, 4, 5)	687			687	706	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	636	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	593	1005	0.590	590	602	1.3	1.1	5.924	A
			2	2, 3, 4, 5	586	1006	0.582	584	600	1.3	1.0	5.947	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	390			390	399	0.0	0.0	0.052	A
	B - Castle Ave	1	1	A, C	14			15	14	0.0	0.0	6.672	A
	C - Emsworth Road (S)	1	1	A, B	540			540	547	0.0	0.0	0.000	A

2026 Selangor Ave (inc. CA Dev), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	8.41	A
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	17.35	C
3	Castle Ave	T-Junction	Two-way			5.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Selangor Ave (inc. CA Dev)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1106	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	78	100.000
	2 - Havant Road		ONE HOUR	✓	1352	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	615	100.000
	B - Castle Ave		ONE HOUR	✓	56	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	30	0	0	293
	3 - A27 Off-Slip	2	770	0	334
	4 - Emsworth Road	53	585	0	1

Proportions

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	E
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.09	0.00	0.00	
	3 - A27 Off-Slip	0.00	0.70	0.00	
	4 - Emsworth Road	0.08	0.92	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	34	0	2	42
	2 - Havant Road	0	2	1	1107	242
	3 - Church Lane	0	0	0	3	1
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	943	4	400	1

Proportions

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	0.00	0.44	0.00	0.03
	2 - Havant Road	0.00	0.00	0.00	0.82
	3 - Church Lane	0.00	0.00	0.00	0.75
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.70	0.00	0.30

Demand (Veh/hr)

3 - Castle Ave

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	5	610
	B - Castle Ave	0	0	56
	C - Emsworth Road (S)	632	0	0

Proportions

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0.00	0.01	0.99
	B - Castle Ave	0.00	0.00	1.00
	C - Emsworth Road (S)	1.00	0.00	0.00

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	5	0	0	2
	3 - A27 Off-Slip	50	4	0	3
	4 - Emsworth Road	4	3	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	1.050	1.000	1.000	
	3 - A27 Off-Slip	1.500	1.040	1.000	
	4 - Emsworth Road	1.040	1.030	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	0	0	0	0
	2 - Havant Road	0	0	0	3	2
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	2	0	2	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.000	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.030
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.020	1.000	1.020

3 - Castle Ave

Heavy Vehicle Percentages

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	833	864
		4 - Emsworth Road	481	496
	2 - A27 / Church Lane	1 - A27 Off-Slip	59	59
		2 - Havant Road	1018	1047
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1015	1035
	3 - Castle Ave	A - Emsworth Road	463	463
		B - Castle Ave	42	42
		C - Emsworth Road (S)	476	476
08:00-08:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	994	1032
		4 - Emsworth Road	574	592
	2 - A27 / Church Lane	1 - A27 Off-Slip	70	70
		2 - Havant Road	1215	1250
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	1212	1236
		A - Emsworth Road	553	553
		B - Castle Ave	50	50
		C - Emsworth Road (S)	568	568
08:15-08:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1218	1264
		4 - Emsworth Road	704	725
	2 - A27 / Church Lane	1 - A27 Off-Slip	86	86
		2 - Havant Road	1489	1530
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1484	1514
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	62	62
		C - Emsworth Road (S)	696	696
08:30-08:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1218	1264
		4 - Emsworth Road	704	725
	2 - A27 / Church Lane	1 - A27 Off-Slip	86	86
		2 - Havant Road	1489	1530
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1484	1514
	3 - Castle Ave	A - Emsworth Road	677	677
		B - Castle Ave	62	62
		C - Emsworth Road (S)	696	696
08:45-09:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	994	1032
		4 - Emsworth Road	574	592
	2 - A27 / Church Lane	1 - A27 Off-Slip	70	70
		2 - Havant Road	1215	1250
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1212	1236
	3 - Castle Ave	A - Emsworth Road	553	553
		B - Castle Ave	50	50
		C - Emsworth Road (S)	568	568
09:00-09:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	833	864
		4 - Emsworth Road	481	496
	2 - A27 / Church Lane	1 - A27 Off-Slip	59	59
		2 - Havant Road	1018	1047
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1015	1035
	3 - Castle Ave	A - Emsworth Road	463	463
		B - Castle Ave	42	42
		C - Emsworth Road (S)	476	476

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.62	0.5	A	263	394
	3 - A27 Off-Slip	8.25	2.9	A	1014	1521
	4 - Emsworth Road	9.88	2.1	A	604	907
2 - A27 / Church Lane	1 - A27 Off-Slip	5.04	0.2	A	72	108
	2 - Havant Road	25.99	10.7	D	1244	1867
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	9.43	4.2	A	1260	1890
3 - Castle Ave	A - Emsworth Road	6.00	1.2	A	561	841
	B - Castle Ave	59.93	1.2	F	50	75
	C - Emsworth Road (S)	0.00	0.0	A	545	817

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			65				
	2 - Emsworth Road (S)	216	54	0.59	215	217	1042	0.0	0.3	4.835	A
	3 - A27 Off-Slip	846	211	216	845	863	0	0.0	1.2	5.330	A
	4 - Emsworth Road	502	125	607	500	515	454	0.0	0.9	5.648	A
2 - A27 / Church Lane	1 - A27 Off-Slip	58	14	1043	57	59	0	0.0	0.1	3.238	A
	2 - Havant Road	1017	254	348	1018	1035	752	0.0	2.0	6.718	A
	3 - Church Lane	0	0	1363	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1146				
	5 - Emsworth Road	1042	260	1	1041	1056	216	0.0	1.7	5.439	A
3 - Castle Ave	A - Emsworth Road	461	115		461	463	454	0.0	0.0	0.167	A
	B - Castle Ave	44	11		43	45	3	0.0	0.2	7.850	A
	C - Emsworth Road (S)	454	114		454	440	502	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			70				
	2 - Emsworth Road (S)	262	65	1	262	265	1228	0.3	0.3	4.990	A
	3 - A27 Off-Slip	994	249	263	996	1031	0	1.2	1.4	6.022	A
	4 - Emsworth Road	574	144	724	576	603	535	0.9	1.0	6.746	A
2 - A27 / Church Lane	1 - A27 Off-Slip	76	19	1237	76	72	0	0.1	0.1	3.693	A
	2 - Havant Road	1227	307	413	1224	1243	900	2.0	3.7	9.348	A
	3 - Church Lane	0	0	1632	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1369				
	5 - Emsworth Road	1229	307	2	1235	1251	262	1.7	2.1	6.371	A
3 - Castle Ave	A - Emsworth Road	534	133		533	543	535	0.0	0.1	0.424	A
	B - Castle Ave	47	12		46	48	4	0.2	0.2	8.629	A
	C - Emsworth Road (S)	535	134		535	536	574	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			93				
	2 - Emsworth Road (S)	315	79	1	315	314	1502	0.3	0.4	5.264	A
	3 - A27 Off-Slip	1208	302	316	1210	1251	0	1.4	2.4	7.956	A
	4 - Emsworth Road	717	179	882	715	732	645	1.0	2.1	9.063	A
2 - A27 / Church Lane	1 - A27 Off-Slip	86	22	1505	85	86	0	0.1	0.2	4.752	A
	2 - Havant Road	1490	373	500	1482	1507	1090	3.7	10.0	19.539	C
	3 - Church Lane	0	0	1976	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1660				
	5 - Emsworth Road	1502	376	2	1503	1514	315	2.1	4.1	9.026	A
3 - Castle Ave	A - Emsworth Road	670	167		667	665	645	0.1	1.0	3.337	A
	B - Castle Ave	55	14		55	58	5	0.2	0.6	33.898	D
	C - Emsworth Road (S)	645	161		645	641	717	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			91				
	2 - Emsworth Road (S)	308	77	0.71	309	321	1511	0.4	0.5	5.615	A
	3 - A27 Off-Slip	1213	303	309	1206	1259	0	2.4	2.8	8.245	A
	4 - Emsworth Road	729	182	872	731	754	643	2.1	2.0	9.879	A
2 - A27 / Church Lane	1 - A27 Off-Slip	87	22	1518	86	88	0	0.2	0.1	5.044	A
	2 - Havant Road	1495	374	504	1490	1527	1100	10.0	10.7	25.988	D
	3 - Church Lane	0	0	1987	0	0	7	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1676				
	5 - Emsworth Road	1511	378	3	1515	1552	308	4.1	4.2	9.428	A
3 - Castle Ave	A - Emsworth Road	676	169		675	677	643	1.0	1.2	6.001	A
	B - Castle Ave	61	15		60	61	7	0.6	1.2	59.926	F
	C - Emsworth Road (S)	643	161		643	649	729	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			75				
	2 - Emsworth Road (S)	262	65	1	261	265	1245	0.5	0.5	5.074	A
	3 - A27 Off-Slip	992	248	263	993	1036	0	2.8	1.6	6.228	A
	4 - Emsworth Road	608	152	714	607	636	542	2.0	1.2	7.423	A
2 - A27 / Church Lane	1 - A27 Off-Slip	69	17	1242	69	70	0	0.1	0.1	4.059	A
	2 - Havant Road	1213	303	415	1210	1271	896	10.7	3.1	11.909	B
	3 - Church Lane	0	0	1620	0	0	6	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1356				
	5 - Emsworth Road	1245	311	2	1240	1289	262	4.2	2.6	6.724	A
3 - Castle Ave	A - Emsworth Road	564	141		563	559	542	1.2	0.1	1.199	A
	B - Castle Ave	51	13		51	56	3	1.2	0.1	13.054	B
	C - Emsworth Road (S)	542	135		542	544	608	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			58				
	2 - Emsworth Road (S)	214	53	0.71	214	222	1032	0.5	0.3	5.029	A
	3 - A27 Off-Slip	830	207	214	833	869	0	1.6	1.0	5.228	A
	4 - Emsworth Road	497	124	597	494	518	450	1.2	0.9	5.667	A
2 - A27 / Church Lane	1 - A27 Off-Slip	55	14	1033	55	58	0	0.1	0.0	3.403	A
	2 - Havant Road	1024	256	332	1018	1053	756	3.1	2.0	6.793	A
	3 - Church Lane	0	0	1346	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1131				
	5 - Emsworth Road	1033	258	2	1031	1066	213	2.6	1.5	5.350	A
3 - Castle Ave	A - Emsworth Road	461	115		461	461	450	0.1	0.0	0.081	A
	B - Castle Ave	42	10		42	44	6	0.1	0.1	7.552	A
	C - Emsworth Road (S)	450	112		450	456	497	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	216	972	0.222	215	217	0.0	0.3	4.835	A
	3 - A27 Off-Slip	1	1	1, 2, 4	427	922	0.463	426	434	0.0	0.7	5.241	A
			2	1, 2, 4	419	921	0.455	419	428	0.0	0.5	5.421	A
	4 - Emsworth Road	2	1	(1, 2, 3, 4)	846			846	868	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	58	1136	0.051	57	59	0.0	0.1	3.238	A
	2 - Havant Road	1	1	2, 3, 4, 5	508	876	0.580	510	518	0.0	1.0	6.741	A
			2	2, 3, 4, 5	508	879	0.578	509	518	0.0	1.0	6.689	A
	3 - Church Lane	2	1	(1, 2, 3, 4, 5)	1017			1017	1044	0.0	0.0	0.003	A
			1	2, 3, 4, 5	0	415	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	528	993	0.532	529	531	0.0	0.8	5.396	A
			2	2, 3, 4, 5	513	992	0.517	512	525	0.0	0.9	5.483	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	461			461	463	0.0	0.0	0.167	A
	B - Castle Ave	1	1	A, C	44			43	45	0.0	0.2	7.850	A
	C - Emsworth Road (S)	1	1	A, B	454			454	440	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	262	970	0.270	262	265	0.3	0.3	4.990	A
	3 - A27 Off-Slip	1	1	1, 2, 4	491	902	0.543	491	517	0.7	0.7	6.016	A
			2	1, 2, 4	504	907	0.555	504	514	0.5	0.8	6.028	A
		2	1	(1, 2, 3, 4)	994			994	1032	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	574	999	0.575	576	603	0.9	1.0	6.746	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	76	1004	0.076	76	72	0.1	0.1	3.693	A
	2 - Havant Road	1	1	2, 3, 4, 5	615	853	0.720	611	621	1.0	2.0	9.367	A
			2	2, 3, 4, 5	612	857	0.715	612	622	1.0	1.7	9.293	A
		2	1	(1, 2, 3, 4, 5)	1227			1227	1250	0.0	0.0	0.018	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	279	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	608	998	0.610	612	625	0.8	1.1	6.371	A
			2	2, 3, 4, 5	620	994	0.624	623	626	0.9	1.1	6.371	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	534			533	543	0.0	0.1	0.424	A
	B - Castle Ave	1	1	A, C	47			46	48	0.2	0.2	8.629	A
	C - Emsworth Road (S)	1	1	A, B	535			535	536	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	315	976	0.322	315	314	0.3	0.4	5.264	
	3 - A27 Off-Slip	1	1	1, 2, 4	599	891	0.672	597	622	0.7	1.3	8.010	
			2	1, 2, 4	609	883	0.690	612	630	0.8	1.1	7.902	
		2	1	(1, 2, 3, 4)	1208			1208	1256	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	717	909	0.788	715	732	1.0	2.1	9.063	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	86	821	0.105	85	86	0.1	0.2	4.752	
	2 - Havant Road	1	1	2, 3, 4, 5	740	827	0.895	737	752	2.0	4.5	18.419	
			2	2, 3, 4, 5	747	825	0.906	745	755	1.7	4.3	17.806	
		2	1	(1, 2, 3, 4, 5)	1490			1487	1528	0.0	1.1	1.355	
	3 - Church Lane	1	1	2, 3, 4, 5	0	108	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	749	997	0.751	752	761	1.1	1.9	8.953	
			2	2, 3, 4, 5	753	998	0.754	752	753	1.1	2.2	9.099	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	670			667	665	0.1	1.0	3.337	
	B - Castle Ave	1	1	A, C	55			55	58	0.2	0.6	33.898	
	C - Emsworth Road (S)	1	1	A, B	645			645	641	0.0	0.0	0.000	

08:30 - 08:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	308	978	0.315	309	321	0.4	0.5	5.615	
	3 - A27 Off-Slip	1	1	1, 2, 4	618	892	0.693	615	635	1.3	1.4	8.161	
			2	1, 2, 4	594	895	0.665	592	624	1.1	1.4	8.331	
		2	1	(1, 2, 3, 4)	1213			1213	1261	0.0	0.0	0.000	
4 - Emsworth Road	1	1	1, 2, 4	729	913	0.798	731	754	2.1	2.0	9.879		
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	87	810	0.107	86	88	0.2	0.1	5.044	
	2 - Havant Road	1	1	2, 3, 4, 5	740	821	0.902	740	757	4.5	4.2	21.909	
			2	2, 3, 4, 5	754	824	0.915	750	770	4.3	4.2	20.435	
	2	1	(1, 2, 3, 4, 5)	1495			1494	1525	1.1	2.3	4.750		
	3 - Church Lane	1	1	2, 3, 4, 5	0	95	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	755	994	0.760	757	772	1.9	2.1	9.499	
2			2, 3, 4, 5	756	994	0.760	758	779	2.2	2.1	9.358		
3 - Castle Ave	A - Emsworth Road	1	1	B, C	676			675	677	1.0	1.2	6.001	
	B - Castle Ave	1	1	A, C	61			60	61	0.6	1.2	59.926	
	C - Emsworth Road (S)	1	1	A, B	643			643	649	0.0	0.0	0.000	

08:45 - 09:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level ser
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	262	978	0.268	261	265	0.5	0.5	5.074	
	3 - A27 Off-Slip	1	1	1, 2, 4	500	913	0.548	501	518	1.4	0.8	6.194	
			2	1, 2, 4	492	911	0.541	492	518	1.4	0.8	6.262	
		2	1	(1, 2, 3, 4)	992			992	1031	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	608	1010	0.603	607	636	2.0	1.2	7.423	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	69	1000	0.069	69	70	0.1	0.1	4.059	
	2 - Havant Road	1	1	2, 3, 4, 5	599	851	0.704	598	632	4.2	1.6	11.339	
			2	2, 3, 4, 5	613	855	0.718	612	640	4.2	1.6	10.917	
		2	1	(1, 2, 3, 4, 5)	1213			1213	1250	2.3	0.0	1.025	
	3 - Church Lane	1	1	2, 3, 4, 5	0	282	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	626	997	0.627	624	645	2.1	1.3	6.696	
			2	2, 3, 4, 5	619	993	0.623	616	643	2.1	1.3	6.752	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	564			563	559	1.2	0.1	1.199	
	B - Castle Ave	1	1	A, C	51			51	56	1.2	0.1	13.054	
	C - Emsworth Road (S)	1	1	A, B	542			542	544	0.0	0.0	0.000	

09:00 - 09:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	214	972	0.219	214	222	0.5	0.3	5.029	A
	3 - A27 Off-Slip	1	1	1, 2, 4	415	928	0.447	417	433	0.8	0.5	5.260	A
			2	1, 2, 4	415	924	0.449	415	436	0.8	0.5	5.195	A
		2	1	(1, 2, 3, 4)	830			830	867	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	497	1080	0.460	494	518	1.2	0.9	5.667	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	55	1147	0.048	55	58	0.1	0.0	3.403	A
	2 - Havant Road	1	1	2, 3, 4, 5	516	882	0.585	512	529	1.6	1.0	6.792	A
			2	2, 3, 4, 5	508	881	0.576	505	524	1.6	1.0	6.781	A
		2	1	(1, 2, 3, 4, 5)	1024			1024	1048	0.0	0.0	0.006	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	424	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	516	996	0.518	515	530	1.3	0.8	5.371	A
			2	2, 3, 4, 5	517	1000	0.517	516	535	1.3	0.7	5.329	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	461			461	461	0.1	0.0	0.081	A
	B - Castle Ave	1	1	A, C	42			42	44	0.1	0.1	7.552	A
	C - Emsworth Road (S)	1	1	A, B	450			450	456	0.0	0.0	0.000	A

2026 Selangor Ave (inc. CA Dev), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked roundabouts	1 - A27 Emsworth Road	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)
Warning	Vehicle Mix	3 - Castle Ave	HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout			1, 2, 3, 4	29.72	D
2	A27 / Church Lane	Standard Roundabout			1, 2, 3, 4, 5	10.91	B
3	Castle Ave	T-Junction	Two-way			8.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Selangor Ave (inc. CA Dev)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
	4 - Emsworth Road	3	C	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	
3 - Castle Ave	C - Emsworth Road (S)	1	4	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1585	100.000
	4 - Emsworth Road	✓				
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	137	100.000
	2 - Havant Road		ONE HOUR	✓	918	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				
3 - Castle Ave	A - Emsworth Road		ONE HOUR	✓	545	100.000
	B - Castle Ave		ONE HOUR	✓	28	100.000
	C - Emsworth Road (S)	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	36	0	0	287
	3 - A27 Off-Slip	10	1101	0	474
	4 - Emsworth Road	77	456	0	1

Proportions

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off- Slip	E
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.11	0.00	0.00	
	3 - A27 Off-Slip	0.01	0.69	0.00	
	4 - Emsworth Road	0.14	0.85	0.00	

Demand (Veh/hr)

2 - A27 / Church Lane

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	48	0	0	89
	2 - Havant Road	0	2	2	705	209
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1311	2	248	1

Proportions

	To				
From		1 - A27 Off- Slip	2 - Havant Road	3 - Church Lane	4 - A27 On- Slip
	1 - A27 Off-Slip	0.00	0.35	0.00	0.00
	2 - Havant Road	0.00	0.00	0.00	0.77
	3 - Church Lane	0.20	0.20	0.20	0.20
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.84	0.00	0.16

Demand (Veh/hr)

3 - Castle Ave

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	11	534
	B - Castle Ave	0	0	28
	C - Emsworth Road (S)	771	0	0

Proportions

	To			
From		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0.00	0.02	0.98
	B - Castle Ave	0.00	0.00	1.00
	C - Emsworth Road (S)	1.00	0.00	0.00

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	4	0	0	2
	3 - A27 Off-Slip	0	1	0	1
	4 - Emsworth Road	0	2	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	1.040	1.000	1.000	
	3 - A27 Off-Slip	1.000	1.010	1.000	
	4 - Emsworth Road	1.000	1.020	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	3	0	0	4
	2 - Havant Road	0	0	0	2	3
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1	0	1	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.030	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.020
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.010	1.000	1.010

3 - Castle Ave

Heavy Vehicle Percentages

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	0	0	0
	B - Castle Ave	0	0	0
	C - Emsworth Road (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Emsworth Road	B - Castle Ave	C - Emsworth Road (S)
	A - Emsworth Road	1.000	1.000	1.000
	B - Castle Ave	1.000	1.000	1.000
	C - Emsworth Road (S)	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	1193	1205
		4 - Emsworth Road	402	409
	2 - A27 / Church Lane	1 - A27 Off-Slip	103	107
		2 - Havant Road	691	706
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1176	1188
	3 - Castle Ave	A - Emsworth Road	410	410
		B - Castle Ave	21	21
		C - Emsworth Road (S)	580	580
17:00-17:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	1425	1439
		4 - Emsworth Road	480	488
	2 - A27 / Church Lane	1 - A27 Off-Slip	123	128
		2 - Havant Road	825	844
		3 - Church Lane	0	0

	3 - Castle Ave	4 - A27 On-Slip	0	0
		5 - Emsworth Road	1404	1418
		A - Emsworth Road	490	490
		B - Castle Ave	25	25
		C - Emsworth Road (S)	693	693
17:15-17:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1745	1762
		4 - Emsworth Road	588	598
	2 - A27 / Church Lane	1 - A27 Off-Slip	151	156
		2 - Havant Road	1011	1033
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1720	1737
	3 - Castle Ave	A - Emsworth Road	600	600
		B - Castle Ave	31	31
		C - Emsworth Road (S)	849	849
17:30-17:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1745	1762
		4 - Emsworth Road	588	598
	2 - A27 / Church Lane	1 - A27 Off-Slip	151	156
		2 - Havant Road	1011	1033
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1720	1737
	3 - Castle Ave	A - Emsworth Road	600	600
		B - Castle Ave	31	31
		C - Emsworth Road (S)	849	849
17:45-18:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	1425	1439
		4 - Emsworth Road	480	488
	2 - A27 / Church Lane	1 - A27 Off-Slip	123	128
		2 - Havant Road	825	844
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1404	1418
	3 - Castle Ave	A - Emsworth Road	490	490
		B - Castle Ave	25	25
		C - Emsworth Road (S)	693	693
18:00-18:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	1193	1205
		4 - Emsworth Road	402	409
	2 - A27 / Church Lane	1 - A27 Off-Slip	103	107
		2 - Havant Road	691	706
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1176	1188
	3 - Castle Ave	A - Emsworth Road	410	410
		B - Castle Ave	21	21
		C - Emsworth Road (S)	580	580

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.53	0.5	A	275	413
	3 - A27 Off-Slip	40.26	20.4	E	1456	2185
	4 - Emsworth Road	13.05	2.3	B	514	771
2 - A27 / Church Lane	1 - A27 Off-Slip	7.25	0.3	A	128	192
	2 - Havant Road	6.77	1.9	A	841	1262
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	13.67	6.7	B	1446	2170
3 - Castle Ave	A - Emsworth Road	15.39	2.8	C	500	750
	B - Castle Ave	114.07	1.1	F	26	38
	C - Emsworth Road (S)	0.00	0.0	A	679	1019

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			91				
	2 - Emsworth Road (S)	228	57	0.65	228	231	1195	0.0	0.3	4.751	A
	3 - A27 Off-Slip	1195	299	229	1193	1195	0	0.0	2.2	6.711	A
	4 - Emsworth Road	427	107	860	426	426	562	0.0	0.7	6.145	A
2 - A27 / Church Lane	1 - A27 Off-Slip	103	26	1197	103	110	0	0.0	0.1	3.915	A
	2 - Havant Road	693	173	266	692	705	1033	0.0	0.9	4.815	A
	3 - Church Lane	0	0	955	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			725				
	5 - Emsworth Road	1195	299	2	1195	1186	228	0.0	1.8	5.811	A
3 - Castle Ave	B - Castle Ave	23	6		23	23	8	0.0	0.0	6.778	A
	C - Emsworth Road (S)	562	141		562	555	427	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			113				
	2 - Emsworth Road (S)	266	67	0.99	266	276	1431	0.3	0.3	5.187	A
	3 - A27 Off-Slip	1430	357	267	1432	1433	0	2.2	4.0	10.032	B
	4 - Emsworth Road	502	125	1043	502	507	657	0.7	1.1	7.848	A
2 - A27 / Church Lane	1 - A27 Off-Slip	125	31	1431	124	128	0	0.1	0.2	4.752	A
	2 - Havant Road	832	208	305	831	851	1249	0.9	1.3	5.508	A
	3 - Church Lane	0	0	1133	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			864				
	5 - Emsworth Road	1431	358	2	1429	1426	266	1.8	3.0	7.499	A
3 - Castle Ave	A - Emsworth Road	488	122		488	487	657	0.0	0.1	0.421	A
	B - Castle Ave	25	6		25	24	10	0.0	0.1	8.403	A
	C - Emsworth Road (S)	657	164		657	660	502	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			137				
	2 - Emsworth Road (S)	331	83	0.73	332	333	1709	0.3	0.5	5.525	A
	3 - A27 Off-Slip	1752	438	332	1721	1719	0	4.0	17.3	26.620	D
	4 - Emsworth Road	605	151	1241	606	608	812	1.1	2.2	11.741	B
2 - A27 / Church Lane	1 - A27 Off-Slip	152	38	1709	151	156	0	0.2	0.3	6.568	A
	2 - Havant Road	1001	250	372	1001	1030	1488	1.3	1.9	6.717	A
	3 - Church Lane	0	0	1369	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1036				
	5 - Emsworth Road	1709	427	2	1707	1697	331	3.0	5.8	11.793	B
3 - Castle Ave	A - Emsworth Road	595	149		590	591	812	0.1	1.9	6.981	A
	B - Castle Ave	31	8		28	27	12	0.1	0.7	58.845	F
	C - Emsworth Road (S)	812	203		812	803	605	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalise level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			134				
	2 - Emsworth Road (S)	331	83	0.99	332	336	1737	0.5	0.4	5.535	A
	3 - A27 Off-Slip	1748	437	333	1736	1755	0	17.3	20.3	40.261	E
	4 - Emsworth Road	618	155	1254	618	625	815	2.2	2.3	13.046	B
2 - A27 / Church Lane	1 - A27 Off-Slip	157	39	1743	157	156	0	0.3	0.3	7.250	A
	2 - Havant Road	1010	253	384	1011	1032	1517	1.9	1.8	6.768	A
	3 - Church Lane	0	0	1391	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1057				
	5 - Emsworth Road	1737	434	2	1741	1746	331	5.8	6.7	13.675	B
3 - Castle Ave	A - Emsworth Road	602	150		602	599	815	1.9	2.8	15.390	C
	B - Castle Ave	30	7		28	28	12	0.7	1.1	114.068	F
	C - Emsworth Road (S)	815	204		815	814	618	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			113				
	2 - Emsworth Road (S)	268	67	0.91	268	276	1429	0.4	0.4	5.030	A
	3 - A27 Off-Slip	1433	358	269	1437	1506	0	20.3	4.3	17.625	C
	4 - Emsworth Road	508	127	1034	508	540	672	2.3	1.2	9.877	A
2 - A27 / Church Lane	1 - A27 Off-Slip	125	31	1434	126	132	0	0.3	0.2	5.741	A
	2 - Havant Road	815	204	316	815	840	1244	1.8	1.3	5.535	A
	3 - Church Lane	0	0	1127	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			857				
	5 - Emsworth Road	1429	357	2	1432	1520	268	6.7	3.0	9.298	A
3 - Castle Ave	A - Emsworth Road	492	123		492	503	672	2.8	0.1	3.929	A
	B - Castle Ave	25	6		26	30	10	1.1	0.1	27.473	D
	C - Emsworth Road (S)	672	168		672	687	508	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			94				
	2 - Emsworth Road (S)	227	57	0.91	227	236	1178	0.4	0.3	4.820	A
	3 - A27 Off-Slip	1180	295	228	1181	1213	0	4.3	2.1	6.951	A
	4 - Emsworth Road	422	106	850	422	434	558	1.2	0.8	6.501	A
2 - A27 / Church Lane	1 - A27 Off-Slip	105	26	1182	105	109	0	0.2	0.1	4.186	A
	2 - Havant Road	696	174	261	696	716	1026	1.3	0.9	4.896	A
	3 - Church Lane	0	0	954	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			725				
	5 - Emsworth Road	1178	294	1	1180	1216	227	3.0	2.1	6.047	A
3 - Castle Ave	A - Emsworth Road	409	102		409	411	558	0.1	0.0	0.132	A
	B - Castle Ave	20	5		20	22	8	0.1	0.0	6.741	A
	C - Emsworth Road (S)	558	140		558	564	422	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	228	978	0.233	228	231	0.0	0.3	4.751	A
	3 - A27 Off-Slip	1	1	1, 2, 4	599	944	0.634	598	598	0.0	1.1	6.719	A
			2	1, 2, 4	596	943	0.632	595	597	0.0	1.1	6.703	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1195			1195	1204	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	103	1006	0.103	103	110	0.0	0.1	3.915	A
	2 - Havant Road	1	1	2, 3, 4, 5	347	912	0.380	346	353	0.0	0.5	4.802	A
			2	2, 3, 4, 5	346	912	0.380	345	352	0.0	0.5	4.828	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	693			693	709	0.0	0.0	0.000	A
			1	2, 3, 4, 5	0	627	0.000	0	0	0.0	0.0	0.000	A
			1	2, 3, 4, 5	598	1005	0.595	599	592	0.0	0.9	5.805	A
3 - Castle Ave	5 - Emsworth Road	1	2	2, 3, 4, 5	596	1005	0.593	596	594	0.0	0.9	5.817	A
	A - Emsworth Road	1	1	B, C	413			412	407	0.0	0.0	0.068	A
	B - Castle Ave	1	1	A, C	23			23	23	0.0	0.0	6.778	A
	C - Emsworth Road (S)	1	1	A, B	562			562	555	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	266	975	0.273	266	276	0.3	0.3	5.187	
	3 - A27 Off-Slip	1	1	1, 2, 4	713	929	0.768	715	717	1.1	2.0	10.026	
			2	1, 2, 4	716	930	0.770	717	716	1.1	2.0	10.038	
		2	1	(1, 2, 3, 4)	1430			1430	1440	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	502	837	0.599	502	507	0.7	1.1	7.848	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	125	843	0.148	124	128	0.1	0.2	4.752	
	2 - Havant Road	1	1	2, 3, 4, 5	418	898	0.465	418	426	0.5	0.6	5.516	
			2	2, 3, 4, 5	414	897	0.461	413	425	0.5	0.7	5.501	
		2	1	(1, 2, 3, 4, 5)	832			832	853	0.0	0.0	0.000	
	3 - Church Lane	1	1	2, 3, 4, 5	0	536	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	715	1005	0.711	713	712	0.9	1.6	7.519	
			2	2, 3, 4, 5	716	1005	0.713	716	714	0.9	1.4	7.479	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	488			488	487	0.0	0.1	0.421	
	B - Castle Ave	1	1	A, C	25			25	24	0.0	0.1	8.403	
	C - Emsworth Road (S)	1	1	A, B	657			657	660	0.0	0.0	0.000	

17:15 - 17:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	331	977	0.339	332	333	0.3	0.5	5.525	
	3 - A27 Off-Slip	1	1	1, 2, 4	879	906	0.970	864	859	2.0	8.6	26.668	
			2	1, 2, 4	873	905	0.964	857	860	2.0	8.7	26.572	
		2	1	(1, 2, 3, 4)	1752			1752	1773	0.0	0.0	0.000	
	4 - Emsworth Road	1	1	1, 2, 4	605	722	0.838	606	608	1.1	2.2	11.741	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	152	666	0.228	151	156	0.2	0.3	6.568	
	2 - Havant Road	1	1	2, 3, 4, 5	503	874	0.576	503	515	0.6	1.0	6.710	
			2	2, 3, 4, 5	498	875	0.569	498	515	0.7	0.9	6.722	
		2	1	(1, 2, 3, 4, 5)	1001			1001	1033	0.0	0.0	0.001	
	3 - Church Lane	1	1	2, 3, 4, 5	0	416	0.000	0	0	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	858	1006	0.853	856	850	1.6	2.9	11.771	
			2	2, 3, 4, 5	851	1005	0.847	850	847	1.4	2.9	11.814	
3 - Castle Ave	A - Emsworth Road	1	1	B, C	595			590	591	0.1	1.9	6.981	
	B - Castle Ave	1	1	A, C	31			28	27	0.1	0.7	58.845	
	C - Emsworth Road (S)	1	1	A, B	812			812	803	0.0	0.0	0.000	

17:30 - 17:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	331	975	0.340	332	336	0.5	0.4	5.535	
	3 - A27 Off-Slip	1	1	1, 2, 4	872	906	0.964	867	876	8.6	10.1	40.210	
			2	1, 2, 4	875	905	0.967	869	879	8.7	10.1	40.264	
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1748			1747	1767	0.0	0.0	0.009	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	618	713	0.866	618	625	2.2	2.3	13.046	
	2 - Havant Road	1	1	2, 3, 4, 5	157	646	0.244	157	156	0.3	0.3	7.250	
			2	2, 3, 4, 5	508	873	0.582	508	518	1.0	0.9	6.740	
			2	2, 3, 4, 5	502	870	0.578	503	515	0.9	0.9	6.795	
	3 - Church Lane	2	1	(1, 2, 3, 4, 5)	1010			1010	1032	0.0	0.0	0.001	
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	406	0.000	0	0	0.0	0.0	0.000	
3 - Castle Ave	A - Emsworth Road	1	1	2, 3, 4, 5	876	1005	0.871	877	872	2.9	3.4	13.679	
	B - Castle Ave	1	2	2, 3, 4, 5	861	1005	0.856	865	874	2.9	3.4	13.671	
	C - Emsworth Road (S)	1	1	B, C	602			602	599	1.9	2.8	15.390	
				A, C	30			28	28	0.7	1.1	114.068	
				A, B	815			815	814	0.0	0.0	0.000	

17:45 - 18:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsig level
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	268	977	0.275	268	276	0.4	0.4	5.030	
	3 - A27 Off-Slip	1	1	1, 2, 4	712	930	0.766	713	751	10.1	2.2	17.776	
			2	1, 2, 4	721	928	0.777	723	755	10.1	2.1	17.514	
	4 - Emsworth Road	2	1	(1, 2, 3, 4)	1433			1433	1442	0.0	0.0	0.001	
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	508	845	0.602	508	540	2.3	1.2	9.877	
	2 - Havant Road	1	1	2, 3, 4, 5	125	844	0.148	126	132	0.3	0.2	5.741	
			2	2, 3, 4, 5	407	894	0.455	407	420	0.9	0.6	5.506	
			2	2, 3, 4, 5	408	894	0.457	408	420	0.9	0.6	5.564	
	3 - Church Lane	2	1	(1, 2, 3, 4, 5)	815			815	838	0.0	0.0	0.000	
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	539	0.000	0	0	0.0	0.0	0.000	
3 - Castle Ave	A - Emsworth Road	1	1	2, 3, 4, 5	712	1006	0.708	714	761	3.4	1.5	9.268	
	B - Castle Ave	1	2	2, 3, 4, 5	717	1006	0.712	719	759	3.4	1.5	9.328	
	C - Emsworth Road (S)	1	1	B, C	492			492	503	2.8	0.1	3.929	
				A, C	25			26	30	1.1	0.1	27.473	
				A, B	672			672	687	0.0	0.0	0.000	

18:00 - 18:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	227	978	0.232	227	236	0.4	0.3	4.820	A
	3 - A27 Off-Slip	1	1	1, 2, 4	590	944	0.625	589	608	2.2	1.1	6.926	A
			2	1, 2, 4	590	943	0.626	591	605	2.1	1.0	6.977	A
		2	1	(1, 2, 3, 4)	1180			1180	1205	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	422	952	0.444	422	434	1.2	0.8	6.501	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	105	1014	0.103	105	109	0.2	0.1	4.186	A
	2 - Havant Road	1	1	2, 3, 4, 5	344	913	0.377	344	357	0.6	0.4	4.936	A
			2	2, 3, 4, 5	352	911	0.386	352	359	0.6	0.5	4.857	A
		2	1	(1, 2, 3, 4, 5)	696			696	715	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	627	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	589	1006	0.586	590	608	1.5	1.0	6.058	A
			2	2, 3, 4, 5	589	1004	0.586	590	608	1.5	1.1	6.035	A
3 - Castle Ave	A - Emsworth Road	1	1	B, C	409			409	411	0.1	0.0	0.132	A
	B - Castle Ave	1	1	A, C	20			20	22	0.1	0.0	6.741	A
	C - Emsworth Road (S)	1	1	A, B	558			558	564	0.0	0.0	0.000	A



Appendix D – Option 4 Junctions 9 Output

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk			
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename: A27 2026 Dual Lane.j9

Path: D:\Dropbox (mode)\Project\Reading\1. Projects\J323916 Persimmon Havant\4. Data\Junction Models\Feb '19\3 Jcns Linked

Report generation date: 20/02/2019 09:05:24

- »2026 Selangor Ave less CA Dev, AM
- »2026 Selangor Ave less CA Dev, PM
- »2026 Selangor Ave (inc. CA Dev), AM
- »2026 Selangor Ave (inc. CA Dev), PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
[Lane Simulation] - 2026 Selangor Ave less CA Dev								
1 - A27 Emsworth Road - 2 - Emsworth Road (S)	0.6	5.60		A	0.6	5.65		A
1 - A27 Emsworth Road - 3 - A27 Off-Slip	2.5	8.04		A	17.6	36.28		E
1 - A27 Emsworth Road - 4 - Emsworth Road	1.4	7.11		A	1.5	8.70		A
2 - A27 / Church Lane - 1 - A27 Off-Slip	0.1	4.60		A	0.4	6.49		A
2 - A27 / Church Lane - 2 - Havant Road	12.0	24.74		C	2.1	6.62		A
2 - A27 / Church Lane - 3 - Church Lane	0.0	0.00		A	0.0	0.00		A
2 - A27 / Church Lane - 5 - Emsworth Road	4.3	8.68		A	7.2	12.84		B
[Lane Simulation] - 2026 Selangor Ave (inc. CA Dev)								
1 - A27 Emsworth Road - 2 - Emsworth Road (S)	0.6	5.61		A	0.6	5.77		A
1 - A27 Emsworth Road - 3 - A27 Off-Slip	2.8	8.37		A	22.3	44.00		E
1 - A27 Emsworth Road - 4 - Emsworth Road	1.9	7.51		A	1.3	8.46		A
2 - A27 / Church Lane - 1 - A27 Off-Slip	0.1	4.94		A	0.4	7.22		A
2 - A27 / Church Lane - 2 - Havant Road	12.0	28.77		D	2.3	6.67		A
2 - A27 / Church Lane - 3 - Church Lane	0.0	0.00		A	0.0	0.00		A
2 - A27 / Church Lane - 5 - Emsworth Road	4.1	8.98		A	5.9	13.21		B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	15/02/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-CE95GQI\ModeT
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	-1	3	1	60	✓			1049640527	94	23.25

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Selangor Ave less CA Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026 Selangor Ave less CA Dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Selangor Ave (inc. CA Dev)	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Selangor Ave (inc. CA Dev)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AL	✓	✓	100.000	100.000

2026 Selangor Ave less CA Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	1 - A27 Emsworth Road - 4 - Emsworth Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout		1, 2, 3, 4	7.42	A
2	A27 / Church Lane	Standard Roundabout		1, 2, 3, 4, 5	16.50	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description
1 - A27 Emsworth Road	1	A27 On Slip	
	2	Emsworth Road (S)	
	3	A27 Off-Slip	
	4	Emsworth Road	
2 - A27 / Church Lane	1	A27 Off-Slip	
	2	Havant Road	
	3	Church Lane	
	4	A27 On-Slip	
	5	Emsworth Road	

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 Emsworth Road	1 - A27 On Slip							✓
	2 - Emsworth Road (S)	3.70	3.70	0.0	12.2	35.0	53.0	
	3 - A27 Off-Slip	7.30	7.30	0.0	24.3	35.0	49.0	
	4 - Emsworth Road	3.10	8.07	33.3	23.6	35.0	46.0	
2 - A27 / Church Lane	1 - A27 Off-Slip	6.08	6.08	0.0	19.0	40.0	27.1	
	2 - Havant Road	6.00	7.00	24.0	13.0	40.0	26.5	
	3 - Church Lane	3.14	6.18	4.0	12.0	40.0	46.0	
	4 - A27 On-Slip							✓
	5 - Emsworth Road	6.00	8.00	12.0	15.0	40.0	48.9	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1 - A27 Emsworth Road	1 - A27 On Slip		
	2 - Emsworth Road (S)	0.475	997
	3 - A27 Off-Slip	0.712	2085
	4 - Emsworth Road	0.670	1864
2 - A27 / Church Lane	1 - A27 Off-Slip	0.675	1856
	2 - Havant Road	0.709	2056
	3 - Church Lane	0.498	1112
	4 - A27 On-Slip		
	5 - Emsworth Road	0.683	2032

The slope and intercept shown above include any corrections and adjustments.

Arm Capacity Adjustments

Junction	Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
1 - A27 Emsworth Road	3 - A27 Off-Slip	Direct		-7
	4 - Emsworth Road	Direct		6

Lane Simulation: Arm options

Junction	Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A27 Emsworth Road	1 - A27 On Slip	Evenly split	10.00
	2 - Emsworth Road (S)	Evenly split	10.00
	3 - A27 Off-Slip	Evenly split	10.00
	4 - Emsworth Road	Evenly split	10.00
2 - A27 / Church Lane	1 - A27 Off-Slip	Evenly split	10.00
	2 - Havant Road	Evenly split	10.00
	3 - Church Lane	Evenly split	10.00
	4 - A27 On-Slip	Evenly split	10.00
	5 - Emsworth Road	Evenly split	10.00

Lanes

Junction	Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	✓	7.00		0	99999	
	3 - A27 Off-Slip	1	1	1, 2, 4	✓	58.00		0	99999	
			2	1, 2, 4	✓	58.00		0	99999	
	4 - Emsworth Road	1	1	(1, 2, 3, 4)		Infinity				
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4		Infinity		0	99999	
	2 - Havant Road	1	1	2, 3, 4, 5	✓	10.43		0	99999	
			2	2, 3, 4, 5	✓	9.57		0	99999	
	3 - Church Lane	2	1	(1, 2, 3, 4, 5)		Infinity				
			1	2, 3, 4, 5		Infinity		0	99999	
			1	2, 3, 4, 5		Infinity		0	99999	
	5 - Emsworth Road	1	1	2, 3, 4, 5	✓	13.00		0	99999	
			2	2, 3, 4, 5	✓	13.00		0	99999	

Entry Lane slope and intercept

Junction	Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	0.475	997
	3 - A27 Off-Slip	1	1	0.356	1043
			2	0.356	1043
	4 - Emsworth Road	1	1	0.670	1864
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	0.675	1856
	2 - Havant Road	1	1	0.354	1028
			2	0.354	1028
	3 - Church Lane	1	1	0.498	1112
	5 - Emsworth Road	1	1	0.342	1016
			2	0.342	1016

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm			
				A27 On Slip	Emsworth Road (S)	A27 Off-Slip	Emsworth Road
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	✓	✓		✓
	3 - A27 Off-Slip	1	1	✓	✓		✓
			2	✓	✓		✓
		2	1	✓	✓	✓	✓
	4 - Emsworth Road	1	1	✓	✓		✓

Summary of Entry Lane allowed movements

Junction	Arm	Lane Level	Lane	Destination arm			
				A27 Off-Slip	Havant Road	Church Lane	A27 On-Slip
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1		✓	✓	✓
	2 - Havant Road	1	1		✓	✓	✓
			2		✓	✓	✓
		2	1	✓	✓	✓	✓
	3 - Church Lane	1	1		✓	✓	✓
	5 - Emsworth Road	1	1		✓	✓	✓
			2		✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 Selangor Ave less CA Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1100	100.000
	4 - Emsworth Road		ONE HOUR	✓	611	100.000
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	77	100.000
	2 - Havant Road		ONE HOUR	✓	1351	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				

Origin-Destination Data

Demand (Veh/hr)

1 - A27 Emsworth Road

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
1 - A27 On Slip	Exit-only		Exit-only	Exit-only	Exit-only
2 - Emsworth Road (S)	30	0	0	291	
3 - A27 Off-Slip	2	770	0	328	
4 - Emsworth Road	48	562	0	1	

Proportions

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	E
1 - A27 On Slip	0.25	0.25	0.25		
2 - Emsworth Road (S)	0.09	0.00	0.00		
3 - A27 Off-Slip	0.00	0.70	0.00		
4 - Emsworth Road	0.08	0.92	0.00		

Demand (Veh/hr)

2 - A27 / Church Lane

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
1 - A27 Off-Slip	0	34	0	2	41
2 - Havant Road	0	2	1	1107	241
3 - Church Lane	0	0	0	3	1
4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5 - Emsworth Road	0	942	4	378	0

Proportions

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
1 - A27 Off-Slip	0.00	0.44	0.00	0.03	
2 - Havant Road	0.00	0.00	0.00	0.82	
3 - Church Lane	0.00	0.00	0.00	0.75	
4 - A27 On-Slip	0.20	0.20	0.20	0.20	
5 - Emsworth Road	0.00	0.71	0.00	0.29	

Vehicle Mix

Heavy Vehicle Percentages

1 - A27 Emsworth Road

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
1 - A27 On Slip	Exit-only		Exit-only	Exit-only	Exit-only
2 - Emsworth Road (S)	5	0	0	2	
3 - A27 Off-Slip	50	4	0	3	
4 - Emsworth Road	4	3	0	0	

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	E
1 - A27 On Slip	Exit-only		Exit-only	Exit-only	
2 - Emsworth Road (S)	1.050	1.000	1.000		
3 - A27 Off-Slip	1.500	1.040	1.000		
4 - Emsworth Road	1.040	1.030	1.000		

Heavy Vehicle Percentages

2 -
A27 /
Church
Lane

	To					
From		1 - A27 Off- Slip	2 - Havant Road	3 - Church Lane	4 - A27 On- Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	0	0	0	0
	2 - Havant Road	0	0	0	3	2
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit- only	Exit- only	Exit- only	Exit- only	Exit-only
	5 - Emsworth Road	0	2	0	2	0

Average PCU Per Veh

	To				
From		1 - A27 Off- Slip	2 - Havant Road	3 - Church Lane	4 - A27 On- Slip
	1 - A27 Off-Slip	1.000	1.000	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.030
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit- only	Exit- only	Exit- only	Exit- only
	5 - Emsworth Road	1.000	1.020	1.000	1.020

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	247
		3 - A27 Off-Slip	828	859
		4 - Emsworth Road	460	474
	2 - A27 / Church Lane	1 - A27 Off-Slip	58	58
		2 - Havant Road	1017	1046
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	997	1017
08:00-08:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	295
		3 - A27 Off-Slip	989	1026
		4 - Emsworth Road	549	566
	2 - A27 / Church Lane	1 - A27 Off-Slip	69	69
		2 - Havant Road	1215	1249
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1190	1214
08:15-08:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	353	361
		3 - A27 Off-Slip	1211	1257
		4 - Emsworth Road	673	693
	2 - A27 / Church Lane	1 - A27 Off-Slip	85	85
		2 - Havant Road	1487	1529
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1458	1487
08:30-08:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	353	361
		3 - A27 Off-Slip	1211	1257
		4 - Emsworth Road	673	693
	2 - A27 / Church Lane	1 - A27 Off-Slip	85	85
		2 - Havant Road	1487	1529
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1458	1487
08:45-09:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	295
		3 - A27 Off-Slip	989	1026
		4 - Emsworth Road	549	566
	2 - A27 / Church Lane	1 - A27 Off-Slip	69	69
		2 - Havant Road	1215	1249
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1190	1214
09:00-09:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	247
		3 - A27 Off-Slip	828	859
		4 - Emsworth Road	460	474
	2 - A27 / Church Lane	1 - A27 Off-Slip	58	58
		2 - Havant Road	1017	1046
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	997	1017

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.60	0.6	A	257	385
	3 - A27 Off-Slip	8.04	2.5	A	1010	1515
	4 - Emsworth Road	7.11	1.4	A	565	848
2 - A27 / Church Lane	1 - A27 Off-Slip	4.60	0.1	A	70	104
	2 - Havant Road	24.74	12.0	C	1251	1877
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	8.68	4.3	A	1226	1838

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			55				
	2 - Emsworth Road (S)	214	54	1	214	219	1000	0.0	0.3	4.742	A
	3 - A27 Off-Slip	817	204	215	816	850	0	0.0	1.1	5.227	A
	4 - Emsworth Road	459	115	597	460	472	435	0.0	0.4	3.691	A
2 - A27 / Church Lane	1 - A27 Off-Slip	59	15	1002	59	63	0	0.0	0.1	2.969	A
	2 - Havant Road	1035	259	331	1033	1049	730	0.0	2.2	6.665	A
	3 - Church Lane	0	0	1360	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1144				
	5 - Emsworth Road	1000	250	2	1001	1016	215	0.0	1.4	5.213	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			65				
	2 - Emsworth Road (S)	255	64	0.89	256	262	1197	0.3	0.3	5.006	A
	3 - A27 Off-Slip	973	243	257	973	1008	0	1.1	1.5	6.005	A
	4 - Emsworth Road	555	139	708	555	566	522	0.4	0.8	4.587	A
2 - A27 / Church Lane	1 - A27 Off-Slip	69	17	1202	69	72	0	0.1	0.1	3.518	A
	2 - Havant Road	1227	307	397	1224	1241	873	2.2	3.1	8.739	A
	3 - Church Lane	0	0	1617	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1360				
	5 - Emsworth Road	1197	299	2	1200	1209	255	1.4	1.9	5.988	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			87				
	2 - Emsworth Road (S)	313	78	0.77	313	316	1472	0.3	0.5	5.456	A
	3 - A27 Off-Slip	1230	307	313	1226	1255	0	1.5	2.4	7.817	A
	4 - Emsworth Road	680	170	880	680	694	659	0.8	1.4	6.723	A
2 - A27 / Church Lane	1 - A27 Off-Slip	88	22	1469	88	89	0	0.1	0.1	4.602	A
	2 - Havant Road	1517	379	476	1484	1497	1081	3.1	12.0	20.866	C
	3 - Church Lane	0	0	1955	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1640				
	5 - Emsworth Road	1472	368	2	1468	1480	313	1.9	4.2	8.364	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			83				
	2 - Emsworth Road (S)	310	77	1	308	317	1481	0.5	0.6	5.596	A
	3 - A27 Off-Slip	1198	299	309	1203	1255	0	2.4	2.3	8.041	A
	4 - Emsworth Road	688	172	878	688	696	635	1.4	1.3	7.115	A
2 - A27 / Church Lane	1 - A27 Off-Slip	84	21	1475	85	86	0	0.1	0.1	4.530	A
	2 - Havant Road	1489	372	477	1503	1539	1083	12.0	9.4	24.741	C
	3 - Church Lane	0	0	1974	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1661				
	5 - Emsworth Road	1481	370	3	1472	1497	310	4.2	4.0	8.684	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			71				
	2 - Emsworth Road (S)	241	60	1	241	261	1193	0.6	0.2	5.043	A
	3 - A27 Off-Slip	1000	250	242	1000	1028	0	2.3	1.6	6.340	A
	4 - Emsworth Road	546	136	720	546	572	523	1.3	0.7	4.746	A
2 - A27 / Church Lane	1 - A27 Off-Slip	62	15	1197	63	66	0	0.1	0.0	3.884	A
	2 - Havant Road	1219	305	387	1223	1279	873	9.4	2.7	10.586	B
	3 - Church Lane	0	0	1607	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1365				
	5 - Emsworth Road	1193	298	2	1196	1230	241	4.0	1.9	6.285	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			55				
	2 - Emsworth Road (S)	206	52	1	208	214	1009	0.2	0.2	4.530	A
	3 - A27 Off-Slip	842	211	209	839	865	0	1.6	1.3	5.255	A
	4 - Emsworth Road	465	116	602	465	473	447	0.7	0.5	3.947	A
2 - A27 / Church Lane	1 - A27 Off-Slip	55	14	1011	55	58	0	0.0	0.0	3.371	A
	2 - Havant Road	1018	254	325	1014	1037	741	2.7	1.8	6.592	A
	3 - Church Lane	0	0	1334	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1127				
	5 - Emsworth Road	1010	252	1	1010	1024	206	1.9	1.3	5.195	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	214	973	0.220	214	219	0.0	0.3	4.742	A
	3 - A27 Off-Slip	1	1	1, 2, 4	405	922	0.440	404	426	0.0	0.6	5.237	A
			2	1, 2, 4	412	926	0.445	412	424	0.0	0.5	5.217	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	817			817	854	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	59	1166	0.051	59	63	0.0	0.1	2.969	A
	2 - Havant Road	1	1	2, 3, 4, 5	512	885	0.579	511	525	0.0	1.1	6.653	A
			2	2, 3, 4, 5	523	885	0.591	522	524	0.0	1.1	6.678	A
	2 - Havant Road	2	1	(1, 2, 3, 4, 5)	1035			1035	1058	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	419	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	498	995	0.501	498	509	0.0	0.7	5.157	A
			2	2, 3, 4, 5	502	998	0.503	503	507	0.0	0.7	5.269	A

08:00 - 08:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	255	971	0.263	256	262	0.3	0.3	5.006	A
	3 - A27 Off-Slip	1	1	1, 2, 4	495	908	0.545	494	509	0.6	0.8	5.914	A
			2	1, 2, 4	478	906	0.528	480	499	0.5	0.7	6.097	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	973			973	1010	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	69	1028	0.068	69	72	0.1	0.1	3.518	A
	2 - Havant Road	1	1	2, 3, 4, 5	611	860	0.710	610	618	1.1	1.5	8.820	A
			2	2, 3, 4, 5	615	858	0.719	615	623	1.1	1.5	8.614	A
	2 - Havant Road	2	1	(1, 2, 3, 4, 5)	1227			1227	1244	0.0	0.1	0.015	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	285	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	596	992	0.600	597	606	0.7	1.0	5.967	A
			2	2, 3, 4, 5	601	998	0.602	603	604	0.7	0.9	6.008	A

08:15 - 08:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	313	976	0.322	313	316	0.3	0.5	5.456	A
	3 - A27 Off-Slip	1	1	1, 2, 4	618	889	0.696	615	630	0.8	1.2	7.753	A
			2	1, 2, 4	612	886	0.690	611	625	0.7	1.2	7.883	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1230			1230	1259	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	88	844	0.105	88	89	0.1	0.1	4.602	A
	2 - Havant Road	1	1	2, 3, 4, 5	750	834	0.900	743	749	1.5	4.9	18.818	C
			2	2, 3, 4, 5	749	834	0.897	741	749	1.5	4.7	18.238	C
	2 - Havant Road	2	1	(1, 2, 3, 4, 5)	1517			1499	1524	0.1	2.4	2.194	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	116	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	745	996	0.749	743	741	1.0	2.1	8.340	A
			2	2, 3, 4, 5	727	995	0.731	724	739	0.9	2.2	8.389	A

08:30 - 08:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	310	974	0.318	308	317	0.5	0.6	5.596	A
	3 - A27 Off-Slip	1	1	1, 2, 4	593	892	0.665	597	630	1.2	1.2	8.009	A
			2	1, 2, 4	605	886	0.681	606	626	1.2	1.1	8.073	A
		2	1	(1, 2, 3, 4)	1198			1198	1255	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	688	1214	0.566	688	696	1.4	1.3	7.115	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	84	840	0.100	85	86	0.1	0.1	4.530	A
	2 - Havant Road	1	1	2, 3, 4, 5	748	830	0.902	753	775	4.9	3.9	20.558	C
			2	2, 3, 4, 5	751	832	0.902	750	764	4.7	4.1	19.928	C
		2	1	(1, 2, 3, 4, 5)	1489			1499	1533	2.4	1.4	4.591	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	106	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	748	995	0.752	743	749	2.1	2.1	8.703	A
			2	2, 3, 4, 5	733	996	0.736	729	748	2.2	2.0	8.665	A

08:45 - 09:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	241	974	0.247	241	261	0.6	0.2	5.043	A
	3 - A27 Off-Slip	1	1	1, 2, 4	507	913	0.555	507	518	1.2	0.8	6.281	A
			2	1, 2, 4	492	913	0.541	493	510	1.1	0.8	6.399	A
		2	1	(1, 2, 3, 4)	1000			1000	1025	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	546	1325	0.412	546	572	1.3	0.7	4.746	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	62	1031	0.060	63	66	0.1	0.0	3.884	A
	2 - Havant Road	1	1	2, 3, 4, 5	608	861	0.706	610	639	3.9	1.3	10.408	B
			2	2, 3, 4, 5	611	864	0.707	613	641	4.1	1.4	10.338	B
		2	1	(1, 2, 3, 4, 5)	1219			1219	1257	1.4	0.0	0.310	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	285	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	604	994	0.607	605	619	2.1	0.9	6.226	A
			2	2, 3, 4, 5	589	997	0.591	591	611	2.0	0.9	6.344	A

09:00 - 09:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	206	977	0.212	208	214	0.2	0.2	4.530	A
	3 - A27 Off-Slip	1	1	1, 2, 4	420	931	0.451	418	431	0.8	0.7	5.276	A
			2	1, 2, 4	423	931	0.455	422	435	0.8	0.6	5.233	A
		2	1	(1, 2, 3, 4)	842			842	864	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	465	1409	0.330	465	473	0.7	0.5	3.947	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	55	1161	0.047	55	58	0.0	0.0	3.371	A
	2 - Havant Road	1	1	2, 3, 4, 5	510	885	0.577	508	523	1.3	0.9	6.500	A
			2	2, 3, 4, 5	508	889	0.571	506	514	1.4	0.8	6.686	A
		2	1	(1, 2, 3, 4, 5)	1018			1018	1033	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	431	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	504	998	0.505	505	510	0.9	0.6	5.242	A
			2	2, 3, 4, 5	505	999	0.506	505	514	0.9	0.7	5.149	A

2026 Selangor Ave less CA Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	1 - A27 Emsworth Road - 4 - Emsworth Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout		1, 2, 3, 4	26.38	D
2	A27 / Church Lane	Standard Roundabout		1, 2, 3, 4, 5	10.30	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026 Selangor Ave less CA Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1567	100.000
	4 - Emsworth Road		ONE HOUR	✓	522	100.000
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	133	100.000
	2 - Havant Road		ONE HOUR	✓	915	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				

Origin-Destination Data

1 - A27 Emsworth Road

Demand (Veh/hr)

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	36	0	0	286
	3 - A27 Off-Slip	10	1101	0	456
	4 - Emsworth Road	75	446	0	1

Proportions

From	To				E
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.11	0.00	0.00	
	3 - A27 Off-Slip	0.01	0.70	0.00	
	4 - Emsworth Road	0.14	0.85	0.00	

Demand (Veh/hr)

	To					
2 - A27 / Church Lane	From	1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	48	0	0	85
	2 - Havant Road	0	2	0	705	208
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1310	2	239	1

Proportions

From	To				E
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	0.00	0.36	0.00	0.00
	2 - Havant Road	0.00	0.00	0.00	0.77
	3 - Church Lane	0.20	0.20	0.20	0.20
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.84	0.00	0.15

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	4	0	0	2
	3 - A27 Off-Slip	0	1	0	1
	4 - Emsworth Road	0	2	0	0

Average PCU Per Veh

From	To				E
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	
	2 - Emsworth Road (S)	1.040	1.000	1.000	
	3 - A27 Off-Slip	1.000	1.010	1.000	
	4 - Emsworth Road	1.000	1.020	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	3	0	0	4
	2 - Havant Road	0	0	0	2	3
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1	0	1	0

Average PCU Per Veh

From	To				E
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.030	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.020
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.010	1.000	1.010

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	248
		3 - A27 Off-Slip	1180	1191
		4 - Emsworth Road	393	400
	2 - A27 / Church Lane	1 - A27 Off-Slip	100	104
		2 - Havant Road	689	704
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1168	1180
17:00-17:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	296
		3 - A27 Off-Slip	1409	1423
		4 - Emsworth Road	469	477
	2 - A27 / Church Lane	1 - A27 Off-Slip	120	124
		2 - Havant Road	823	841
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1395	1409
17:15-17:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	355	362
		3 - A27 Off-Slip	1725	1742
		4 - Emsworth Road	575	585
	2 - A27 / Church Lane	1 - A27 Off-Slip	146	152
		2 - Havant Road	1007	1030
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1709	1726
17:30-17:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	355	362
		3 - A27 Off-Slip	1725	1742
		4 - Emsworth Road	575	585
	2 - A27 / Church Lane	1 - A27 Off-Slip	146	152
		2 - Havant Road	1007	1030
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1709	1726
17:45-18:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	289	296
		3 - A27 Off-Slip	1409	1423
		4 - Emsworth Road	469	477
	2 - A27 / Church Lane	1 - A27 Off-Slip	120	124
		2 - Havant Road	823	841
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1395	1409
18:00-18:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	242	248
		3 - A27 Off-Slip	1180	1191
		4 - Emsworth Road	393	400
	2 - A27 / Church Lane	1 - A27 Off-Slip	100	104
		2 - Havant Road	689	704
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1168	1180

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.65	0.6	A	270	406
	3 - A27 Off-Slip	36.28	17.6	E	1436	2153
	4 - Emsworth Road	8.70	1.5	A	479	718
2 - A27 / Church Lane	1 - A27 Off-Slip	6.49	0.4	A	126	189
	2 - Havant Road	6.62	2.1	A	835	1253
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	12.84	7.2	B	1420	2130

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			87				
	2 - Emsworth Road (S)	224	56	0.58	223	227	1165	0.0	0.3	4.615	A
	3 - A27 Off-Slip	1193	298	223	1191	1196	0	0.0	2.3	6.770	A
	4 - Emsworth Road	388	97	864	388	400	551	0.0	0.5	4.057	A
2 - A27 / Church Lane	1 - A27 Off-Slip	99	25	1173	100	106	0	0.0	0.1	3.910	A
	2 - Havant Road	694	173	253	695	705	1021	0.0	0.8	4.822	A
	3 - Church Lane	0	0	946	0	0	1	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			721				
	5 - Emsworth Road	1165	291	2	1171	1172	224	0.0	1.8	5.792	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			107				
	2 - Emsworth Road (S)	270	68	0.58	269	274	1408	0.3	0.4	5.305	A
	3 - A27 Off-Slip	1422	355	270	1420	1424	0	2.3	4.4	10.383	B
	4 - Emsworth Road	484	121	1032	484	476	658	0.5	0.8	5.077	A
2 - A27 / Church Lane	1 - A27 Off-Slip	129	32	1407	130	128	0	0.1	0.1	4.726	A
	2 - Havant Road	810	203	303	806	834	1235	0.8	1.5	5.377	A
	3 - Church Lane	0	0	1107	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			834				
	5 - Emsworth Road	1408	352	2	1405	1391	270	1.8	3.1	7.355	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			126				
	2 - Emsworth Road (S)	323	81	0.58	324	334	1690	0.4	0.6	5.652	A
	3 - A27 Off-Slip	1707	427	324	1692	1692	0	4.4	15.0	25.571	D
	4 - Emsworth Road	578	144	1240	577	583	777	0.8	1.4	8.034	A
2 - A27 / Church Lane	1 - A27 Off-Slip	151	38	1705	149	152	0	0.1	0.4	6.376	A
	2 - Havant Road	1006	252	363	1004	1028	1492	1.5	1.9	6.567	A
	3 - Church Lane	0	0	1365	0	0	1	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1040				
	5 - Emsworth Road	1690	423	3	1703	1679	323	3.1	5.4	11.372	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			126				
	2 - Emsworth Road (S)	325	81	1	322	333	1715	0.6	0.6	5.615	A
	3 - A27 Off-Slip	1709	427	324	1715	1730	0	15.0	17.5	36.278	E
	4 - Emsworth Road	580	145	1256	584	586	782	1.4	1.4	8.701	A
2 - A27 / Church Lane	1 - A27 Off-Slip	152	38	1704	151	157	0	0.4	0.2	6.492	A
	2 - Havant Road	996	249	359	994	1022	1497	1.9	2.0	6.616	A
	3 - Church Lane	0	0	1350	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1023				
	5 - Emsworth Road	1715	429	2	1702	1707	325	5.4	7.1	12.844	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			103				
	2 - Emsworth Road (S)	269	67	0.93	268	278	1366	0.6	0.4	5.289	A
	3 - A27 Off-Slip	1401	350	269	1401	1470	0	17.5	4.1	13.989	B
	4 - Emsworth Road	451	113	1019	451	477	651	1.4	0.7	5.874	A
2 - A27 / Church Lane	1 - A27 Off-Slip	126	32	1375	127	131	0	0.2	0.1	5.374	A
	2 - Havant Road	828	207	289	826	850	1214	2.0	1.3	5.475	A
	3 - Church Lane	0	0	1113	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			842				
	5 - Emsworth Road	1366	342	2	1373	1461	269	7.1	2.6	8.129	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			85				
	2 - Emsworth Road (S)	213	53	1	214	223	1175	0.4	0.2	4.688	A
	3 - A27 Off-Slip	1182	296	215	1182	1200	0	4.1	2.0	6.695	A
	4 - Emsworth Road	393	98	867	394	403	530	0.7	0.4	4.347	A
2 - A27 / Church Lane	1 - A27 Off-Slip	99	25	1176	99	103	0	0.1	0.2	4.027	A
	2 - Havant Road	674	168	248	677	700	1027	1.3	0.7	4.822	A
	3 - Church Lane	0	0	923	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			709				
	5 - Emsworth Road	1175	294	1	1175	1195	213	2.6	2.0	5.852	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	224	970	0.230	223	227	0.0	0.3	4.615	A
	3 - A27 Off-Slip	1	1	1, 2, 4	590	942	0.626	589	600	0.0	1.1	6.736	A
			2	1, 2, 4	603	947	0.637	602	596	0.0	1.2	6.805	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1193			1193	1206	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	99	1007	0.098	100	106	0.0	0.1	3.910	A
	2 - Havant Road	1	1	2, 3, 4, 5	348	916	0.379	349	353	0.0	0.4	4.834	A
			2	2, 3, 4, 5	346	916	0.378	346	352	0.0	0.4	4.810	A
	2 - Havant Road	2	1	(1, 2, 3, 4, 5)	694			694	708	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	630	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	580	1005	0.577	584	591	0.0	0.9	5.771	A
			2	2, 3, 4, 5	585	1007	0.581	587	581	0.0	1.0	5.813	A

17:00 - 17:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	270	971	0.278	269	274	0.3	0.4	5.305	A
	3 - A27 Off-Slip	1	1	1, 2, 4	710	927	0.765	708	714	1.1	2.2	10.325	B
			2	1, 2, 4	712	927	0.768	712	710	1.2	2.2	10.440	B
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1422			1422	1433	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	129	868	0.149	130	128	0.1	0.1	4.726	A
	2 - Havant Road	1	1	2, 3, 4, 5	404	896	0.451	403	416	0.4	0.7	5.414	A
			2	2, 3, 4, 5	406	900	0.452	403	418	0.4	0.8	5.341	A
	2 - Havant Road	2	1	(1, 2, 3, 4, 5)	810			810	837	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	549	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	700	1006	0.696	698	690	0.9	1.6	7.420	A
			2	2, 3, 4, 5	707	1007	0.702	707	701	1.0	1.4	7.291	A

17:15 - 17:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	323	969	0.333	324	334	0.4	0.6	5.652	A
	3 - A27 Off-Slip	1	1	1, 2, 4	851	907	0.938	845	846	2.2	7.4	25.596	D
			2	1, 2, 4	856	908	0.943	847	847	2.2	7.6	25.546	D
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1707			1707	1735	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	151	673	0.225	149	152	0.1	0.4	6.376	A
	2 - Havant Road	1	1	2, 3, 4, 5	512	877	0.584	510	518	0.7	0.9	6.514	A
			2	2, 3, 4, 5	495	877	0.564	494	510	0.8	1.0	6.610	A
	2 - Havant Road	2	1	(1, 2, 3, 4, 5)	1006			1006	1030	0.0	0.0	0.006	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	418	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	839	1006	0.834	845	837	1.6	2.8	11.417	B
			2	2, 3, 4, 5	851	1005	0.847	857	842	1.4	2.6	11.328	B

17:30 - 17:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	325	974	0.333	322	333	0.6	0.6	5.615	A
	3 - A27 Off-Slip	1	1	1, 2, 4	854	908	0.941	856	868	7.4	8.8	36.032	E
			2	1, 2, 4	854	908	0.941	859	861	7.6	8.7	36.526	E
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1709			1709	1740	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	580	1001	0.580	584	586	1.4	1.4	8.701	A
	2 - Havant Road	1	1	2, 3, 4, 5	152	669	0.227	151	157	0.4	0.2	6.492	A
			2	2, 3, 4, 5	498	880	0.567	497	513	0.9	1.0	6.586	A
		2	1	2, 3, 4, 5	498	880	0.565	497	509	1.0	1.1	6.646	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	996			996	1022	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	426	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	865	1007	0.860	861	853	2.8	3.5	12.850	B
			2	2, 3, 4, 5	849	1004	0.846	840	855	2.6	3.6	12.839	B

17:45 - 18:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	269	976	0.276	268	278	0.6	0.4	5.289	A
	3 - A27 Off-Slip	1	1	1, 2, 4	705	929	0.759	703	736	8.8	2.1	14.069	B
			2	1, 2, 4	696	929	0.749	697	734	8.7	2.0	13.909	B
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1401			1401	1416	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	451	1164	0.388	451	477	1.4	0.7	5.874	A
	2 - Havant Road	1	1	2, 3, 4, 5	126	888	0.142	127	131	0.2	0.1	5.374	A
			2	2, 3, 4, 5	410	904	0.454	407	421	1.0	0.8	5.553	A
		2	1	2, 3, 4, 5	418	903	0.463	419	429	1.1	0.5	5.399	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	828			828	848	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	547	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	674	1006	0.670	679	728	3.5	1.2	8.189	A
			2	2, 3, 4, 5	692	1006	0.688	694	734	3.6	1.4	8.069	A

18:00 - 18:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	213	976	0.219	214	223	0.4	0.2	4.688	A
	3 - A27 Off-Slip	1	1	1, 2, 4	592	948	0.624	592	599	2.1	1.0	6.705	A
			2	1, 2, 4	590	950	0.621	590	602	2.0	1.0	6.686	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1182			1182	1192	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	393	1261	0.311	394	403	0.7	0.4	4.347	A
	2 - Havant Road	1	1	2, 3, 4, 5	99	1018	0.098	99	103	0.1	0.2	4.027	A
			2	2, 3, 4, 5	336	921	0.365	338	348	0.8	0.4	4.853	A
		2	1	2, 3, 4, 5	338	919	0.367	339	351	0.5	0.3	4.791	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	674			674	697	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	643	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	588	1003	0.586	589	597	1.2	0.9	5.878	A
			2	2, 3, 4, 5	587	1006	0.584	586	598	1.4	1.1	5.827	A

2026 Selangor Ave (inc. CA Dev), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	1 - A27 Emsworth Road - 4 - Emsworth Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout		1, 2, 3, 4	7.72	A
2	A27 / Church Lane	Standard Roundabout		1, 2, 3, 4, 5	18.55	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026 Selangor Ave (inc. CA Dev)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1106	100.000
	4 - Emsworth Road		ONE HOUR	✓	639	100.000
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	78	100.000
	2 - Havant Road		ONE HOUR	✓	1352	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				

Origin-Destination Data

1 - A27 Emsworth Road

Demand (Veh/hr)

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	30	0	0	293
	3 - A27 Off-Slip	2	770	0	334
	4 - Emsworth Road	53	585	0	1

Proportions

From	To				E
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	
	1 - A27 On Slip	0.25	0.25	0.25	
	2 - Emsworth Road (S)	0.09	0.00	0.00	
	3 - A27 Off-Slip	0.00	0.70	0.00	
	4 - Emsworth Road	0.08	0.92	0.00	

Demand (Veh/hr)

	To					
2 - A27 / Church Lane		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	34	0	2	42
	2 - Havant Road	0	2	1	1107	242
	3 - Church Lane	0	0	0	3	1
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	943	4	400	1

Proportions

	To				
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	0.00	0.44	0.00	0.03
	2 - Havant Road	0.00	0.00	0.00	0.82
	3 - Church Lane	0.00	0.00	0.00	0.75
	4 - A27 On-Slip	0.20	0.20	0.20	0.20
	5 - Emsworth Road	0.00	0.70	0.00	0.30

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

	To				
From		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	5	0	0	2
	3 - A27 Off-Slip	50	4	0	3
	4 - Emsworth Road	4	3	0	0

Average PCU Per Veh

From	To				E
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	
	1 - A27 On Slip	Exit-only	Exit-only	Exit-only	
	2 - Emsworth Road (S)	1.050	1.000	1.000	
	3 - A27 Off-Slip	1.500	1.040	1.000	
	4 - Emsworth Road	1.040	1.030	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

	To					
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
	1 - A27 Off-Slip	0	0	0	0	0
	2 - Havant Road	0	0	0	3	2
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	2	0	2	0

Average PCU Per Veh

	To				
From		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
	1 - A27 Off-Slip	1.000	1.000	1.000	1.000
	2 - Havant Road	1.000	1.000	1.000	1.030
	3 - Church Lane	1.000	1.000	1.000	1.000
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	1.000	1.020	1.000	1.020

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	833	864
		4 - Emsworth Road	481	496
	2 - A27 / Church Lane	1 - A27 Off-Slip	59	59
		2 - Havant Road	1018	1047
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1015	1035
08:00-08:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	994	1032
		4 - Emsworth Road	574	592
	2 - A27 / Church Lane	1 - A27 Off-Slip	70	70
		2 - Havant Road	1215	1250
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1212	1236
08:15-08:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1218	1264
		4 - Emsworth Road	704	725
	2 - A27 / Church Lane	1 - A27 Off-Slip	86	86
		2 - Havant Road	1489	1530
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1484	1514
08:30-08:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1218	1264
		4 - Emsworth Road	704	725
	2 - A27 / Church Lane	1 - A27 Off-Slip	86	86
		2 - Havant Road	1489	1530
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1484	1514
08:45-09:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	994	1032
		4 - Emsworth Road	574	592
	2 - A27 / Church Lane	1 - A27 Off-Slip	70	70
		2 - Havant Road	1215	1250
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1212	1236
09:00-09:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	833	864
		4 - Emsworth Road	481	496
	2 - A27 / Church Lane	1 - A27 Off-Slip	59	59
		2 - Havant Road	1018	1047
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1015	1035

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.61	0.6	A	262	393
	3 - A27 Off-Slip	8.37	2.8	A	1018	1527
	4 - Emsworth Road	7.51	1.9	A	582	873
2 - A27 / Church Lane	1 - A27 Off-Slip	4.94	0.1	A	71	107
	2 - Havant Road	28.77	12.0	D	1243	1865
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	8.98	4.1	A	1238	1857

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			57				
	2 - Emsworth Road (S)	213	53	0.85	212	217	1007	0.0	0.3	4.825	A
	3 - A27 Off-Slip	857	214	213	851	868	0	0.0	1.5	5.228	A
	4 - Emsworth Road	455	114	610	455	486	454	0.0	0.6	3.897	A
2 - A27 / Church Lane	1 - A27 Off-Slip	58	15	1013	57	63	0	0.0	0.1	3.059	A
	2 - Havant Road	996	249	334	1002	1036	736	0.0	1.7	6.401	A
	3 - Church Lane	0	0	1333	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1119				
	5 - Emsworth Road	1007	252	0.51	1012	1032	213	0.0	1.2	5.276	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			69				
	2 - Emsworth Road (S)	245	61	0.68	246	258	1215	0.3	0.3	5.117	A
	3 - A27 Off-Slip	998	250	247	994	1022	0	1.5	1.7	6.049	A
	4 - Emsworth Road	578	145	707	578	589	535	0.6	0.6	4.480	A
2 - A27 / Church Lane	1 - A27 Off-Slip	69	17	1217	70	72	0	0.1	0.1	3.644	A
	2 - Havant Road	1214	304	400	1209	1235	886	1.7	2.9	8.670	A
	3 - Church Lane	0	0	1605	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1358				
	5 - Emsworth Road	1215	304	2	1214	1224	245	1.2	2.2	6.115	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			87				
	2 - Emsworth Road (S)	313	78	2	314	314	1485	0.3	0.5	5.608	A
	3 - A27 Off-Slip	1213	303	316	1209	1258	0	1.7	2.7	7.933	A
	4 - Emsworth Road	710	178	867	707	727	658	0.6	1.9	7.101	A
2 - A27 / Church Lane	1 - A27 Off-Slip	83	21	1491	84	87	0	0.1	0.1	4.838	A
	2 - Havant Road	1502	376	488	1483	1503	1087	2.9	10.4	20.082	C
	3 - Church Lane	0	0	1964	0	0	7	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1649				
	5 - Emsworth Road	1485	371	2	1489	1517	313	2.2	4.1	8.977	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			89				
	2 - Emsworth Road (S)	317	79	0.85	317	323	1465	0.5	0.6	5.604	A
	3 - A27 Off-Slip	1205	301	318	1208	1266	0	2.7	2.7	8.370	A
	4 - Emsworth Road	688	172	871	683	726	655	1.9	1.6	7.515	A
2 - A27 / Church Lane	1 - A27 Off-Slip	85	21	1472	85	83	0	0.1	0.1	4.943	A
	2 - Havant Road	1492	373	485	1502	1537	1072	10.4	12.0	28.769	D
	3 - Church Lane	0	0	1983	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1664				
	5 - Emsworth Road	1465	366	2	1470	1519	318	4.1	3.7	8.742	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			75				
	2 - Emsworth Road (S)	265	66	0.51	265	269	1225	0.6	0.4	4.998	A
	3 - A27 Off-Slip	994	249	265	995	1034	0	2.7	1.5	6.146	A
	4 - Emsworth Road	573	143	725	576	590	535	1.6	0.7	5.091	A
2 - A27 / Church Lane	1 - A27 Off-Slip	74	19	1226	74	68	0	0.1	0.1	4.160	A
	2 - Havant Road	1238	310	418	1239	1291	881	12.0	3.6	13.023	B
	3 - Church Lane	0	0	1652	0	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1385				
	5 - Emsworth Road	1225	306	2	1223	1250	265	3.7	2.5	6.497	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			59				
	2 - Emsworth Road (S)	219	55	0.68	218	223	1030	0.4	0.4	4.784	A
	3 - A27 Off-Slip	841	210	219	837	867	0	1.5	1.3	5.205	A
	4 - Emsworth Road	485	121	604	487	503	452	0.7	0.5	4.167	A
2 - A27 / Church Lane	1 - A27 Off-Slip	56	14	1037	56	58	0	0.1	0.0	3.427	A
	2 - Havant Road	1016	254	332	1018	1054	761	3.6	2.0	7.037	A
	3 - Church Lane	0	0	1347	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1126				
	5 - Emsworth Road	1030	257	2	1035	1055	219	2.5	1.1	5.174	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	213	974	0.218	212	217	0.0	0.3	4.825	A
	3 - A27 Off-Slip	1	1	1, 2, 4	424	920	0.462	423	434	0.0	0.7	5.244	A
			2	1, 2, 4	433	920	0.470	428	434	0.0	0.8	5.211	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	857			857	874	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	455	1396	0.326	455	486	0.0	0.6	3.897	A
	2 - Havant Road	1	1	2, 3, 4, 5	58	1158	0.050	57	63	0.0	0.1	3.059	A
			2	2, 3, 4, 5	490	882	0.555	491	514	0.0	0.9	6.490	A
		2	1	2, 3, 4, 5	506	881	0.574	511	522	0.0	0.8	6.314	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	996			996	1043	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	431	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	503	996	0.505	505	519	0.0	0.7	5.228	A
			2	2, 3, 4, 5	505	996	0.507	508	513	0.0	0.5	5.324	A

08:00 - 08:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	245	977	0.251	246	258	0.3	0.3	5.117	A
	3 - A27 Off-Slip	1	1	1, 2, 4	495	908	0.544	493	511	0.7	0.8	6.030	A
			2	1, 2, 4	503	910	0.554	501	511	0.8	0.9	6.068	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	998			998	1023	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	578	1338	0.432	578	589	0.6	0.6	4.480	A
	2 - Havant Road	1	1	2, 3, 4, 5	69	1021	0.068	70	72	0.1	0.1	3.644	A
			2	2, 3, 4, 5	609	862	0.707	606	621	0.9	1.4	8.561	A
		2	1	2, 3, 4, 5	605	864	0.700	603	613	0.8	1.5	8.767	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1214			1214	1240	0.0	0.0	0.006	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	296	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	608	1001	0.607	608	614	0.7	1.0	6.081	A
			2	2, 3, 4, 5	607	998	0.608	607	610	0.5	1.1	6.149	A

08:15 - 08:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	313	972	0.321	314	314	0.3	0.5	5.608	A
	3 - A27 Off-Slip	1	1	1, 2, 4	615	887	0.694	614	632	0.8	1.3	7.898	A
			2	1, 2, 4	598	882	0.677	595	626	0.9	1.4	7.968	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1213			1213	1262	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	710	1227	0.579	707	727	0.6	1.9	7.101	A
	2 - Havant Road	1	1	2, 3, 4, 5	83	830	0.101	84	87	0.1	0.1	4.838	A
			2	2, 3, 4, 5	752	831	0.905	744	761	1.4	4.5	17.858	C
		2	1	2, 3, 4, 5	748	830	0.901	739	742	1.5	4.4	17.735	C
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1502			1499	1528	0.0	1.4	2.208	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	115	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	729	993	0.734	732	758	1.0	1.9	8.989	A
			2	2, 3, 4, 5	757	999	0.757	758	759	1.1	2.1	8.966	A

08:30 - 08:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	317	973	0.327	317	323	0.5	0.6	5.604	A
	3 - A27 Off-Slip	1	1	1, 2, 4	602	886	0.680	603	628	1.3	1.4	8.402	A
			2	1, 2, 4	603	885	0.682	605	638	1.4	1.3	8.338	A
		2	1	(1, 2, 3, 4)	1205			1205	1265	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	688	1227	0.561	683	726	1.9	1.6	7.515	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	85	843	0.101	85	83	0.1	0.1	4.943	A
	2 - Havant Road	1	1	2, 3, 4, 5	735	830	0.886	741	765	4.5	4.5	23.386	C
			2	2, 3, 4, 5	756	833	0.908	761	771	4.4	4.6	21.999	C
		2	1	(1, 2, 3, 4, 5)	1492			1491	1538	1.4	2.8	6.008	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	102	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	738	994	0.742	741	764	1.9	2.0	8.635	A
			2	2, 3, 4, 5	727	998	0.728	729	755	2.1	1.8	8.850	A

08:45 - 09:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	265	970	0.273	265	269	0.6	0.4	4.998	A
	3 - A27 Off-Slip	1	1	1, 2, 4	498	904	0.550	498	520	1.4	0.8	6.129	A
			2	1, 2, 4	497	901	0.551	497	514	1.3	0.7	6.164	A
		2	1	(1, 2, 3, 4)	994			994	1029	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	573	1324	0.433	576	590	1.6	0.7	5.091	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	74	1013	0.073	74	68	0.1	0.1	4.160	A
	2 - Havant Road	1	1	2, 3, 4, 5	624	852	0.731	626	649	4.5	1.7	12.096	B
			2	2, 3, 4, 5	613	851	0.722	613	642	4.6	1.8	12.061	B
		2	1	(1, 2, 3, 4, 5)	1238			1238	1268	2.8	0.1	1.191	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	262	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	617	997	0.619	615	625	2.0	1.2	6.499	A
			2	2, 3, 4, 5	608	996	0.611	608	625	1.8	1.3	6.494	A

09:00 - 09:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	219	977	0.224	218	223	0.4	0.4	4.784	A
	3 - A27 Off-Slip	1	1	1, 2, 4	417	920	0.454	415	434	0.8	0.6	5.150	A
			2	1, 2, 4	424	923	0.459	422	434	0.7	0.6	5.259	A
		2	1	(1, 2, 3, 4)	841			841	867	0.0	0.0	0.000	A
	4 - Emsworth Road	1	1	1, 2, 4	485	1403	0.346	487	503	0.7	0.5	4.167	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	56	1144	0.049	56	58	0.1	0.0	3.427	A
	2 - Havant Road	1	1	2, 3, 4, 5	501	887	0.564	501	522	1.7	1.0	7.018	A
			2	2, 3, 4, 5	514	890	0.579	517	532	1.8	0.9	7.052	A
		2	1	(1, 2, 3, 4, 5)	1016			1016	1048	0.1	0.0	0.013	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	428	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	511	1000	0.511	514	526	1.2	0.6	5.137	A
			2	2, 3, 4, 5	519	996	0.520	521	529	1.3	0.6	5.211	A

2026 Selangor Ave (inc. CA Dev), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	1 - A27 Emsworth Road - 4 - Emsworth Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked roundabouts	2 - A27 / Church Lane	U-turns on linked arms may cause sporadic locking up of junctions and/or unreliable results.
Warning	Linked junction	2 - A27 / Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A27 Emsworth Road	Standard Roundabout		1, 2, 3, 4	31.35	D
2	A27 / Church Lane	Standard Roundabout		1, 2, 3, 4, 5	10.57	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Selangor Ave (inc. CA Dev)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27 Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
2 - A27 / Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1585	100.000
	4 - Emsworth Road		ONE HOUR	✓	534	100.000
2 - A27 / Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	137	100.000
	2 - Havant Road		ONE HOUR	✓	918	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				

Origin-Destination Data

1 - A27 Emsworth Road

Demand (Veh/hr)

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
1 - A27 On Slip		Exit-only	Exit-only	Exit-only	Exit-only
2 - Emsworth Road (S)		36	0	0	287
3 - A27 Off-Slip		10	1101	0	474
4 - Emsworth Road		77	456	0	1

Proportions

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	E
1 - A27 On Slip		0.25	0.25	0.25	
2 - Emsworth Road (S)		0.11	0.00	0.00	
3 - A27 Off-Slip		0.01	0.69	0.00	
4 - Emsworth Road		0.14	0.85	0.00	

2 - A27 / Church Lane

Demand (Veh/hr)

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
1 - A27 Off-Slip		0	48	0	0	89
2 - Havant Road		0	2	2	705	209
3 - Church Lane		0	0	0	0	0
4 - A27 On-Slip		Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5 - Emsworth Road		0	1311	2	248	1

Proportions

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
1 - A27 Off-Slip		0.00	0.35	0.00	0.00
2 - Havant Road		0.00	0.00	0.00	0.77
3 - Church Lane		0.20	0.20	0.20	0.20
4 - A27 On-Slip		0.20	0.20	0.20	0.20
5 - Emsworth Road		0.00	0.84	0.00	0.16

Vehicle Mix

1 - A27 Emsworth Road

Heavy Vehicle Percentages

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - Emsworth Road
1 - A27 On Slip		Exit-only	Exit-only	Exit-only	Exit-only
2 - Emsworth Road (S)		4	0	0	2
3 - A27 Off-Slip		0	1	0	1
4 - Emsworth Road		0	2	0	0

Average PCU Per Veh

From	To				
		1 - A27 On Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	E
1 - A27 On Slip		Exit-only	Exit-only	Exit-only	
2 - Emsworth Road (S)		1.040	1.000	1.000	
3 - A27 Off-Slip		1.000	1.010	1.000	
4 - Emsworth Road		1.000	1.020	1.000	

2 - A27 / Church Lane

Heavy Vehicle Percentages

From	To					
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
1 - A27 Off-Slip		0	3	0	0	4
2 - Havant Road		0	0	0	2	3
3 - Church Lane		0	0	0	0	0
4 - A27 On-Slip		Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5 - Emsworth Road		0	1	0	1	0

Average PCU Per Veh

From	To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip
1 - A27 Off-Slip		1.000	1.030	1.000	1.000
2 - Havant Road		1.000	1.000	1.000	1.020
3 - Church Lane		1.000	1.000	1.000	1.000
4 - A27 On-Slip		Exit-only	Exit-only	Exit-only	Exit-only
5 - Emsworth Road		1.000	1.010	1.000	1.010

Detailed Demand Data

Demand for each time segment

Time Segment	Junction	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	1193	1205
		4 - Emsworth Road	402	409
	2 - A27 / Church Lane	1 - A27 Off-Slip	103	107
		2 - Havant Road	691	706
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1176	1188
17:00-17:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	1425	1439
		4 - Emsworth Road	480	488
	2 - A27 / Church Lane	1 - A27 Off-Slip	123	128
		2 - Havant Road	825	844
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1404	1418
17:15-17:30	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1745	1762
		4 - Emsworth Road	588	598
	2 - A27 / Church Lane	1 - A27 Off-Slip	151	156
		2 - Havant Road	1011	1033
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1720	1737
17:30-17:45	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	356	364
		3 - A27 Off-Slip	1745	1762
		4 - Emsworth Road	588	598
	2 - A27 / Church Lane	1 - A27 Off-Slip	151	156
		2 - Havant Road	1011	1033
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1720	1737
17:45-18:00	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	290	297
		3 - A27 Off-Slip	1425	1439
		4 - Emsworth Road	480	488
	2 - A27 / Church Lane	1 - A27 Off-Slip	123	128
		2 - Havant Road	825	844
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1404	1418
18:00-18:15	1 - A27 Emsworth Road	1 - A27 On Slip	0	0
		2 - Emsworth Road (S)	243	249
		3 - A27 Off-Slip	1193	1205
		4 - Emsworth Road	402	409
	2 - A27 / Church Lane	1 - A27 Off-Slip	103	107
		2 - Havant Road	691	706
		3 - Church Lane	0	0
		4 - A27 On-Slip	0	0
		5 - Emsworth Road	1176	1188

Results

Results Summary for whole modelled period

Junction	Arm	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27 Emsworth Road	1 - A27 On Slip					
	2 - Emsworth Road (S)	5.77	0.6	A	275	413
	3 - A27 Off-Slip	44.00	22.3	E	1448	2172
	4 - Emsworth Road	8.46	1.3	A	487	730
2 - A27 / Church Lane	1 - A27 Off-Slip	7.22	0.4	A	127	190
	2 - Havant Road	6.67	2.3	A	842	1263
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	13.21	5.9	B	1420	2130

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			87				
	2 - Emsworth Road (S)	226	57	0.63	226	231	1186	0.0	0.4	4.734	A
	3 - A27 Off-Slip	1185	296	227	1189	1187	0	0.0	2.1	6.836	A
	4 - Emsworth Road	410	102	865	409	411	551	0.0	0.6	4.089	A
2 - A27 / Church Lane	1 - A27 Off-Slip	105	26	1185	105	109	0	0.0	0.1	3.842	A
	2 - Havant Road	694	174	262	695	710	1028	0.0	0.9	4.875	A
	3 - Church Lane	0	0	955	0	0	2	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			726				
	5 - Emsworth Road	1186	297	2	1183	1169	227	0.0	1.9	5.821	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			112				
	2 - Emsworth Road (S)	269	67	1	269	271	1392	0.4	0.4	5.064	A
	3 - A27 Off-Slip	1412	353	270	1414	1431	0	2.1	3.9	9.714	A
	4 - Emsworth Road	477	119	1024	481	488	660	0.6	0.5	5.317	A
2 - A27 / Church Lane	1 - A27 Off-Slip	122	31	1395	123	124	0	0.1	0.1	4.727	A
	2 - Havant Road	830	207	307	828	846	1210	0.9	1.2	5.383	A
	3 - Church Lane	0	0	1132	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			861				
	5 - Emsworth Road	1392	348	2	1393	1405	269	1.9	2.8	7.317	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			136				
	2 - Emsworth Road (S)	335	84	1	337	341	1675	0.4	0.4	5.766	A
	3 - A27 Off-Slip	1741	435	338	1703	1695	0	3.9	17.8	28.529	D
	4 - Emsworth Road	581	145	1231	581	592	810	0.5	1.3	8.038	A
2 - A27 / Church Lane	1 - A27 Off-Slip	153	38	1674	152	157	0	0.1	0.4	6.548	A
	2 - Havant Road	1021	255	366	1015	1031	1460	1.2	2.3	6.674	A
	3 - Church Lane	0	0	1378	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1040				
	5 - Emsworth Road	1675	419	2	1672	1664	335	2.8	5.5	11.059	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			131				
	2 - Emsworth Road (S)	331	83	1	331	338	1703	0.4	0.6	5.496	A
	3 - A27 Off-Slip	1742	435	332	1748	1741	0	17.8	22.3	44.003	E
	4 - Emsworth Road	578	144	1257	579	594	824	1.3	1.2	8.465	A
2 - A27 / Church Lane	1 - A27 Off-Slip	153	38	1713	153	157	0	0.4	0.4	7.221	A
	2 - Havant Road	1002	250	376	996	1030	1490	2.3	2.2	6.458	A
	3 - Church Lane	0	0	1368	0	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			1035				
	5 - Emsworth Road	1703	426	2	1711	1710	331	5.5	5.9	13.210	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			109				
	2 - Emsworth Road (S)	266	66	0.79	266	277	1407	0.6	0.3	5.167	A
	3 - A27 Off-Slip	1415	354	267	1429	1506	0	22.3	3.7	17.083	C
	4 - Emsworth Road	483	121	1035	482	497	661	1.2	0.9	6.059	A
2 - A27 / Church Lane	1 - A27 Off-Slip	125	31	1415	126	128	0	0.4	0.1	5.513	A
	2 - Havant Road	812	203	312	813	848	1229	2.2	1.2	5.513	A
	3 - Church Lane	0	0	1122	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			854				
	5 - Emsworth Road	1407	352	3	1412	1479	266	5.9	2.8	8.623	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Average throughput (PCU/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A27 Emsworth Road	1 - A27 On Slip			0			90				
	2 - Emsworth Road (S)	223	56	0.63	224	231	1160	0.3	0.2	4.633	A
	3 - A27 Off-Slip	1195	299	225	1193	1205	0	3.7	2.5	6.995	A
	4 - Emsworth Road	391	98	862	389	412	556	0.9	0.6	4.528	A
2 - A27 / Church Lane	1 - A27 Off-Slip	103	26	1161	102	109	0	0.1	0.1	4.135	A
	2 - Havant Road	692	173	249	693	710	1014	1.2	1.0	4.872	A
	3 - Church Lane	0	0	940	0	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0			715				
	5 - Emsworth Road	1160	290	2	1160	1194	223	2.8	2.0	5.962	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	226	971	0.234	226	231	0.0	0.4	4.734	A
	3 - A27 Off-Slip	1	1	1, 2, 4	596	944	0.631	597	594	0.0	1.1	6.799	A
			2	1, 2, 4	590	943	0.625	591	593	0.0	1.0	6.872	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1185			1185	1196	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	105	1014	0.104	105	109	0.0	0.1	3.842	A
	2 - Havant Road	1	1	2, 3, 4, 5	345	912	0.378	345	357	0.0	0.5	4.869	A
			2	2, 3, 4, 5	350	910	0.384	350	353	0.0	0.4	4.881	A
	2 - Havant Road	2	1	(1, 2, 3, 4, 5)	694			694	714	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	626	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	595	1007	0.591	594	584	0.0	0.9	5.863	A
			2	2, 3, 4, 5	591	1004	0.589	589	585	0.0	1.0	5.778	A

17:00 - 17:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	269	978	0.275	269	271	0.4	0.4	5.064	A
	3 - A27 Off-Slip	1	1	1, 2, 4	708	929	0.763	708	715	1.1	2.0	9.708	A
			2	1, 2, 4	703	928	0.758	706	716	1.0	1.9	9.720	A
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1412			1412	1438	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	122	880	0.139	123	124	0.1	0.1	4.727	A
	2 - Havant Road	1	1	2, 3, 4, 5	418	895	0.467	417	423	0.5	0.6	5.416	A
			2	2, 3, 4, 5	411	896	0.459	411	423	0.4	0.6	5.350	A
	2 - Havant Road	2	1	(1, 2, 3, 4, 5)	830			830	847	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	536	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	696	1006	0.692	698	703	0.9	1.4	7.320	A
			2	2, 3, 4, 5	696	1006	0.691	695	702	1.0	1.4	7.315	A

17:15 - 17:30

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	335	972	0.345	337	341	0.4	0.4	5.766	A
	3 - A27 Off-Slip	1	1	1, 2, 4	866	902	0.959	847	845	2.0	8.9	28.602	D
			2	1, 2, 4	875	903	0.969	856	850	1.9	8.9	28.457	D
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1741			1741	1751	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	2, 3, 4, 5	153	685	0.224	152	157	0.1	0.4	6.548	A
	2 - Havant Road	1	1	2, 3, 4, 5	510	877	0.582	508	512	0.6	1.1	6.752	A
			2	2, 3, 4, 5	511	879	0.582	507	518	0.6	1.2	6.596	A
	2 - Havant Road	2	1	(1, 2, 3, 4, 5)	1021			1021	1035	0.0	0.0	0.000	A
	3 - Church Lane	1	1	2, 3, 4, 5	0	413	0.000	0	0	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	850	1005	0.846	849	837	1.4	2.7	10.962	B
			2	2, 3, 4, 5	825	1004	0.822	824	826	1.4	2.8	11.157	B

17:30 - 17:45

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	331	977	0.339	331	338	0.4	0.6	5.496	A
	3 - A27 Off-Slip	1	1	1, 2, 4	880	907	0.971	885	875	8.9	11.1	43.713	E
			2	1, 2, 4	862	905	0.952	863	867	8.9	11.2	44.290	E
	4 - Emsworth Road	1	1	(1, 2, 3, 4)	1742			1742	1760	0.0	0.0	0.002	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	578	1005	0.575	579	594	1.3	1.2	8.465	A
	2 - Havant Road	1	1	2, 3, 4, 5	153	665	0.230	153	157	0.4	0.4	7.221	A
			2	2, 3, 4, 5	497	873	0.569	494	514	1.1	1.1	6.514	A
		2	1	2, 3, 4, 5	505	874	0.578	502	517	1.2	1.1	6.402	A
	3 - Church Lane	1	1	(1, 2, 3, 4, 5)	1002			1002	1030	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	417	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	849	1006	0.844	854	850	2.7	2.9	13.286	B
			2	2, 3, 4, 5	854	1005	0.850	857	860	2.8	3.0	13.135	B

17:45 - 18:00

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	266	977	0.272	266	277	0.6	0.3	5.167	A
	3 - A27 Off-Slip	1	1	1, 2, 4	699	930	0.752	707	751	11.1	1.8	17.217	C
			2	1, 2, 4	716	929	0.771	722	754	11.2	1.9	16.949	C
	4 - Emsworth Road	2	1	(1, 2, 3, 4)	1415			1415	1431	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	483	1151	0.420	482	497	1.2	0.9	6.059	A
	2 - Havant Road	1	1	2, 3, 4, 5	125	860	0.145	126	128	0.4	0.1	5.513	A
			2	2, 3, 4, 5	409	893	0.459	410	424	1.1	0.6	5.517	A
		2	1	2, 3, 4, 5	403	897	0.449	404	424	1.1	0.6	5.509	A
	3 - Church Lane	2	1	(1, 2, 3, 4, 5)	812			812	845	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	542	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	708	1005	0.705	711	740	2.9	1.5	8.612	A
			2	2, 3, 4, 5	699	1005	0.695	701	738	3.0	1.4	8.634	A

18:00 - 18:15

Junction	Arm	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Average throughput (PCU/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsign level serv
1 - A27 Emsworth Road	2 - Emsworth Road (S)	1	1	1, 2, 4	223	969	0.230	224	231	0.3	0.2	4.633	A
	3 - A27 Off-Slip	1	1	1, 2, 4	602	944	0.637	600	601	1.8	1.3	7.021	A
			2	1, 2, 4	594	944	0.629	592	604	1.9	1.3	6.968	A
	4 - Emsworth Road	2	1	(1, 2, 3, 4)	1195			1195	1200	0.0	0.0	0.000	A
2 - A27 / Church Lane	1 - A27 Off-Slip	1	1	1, 2, 4	391	1263	0.310	389	412	0.9	0.6	4.528	A
	2 - Havant Road	1	1	2, 3, 4, 5	103	1026	0.100	102	109	0.1	0.1	4.135	A
			2	2, 3, 4, 5	346	915	0.379	347	355	0.6	0.5	4.917	A
		2	1	2, 3, 4, 5	346	919	0.376	346	355	0.6	0.5	4.827	A
	3 - Church Lane	2	1	(1, 2, 3, 4, 5)	692			692	709	0.0	0.0	0.000	A
	5 - Emsworth Road	1	1	2, 3, 4, 5	0	634	0.000	0	0	0.0	0.0	0.000	A
			2	2, 3, 4, 5	578	1006	0.574	579	596	1.5	1.0	5.986	A
			2	2, 3, 4, 5	582	1006	0.579	581	598	1.4	1.0	5.939	A