Appendix DT/26

Hilden Road Modelling Output

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Peel Hall A50_HildenRd_Roundabout with Mitigation - Option A - PHF.j9
Path: C:\Users\Brad\Highgate Transportation\HTp - Documents\1900 - Projects\1901 - Peel Hall\Modelling\Junctions 9\A50 Hilden Road Roundabout\Seperate Models
Report generation date: 15/07/2020 10:57:16

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	A50-Conjunction - 2018 Validation									
1 - Hilden Rd	D1	1.0	6.76	0.50	A	D9	1.2	6.96	0.54	A
2 - Orford Rd		0.9	4.20	0.48	A		1.1	4.67	0.53	A
3 - Smith Drive		0.7	6.89	0.40	A		0.1	5.20	0.11	A
4 - A50		0.5	2.95	0.35	A		0.6	2.81	0.39	A
	A50-Conjunction - 2022 Do Minimum									
1 - Hilden Rd	D2	1.2	7.53	0.55	A	D10	1.3	7.47	0.57	A
2 - Orford Rd		1.1	4.50	0.51	A		1.3	5.06	0.56	A
3 - Smith Drive		0.8	7.29	0.43	A		0.1	5.29	0.12	A
4 - A50		0.6	3.08	0.37	A		0.7	2.93	0.41	A
	A50-Conjunction - 2022 Do Something									
1 - Hilden Rd	D3	1.3	8.08	0.57	A	D11	1.5	8.03	0.59	A
2 - Orford Rd		1.2	4.87	0.53	A		1.3	5.26	0.57	A
3 - Smith Drive		0.8	7.67	0.44	A		0.2	5.68	0.13	A
4 - A50		0.7	3.26	0.39	A		0.8	3.04	0.42	A
	A50-Conjunction - 2022 Do Something Full									
1 - Hilden Rd	D4	2.2	11.15	0.69	B	D12	1.6	8.43	0.61	A
2 - Orford Rd		1.5	5.63	0.59	A		1.7	5.96	0.62	A
3 - Smith Drive		0.9	8.56	0.47	A		0.3	6.20	0.20	A
4 - A50		0.7	3.48	0.41	A		0.8	3.23	0.44	A
	A50-Conjunction - 2027 Do Minimum									
1 - Hilden Rd	D5	1.4	8.39	0.58	A	D13	1.4	7.93	0.59	A
2 - Orford Rd		1.2	4.92	0.54	A		1.4	5.41	0.59	A
3 - Smith Drive		0.9	8.10	0.47	A		0.2	5.48	0.14	A
4 - A50		0.7	3.25	0.40	A		0.8	3.03	0.43	A
	A50-Conjunction - 2027 Do Something									
1 - Hilden Rd	D6	1.9	10.29	0.66	B	D14	1.7	8.93	0.62	A
2 - Orford Rd		1.6	5.88	0.61	A		1.8	6.31	0.64	A
3 - Smith Drive		1.0	9.37	0.51	A		0.3	6.34	0.20	A
4 - A50		0.8	3.54	0.42	A		0.9	3.28	0.45	A
	A50-Conjunction - 2032 Do Minimum									
1 - Hilden Rd	D7	1.6	9.23	0.62	A	D15	1.6	8.58	0.62	A
2 - Orford Rd		1.4	5.32	0.58	A		1.6	5.88	0.62	A
3 - Smith Drive		1.1	9.30	0.52	A		0.2	5.83	0.18	A
4 - A50		0.7	3.39	0.41	A		0.8	3.10	0.44	A
	A50-Conjunction - 2032 Do Something Full									
1 - Hilden Rd	D8	2.4	11.76	0.72	B	D16	2.0	9.82	0.66	A
2 - Orford Rd		1.9	6.55	0.65	A		2.1	7.07	0.68	A
3 - Smith Drive		1.0	9.54	0.49	A		0.3	6.76	0.24	A
4 - A50		0.8	3.57	0.44	A		0.9	3.39	0.47	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	17/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	NA\Weijia.Chen
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	PCU	PCU	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

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	2018 Validation	AM	PHF	08:00	09:00	15	✓
D2	2022 Do Minimum	AM	PHF	08:00	09:00	15	✓
D3	2022 Do Something	AM	PHF	08:00	09:00	15	✓
D4	2022 Do Something Full	AM	PHF	08:00	09:00	15	✓
D5	2027 Do Minimum	AM	PHF	08:00	09:00	15	✓
D6	2027 Do Something	AM	PHF	08:00	09:00	15	✓
D7	2032 Do Minimum	AM	PHF	08:00	09:00	15	✓
D8	2032 Do Something Full	AM	PHF	08:00	09:00	15	✓
D9	2018 Validation	PM	PHF	17:00	18:00	15	✓
D10	2022 Do Minimum	PM	PHF	17:00	18:00	15	✓
D11	2022 Do Something	PM	PHF	17:00	18:00	15	✓
D12	2022 Do Something Full	PM	PHF	17:00	18:00	15	✓
D13	2027 Do Minimum	PM	PHF	17:00	18:00	15	✓
D14	2027 Do Something	PM	PHF	17:00	18:00	15	✓
D15	2032 Do Minimum	PM	PHF	17:00	18:00	15	✓
D16	2032 Do Something Full	PM	PHF	17:00	18:00	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AV-1	A50-Conjunction	✓	100.000	100.000

A50-Conjunction - 2018 Validation, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	4.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Hilden Rd	Hilden Rd
2	Orford Rd	
3	Smith Drive	
4	A50	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Hilden Rd	3.70	5.50	11.3	31.3	78.0	54.5	
2 - Orford Rd	4.35	6.50	50.0	29.5	78.0	25.1	
3 - Smith Drive	3.60	4.40	3.8	15.0	78.0	32.0	
4 - A50	6.00	7.40	10.0	48.7	78.0	20.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Hilden Rd	0.415	1383
2 - Orford Rd	0.522	1953
3 - Smith Drive	0.399	1207
4 - A50	0.572	2241

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

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	2018 Validation	AM	PHF	08:00	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	527	100.000
2 - Orford Rd		PHF	✓	782	100.000
3 - Smith Drive		PHF	✓	345	100.000
4 - A50		PHF	✓	642	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	527	0.97	SecondQuarter
2 - Orford Rd	782	0.97	SecondQuarter
3 - Smith Drive	345	0.97	SecondQuarter
4 - A50	642	0.97	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	52	384	91
	2 - Orford Rd	208	0	80	494
	3 - Smith Drive	234	108	0	3
	4 - A50	44	579	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	2	1	1
	2 - Orford Rd	0	0	3	4
	3 - Smith Drive	1	0	0	0
	4 - A50	1	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.50	6.76	1.0	A	527	527
2 - Orford Rd	0.48	4.20	0.9	A	782	782
3 - Smith Drive	0.40	6.89	0.7	A	345	345
4 - A50	0.35	2.95	0.5	A	642	642

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	516	129	689	1097	0.471	513	473	0.0	0.9	6.195	A
2 - Orford Rd	766	191	481	1702	0.450	763	721	0.0	0.8	3.928	A
3 - Smith Drive	338	84	773	899	0.376	335	470	0.0	0.6	6.409	A
4 - A50	629	157	535	1935	0.325	627	573	0.0	0.5	2.824	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	543	136	728	1081	0.503	543	501	0.9	1.0	6.762	A
2 - Orford Rd	806	202	509	1687	0.478	806	762	0.8	0.9	4.198	A
3 - Smith Drive	356	89	817	881	0.404	355	498	0.6	0.7	6.889	A
4 - A50	662	165	567	1918	0.345	662	606	0.5	0.5	2.945	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	532	133	713	1086	0.490	533	491	1.0	1.0	6.574	A
2 - Orford Rd	790	198	499	1692	0.467	790	747	0.9	0.9	4.104	A
3 - Smith Drive	349	87	801	887	0.393	349	488	0.7	0.7	6.728	A
4 - A50	649	162	556	1924	0.337	649	594	0.5	0.5	2.903	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	516	129	692	1096	0.471	516	476	1.0	0.9	6.290	A
2 - Orford Rd	766	191	484	1700	0.451	766	724	0.9	0.8	3.964	A
3 - Smith Drive	338	84	777	897	0.377	338	473	0.7	0.6	6.485	A
4 - A50	629	157	539	1933	0.325	629	576	0.5	0.5	2.837	A

A50-Conjunction - 2022 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	5.22	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	2022 Do Minimum	AM	PHF	08:00	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	563	100.000
2 - Orford Rd		PHF	✓	823	100.000
3 - Smith Drive		PHF	✓	364	100.000
4 - A50		PHF	✓	680	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	563	0.97	SecondQuarter
2 - Orford Rd	823	0.97	SecondQuarter
3 - Smith Drive	364	0.97	SecondQuarter
4 - A50	680	0.97	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	56	423	84
	2 - Orford Rd	215	0	92	516
	3 - Smith Drive	245	115	0	4
	4 - A50	46	614	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	2	1	1
	2 - Orford Rd	0	0	2	4
	3 - Smith Drive	1	0	0	0
	4 - A50	1	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.55	7.53	1.2	A	563	563
2 - Orford Rd	0.51	4.50	1.1	A	823	823
3 - Smith Drive	0.43	7.29	0.8	A	364	364
4 - A50	0.37	3.08	0.6	A	680	680

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	551	138	731	1079	0.511	547	493	0.0	1.0	6.788	A
2 - Orford Rd	806	202	512	1685	0.478	802	766	0.0	0.9	4.170	A
3 - Smith Drive	356	89	794	890	0.400	354	520	0.0	0.7	6.726	A
4 - A50	666	166	560	1922	0.347	664	589	0.0	0.5	2.936	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	580	145	772	1062	0.546	580	521	1.0	1.2	7.532	A
2 - Orford Rd	848	212	543	1669	0.508	848	809	0.9	1.1	4.498	A
3 - Smith Drive	375	94	840	872	0.430	375	551	0.7	0.8	7.286	A
4 - A50	701	175	592	1903	0.368	701	622	0.5	0.6	3.077	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	569	142	757	1068	0.532	569	511	1.2	1.2	7.288	A
2 - Orford Rd	831	208	533	1675	0.497	832	793	1.1	1.0	4.386	A
3 - Smith Drive	368	92	824	878	0.419	368	541	0.8	0.7	7.098	A
4 - A50	687	172	581	1909	0.360	687	610	0.6	0.6	3.026	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	551	138	734	1078	0.511	552	496	1.2	1.1	6.923	A
2 - Orford Rd	806	202	516	1683	0.479	806	769	1.0	1.0	4.220	A
3 - Smith Drive	356	89	798	888	0.401	357	524	0.7	0.7	6.820	A
4 - A50	666	166	563	1919	0.347	666	592	0.6	0.5	2.951	A

A50-Conjunction - 2022 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	5.57	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	2022 Do Something	AM	PHF	08:00	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	579	100.000
2 - Orford Rd		PHF	✓	856	100.000
3 - Smith Drive		PHF	✓	370	100.000
4 - A50		PHF	✓	708	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	579	0.97	SecondQuarter
2 - Orford Rd	856	0.97	SecondQuarter
3 - Smith Drive	370	0.97	SecondQuarter
4 - A50	708	0.97	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	61	429	89
	2 - Orford Rd	221	0	95	540
	3 - Smith Drive	251	115	0	4
	4 - A50	47	641	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	2	2	3
	2 - Orford Rd	1	0	6	8
	3 - Smith Drive	2	1	0	0
	4 - A50	2	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.57	8.08	1.3	A	579	579
2 - Orford Rd	0.53	4.87	1.2	A	856	856
3 - Smith Drive	0.44	7.67	0.8	A	370	370
4 - A50	0.39	3.26	0.7	A	708	708

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	567	142	757	1068	0.531	563	505	0.0	1.1	7.208	A
2 - Orford Rd	838	210	523	1680	0.499	834	797	0.0	1.0	4.487	A
3 - Smith Drive	362	91	828	877	0.413	360	529	0.0	0.7	7.040	A
4 - A50	693	173	571	1915	0.362	691	617	0.0	0.6	3.099	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	597	149	800	1051	0.568	596	535	1.1	1.3	8.078	A
2 - Orford Rd	882	221	554	1663	0.531	882	842	1.0	1.2	4.875	A
3 - Smith Drive	381	95	876	858	0.445	381	560	0.7	0.8	7.673	A
4 - A50	730	182	605	1896	0.385	730	652	0.6	0.7	3.258	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	585	146	784	1057	0.553	585	524	1.3	1.3	7.796	A
2 - Orford Rd	865	216	544	1669	0.518	865	826	1.2	1.1	4.743	A
3 - Smith Drive	374	93	859	864	0.432	374	550	0.8	0.8	7.466	A
4 - A50	715	179	593	1902	0.376	715	640	0.7	0.6	3.200	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	567	142	760	1067	0.531	567	509	1.3	1.2	7.368	A
2 - Orford Rd	838	210	527	1677	0.500	839	800	1.1	1.1	4.546	A
3 - Smith Drive	362	91	833	875	0.414	363	533	0.8	0.7	7.151	A
4 - A50	693	173	575	1913	0.363	694	620	0.6	0.6	3.116	A

A50-Conjunction - 2022 Do Something Full, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	6.84	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	2022 Do Something Full	AM	PHF	08:00	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	702	100.000
2 - Orford Rd		PHF	✓	937	100.000
3 - Smith Drive		PHF	✓	371	100.000
4 - A50		PHF	✓	748	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	702	0.97	SecondQuarter
2 - Orford Rd	937	0.97	SecondQuarter
3 - Smith Drive	371	0.97	SecondQuarter
4 - A50	748	0.97	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	139	439	124
	2 - Orford Rd	282	0	91	564
	3 - Smith Drive	266	101	0	4
	4 - A50	69	659	19	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	1	2	2
	2 - Orford Rd	1	0	6	8
	3 - Smith Drive	2	0	0	0
	4 - A50	20	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.69	11.15	2.2	B	702	702
2 - Orford Rd	0.59	5.63	1.5	A	937	937
3 - Smith Drive	0.47	8.56	0.9	A	371	371
4 - A50	0.41	3.48	0.7	A	748	748

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	688	172	761	1067	0.644	680	600	0.0	1.8	9.319	A
2 - Orford Rd	918	229	565	1658	0.554	913	876	0.0	1.3	5.069	A
3 - Smith Drive	363	91	945	830	0.438	360	533	0.0	0.8	7.723	A
4 - A50	733	183	631	1881	0.390	730	674	0.0	0.7	3.284	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	724	181	804	1049	0.690	722	635	1.8	2.2	11.147	B
2 - Orford Rd	966	241	600	1639	0.589	965	926	1.3	1.5	5.630	A
3 - Smith Drive	382	96	1000	808	0.473	382	565	0.8	0.9	8.558	A
4 - A50	771	193	668	1859	0.415	771	714	0.7	0.7	3.478	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	709	177	788	1055	0.672	709	623	2.2	2.1	10.610	B
2 - Orford Rd	947	237	589	1645	0.575	947	908	1.5	1.4	5.449	A
3 - Smith Drive	375	94	981	816	0.460	375	555	0.9	0.9	8.290	A
4 - A50	756	189	656	1867	0.405	756	700	0.7	0.7	3.411	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	688	172	764	1065	0.645	688	605	2.1	1.9	9.751	A
2 - Orford Rd	918	229	572	1654	0.555	918	881	1.4	1.3	5.171	A
3 - Smith Drive	363	91	952	827	0.439	364	538	0.9	0.8	7.879	A
4 - A50	733	183	636	1878	0.390	733	679	0.7	0.7	3.306	A

A50-Conjunction - 2027 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	5.72	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
D5	2027 Do Minimum	AM	PHF	08:00	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	590	100.000
2 - Orford Rd		PHF	✓	871	100.000
3 - Smith Drive		PHF	✓	384	100.000
4 - A50		PHF	✓	723	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	590	0.97	SecondQuarter
2 - Orford Rd	871	0.97	SecondQuarter
3 - Smith Drive	384	0.97	SecondQuarter
4 - A50	723	0.97	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	45	431	114
	2 - Orford Rd	230	0	98	543
	3 - Smith Drive	259	121	0	4
	4 - A50	43	659	20	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	2	1	1
	2 - Orford Rd	0	0	2	4
	3 - Smith Drive	1	0	0	0
	4 - A50	1	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.58	8.39	1.4	A	590	590
2 - Orford Rd	0.54	4.92	1.2	A	871	871
3 - Smith Drive	0.47	8.10	0.9	A	384	384
4 - A50	0.40	3.25	0.7	A	723	723

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	578	144	781	1058	0.546	573	518	0.0	1.2	7.427	A
2 - Orford Rd	853	213	550	1666	0.512	849	804	0.0	1.1	4.503	A
3 - Smith Drive	376	94	865	862	0.436	373	534	0.0	0.8	7.368	A
4 - A50	708	177	593	1902	0.372	706	645	0.0	0.6	3.085	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	608	152	825	1040	0.585	607	548	1.2	1.4	8.394	A
2 - Orford Rd	898	224	583	1648	0.545	897	850	1.1	1.2	4.918	A
3 - Smith Drive	396	99	915	842	0.470	395	565	0.8	0.9	8.104	A
4 - A50	745	186	628	1882	0.396	745	682	0.6	0.7	3.253	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	596	149	809	1047	0.570	596	538	1.4	1.4	8.085	A
2 - Orford Rd	880	220	572	1654	0.532	880	834	1.2	1.2	4.778	A
3 - Smith Drive	388	97	897	849	0.457	388	555	0.9	0.9	7.865	A
4 - A50	730	183	616	1889	0.387	731	669	0.7	0.7	3.196	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	578	144	785	1057	0.547	578	521	1.4	1.2	7.614	A
2 - Orford Rd	853	213	555	1663	0.513	853	808	1.2	1.1	4.570	A
3 - Smith Drive	376	94	870	860	0.437	376	538	0.9	0.8	7.501	A
4 - A50	708	177	598	1900	0.373	708	649	0.7	0.6	3.105	A

A50-Conjunction - 2027 Do Something, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	6.76	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
D6	2027 Do Something	AM	PHF	08:00	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	653	100.000
2 - Orford Rd		PHF	✓	967	100.000
3 - Smith Drive		PHF	✓	391	100.000
4 - A50		PHF	✓	767	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	653	0.97	SecondQuarter
2 - Orford Rd	967	0.97	SecondQuarter
3 - Smith Drive	391	0.97	SecondQuarter
4 - A50	767	0.97	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	90	420	143
	2 - Orford Rd	261	0	100	606
	3 - Smith Drive	269	117	0	5
	4 - A50	52	694	19	2

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	1	2	2
	2 - Orford Rd	1	0	5	7
	3 - Smith Drive	2	0	0	0
	4 - A50	27	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.66	10.29	1.9	B	653	653
2 - Orford Rd	0.61	5.88	1.6	A	967	967
3 - Smith Drive	0.51	9.37	1.0	A	391	391
4 - A50	0.42	3.54	0.8	A	767	767

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	640	160	811	1046	0.611	633	566	0.0	1.6	8.761	A
2 - Orford Rd	947	237	566	1657	0.572	942	878	0.0	1.4	5.251	A
3 - Smith Drive	383	96	985	814	0.470	379	523	0.0	0.9	8.328	A
4 - A50	751	188	629	1882	0.399	748	736	0.0	0.7	3.331	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	673	168	857	1027	0.656	672	599	1.6	1.9	10.289	B
2 - Orford Rd	997	249	601	1639	0.608	996	928	1.4	1.6	5.877	A
3 - Smith Drive	403	101	1042	791	0.509	402	555	0.9	1.0	9.371	A
4 - A50	791	198	666	1861	0.425	790	779	0.7	0.8	3.538	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	660	165	841	1034	0.638	660	588	1.9	1.8	9.825	A
2 - Orford Rd	977	244	590	1644	0.594	977	910	1.6	1.6	5.672	A
3 - Smith Drive	395	99	1023	799	0.494	395	545	1.0	1.0	9.039	A
4 - A50	775	194	654	1868	0.415	775	764	0.8	0.7	3.464	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	640	160	815	1044	0.612	640	570	1.8	1.6	9.098	A
2 - Orford Rd	947	237	573	1654	0.573	948	883	1.6	1.4	5.363	A
3 - Smith Drive	383	96	992	811	0.472	383	528	1.0	0.9	8.532	A
4 - A50	751	188	634	1879	0.400	751	741	0.7	0.7	3.360	A

A50-Conjunction - 2032 Do Minimum, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	6.28	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
D7	2032 Do Minimum	AM	PHF	08:00	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	613	100.000
2 - Orford Rd		PHF	✓	913	100.000
3 - Smith Drive		PHF	✓	408	100.000
4 - A50		PHF	✓	747	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	613	0.97	SecondQuarter
2 - Orford Rd	913	0.97	SecondQuarter
3 - Smith Drive	408	0.97	SecondQuarter
4 - A50	747	0.97	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	47	406	160
	2 - Orford Rd	239	0	107	567
	3 - Smith Drive	277	127	0	4
	4 - A50	36	688	20	3

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	2	1	1
	2 - Orford Rd	0	0	3	4
	3 - Smith Drive	1	0	0	0
	4 - A50	1	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.62	9.23	1.6	A	613	613
2 - Orford Rd	0.58	5.32	1.4	A	913	913
3 - Smith Drive	0.52	9.30	1.1	A	408	408
4 - A50	0.41	3.39	0.7	A	747	747

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	600	150	817	1043	0.575	595	537	0.0	1.3	8.023	A
2 - Orford Rd	894	224	572	1654	0.541	889	840	0.0	1.2	4.811	A
3 - Smith Drive	400	100	943	831	0.481	396	518	0.0	0.9	8.269	A
4 - A50	732	183	625	1884	0.388	729	714	0.0	0.6	3.197	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	632	158	863	1024	0.617	631	568	1.3	1.6	9.225	A
2 - Orford Rd	941	235	606	1636	0.575	941	888	1.2	1.4	5.315	A
3 - Smith Drive	421	105	998	809	0.520	420	549	0.9	1.1	9.304	A
4 - A50	770	193	662	1863	0.413	770	756	0.6	0.7	3.385	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	619	155	847	1031	0.601	620	558	1.6	1.5	8.847	A
2 - Orford Rd	922	231	595	1642	0.562	923	871	1.4	1.3	5.147	A
3 - Smith Drive	412	103	979	816	0.505	412	539	1.1	1.0	8.974	A
4 - A50	755	189	650	1870	0.404	755	742	0.7	0.7	3.320	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	600	150	821	1042	0.576	601	541	1.5	1.4	8.268	A
2 - Orford Rd	894	224	577	1651	0.542	895	845	1.3	1.2	4.894	A
3 - Smith Drive	400	100	950	828	0.482	400	522	1.0	1.0	8.471	A
4 - A50	732	183	630	1881	0.389	732	719	0.7	0.7	3.222	A

A50-Conjunction - 2032 Do Something Full, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	7.44	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
D8	2032 Do Something Full	AM	PHF	08:00	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	738	100.000
2 - Orford Rd		PHF	✓	1020	100.000
3 - Smith Drive		PHF	✓	358	100.000
4 - A50		PHF	✓	785	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	738	0.97	SecondQuarter
2 - Orford Rd	1020	0.97	SecondQuarter
3 - Smith Drive	358	0.97	SecondQuarter
4 - A50	785	0.97	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	143	403	192
	2 - Orford Rd	298	0	109	613
	3 - Smith Drive	291	61	0	6
	4 - A50	100	663	17	5

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	0	0	1
	2 - Orford Rd	1	0	9	5
	3 - Smith Drive	2	0	0	14
	4 - A50	14	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.72	11.76	2.4	B	738	738
2 - Orford Rd	0.65	6.55	1.9	A	1020	1020
3 - Smith Drive	0.49	9.54	1.0	A	358	358
4 - A50	0.44	3.57	0.8	A	785	785

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	723	181	728	1081	0.669	715	670	0.0	2.0	9.677	A
2 - Orford Rd	999	250	598	1640	0.609	993	845	0.0	1.6	5.735	A
3 - Smith Drive	351	88	1077	777	0.451	347	513	0.0	0.8	8.465	A
4 - A50	769	192	631	1880	0.409	766	793	0.0	0.7	3.357	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	761	190	769	1064	0.715	759	709	2.0	2.4	11.764	B
2 - Orford Rd	1052	263	635	1621	0.649	1050	893	1.6	1.9	6.555	A
3 - Smith Drive	369	92	1141	752	0.491	369	544	0.8	1.0	9.544	A
4 - A50	809	202	669	1859	0.435	809	840	0.7	0.8	3.572	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	746	186	754	1070	0.697	746	696	2.4	2.4	11.165	B
2 - Orford Rd	1031	258	624	1627	0.633	1031	876	1.9	1.8	6.294	A
3 - Smith Drive	362	90	1120	760	0.476	362	535	1.0	0.9	9.202	A
4 - A50	793	198	657	1866	0.425	793	825	0.8	0.8	3.498	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	723	181	731	1079	0.670	724	675	2.4	2.1	10.197	B
2 - Orford Rd	999	250	605	1637	0.610	1000	850	1.8	1.7	5.895	A
3 - Smith Drive	351	88	1086	774	0.453	351	519	0.9	0.9	8.677	A
4 - A50	769	192	637	1877	0.410	769	800	0.8	0.7	3.387	A

A50-Conjunction - 2018 Validation, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	4.65	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
D9	2018 Validation	PM	PHF	17:00	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	600	100.000
2 - Orford Rd		PHF	✓	836	100.000
3 - Smith Drive		PHF	✓	88	100.000
4 - A50		PHF	✓	790	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	600	0.96	SecondQuarter
2 - Orford Rd	836	0.96	SecondQuarter
3 - Smith Drive	88	0.96	SecondQuarter
4 - A50	790	0.96	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	49	314	237
	2 - Orford Rd	90	0	117	629
	3 - Smith Drive	83	5	0	0
	4 - A50	277	500	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	3	4
	2 - Orford Rd	0	0	0	1
	3 - Smith Drive	4	0	0	0
	4 - A50	3	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.54	6.96	1.2	A	600	600
2 - Orford Rd	0.53	4.67	1.1	A	836	836
3 - Smith Drive	0.11	5.20	0.1	A	88	88
4 - A50	0.39	2.81	0.6	A	790	790

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	583	146	502	1174	0.497	579	436	0.0	1.0	6.219	A
2 - Orford Rd	813	203	545	1668	0.487	809	537	0.0	0.9	4.202	A
3 - Smith Drive	86	21	925	838	0.102	85	429	0.0	0.1	4.957	A
4 - A50	768	192	172	2143	0.358	766	837	0.0	0.6	2.670	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	625	156	539	1159	0.539	624	469	1.0	1.2	6.960	A
2 - Orford Rd	871	218	587	1646	0.529	870	577	0.9	1.1	4.669	A
3 - Smith Drive	92	23	995	810	0.113	92	462	0.1	0.1	5.199	A
4 - A50	823	206	185	2135	0.385	823	901	0.6	0.6	2.805	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	608	152	525	1165	0.522	609	456	1.2	1.1	6.704	A
2 - Orford Rd	848	212	572	1654	0.512	848	562	1.1	1.1	4.500	A
3 - Smith Drive	89	22	970	820	0.109	89	450	0.1	0.1	5.111	A
4 - A50	801	200	181	2138	0.375	801	878	0.6	0.6	2.756	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	583	146	504	1173	0.497	584	438	1.1	1.0	6.321	A
2 - Orford Rd	813	203	549	1666	0.488	813	539	1.1	1.0	4.255	A
3 - Smith Drive	86	21	930	836	0.102	86	432	0.1	0.1	4.977	A
4 - A50	768	192	173	2142	0.359	768	842	0.6	0.6	2.680	A

A50-Conjunction - 2022 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	4.95	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
D10	2022 Do Minimum	PM	PHF	17:00	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	625	100.000
2 - Orford Rd		PHF	✓	882	100.000
3 - Smith Drive		PHF	✓	91	100.000
4 - A50		PHF	✓	838	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	625	0.96	SecondQuarter
2 - Orford Rd	882	0.96	SecondQuarter
3 - Smith Drive	91	0.96	SecondQuarter
4 - A50	838	0.96	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	52	340	233
	2 - Orford Rd	95	0	121	666
	3 - Smith Drive	84	6	0	1
	4 - A50	295	529	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	2	4
	2 - Orford Rd	0	0	0	1
	3 - Smith Drive	3	0	0	0
	4 - A50	3	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.57	7.47	1.3	A	625	625
2 - Orford Rd	0.56	5.06	1.3	A	882	882
3 - Smith Drive	0.12	5.29	0.1	A	91	91
4 - A50	0.41	2.93	0.7	A	838	838

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	608	152	532	1162	0.523	603	459	0.0	1.1	6.583	A
2 - Orford Rd	858	214	567	1657	0.518	853	569	0.0	1.1	4.491	A
3 - Smith Drive	88	22	961	824	0.107	88	459	0.0	0.1	5.025	A
4 - A50	815	204	179	2139	0.381	812	870	0.0	0.6	2.771	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	651	163	572	1145	0.568	650	493	1.1	1.3	7.468	A
2 - Orford Rd	919	230	611	1634	0.562	918	611	1.1	1.3	5.060	A
3 - Smith Drive	95	24	1034	794	0.119	95	494	0.1	0.1	5.287	A
4 - A50	873	218	193	2131	0.410	873	937	0.6	0.7	2.926	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	634	158	557	1151	0.550	634	481	1.3	1.3	7.163	A
2 - Orford Rd	894	224	595	1642	0.545	894	595	1.3	1.2	4.857	A
3 - Smith Drive	92	23	1008	805	0.115	92	482	0.1	0.1	5.191	A
4 - A50	850	212	188	2134	0.398	850	913	0.7	0.7	2.869	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	608	152	534	1161	0.523	608	461	1.3	1.1	6.707	A
2 - Orford Rd	858	214	571	1654	0.518	858	571	1.2	1.1	4.558	A
3 - Smith Drive	88	22	967	821	0.108	89	462	0.1	0.1	5.048	A
4 - A50	815	204	180	2139	0.381	815	876	0.7	0.6	2.782	A

A50-Conjunction - 2022 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	5.23	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
D11	2022 Do Something	PM	PHF	17:00	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	646	100.000
2 - Orford Rd		PHF	✓	893	100.000
3 - Smith Drive		PHF	✓	99	100.000
4 - A50		PHF	✓	859	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	646	0.96	SecondQuarter
2 - Orford Rd	893	0.96	SecondQuarter
3 - Smith Drive	99	0.96	SecondQuarter
4 - A50	859	0.96	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	54	344	248
	2 - Orford Rd	100	0	122	671
	3 - Smith Drive	92	6	0	1
	4 - A50	310	535	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	3	9
	2 - Orford Rd	0	0	0	2
	3 - Smith Drive	8	0	0	0
	4 - A50	7	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.59	8.03	1.5	A	646	646
2 - Orford Rd	0.57	5.26	1.3	A	893	893
3 - Smith Drive	0.13	5.68	0.2	A	99	99
4 - A50	0.42	3.04	0.8	A	859	859

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	628	157	538	1159	0.542	623	486	0.0	1.2	7.009	A
2 - Orford Rd	868	217	585	1647	0.527	864	576	0.0	1.1	4.637	A
3 - Smith Drive	96	24	985	814	0.118	96	463	0.0	0.1	5.373	A
4 - A50	835	209	191	2132	0.392	832	889	0.0	0.7	2.867	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	673	168	578	1143	0.589	672	523	1.2	1.5	8.033	A
2 - Orford Rd	930	233	630	1624	0.573	929	619	1.1	1.3	5.257	A
3 - Smith Drive	103	26	1060	784	0.132	103	499	0.1	0.2	5.677	A
4 - A50	895	224	206	2124	0.421	894	957	0.7	0.8	3.037	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	655	164	563	1149	0.570	655	509	1.5	1.4	7.684	A
2 - Orford Rd	905	226	615	1632	0.555	906	603	1.3	1.3	5.034	A
3 - Smith Drive	100	25	1033	795	0.126	100	487	0.2	0.2	5.569	A
4 - A50	871	218	201	2127	0.410	871	933	0.8	0.7	2.973	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	628	157	540	1159	0.542	629	488	1.4	1.3	7.166	A
2 - Orford Rd	868	217	590	1645	0.528	869	579	1.3	1.1	4.713	A
3 - Smith Drive	96	24	991	812	0.119	96	467	0.2	0.1	5.407	A
4 - A50	835	209	193	2131	0.392	835	895	0.7	0.7	2.883	A

A50-Conjunction - 2022 Do Something Full, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	5.69	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
D12	2022 Do Something Full	PM	PHF	17:00	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	663	100.000
2 - Orford Rd		PHF	✓	974	100.000
3 - Smith Drive		PHF	✓	145	100.000
4 - A50		PHF	✓	872	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	663	0.96	SecondQuarter
2 - Orford Rd	974	0.96	SecondQuarter
3 - Smith Drive	145	0.96	SecondQuarter
4 - A50	872	0.96	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	73	368	222
	2 - Orford Rd	155	0	117	702
	3 - Smith Drive	138	6	0	1
	4 - A50	314	544	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	3	3	11
	2 - Orford Rd	0	0	0	2
	3 - Smith Drive	5	0	0	0
	4 - A50	7	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.61	8.43	1.6	A	663	663
2 - Orford Rd	0.62	5.96	1.7	A	974	974
3 - Smith Drive	0.20	6.20	0.3	A	145	145
4 - A50	0.44	3.23	0.8	A	872	872

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	645	161	546	1156	0.558	639	587	0.0	1.3	7.287	A
2 - Orford Rd	947	237	583	1648	0.574	942	603	0.0	1.4	5.127	A
3 - Smith Drive	141	35	1043	791	0.178	140	482	0.0	0.2	5.783	A
4 - A50	848	212	289	2076	0.408	845	894	0.0	0.7	3.026	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	691	173	587	1139	0.606	689	632	1.3	1.6	8.432	A
2 - Orford Rd	1015	254	628	1625	0.624	1013	649	1.4	1.7	5.961	A
3 - Smith Drive	151	38	1122	759	0.199	151	519	0.2	0.3	6.197	A
4 - A50	908	227	311	2064	0.440	908	962	0.7	0.8	3.231	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	672	168	572	1145	0.587	672	616	1.6	1.5	8.045	A
2 - Orford Rd	988	247	613	1633	0.605	988	632	1.7	1.6	5.666	A
3 - Smith Drive	147	37	1094	770	0.191	147	506	0.3	0.2	6.048	A
4 - A50	884	221	303	2068	0.428	884	938	0.8	0.8	3.153	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	645	161	548	1155	0.558	645	590	1.5	1.4	7.469	A
2 - Orford Rd	947	237	588	1646	0.575	948	606	1.6	1.4	5.238	A
3 - Smith Drive	141	35	1050	788	0.179	141	486	0.2	0.2	5.827	A
4 - A50	848	212	291	2075	0.409	848	900	0.8	0.7	3.042	A

A50-Conjunction - 2027 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	5.23	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
D13	2027 Do Minimum	PM	PHF	17:00	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	641	100.000
2 - Orford Rd		PHF	✓	920	100.000
3 - Smith Drive		PHF	✓	102	100.000
4 - A50		PHF	✓	872	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	641	0.96	SecondQuarter
2 - Orford Rd	920	0.96	SecondQuarter
3 - Smith Drive	102	0.96	SecondQuarter
4 - A50	872	0.96	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	55	356	230
	2 - Orford Rd	100	0	125	695
	3 - Smith Drive	95	6	0	1
	4 - A50	300	557	15	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	2	4
	2 - Orford Rd	0	0	0	1
	3 - Smith Drive	3	0	0	0
	4 - A50	3	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.59	7.93	1.4	A	641	641
2 - Orford Rd	0.59	5.41	1.4	A	920	920
3 - Smith Drive	0.14	5.48	0.2	A	102	102
4 - A50	0.43	3.03	0.8	A	872	872

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	623	156	560	1150	0.542	618	479	0.0	1.2	6.907	A
2 - Orford Rd	894	224	580	1650	0.542	890	599	0.0	1.2	4.742	A
3 - Smith Drive	99	25	991	812	0.122	99	479	0.0	0.1	5.184	A
4 - A50	848	212	194	2130	0.398	845	895	0.0	0.7	2.859	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	668	167	602	1133	0.589	667	515	1.2	1.4	7.928	A
2 - Orford Rd	958	240	625	1626	0.589	957	643	1.2	1.4	5.415	A
3 - Smith Drive	106	27	1066	782	0.136	106	516	0.1	0.2	5.478	A
4 - A50	908	227	209	2122	0.428	908	963	0.7	0.8	3.034	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	650	162	586	1139	0.570	650	502	1.4	1.4	7.576	A
2 - Orford Rd	933	233	610	1634	0.571	933	627	1.4	1.4	5.174	A
3 - Smith Drive	103	26	1040	792	0.131	103	503	0.2	0.2	5.371	A
4 - A50	884	221	204	2125	0.416	884	939	0.8	0.7	2.970	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	623	156	562	1149	0.542	624	481	1.4	1.2	7.059	A
2 - Orford Rd	894	224	585	1647	0.543	895	601	1.4	1.2	4.827	A
3 - Smith Drive	99	25	997	809	0.123	99	483	0.2	0.1	5.213	A
4 - A50	848	212	196	2130	0.398	848	901	0.7	0.7	2.873	A

A50-Conjunction - 2027 Do Something, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	5.95	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
D14	2027 Do Something	PM	PHF	17:00	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	671	100.000
2 - Orford Rd		PHF	✓	998	100.000
3 - Smith Drive		PHF	✓	146	100.000
4 - A50		PHF	✓	904	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	671	0.96	SecondQuarter
2 - Orford Rd	998	0.96	SecondQuarter
3 - Smith Drive	146	0.96	SecondQuarter
4 - A50	904	0.96	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	65	371	235
	2 - Orford Rd	130	0	123	745
	3 - Smith Drive	139	6	0	1
	4 - A50	304	585	15	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	3	3	10
	2 - Orford Rd	0	0	0	2
	3 - Smith Drive	5	0	0	0
	4 - A50	7	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.62	8.93	1.7	A	671	671
2 - Orford Rd	0.64	6.31	1.8	A	998	998
3 - Smith Drive	0.20	6.34	0.3	A	146	146
4 - A50	0.45	3.28	0.9	A	904	904

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	652	163	587	1139	0.573	647	554	0.0	1.4	7.626	A
2 - Orford Rd	970	243	599	1640	0.592	964	635	0.0	1.4	5.364	A
3 - Smith Drive	142	35	1072	779	0.182	141	491	0.0	0.2	5.899	A
4 - A50	879	220	266	2090	0.421	876	947	0.0	0.7	3.065	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	699	175	631	1121	0.624	698	596	1.4	1.7	8.934	A
2 - Orford Rd	1040	260	646	1615	0.644	1038	683	1.4	1.8	6.310	A
3 - Smith Drive	152	38	1155	746	0.204	152	529	0.2	0.3	6.341	A
4 - A50	942	235	286	2078	0.453	941	1020	0.7	0.9	3.281	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	680	170	615	1128	0.603	681	581	1.7	1.6	8.497	A
2 - Orford Rd	1012	253	630	1624	0.623	1012	665	1.8	1.7	5.981	A
3 - Smith Drive	148	37	1126	758	0.195	148	516	0.3	0.3	6.185	A
4 - A50	917	229	279	2082	0.440	917	995	0.9	0.8	3.202	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	652	163	589	1138	0.573	653	557	1.6	1.4	7.836	A
2 - Orford Rd	970	243	604	1637	0.593	971	638	1.7	1.5	5.493	A
3 - Smith Drive	142	35	1080	776	0.183	142	495	0.3	0.2	5.949	A
4 - A50	879	220	268	2088	0.421	879	955	0.8	0.8	3.086	A

A50-Conjunction - 2032 Do Minimum, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	5.62	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
D15	2032 Do Minimum	PM	PHF	17:00	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	663	100.000
2 - Orford Rd		PHF	✓	961	100.000
3 - Smith Drive		PHF	✓	133	100.000
4 - A50		PHF	✓	884	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	663	0.96	SecondQuarter
2 - Orford Rd	961	0.96	SecondQuarter
3 - Smith Drive	133	0.96	SecondQuarter
4 - A50	884	0.96	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	58	377	228
	2 - Orford Rd	106	0	130	725
	3 - Smith Drive	123	6	0	4
	4 - A50	281	587	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	4	2	4
	2 - Orford Rd	0	0	0	1
	3 - Smith Drive	2	0	0	0
	4 - A50	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.62	8.58	1.6	A	663	663
2 - Orford Rd	0.62	5.88	1.6	A	961	961
3 - Smith Drive	0.18	5.83	0.2	A	133	133
4 - A50	0.44	3.10	0.8	A	884	884

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	645	161	590	1138	0.567	639	494	0.0	1.3	7.356	A
2 - Orford Rd	934	234	599	1640	0.570	929	631	0.0	1.3	5.065	A
3 - Smith Drive	129	32	1023	799	0.162	129	505	0.0	0.2	5.465	A
4 - A50	859	215	227	2112	0.407	857	925	0.0	0.7	2.909	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	691	173	634	1119	0.617	689	531	1.3	1.6	8.585	A
2 - Orford Rd	1001	250	646	1615	0.620	1000	678	1.3	1.6	5.879	A
3 - Smith Drive	139	35	1102	768	0.181	138	544	0.2	0.2	5.828	A
4 - A50	921	230	245	2102	0.438	920	996	0.7	0.8	3.097	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	672	168	618	1126	0.597	672	517	1.6	1.5	8.168	A
2 - Orford Rd	974	244	630	1624	0.600	975	660	1.6	1.5	5.593	A
3 - Smith Drive	135	34	1074	779	0.173	135	530	0.2	0.2	5.696	A
4 - A50	896	224	238	2105	0.426	896	971	0.8	0.8	3.025	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	645	161	592	1137	0.567	645	496	1.5	1.4	7.549	A
2 - Orford Rd	934	234	604	1637	0.571	935	633	1.5	1.4	5.171	A
3 - Smith Drive	129	32	1030	796	0.162	129	509	0.2	0.2	5.502	A
4 - A50	859	215	229	2111	0.407	860	931	0.8	0.7	2.923	A

A50-Conjunction - 2032 Do Something Full, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Orford Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A50/Hilden Rd Roundabout	Standard Roundabout		1, 2, 3, 4	6.55	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
D16	2032 Do Something Full	PM	PHF	17:00	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hilden Rd		PHF	✓	707	100.000
2 - Orford Rd		PHF	✓	1050	100.000
3 - Smith Drive		PHF	✓	172	100.000
4 - A50		PHF	✓	912	100.000

Peak Hour Factor Data (Traffic)

Arm	Hourly volume (PCU/hr)	Peak hour factor	Peak time segment
1 - Hilden Rd	707	0.96	SecondQuarter
2 - Orford Rd	1050	0.96	SecondQuarter
3 - Smith Drive	172	0.96	SecondQuarter
4 - A50	912	0.96	SecondQuarter

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	78	402	227
	2 - Orford Rd	165	0	131	754
	3 - Smith Drive	165	6	0	1
	4 - A50	294	602	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Hilden Rd	2 - Orford Rd	3 - Smith Drive	4 - A50
From	1 - Hilden Rd	0	0	1	10
	2 - Orford Rd	0	0	0	1
	3 - Smith Drive	4	0	0	0
	4 - A50	7	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hilden Rd	0.66	9.82	2.0	A	707	707
2 - Orford Rd	0.68	7.07	2.1	A	1050	1050
3 - Smith Drive	0.24	6.76	0.3	A	172	172
4 - A50	0.47	3.39	0.9	A	912	912

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	687	172	605	1132	0.607	681	604	0.0	1.6	8.170	A
2 - Orford Rd	1021	255	621	1628	0.627	1014	664	0.0	1.7	5.842	A
3 - Smith Drive	167	42	1106	766	0.218	166	529	0.0	0.3	6.223	A
4 - A50	887	222	324	2056	0.431	884	948	0.0	0.8	3.150	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	736	184	650	1113	0.662	735	649	1.6	2.0	9.818	A
2 - Orford Rd	1094	273	670	1603	0.682	1092	714	1.7	2.1	7.071	A
3 - Smith Drive	179	45	1192	732	0.245	179	571	0.3	0.3	6.762	A
4 - A50	950	238	350	2042	0.465	950	1021	0.8	0.9	3.388	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	717	179	633	1120	0.640	717	633	2.0	1.9	9.274	A
2 - Orford Rd	1065	266	654	1611	0.661	1065	696	2.1	2.0	6.649	A
3 - Smith Drive	174	44	1162	743	0.235	174	557	0.3	0.3	6.570	A
4 - A50	925	231	341	2047	0.452	925	996	0.9	0.9	3.300	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Hilden Rd	687	172	607	1131	0.608	688	607	1.9	1.6	8.453	A
2 - Orford Rd	1021	255	628	1625	0.628	1022	667	2.0	1.7	6.027	A
3 - Smith Drive	167	42	1115	762	0.219	167	534	0.3	0.3	6.285	A
4 - A50	887	222	327	2055	0.432	887	956	0.9	0.8	3.173	A