



# **Norwich Western Link**

## **Transport Assessment - Appendix 11 – Junction Model Results**

### **Sub Appendix 11x – Junction 31 Shortthorn Road / A140 Cromer Road / Parish Road staggered crossroads**

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Document Reference: 4.01.11x

Version Number: 00

Date: March 2024



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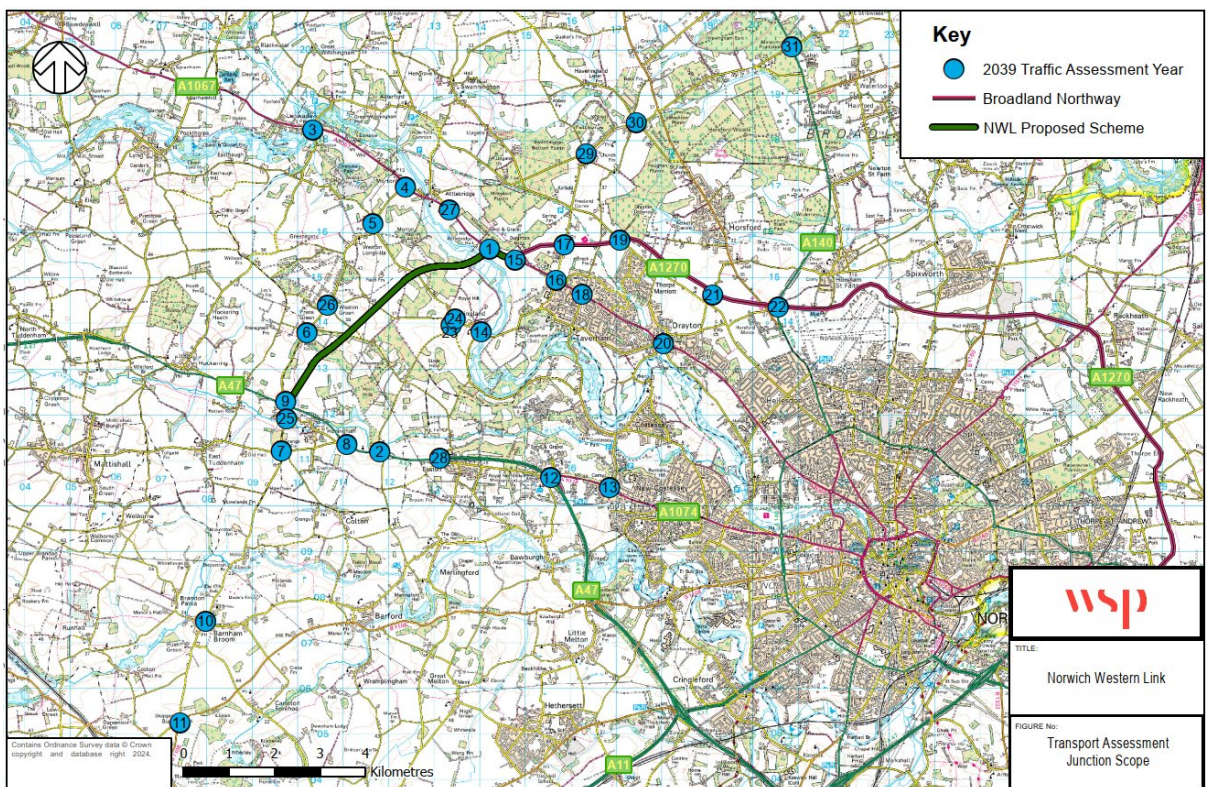
# 1 Junction Model Results

1.1.1 Junctions 10 modelling software output file that shows the junction capacity results for Junction 31 of the TA.

1.1.2 We have included a summary of key information shown in this document in an accessible format. However, some users may not be able to access all technical details. If you require this document in a more accessible format please contact [norwichwesternlink@norfolk.gov.uk](mailto:norwichwesternlink@norfolk.gov.uk)

1.1.3 The TA scope map is shown below as a location plan.

**Figure 1-1 Junction Assessment Scope**



1.1.4 The model results are presented for 2029 and 2039 future assessment years for AM and PM peak hours, taking 7.30-8.30am and AM peak and 5pm-6pm as PM peak.



1.1.5 The scenarios tested are as follows:

- Do Minimum – the baseline future situation with committed developments and planned highway improvements but without the Proposed Scheme.
- Do Something - the baseline future situation with the Proposed Scheme.
- Do Something + Mitigation - the baseline future situation with the Proposed Scheme added plus a package of traffic mitigation measures in the wider network (north of A1067 and south of A47 plus Honingham Lane closure).





**J31 – Shortthorn Road / A140 Cromer Road / Parish Road staggered  
crossroads Results**

<h1>Junctions 10</h1>
<h2>PICADY 10 - Priority Intersection Module</h2>
Version: 10.0.1.1519 © Copyright TRL Software Limited, 2021
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**Filename:** J31.j10

**Path:** \\corp.pbwan.net\IN\IN\_Projects\70118686-70061370-Norwich Western Link 2019 20\04 Record of Issue\4A Internal WSP Doc Registers\20240129\_Model Reports(wo 2044)\J31

**Report generation date:** 29/01/2024 15:07:43

- 
- »2029DM, AM
  - »2029DM, PM
  - »2029DS, AM
  - »2029DS, PM
  - »2029DS\_Mitigation, AM
  - »2029DS\_Mitigation, PM
  - »2039DM, AM
  - »2039DM, PM
  - »2039DS, AM
  - »2039DS, PM
  - »2039DS\_Mitigation, AM
  - »2039DS\_Mitigation, PM

### Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
<b>2029DM</b>										
Stream B-C	D1	0.3	10.59	0.24	B	D2	0.6	14.32	0.36	B
Stream B-AD		0.6	37.33	0.37	E		0.6	44.69	0.38	E
Stream A-BCD		0.1	9.50	0.11	A		0.2	8.84	0.15	A
Stream D-A		0.3	10.65	0.26	B		0.2	8.32	0.15	A
Stream D-BC		0.2	29.12	0.20	D		0.1	26.34	0.09	D
Stream C-ABD		0.4	10.83	0.27	B		0.2	11.06	0.17	B
<b>2029DS</b>										
Stream B-C	D3	0.6	12.91	0.38	B	D4	1.3	19.43	0.56	C
Stream B-AD		0.9	54.00	0.47	F		0.5	46.70	0.36	E
Stream A-BCD		0.1	9.07	0.11	A		0.2	8.53	0.14	A
Stream D-A		0.3	10.45	0.24	B		0.2	7.80	0.14	A
Stream D-BC		0.4	26.32	0.27	D		0.1	22.54	0.11	C
Stream C-ABD		1.2	16.86	0.55	C		0.6	13.78	0.37	B
<b>2029DS_Mitigation</b>										
Stream B-C	D5	0.1	9.30	0.09	A	D6	0.1	10.25	0.10	B
Stream B-AD		0.3	28.03	0.22	D		0.2	35.84	0.18	E
Stream A-BCD		0.2	10.28	0.14	B		0.2	9.73	0.20	A
Stream D-A		0.4	11.27	0.30	B		0.2	8.61	0.18	A
Stream D-BC		0.0	29.63	0.01	D		0.0	31.02	0.01	D
Stream C-ABD		0.1	8.78	0.09	A		0.1	10.20	0.08	B
<b>2039DM</b>										
Stream B-C	D7	0.4	11.85	0.26	B	D8	0.6	15.37	0.36	C
Stream B-AD		0.7	45.20	0.42	E		0.9	56.04	0.48	F
Stream A-BCD		0.1	8.13	0.10	A		0.2	9.14	0.15	A
Stream D-A		0.1	8.56	0.13	A		0.2	8.61	0.16	A
Stream D-BC		0.3	21.83	0.23	C		0.1	29.02	0.09	D
Stream C-ABD		0.9	16.47	0.49	C		0.2	11.24	0.18	B
<b>2039DS</b>										
Stream B-C	D9	0.8	15.77	0.45	C	D10	1.6	22.66	0.62	C
Stream B-AD		1.0	60.31	0.52	F		0.7	57.29	0.41	F
Stream A-BCD		0.1	8.02	0.09	A		0.2	8.66	0.14	A
Stream D-A		0.1	8.62	0.13	A		0.2	8.07	0.14	A
Stream D-BC		0.3	20.80	0.24	C		0.1	24.35	0.12	C
Stream C-ABD		1.6	21.78	0.63	C		0.6	14.55	0.39	B
<b>2039DS_Mitigation</b>										
Stream B-C	D11	0.1	10.57	0.10	B	D12	0.1	11.60	0.12	B
Stream B-AD		0.4	28.18	0.28	D		0.4	46.47	0.29	E
Stream A-BCD		0.1	8.67	0.13	A		0.3	10.21	0.21	B
Stream D-A		0.2	8.56	0.15	A		0.2	9.06	0.19	A
Stream D-BC		0.2	25.07	0.18	D		0.0	37.61	0.01	E
Stream C-ABD		0.2	10.19	0.16	B		0.1	10.55	0.08	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.*

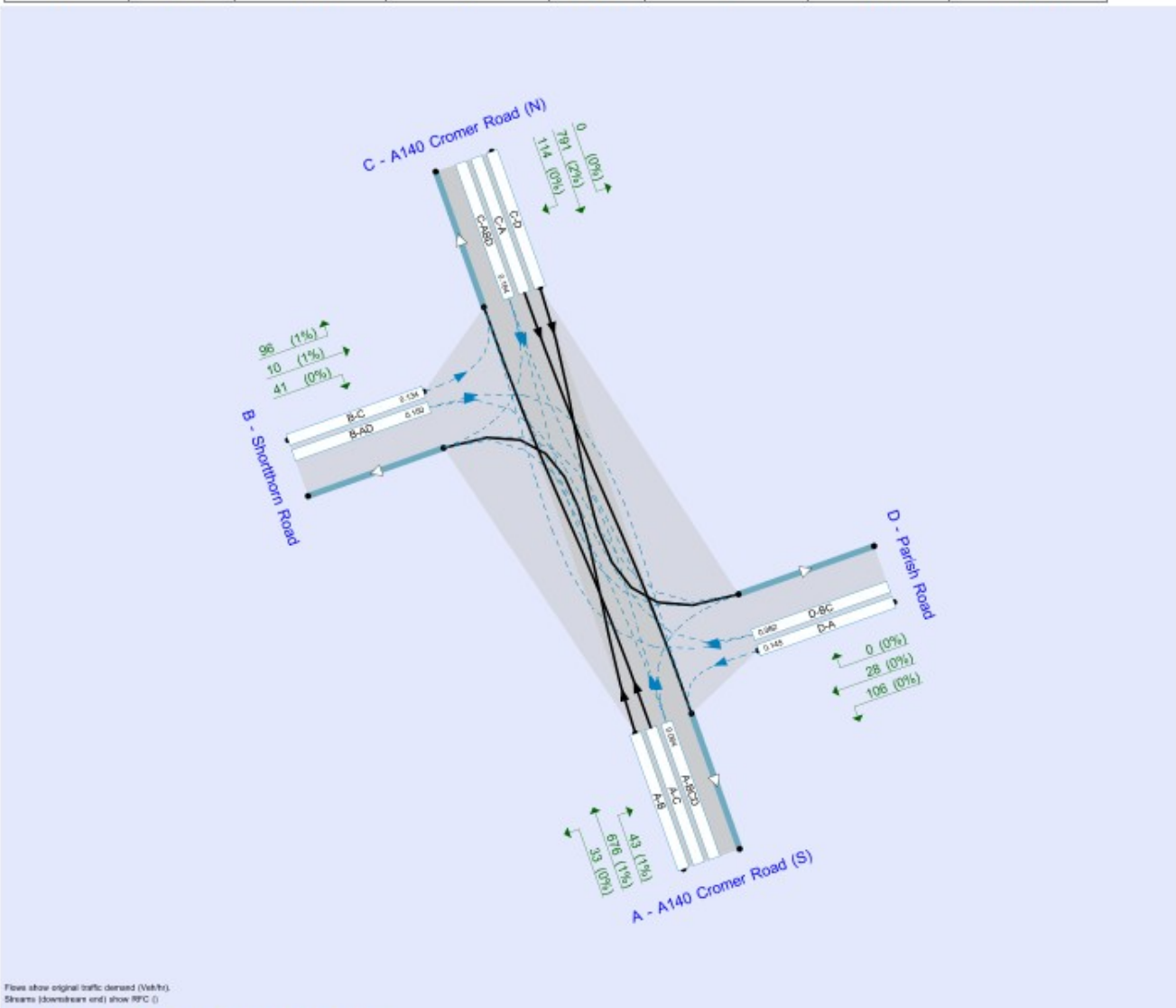
## File summary

### File Description

Title	Cromer Road/ Parish Road/ Shortthorn Road
Location	52.73332540220275, 1.2899367550064373
Site number	J31
Date	21/03/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INVN01911
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	PCU	perHour	s	-Min	perMin



### Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	38.00	20.00		500

### 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	2029DM	AM	ONE HOUR	07:15	08:45	15	✓
D2	2029DM	PM	ONE HOUR	16:45	18:15	15	✓
D3	2029DS	AM	ONE HOUR	07:15	08:45	15	✓
D4	2029DS	PM	ONE HOUR	16:45	18:15	15	✓
D5	2029DS_Mitigation	AM	ONE HOUR	07:15	08:45	15	✓
D6	2029DS_Mitigation	PM	ONE HOUR	16:45	18:15	15	✓
D7	2039DM	AM	ONE HOUR	07:15	08:45	15	✓
D8	2039DM	PM	ONE HOUR	16:45	18:15	15	✓
D9	2039DS	AM	ONE HOUR	07:15	08:45	15	✓
D10	2039DS	PM	ONE HOUR	16:45	18:15	15	✓
D11	2039DS_Mitigation	AM	ONE HOUR	07:15	08:45	15	✓
D12	2039DS_Mitigation	PM	ONE HOUR	16:45	18:15	15	✓

### Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000



# 2029DM, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shortthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shortthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.32	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.32	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	A140 Cromer Road (S)		Major
B	Shortthorn Road		Minor
C	A140 Cromer Road (N)		Major
D	Parish Road		Minor

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A140 Cromer Road (S)	6.55		✓	3.50	23.9	✓	13.90
C - A140 Cromer Road (N)	6.55		✓	3.50	15.9	✓	13.15

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

### Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Shortthorn Road	One lane plus flare	10.00	7.39	6.44	5.42	5.02	✓	3.00	31	20
D - Parish Road	One lane plus flare	10.00	6.56	4.90	4.18	3.92	✓	2.00	34	30



## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	671	-	-	-	0.254	0.254	0.254	-	0.254	-	-
B-AD	481	0.088	0.216	-	-	-	0.138	0.309	0.138	0.088	0.216
B-C	712	0.107	0.269	-	-	-	-	-	-	0.107	0.269
C-B	668	0.252	0.252	-	-	-	-	-	-	0.252	0.252
D-A	747	-	-	-	0.283	0.112	0.283	-	0.112	-	-
D-BC	479	0.138	0.138	0.308	0.215	0.085	0.215	-	0.085	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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.

## 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	2029DM	AM	ONE HOUR	07:15	08:45	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 (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	751	100.000
B - Shorthorn Road		ONE HOUR	✓	147	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	905	100.000
D - Parish Road		ONE HOUR	✓	134	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0	33	676	43
	B - Shorthorn Road	41	0	96	10
	C - A140 Cromer Road (N)	791	114	0	0
	D - Parish Road	106	28	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0.00	0.04	0.90	0.06
	B - Shorthorn Road	0.28	0.00	0.65	0.07
	C - A140 Cromer Road (N)	0.87	0.13	0.00	0.00
	D - Parish Road	0.79	0.21	0.00	0.00

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	1	1
B - Shorthorn Road	0	0	1	1
C - A140 Cromer Road (N)	2	0	0	0
D - Parish Road	0	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.004	1.011	1.0
B - Shorthorn Road	1.000	1.004	1.012	1.0
C - A140 Cromer Road (N)	1.022	1.003	1.000	1.0
D - Parish Road	1.001	1.000	1.000	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - A140 Cromer Road (S)	566	572
	B - Shorthorn Road	111	111
	C - A140 Cromer Road (N)	682	695
	D - Parish Road	101	101
07:30-07:45	A - A140 Cromer Road (S)	675	683
	B - Shorthorn Road	132	133
	C - A140 Cromer Road (N)	814	830
	D - Parish Road	121	121
07:45-08:00	A - A140 Cromer Road (S)	827	836
	B - Shorthorn Road	162	163
	C - A140 Cromer Road (N)	997	1016
	D - Parish Road	148	148
08:00-08:15	A - A140 Cromer Road (S)	827	836
	B - Shorthorn Road	162	163
	C - A140 Cromer Road (N)	997	1016
	D - Parish Road	148	148
08:15-08:30	A - A140 Cromer Road (S)	675	683
	B - Shorthorn Road	132	133
	C - A140 Cromer Road (N)	814	830
	D - Parish Road	121	121
08:30-08:45	A - A140 Cromer Road (S)	566	572
	B - Shorthorn Road	111	111
	C - A140 Cromer Road (N)	682	695
	D - Parish Road	101	101

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.24	10.59	0.3	B	89	134
B-AD	0.37	37.33	0.6	E	47	70
A-BCD	0.11	9.50	0.1	A	40	59
A-B					30	45
A-C					627	940
D-A	0.26	10.65	0.3	B	98	146
D-BC	0.20	29.12	0.2	D	26	39
C-ABD	0.27	10.83	0.4	B	105	157
C-D					0	0
C-A					742	1113

### Main Results for each time segment

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	18	547	0.134	72	0.0	0.2	7.658	A
B-AD	38	10	257	0.150	38	0.0	0.2	16.439	C
A-BCD	33	8	507	0.064	32	0.0	0.1	7.658	A
A-B	25	6			25				
A-C	514	129			514				
D-A	80	20	554	0.145	79	0.0	0.2	7.580	A
D-BC	21	5	258	0.082	21	0.0	0.1	15.167	C
C-ABD	88	22	525	0.164	85	0.0	0.2	8.205	A
C-D	0	0			0				
C-A	609	152			609				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	511	0.171	87	0.2	0.2	8.591	A
B-AD	46	11	213	0.215	45	0.2	0.3	21.503	C
A-BCD	39	10	475	0.082	39	0.1	0.1	8.339	A
A-B	30	7			30				
A-C	614	154			614				
D-A	96	24	514	0.188	95	0.2	0.2	8.598	A
D-BC	25	6	215	0.118	25	0.1	0.1	18.982	C
C-ABD	103	28	497	0.207	103	0.2	0.3	9.143	A
C-D	0	0			0				
C-A	727	182			727				

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	27	453	0.236	107	0.2	0.3	10.504	B
B-AD	56	14	152	0.368	55	0.3	0.6	36.609	E
A-BCD	48	12	431	0.110	47	0.1	0.1	9.486	A
A-B	36	9			36				
A-C	752	188			752				
D-A	117	29	456	0.257	117	0.2	0.3	10.600	B
D-BC	31	8	155	0.200	31	0.1	0.2	28.877	D
C-ABD	126	31	459	0.274	126	0.3	0.4	10.800	B
C-D	0	0			0				
C-A	890	223			890				



**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	27	451	0.237	107	0.3	0.3	10.585	B
B-AD	58	14	153	0.388	58	0.6	0.6	37.334	E
A-BCD	48	12	430	0.110	48	0.1	0.1	9.498	A
A-B	38	9			38				
A-C	752	188			752				
D-A	117	29	455	0.257	117	0.3	0.3	10.650	B
D-BC	31	8	155	0.200	31	0.2	0.2	29.121	D
C-ABD	126	31	459	0.274	126	0.4	0.4	10.833	B
C-D	0	0			0				
C-A	890	223			890				

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	22	508	0.172	88	0.3	0.2	8.665	A
B-AD	46	11	213	0.215	47	0.6	0.3	21.845	C
A-BCD	39	10	474	0.082	39	0.1	0.1	8.354	A
A-B	30	7			30				
A-C	614	154			614				
D-A	96	24	513	0.188	96	0.3	0.2	8.648	A
D-BC	25	6	214	0.118	28	0.2	0.1	19.130	C
C-ABD	103	28	497	0.207	103	0.4	0.3	9.180	A
C-D	0	0			0				
C-A	727	182			727				

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	18	546	0.134	73	0.2	0.2	7.710	A
B-AD	38	10	257	0.150	39	0.3	0.2	16.593	C
A-BCD	33	8	506	0.064	33	0.1	0.1	7.675	A
A-B	25	6			25				
A-C	514	129			514				
D-A	80	20	553	0.145	80	0.2	0.2	7.621	A
D-BC	21	5	258	0.082	21	0.1	0.1	15.249	C
C-ABD	86	22	525	0.164	86	0.3	0.2	8.246	A
C-D	0	0			0				
C-A	609	152			609				

# 2029DM, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.01	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.01	A

## 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	2029DM	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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	1027	100.000
B - Shorthorn Road		ONE HOUR	✓	174	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	702	100.000
D - Parish Road		ONE HOUR	✓	84	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	25	940	63
B - Shorthorn Road	23	0	129	23
C - A140 Cromer Road (N)	641	62	0	0
D - Parish Road	72	12	0	0

### Proportions

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0.00	0.02	0.91	0.07
B - Shorthorn Road	0.13	0.00	0.74	0.13
C - A140 Cromer Road (N)	0.91	0.09	0.00	0.00
D - Parish Road	0.86	0.14	0.00	0.00

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	0	0
B - Shorthorn Road	0	0	0	0
C - A140 Cromer Road (N)	1	0	0	0
D - Parish Road	1	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.000	1.004	1.0
B - Shorthorn Road	1.000	1.000	1.000	1.0
C - A140 Cromer Road (N)	1.012	1.001	1.000	1.0
D - Parish Road	1.006	1.001	1.000	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A140 Cromer Road (S)	774	776
	B - Shorthorn Road	131	131
	C - A140 Cromer Road (N)	529	535
	D - Parish Road	63	64
17:00-17:15	A - A140 Cromer Road (S)	924	927
	B - Shorthorn Road	156	157
	C - A140 Cromer Road (N)	631	638
	D - Parish Road	76	76
17:15-17:30	A - A140 Cromer Road (S)	1131	1135
	B - Shorthorn Road	192	192
	C - A140 Cromer Road (N)	773	782
	D - Parish Road	93	93
17:30-17:45	A - A140 Cromer Road (S)	1131	1135
	B - Shorthorn Road	192	192
	C - A140 Cromer Road (N)	773	782
	D - Parish Road	93	93
17:45-18:00	A - A140 Cromer Road (S)	924	927
	B - Shorthorn Road	156	157
	C - A140 Cromer Road (N)	631	638
	D - Parish Road	76	76
18:00-18:15	A - A140 Cromer Road (S)	774	776
	B - Shorthorn Road	131	131
	C - A140 Cromer Road (N)	529	535
	D - Parish Road	63	64

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.36	14.32	0.6	B	118	177
B-AD	0.38	44.69	0.6	E	41	62
A-BCD	0.15	8.84	0.2	A	58	87
A-B					23	34
A-C					868	1299
D-A	0.15	8.32	0.2	A	67	100
D-BC	0.09	26.34	0.1	D	11	17
C-ABD	0.17	11.06	0.2	B	57	85
C-D					0	0
C-A					595	892



### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	24	514	0.189	96	0.0	0.2	8.608	A
B-AD	34	8	236	0.144	33	0.0	0.2	17.679	C
A-BCD	47	12	538	0.088	47	0.0	0.1	7.329	A
A-B	18	5			18				
A-C	710	178			710				
D-A	55	14	589	0.093	54	0.0	0.1	6.773	A
D-BC	9	2	253	0.036	9	0.0	0.0	14.758	B
C-ABD	47	12	480	0.097	46	0.0	0.1	8.298	A
C-D	0	0			0				
C-A	488	122			488				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	29	467	0.248	116	0.2	0.3	10.233	B
B-AD	41	10	192	0.212	40	0.2	0.3	23.685	C
A-BCD	57	14	513	0.111	57	0.1	0.1	7.896	A
A-B	22	6			22				
A-C	848	212			848				
D-A	65	16	559	0.117	65	0.1	0.1	7.335	A
D-BC	11	3	210	0.052	11	0.0	0.1	18.100	C
C-ABD	56	14	444	0.125	55	0.1	0.1	9.273	A
C-D	0	0			0				
C-A	583	146			583				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	35	395	0.359	141	0.3	0.5	14.124	B
B-AD	50	12	130	0.383	48	0.3	0.6	43.528	E
A-BCD	69	17	477	0.146	69	0.1	0.2	8.830	A
A-B	27	7			27				
A-C	1039	280			1039				
D-A	80	20	516	0.155	80	0.1	0.2	8.300	A
D-BC	13	3	150	0.089	13	0.1	0.1	26.240	D
C-ABD	68	17	394	0.173	68	0.1	0.2	11.037	B
C-D	0	0			0				
C-A	714	178			714				

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	35	393	0.361	142	0.5	0.6	14.315	B
B-AD	50	12	130	0.382	50	0.6	0.6	44.685	E
A-BCD	69	17	477	0.146	69	0.2	0.2	8.844	A
A-B	27	7			27				
A-C	1039	260			1039				
D-A	80	20	515	0.155	80	0.2	0.2	8.315	A
D-BC	13	3	150	0.089	13	0.1	0.1	26.340	D
C-ABD	68	17	394	0.173	68	0.2	0.2	11.058	B
C-D	0	0			0				
C-A	714	178			714				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	29	465	0.249	117	0.6	0.3	10.363	B
B-AD	41	10	192	0.211	42	0.6	0.3	24.161	C
A-BCD	57	14	512	0.111	57	0.2	0.1	7.913	A
A-B	22	6			22				
A-C	848	212			848				
D-A	65	16	558	0.117	65	0.2	0.1	7.356	A
D-BC	11	3	209	0.052	11	0.1	0.1	18.168	C
C-ABD	56	14	444	0.125	56	0.2	0.1	9.294	A
C-D	0	0			0				
C-A	583	146			583				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	24	512	0.189	97	0.3	0.2	8.687	A
B-AD	34	8	236	0.144	34	0.3	0.2	17.855	C
A-BCD	47	12	538	0.088	48	0.1	0.1	7.341	A
A-B	18	5			18				
A-C	710	178			710				
D-A	55	14	588	0.093	55	0.1	0.1	6.793	A
D-BC	9	2	253	0.036	9	0.1	0.0	14.803	B
C-ABD	47	12	480	0.097	47	0.1	0.1	8.319	A
C-D	0	0			0				
C-A	488	122			488				

# 2029DS, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		5.67	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.67	A

## 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	2029DS	AM	ONE HOUR	07:15	08:45	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 (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	693	100.000
B - Shorthorn Road		ONE HOUR	✓	209	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	956	100.000
D - Parish Road		ONE HOUR	✓	142	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0	21	629	43
	B - Shorthorn Road	37	0	155	17
	C - A140 Cromer Road (N)	724	232	0	0
	D - Parish Road	97	45	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0.00	0.03	0.91	0.06
	B - Shorthorn Road	0.18	0.00	0.74	0.08
	C - A140 Cromer Road (N)	0.76	0.24	0.00	0.00
	D - Parish Road	0.68	0.32	0.00	0.00

## Vehicle Mix



### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	1	1
B - Shorthorn Road	0	0	1	3
C - A140 Cromer Road (N)	2	0	0	0
D - Parish Road	0	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.004	1.012	1.0
B - Shorthorn Road	1.000	1.000	1.012	1.0
C - A140 Cromer Road (N)	1.023	1.003	1.000	1.0
D - Parish Road	1.001	1.000	1.000	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - A140 Cromer Road (S)	522	528
	B - Shorthorn Road	158	160
	C - A140 Cromer Road (N)	720	732
	D - Parish Road	107	107
07:30-07:45	A - A140 Cromer Road (S)	623	630
	B - Shorthorn Road	188	191
	C - A140 Cromer Road (N)	859	875
	D - Parish Road	128	128
07:45-08:00	A - A140 Cromer Road (S)	763	772
	B - Shorthorn Road	231	233
	C - A140 Cromer Road (N)	1052	1071
	D - Parish Road	156	156
08:00-08:15	A - A140 Cromer Road (S)	763	772
	B - Shorthorn Road	231	233
	C - A140 Cromer Road (N)	1052	1071
	D - Parish Road	156	156
08:15-08:30	A - A140 Cromer Road (S)	623	630
	B - Shorthorn Road	188	191
	C - A140 Cromer Road (N)	859	875
	D - Parish Road	128	128
08:30-08:45	A - A140 Cromer Road (S)	522	528
	B - Shorthorn Road	158	160
	C - A140 Cromer Road (N)	720	732
	D - Parish Road	107	107

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.38	12.91	0.6	B	144	216
B-AD	0.47	54.00	0.9	F	50	75
A-BCD	0.11	9.07	0.1	A	40	59
A-B					20	29
A-C					584	876
D-A	0.24	10.45	0.3	B	89	133
D-BC	0.27	26.32	0.4	D	41	62
C-ABD	0.55	16.88	1.2	C	214	321
C-D					0	0
C-A					679	1018

## Main Results for each time segment

### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	30	588	0.208	117	0.0	0.3	8.082	A
B-AD	41	10	235	0.175	40	0.0	0.2	18.594	C
A-BCD	32	8	519	0.062	32	0.0	0.1	7.462	A
A-B	16	4			16				
A-C	479	120			479				
D-A	73	18	546	0.134	72	0.0	0.2	7.598	A
D-BC	34	8	285	0.119	33	0.0	0.1	14.265	B
C-ABD	175	44	532	0.330	173	0.0	0.5	10.008	B
C-D	0	0			0				
C-A	557	139			557				

### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	530	0.267	141	0.3	0.4	9.371	A
B-AD	49	12	190	0.259	49	0.2	0.3	25.645	D
A-BCD	39	10	489	0.079	39	0.1	0.1	8.083	A
A-B	19	5			19				
A-C	572	143			572				
D-A	87	22	508	0.172	87	0.2	0.2	8.546	A
D-BC	41	10	244	0.166	40	0.1	0.2	17.657	C
C-ABD	209	52	506	0.414	209	0.5	0.7	12.092	B
C-D	0	0			0				
C-A	665	166			665				

### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	459	0.377	172	0.4	0.6	12.653	B
B-AD	60	15	127	0.472	58	0.3	0.8	51.293	F
A-BCD	47	12	449	0.106	47	0.1	0.1	9.056	A
A-B	24	6			24				
A-C	701	175			701				
D-A	107	27	453	0.236	106	0.2	0.3	10.392	B
D-BC	50	12	187	0.266	49	0.2	0.3	26.049	D
C-ABD	257	64	471	0.545	255	0.7	1.2	16.571	C
C-D	0	0			0				
C-A	815	204			815				

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	455	0.380	173	0.6	0.6	12.913	B
B-AD	60	15	127	0.474	60	0.8	0.9	54.002	F
A-BCD	47	12	448	0.106	47	0.1	0.1	9.072	A
A-B	24	6			24				
A-C	701	175			701				
D-A	107	27	452	0.238	107	0.3	0.3	10.448	B
D-BC	50	12	186	0.267	50	0.3	0.4	26.319	D
C-ABD	257	64	471	0.545	257	1.2	1.2	16.883	C
C-D	0	0			0				
C-A	815	204			815				

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	526	0.269	142	0.6	0.4	9.522	A
B-AD	49	12	189	0.259	51	0.9	0.4	26.625	D
A-BCD	39	10	489	0.079	39	0.1	0.1	8.081	A
A-B	19	5			19				
A-C	572	143			572				
D-A	87	22	507	0.172	88	0.3	0.2	8.603	A
D-BC	41	10	244	0.167	41	0.4	0.2	17.827	C
C-ABD	209	52	506	0.414	211	1.2	0.7	12.322	B
C-D	0	0			0				
C-A	665	166			665				

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	30	567	0.209	119	0.4	0.3	8.147	A
B-AD	41	10	235	0.175	42	0.4	0.2	18.918	C
A-BCD	32	8	519	0.063	33	0.1	0.1	7.479	A
A-B	16	4			16				
A-C	479	120			479				
D-A	73	18	545	0.134	73	0.2	0.2	7.646	A
D-BC	34	8	285	0.119	34	0.2	0.1	14.359	B
C-ABD	175	44	532	0.330	176	0.7	0.5	10.172	B
C-D	0	0			0				
C-A	557	139			557				



# 2029DS, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.67	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.67	A

## 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	2029DS	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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	946	100.000
B - Shorthorn Road		ONE HOUR	✓	257	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	736	100.000
D - Parish Road		ONE HOUR	✓	86	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0	19	864	63
	B - Shorthorn Road	2	0	218	38
	C - A140 Cromer Road (N)	596	140	0	0
	D - Parish Road	69	17	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0.00	0.02	0.91	0.07
	B - Shorthorn Road	0.01	0.00	0.85	0.14
	C - A140 Cromer Road (N)	0.81	0.19	0.00	0.00
	D - Parish Road	0.80	0.20	0.00	0.00

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	0	0
B - Shorthorn Road	0	0	1	0
C - A140 Cromer Road (N)	1	0	0	0
D - Parish Road	1	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.000	1.004	1.0
B - Shorthorn Road	1.000	1.000	1.008	1.0
C - A140 Cromer Road (N)	1.007	1.000	1.000	1.0
D - Parish Road	1.006	1.001	1.001	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A140 Cromer Road (S)	713	715
	B - Shorthorn Road	194	195
	C - A140 Cromer Road (N)	554	557
	D - Parish Road	65	65
17:00-17:15	A - A140 Cromer Road (S)	851	854
	B - Shorthorn Road	231	233
	C - A140 Cromer Road (N)	661	665
	D - Parish Road	77	78
17:15-17:30	A - A140 Cromer Road (S)	1042	1046
	B - Shorthorn Road	283	285
	C - A140 Cromer Road (N)	810	814
	D - Parish Road	94	95
17:30-17:45	A - A140 Cromer Road (S)	1042	1046
	B - Shorthorn Road	283	285
	C - A140 Cromer Road (N)	810	814
	D - Parish Road	94	95
17:45-18:00	A - A140 Cromer Road (S)	851	854
	B - Shorthorn Road	231	233
	C - A140 Cromer Road (N)	661	665
	D - Parish Road	77	78
18:00-18:15	A - A140 Cromer Road (S)	713	715
	B - Shorthorn Road	194	195
	C - A140 Cromer Road (N)	554	557
	D - Parish Road	65	65

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.56	19.43	1.3	C	201	302
B-AD	0.36	46.70	0.5	E	36	55
A-BCD	0.14	8.53	0.2	A	58	87
A-B					18	27
A-C					796	1194
D-A	0.14	7.80	0.2	A	63	95
D-BC	0.11	22.54	0.1	C	16	24
C-ABD	0.37	13.78	0.6	B	128	192
C-D					0	0
C-A					551	826

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	165	41	543	0.304	163	0.0	0.4	9.521	A
B-AD	30	7	228	0.131	29	0.0	0.1	18.031	C
A-BCD	47	12	549	0.088	47	0.0	0.1	7.173	A
A-B	15	4			15				
A-C	653	163			653				
D-A	52	13	609	0.085	52	0.0	0.1	6.491	A
D-BC	13	3	274	0.047	13	0.0	0.0	13.788	B
C-ABD	105	26	494	0.213	104	0.0	0.3	9.203	A
C-D	0	0			0				
C-A	452	113			452				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	197	49	499	0.395	196	0.4	0.6	11.965	B
B-AD	36	9	184	0.194	35	0.1	0.2	24.155	C
A-BCD	57	14	525	0.108	56	0.1	0.1	7.687	A
A-B	17	4			17				
A-C	780	195			780				
D-A	62	16	581	0.107	62	0.1	0.1	6.976	A
D-BC	15	4	234	0.066	15	0.0	0.1	16.483	C
C-ABD	125	31	461	0.272	125	0.3	0.4	10.708	B
C-D	0	0			0				
C-A	539	135			539				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	241	60	429	0.562	239	0.6	1.2	18.833	C
B-AD	44	11	121	0.362	43	0.2	0.5	45.251	E
A-BCD	69	17	492	0.141	69	0.1	0.2	8.513	A
A-B	21	5			21				
A-C	955	239			955				
D-A	76	19	541	0.141	76	0.1	0.2	7.794	A
D-BC	19	5	179	0.106	19	0.1	0.1	22.479	C
C-ABD	154	38	415	0.370	153	0.4	0.6	13.696	B
C-D	0	0			0				
C-A	661	165			661				



**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	241	60	428	0.565	241	1.2	1.3	19.427	C
B-AD	44	11	121	0.363	44	0.5	0.5	46.695	E
A-BCD	69	17	492	0.141	69	0.2	0.2	8.526	A
A-B	21	5			21				
A-C	955	239			955				
D-A	76	19	540	0.141	76	0.2	0.2	7.802	A
D-BC	19	5	179	0.108	19	0.1	0.1	22.545	C
C-ABD	154	38	415	0.370	154	0.6	0.6	13.778	B
C-D	0	0			0				
C-A	661	165			661				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	197	49	497	0.397	200	1.3	0.7	12.286	B
B-AD	36	9	184	0.195	37	0.5	0.2	24.709	C
A-BCD	57	14	524	0.108	57	0.2	0.1	7.704	A
A-B	17	4			17				
A-C	780	195			780				
D-A	62	16	581	0.107	62	0.2	0.1	6.993	A
D-BC	15	4	234	0.066	16	0.1	0.1	16.527	C
C-ABD	125	31	461	0.272	126	0.6	0.4	10.789	B
C-D	0	0			0				
C-A	539	135			539				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	165	41	542	0.305	166	0.7	0.4	9.676	A
B-AD	30	7	228	0.131	30	0.2	0.2	18.240	C
A-BCD	47	12	548	0.086	47	0.1	0.1	7.191	A
A-B	15	4			15				
A-C	653	163			653				
D-A	52	13	609	0.085	52	0.1	0.1	6.509	A
D-BC	13	3	274	0.047	13	0.1	0.1	13.826	B
C-ABD	105	26	494	0.213	106	0.4	0.3	9.276	A
C-D	0	0			0				
C-A	452	113			452				

# 2029DS\_Mitigation, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		1.85	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.85	A

## 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	2029DS_Mitigation	AM	ONE HOUR	07:15	08:45	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 (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	813	100.000
B - Shorthorn Road		ONE HOUR	✓	70	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	904	100.000
D - Parish Road		ONE HOUR	✓	128	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0	14	747	52
	B - Shorthorn Road	31	0	37	2
	C - A140 Cromer Road (N)	888	36	0	0
	D - Parish Road	128	1	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0.00	0.02	0.92	0.01
	B - Shorthorn Road	0.45	0.00	0.52	0.01
	C - A140 Cromer Road (N)	0.96	0.04	0.00	0.01
	D - Parish Road	0.99	0.01	0.00	0.01

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorothorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	1	2
B - Shorothorn Road	0	0	1	8
C - A140 Cromer Road (N)	2	1	0	0
D - Parish Road	0	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorothorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.000	1.010	1.0
B - Shorothorn Road	1.000	1.000	1.011	1.0
C - A140 Cromer Road (N)	1.020	1.006	1.000	1.0
D - Parish Road	1.001	1.003	1.001	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - A140 Cromer Road (S)	612	618
	B - Shorothorn Road	52	53
	C - A140 Cromer Road (N)	681	694
	D - Parish Road	96	96
07:30-07:45	A - A140 Cromer Road (S)	731	738
	B - Shorothorn Road	63	63
	C - A140 Cromer Road (N)	813	829
	D - Parish Road	115	115
07:45-08:00	A - A140 Cromer Road (S)	895	904
	B - Shorothorn Road	77	77
	C - A140 Cromer Road (N)	996	1015
	D - Parish Road	140	141
08:00-08:15	A - A140 Cromer Road (S)	895	904
	B - Shorothorn Road	77	77
	C - A140 Cromer Road (N)	996	1015
	D - Parish Road	140	141
08:15-08:30	A - A140 Cromer Road (S)	731	738
	B - Shorothorn Road	63	63
	C - A140 Cromer Road (N)	813	829
	D - Parish Road	115	115
08:30-08:45	A - A140 Cromer Road (S)	612	618
	B - Shorothorn Road	52	53
	C - A140 Cromer Road (N)	681	694
	D - Parish Road	96	96

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	9.30	0.1	A	34	51
B-AD	0.22	28.03	0.3	D	30	46
A-BCD	0.14	10.28	0.2	B	48	73
A-B					13	19
A-C					692	1039
D-A	0.30	11.27	0.4	B	116	174
D-BC	0.01	29.63	0.0	D	1	2
C-ABD	0.09	8.78	0.1	A	33	50
C-D					0	0
C-A					813	1219



### Main Results for each time segment

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	515	0.054	28	0.0	0.1	7.467	A
B-AD	25	6	275	0.091	25	0.0	0.1	14.415	B
A-BCD	40	10	495	0.080	39	0.0	0.1	8.015	A
A-B	10	3			10				
A-C	568	142			568				
D-A	95	24	550	0.173	94	0.0	0.2	7.895	A
D-BC	1	0.26	232	0.004	1	0.0	0.0	15.661	C
C-ABD	27	7	520	0.053	27	0.0	0.1	7.346	A
C-D	0	0			0				
C-A	667	167			667				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	482	0.069	33	0.1	0.1	8.114	A
B-AD	30	7	229	0.130	30	0.1	0.1	18.113	C
A-BCD	47	12	461	0.103	47	0.1	0.1	8.835	A
A-B	12	3			12				
A-C	678	170			678				
D-A	114	28	512	0.222	113	0.2	0.3	9.037	A
D-BC	1	0.31	186	0.007	1	0.0	0.0	19.516	C
C-ABD	33	8	491	0.067	33	0.1	0.1	7.890	A
C-D	0	0			0				
C-A	796	199			796				

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	433	0.094	41	0.1	0.1	9.271	A
B-AD	37	9	165	0.221	36	0.1	0.3	27.859	D
A-BCD	58	15	414	0.140	58	0.1	0.2	10.264	B
A-B	15	4			15				
A-C	831	208			831				
D-A	139	35	459	0.303	138	0.3	0.4	11.227	B
D-BC	2	0.38	124	0.012	1	0.0	0.0	29.582	D
C-ABD	40	10	452	0.089	40	0.1	0.1	8.778	A
C-D	0	0			0				
C-A	975	244			975				

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	432	0.094	41	0.1	0.1	9.297	A
B-AD	37	9	165	0.221	37	0.3	0.3	28.028	D
A-BCD	58	15	414	0.140	58	0.2	0.2	10.277	B
A-B	15	4			15				
A-C	831	208			831				
D-A	139	35	459	0.303	139	0.4	0.4	11.272	B
D-BC	2	0.38	123	0.012	1	0.0	0.0	29.633	D
C-ABD	40	10	452	0.089	40	0.1	0.1	8.781	A
C-D	0	0			0				
C-A	975	244			975				

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	480	0.069	33	0.1	0.1	8.144	A
B-AD	30	7	229	0.130	30	0.3	0.2	18.201	C
A-BCD	47	12	461	0.103	48	0.2	0.1	8.852	A
A-B	12	3			12				
A-C	678	170			678				
D-A	114	28	511	0.222	114	0.4	0.3	9.082	A
D-BC	1	0.31	186	0.007	1	0.0	0.0	19.548	C
C-ABD	33	8	491	0.067	33	0.1	0.1	7.895	A
C-D	0	0			0				
C-A	796	199			796				

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	514	0.054	28	0.1	0.1	7.492	A
B-AD	25	6	275	0.091	25	0.2	0.1	14.461	B
A-BCD	40	10	495	0.080	40	0.1	0.1	8.035	A
A-B	10	3			10				
A-C	568	142			568				
D-A	95	24	549	0.173	95	0.3	0.2	7.939	A
D-BC	1	0.26	231	0.004	1	0.0	0.0	15.682	C
C-ABD	27	7	520	0.053	27	0.1	0.1	7.353	A
C-D	0	0			0				
C-A	667	167			667				

# 2029DS\_Mitigation, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		1.46	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.46	A

## 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	2029DS_Mitigation	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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	1093	100.000
B - Shorthorn Road		ONE HOUR	✓	57	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	754	100.000
D - Parish Road		ONE HOUR	✓	82	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0	13	999	82
	B - Shorthorn Road	19	0	37	1
	C - A140 Cromer Road (N)	725	28	0	0
	D - Parish Road	81	0.93	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0.00	0.01	0.91	0.01
	B - Shorthorn Road	0.33	0.00	0.65	0.01
	C - A140 Cromer Road (N)	0.96	0.04	0.00	0.01
	D - Parish Road	0.99	0.01	0.00	0.01

## Vehicle Mix



### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorothorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	0	0
B - Shorothorn Road	0	0	0	1
C - A140 Cromer Road (N)	1	0	0	0
D - Parish Road	1	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorothorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.000	1.004	1.0
B - Shorothorn Road	1.000	1.000	1.000	1.0
C - A140 Cromer Road (N)	1.010	1.000	1.000	1.0
D - Parish Road	1.005	1.001	1.002	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A140 Cromer Road (S)	823	826
	B - Shorothorn Road	43	43
	C - A140 Cromer Road (N)	567	573
	D - Parish Road	62	62
17:00-17:15	A - A140 Cromer Road (S)	983	986
	B - Shorothorn Road	51	51
	C - A140 Cromer Road (N)	678	684
	D - Parish Road	74	74
17:15-17:30	A - A140 Cromer Road (S)	1204	1208
	B - Shorothorn Road	63	63
	C - A140 Cromer Road (N)	830	838
	D - Parish Road	91	91
17:30-17:45	A - A140 Cromer Road (S)	1204	1208
	B - Shorothorn Road	63	63
	C - A140 Cromer Road (N)	830	838
	D - Parish Road	91	91
17:45-18:00	A - A140 Cromer Road (S)	983	986
	B - Shorothorn Road	51	51
	C - A140 Cromer Road (N)	678	684
	D - Parish Road	74	74
18:00-18:15	A - A140 Cromer Road (S)	823	826
	B - Shorothorn Road	43	43
	C - A140 Cromer Road (N)	567	573
	D - Parish Road	62	62

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.10	10.25	0.1	B	34	51
B-AD	0.18	35.84	0.2	E	18	28
A-BCD	0.20	9.73	0.2	A	75	113
A-B					12	17
A-C					920	1380
D-A	0.18	8.61	0.2	A	75	113
D-BC	0.01	31.02	0.0	D	0.85	1
C-ABD	0.08	10.20	0.1	B	26	39
C-D					0	0
C-A					672	1008

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	498	0.058	28	0.0	0.1	7.645	A
B-AD	15	4	236	0.064	15	0.0	0.1	16.253	C
A-BCD	62	15	527	0.117	61	0.0	0.1	7.719	A
A-B	10	2			10				
A-C	755	189			755				
D-A	62	15	585	0.105	61	0.0	0.1	6.905	A
D-BC	0.70	0.18	227	0.003	0.69	0.0	0.0	15.919	C
C-ABD	21	5	473	0.045	21	0.0	0.0	7.962	A
C-D	0	0			0				
C-A	552	138			552				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	455	0.073	33	0.1	0.1	8.531	A
B-AD	18	5	188	0.096	18	0.1	0.1	21.095	C
A-BCD	74	18	499	0.148	74	0.1	0.2	8.480	A
A-B	11	3			11				
A-C	901	225			901				
D-A	74	18	554	0.133	73	0.1	0.2	7.534	A
D-BC	0.84	0.21	181	0.005	0.83	0.0	0.0	20.010	C
C-ABD	28	6	436	0.059	25	0.0	0.1	8.773	A
C-D	0	0			0				
C-A	659	165			659				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	393	0.104	41	0.1	0.1	10.219	B
B-AD	22	6	122	0.180	22	0.1	0.2	35.624	E
A-BCD	90	23	461	0.196	90	0.2	0.2	9.710	A
A-B	14	3			14				
A-C	1104	276			1104				
D-A	90	23	510	0.176	90	0.2	0.2	8.604	A
D-BC	1	0.26	117	0.009	1	0.0	0.0	30.972	D
C-ABD	31	8	384	0.081	31	0.1	0.1	10.198	B
C-D	0	0			0				
C-A	807	202			807				

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	392	0.104	41	0.1	0.1	10.255	B
B-AD	22	6	123	0.180	22	0.2	0.2	35.839	E
A-BCD	90	23	460	0.196	90	0.2	0.2	9.726	A
A-B	14	3			14				
A-C	1104	276			1104				
D-A	90	23	510	0.177	90	0.2	0.2	8.615	A
D-BC	1	0.26	117	0.009	1	0.0	0.0	31.023	D
C-ABD	31	8	384	0.081	31	0.1	0.1	10.202	B
C-D	0	0			0				
C-A	807	202			807				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	454	0.074	34	0.1	0.1	8.568	A
B-AD	18	5	189	0.095	18	0.2	0.1	21.175	C
A-BCD	74	18	499	0.148	74	0.2	0.2	8.476	A
A-B	11	3			11				
A-C	901	225			901				
D-A	74	18	553	0.133	74	0.2	0.2	7.551	A
D-BC	0.84	0.21	181	0.005	0.85	0.0	0.0	20.043	C
C-ABD	28	6	436	0.059	28	0.1	0.1	8.779	A
C-D	0	0			0				
C-A	659	165			659				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	497	0.056	28	0.1	0.1	7.674	A
B-AD	15	4	237	0.064	15	0.1	0.1	16.287	C
A-BCD	62	15	527	0.117	62	0.2	0.1	7.743	A
A-B	10	2			10				
A-C	755	189			755				
D-A	62	15	585	0.105	62	0.2	0.1	6.924	A
D-BC	0.70	0.18	227	0.003	0.71	0.0	0.0	15.942	C
C-ABD	21	5	473	0.045	21	0.1	0.0	7.970	A
C-D	0	0			0				
C-A	552	138			552				



# 2039DM, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.57	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.57	A

## 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	2039DM	AM	ONE HOUR	07:15	08:45	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 (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	844	100.000
B - Shorthorn Road		ONE HOUR	✓	152	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	752	100.000
D - Parish Road		ONE HOUR	✓	99	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0	41	759	44
	B - Shorthorn Road	43	0	99	10
	C - A140 Cromer Road (N)	561	191	0	0
	D - Parish Road	55	44	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0.00	0.05	0.90	0.05
	B - Shorthorn Road	0.28	0.00	0.65	0.07
	C - A140 Cromer Road (N)	0.75	0.25	0.00	0.00
	D - Parish Road	0.56	0.44	0.00	0.00

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	1	1
B - Shorthorn Road	1	0	1	1
C - A140 Cromer Road (N)	2	0	0	0
D - Parish Road	0	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.004	1.010	1.0
B - Shorthorn Road	1.010	1.000	1.007	1.0
C - A140 Cromer Road (N)	1.023	1.002	1.000	1.0
D - Parish Road	1.002	1.000	1.002	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - A140 Cromer Road (S)	636	642
	B - Shorthorn Road	115	115
	C - A140 Cromer Road (N)	566	576
	D - Parish Road	74	74
07:30-07:45	A - A140 Cromer Road (S)	759	766
	B - Shorthorn Road	137	138
	C - A140 Cromer Road (N)	676	688
	D - Parish Road	89	89
07:45-08:00	A - A140 Cromer Road (S)	930	938
	B - Shorthorn Road	167	169
	C - A140 Cromer Road (N)	828	843
	D - Parish Road	109	109
08:00-08:15	A - A140 Cromer Road (S)	930	938
	B - Shorthorn Road	167	169
	C - A140 Cromer Road (N)	828	843
	D - Parish Road	109	109
08:15-08:30	A - A140 Cromer Road (S)	759	766
	B - Shorthorn Road	137	138
	C - A140 Cromer Road (N)	676	688
	D - Parish Road	89	89
08:30-08:45	A - A140 Cromer Road (S)	636	642
	B - Shorthorn Road	115	115
	C - A140 Cromer Road (N)	566	576
	D - Parish Road	74	74

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.26	11.85	0.4	B	92	137
B-AD	0.42	45.20	0.7	E	49	74
A-BCD	0.10	8.13	0.1	A	41	61
A-B					38	57
A-C					703	1055
D-A	0.13	8.56	0.1	A	50	76
D-BC	0.23	21.83	0.3	C	40	60
C-ABD	0.49	16.47	0.9	C	176	263
C-D					0	0
C-A					527	790

### Main Results for each time segment

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	526	0.143	74	0.0	0.2	8.008	A
B-AD	40	10	248	0.163	40	0.0	0.2	17.373	C
A-BCD	33	8	551	0.061	33	0.0	0.1	7.004	A
A-B	31	8			31				
A-C	577	144			577				
D-A	41	10	556	0.075	41	0.0	0.1	7.009	A
D-BC	33	8	311	0.106	33	0.0	0.1	12.910	B
C-ABD	144	36	504	0.288	143	0.0	0.4	9.926	A
C-D	0	0			0				
C-A	432	108			432				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	22	485	0.185	89	0.2	0.2	9.148	A
B-AD	48	12	202	0.238	48	0.2	0.3	23.439	C
A-BCD	40	10	528	0.076	40	0.1	0.1	7.439	A
A-B	37	9			37				
A-C	689	172			689				
D-A	49	12	526	0.094	49	0.1	0.1	7.565	A
D-BC	39	10	270	0.146	39	0.1	0.2	15.586	C
C-ABD	172	43	473	0.364	171	0.4	0.6	11.934	B
C-D	0	0			0				
C-A	516	129			516				

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	418	0.263	109	0.2	0.4	11.709	B
B-AD	59	15	139	0.424	57	0.3	0.7	43.654	E
A-BCD	49	12	495	0.099	49	0.1	0.1	8.124	A
A-B	46	11			46				
A-C	844	211			844				
D-A	61	15	483	0.125	60	0.1	0.1	8.536	A
D-BC	48	12	213	0.227	48	0.2	0.3	21.688	C
C-ABD	211	53	429	0.491	209	0.6	0.9	16.280	C
C-D	0	0			0				
C-A	632	158			632				



**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	110	27	416	0.264	110	0.4	0.4	11.850	B
B-AD	59	15	139	0.424	59	0.7	0.7	45.203	E
A-BCD	49	12	495	0.099	49	0.1	0.1	8.134	A
A-B	46	11			46				
A-C	844	211			844				
D-A	61	15	482	0.126	61	0.1	0.1	8.561	A
D-BC	48	12	213	0.227	48	0.3	0.3	21.833	C
C-ABD	211	53	429	0.491	211	0.9	0.9	16.475	C
C-D	0	0			0				
C-A	632	158			632				

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	22	482	0.186	90	0.4	0.2	9.256	A
B-AD	48	12	202	0.238	50	0.7	0.3	24.040	C
A-BCD	40	10	527	0.076	40	0.1	0.1	7.451	A
A-B	37	9			37				
A-C	689	172			689				
D-A	49	12	525	0.094	50	0.1	0.1	7.598	A
D-BC	39	10	270	0.146	40	0.3	0.2	15.689	C
C-ABD	172	43	473	0.364	174	0.9	0.6	12.113	B
C-D	0	0			0				
C-A	516	129			516				

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	525	0.143	75	0.2	0.2	8.072	A
B-AD	40	10	248	0.163	41	0.3	0.2	17.602	C
A-BCD	33	8	551	0.061	33	0.1	0.1	7.018	A
A-B	31	8			31				
A-C	577	144			577				
D-A	41	10	554	0.075	41	0.1	0.1	7.035	A
D-BC	33	8	311	0.106	33	0.2	0.1	12.977	B
C-ABD	144	38	504	0.286	145	0.6	0.4	10.055	B
C-D	0	0			0				
C-A	432	108			432				

# 2039DM, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.46	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.46	A

## 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	2039DM	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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	1044	100.000
B - Shorthorn Road		ONE HOUR	✓	174	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	736	100.000
D - Parish Road		ONE HOUR	✓	82	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0	24	957	64
	B - Shorthorn Road	30	0	120	24
	C - A140 Cromer Road (N)	674	63	0	0
	D - Parish Road	70	12	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0.00	0.02	0.92	0.01
	B - Shorthorn Road	0.17	0.00	0.69	0.14
	C - A140 Cromer Road (N)	0.92	0.08	0.00	0.00
	D - Parish Road	0.86	0.14	0.00	0.00

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	0	0
B - Shorthorn Road	0	0	0	0
C - A140 Cromer Road (N)	2	0	0	0
D - Parish Road	1	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.000	1.004	1.0
B - Shorthorn Road	1.000	1.000	1.000	1.0
C - A140 Cromer Road (N)	1.015	1.001	1.000	1.0
D - Parish Road	1.012	1.001	1.002	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A140 Cromer Road (S)	786	789
	B - Shorthorn Road	131	131
	C - A140 Cromer Road (N)	554	562
	D - Parish Road	61	62
17:00-17:15	A - A140 Cromer Road (S)	939	942
	B - Shorthorn Road	156	156
	C - A140 Cromer Road (N)	662	671
	D - Parish Road	73	74
17:15-17:30	A - A140 Cromer Road (S)	1150	1154
	B - Shorthorn Road	191	191
	C - A140 Cromer Road (N)	811	822
	D - Parish Road	90	91
17:30-17:45	A - A140 Cromer Road (S)	1150	1154
	B - Shorthorn Road	191	191
	C - A140 Cromer Road (N)	811	822
	D - Parish Road	90	91
17:45-18:00	A - A140 Cromer Road (S)	939	942
	B - Shorthorn Road	156	156
	C - A140 Cromer Road (N)	662	671
	D - Parish Road	73	74
18:00-18:15	A - A140 Cromer Road (S)	786	789
	B - Shorthorn Road	131	131
	C - A140 Cromer Road (N)	554	562
	D - Parish Road	61	62

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.36	15.37	0.6	C	110	165
B-AD	0.48	56.04	0.9	F	49	74
A-BCD	0.15	9.14	0.2	A	58	88
A-B					22	33
A-C					882	1322
D-A	0.16	8.61	0.2	A	65	97
D-BC	0.09	29.02	0.1	D	11	16
C-ABD	0.18	11.24	0.2	B	57	88
C-D					0	0
C-A					628	941



### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	23	499	0.181	90	0.0	0.2	8.780	A
B-AD	41	10	234	0.173	40	0.0	0.2	18.441	C
A-BCD	48	12	530	0.090	47	0.0	0.1	7.458	A
A-B	18	4			18				
A-C	723	181			723				
D-A	53	13	580	0.092	53	0.0	0.1	6.915	A
D-BC	9	2	244	0.038	9	0.0	0.0	15.295	C
C-ABD	47	12	477	0.099	47	0.0	0.1	8.365	A
C-D	0	0			0				
C-A	515	129			515				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	108	27	450	0.240	108	0.2	0.3	10.494	B
B-AD	48	12	188	0.258	48	0.2	0.3	25.668	D
A-BCD	57	14	502	0.114	57	0.1	0.1	8.086	A
A-B	21	5			21				
A-C	864	216			864				
D-A	64	16	548	0.116	63	0.1	0.1	7.523	A
D-BC	11	3	199	0.053	10	0.0	0.1	19.087	C
C-ABD	56	14	440	0.128	56	0.1	0.1	9.379	A
C-D	0	0			0				
C-A	615	154			615				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	132	33	370	0.358	131	0.3	0.5	15.031	C
B-AD	59	15	123	0.482	57	0.3	0.8	53.374	F
A-BCD	70	18	465	0.151	70	0.1	0.2	9.122	A
A-B	26	7			26				
A-C	1058	264			1058				
D-A	78	19	502	0.155	78	0.1	0.2	8.584	A
D-BC	13	3	137	0.094	13	0.1	0.1	28.858	D
C-ABD	69	17	389	0.177	69	0.1	0.2	11.218	B
C-D	0	0			0				
C-A	753	188			753				

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	132	33	386	0.361	132	0.5	0.6	15.388	C
B-AD	59	15	123	0.482	59	0.8	0.9	58.035	F
A-BCD	70	18	464	0.151	70	0.2	0.2	9.143	A
A-B	28	7			28				
A-C	1058	264			1058				
D-A	78	19	501	0.155	78	0.2	0.2	8.606	A
D-BC	13	3	137	0.094	13	0.1	0.1	29.019	D
C-ABD	69	17	389	0.177	69	0.2	0.2	11.237	B
C-D	0	0			0				
C-A	753	188			753				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	108	27	447	0.241	109	0.6	0.3	10.688	B
B-AD	48	12	188	0.257	50	0.9	0.4	26.537	D
A-BCD	57	14	502	0.114	57	0.2	0.1	8.110	A
A-B	21	5			21				
A-C	864	216			864				
D-A	64	16	547	0.116	64	0.2	0.1	7.546	A
D-BC	11	3	199	0.053	11	0.1	0.1	19.176	C
C-ABD	56	14	440	0.128	57	0.2	0.1	9.398	A
C-D	0	0			0				
C-A	615	154			615				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	23	497	0.182	91	0.3	0.2	8.867	A
B-AD	41	10	234	0.173	41	0.4	0.2	18.688	C
A-BCD	48	12	530	0.090	48	0.1	0.1	7.479	A
A-B	18	4			18				
A-C	723	181			723				
D-A	53	13	579	0.092	53	0.1	0.1	6.934	A
D-BC	9	2	244	0.036	9	0.1	0.0	15.346	C
C-ABD	47	12	477	0.099	47	0.1	0.1	8.390	A
C-D	0	0			0				
C-A	515	129			515				

# 2039DS, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		6.97	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.97	A

## 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	2039DS	AM	ONE HOUR	07:15	08:45	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 (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	799	100.000
B - Shorthorn Road		ONE HOUR	✓	228	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	792	100.000
D - Parish Road		ONE HOUR	✓	105	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0	45	713	41
	B - Shorthorn Road	41	0	169	18
	C - A140 Cromer Road (N)	543	249	0	0
	D - Parish Road	55	49	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0.00	0.06	0.89	0.05
	B - Shorthorn Road	0.18	0.00	0.74	0.08
	C - A140 Cromer Road (N)	0.69	0.31	0.00	0.00
	D - Parish Road	0.53	0.47	0.00	0.00

## Vehicle Mix



### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	1	1
B - Shorthorn Road	0	0	1	3
C - A140 Cromer Road (N)	2	0	0	0
D - Parish Road	0	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.004	1.010	1.0
B - Shorthorn Road	1.000	1.000	1.012	1.0
C - A140 Cromer Road (N)	1.024	1.003	1.000	1.0
D - Parish Road	1.002	1.000	1.002	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	B - Shorthorn Road	172	174
	C - A140 Cromer Road (N)	596	607
	D - Parish Road	79	79
07:30-07:45	A - A140 Cromer Road (S)	718	725
	B - Shorthorn Road	205	207
	C - A140 Cromer Road (N)	712	725
	D - Parish Road	94	94
07:45-08:00	A - A140 Cromer Road (S)	880	888
	B - Shorthorn Road	251	254
	C - A140 Cromer Road (N)	872	887
	D - Parish Road	116	116
08:00-08:15	A - A140 Cromer Road (S)	880	888
	B - Shorthorn Road	251	254
	C - A140 Cromer Road (N)	872	887
	D - Parish Road	116	116
08:15-08:30	A - A140 Cromer Road (S)	718	725
	B - Shorthorn Road	205	207
	C - A140 Cromer Road (N)	712	725
	D - Parish Road	94	94
08:30-08:45	A - A140 Cromer Road (S)	602	608
	B - Shorthorn Road	172	174
	C - A140 Cromer Road (N)	596	607
	D - Parish Road	79	79

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.45	15.77	0.8	C	157	235
B-AD	0.52	60.31	1.0	F	55	82
A-BCD	0.09	8.02	0.1	A	38	57
A-B					41	62
A-C					661	992
D-A	0.13	8.62	0.1	A	51	77
D-BC	0.24	20.80	0.3	C	45	68
C-ABD	0.63	21.78	1.6	C	229	344
C-D					0	0
C-A					510	765

### Main Results for each time segment

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	547	0.235	127	0.0	0.3	8.657	A
B-AD	45	11	235	0.191	44	0.0	0.2	18.961	C
A-BCD	31	8	553	0.056	31	0.0	0.1	6.945	A
A-B	34	8			34				
A-C	542	136			542				
D-A	42	10	552	0.078	42	0.0	0.1	7.061	A
D-BC	37	9	323	0.115	37	0.0	0.1	12.571	B
C-ABD	188	47	511	0.368	186	0.0	0.6	11.012	B
C-D	0	0			0				
C-A	419	105			419				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	154	38	504	0.305	153	0.3	0.4	10.372	B
B-AD	54	13	189	0.283	53	0.2	0.4	26.558	D
A-BCD	37	9	530	0.070	37	0.1	0.1	7.361	A
A-B	41	10			41				
A-C	648	162			648				
D-A	50	12	523	0.096	50	0.1	0.1	7.618	A
D-BC	44	11	283	0.157	44	0.1	0.2	15.076	C
C-ABD	224	56	481	0.466	223	0.6	0.9	13.937	B
C-D	0	0			0				
C-A	500	125			500				

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	188	47	424	0.444	187	0.4	0.8	15.241	C
B-AD	66	16	126	0.521	63	0.4	1.0	56.130	F
A-BCD	46	11	499	0.092	46	0.1	0.1	8.011	A
A-B	50	12			50				
A-C	793	198			793				
D-A	61	15	481	0.127	61	0.1	0.1	8.590	A
D-BC	54	14	228	0.239	54	0.2	0.3	20.641	C
C-ABD	276	69	441	0.625	273	0.9	1.6	21.102	C
C-D	0	0			0				
C-A	612	153			612				

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	188	47	419	0.449	188	0.8	0.8	15.771	C
B-AD	66	16	125	0.525	65	1.0	1.0	60.315	F
A-BCD	46	11	498	0.092	46	0.1	0.1	8.024	A
A-B	50	12			50				
A-C	793	198			793				
D-A	61	15	480	0.128	61	0.1	0.1	8.615	A
D-BC	54	14	228	0.239	54	0.3	0.3	20.795	C
C-ABD	276	69	441	0.625	275	1.6	1.6	21.775	C
C-D	0	0			0				
C-A	612	153			612				

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	154	38	500	0.308	155	0.8	0.5	10.609	B
B-AD	54	13	188	0.284	56	1.0	0.4	27.931	D
A-BCD	37	9	529	0.070	37	0.1	0.1	7.379	A
A-B	41	10			41				
A-C	648	162			648				
D-A	50	12	522	0.096	50	0.1	0.1	7.654	A
D-BC	44	11	282	0.158	45	0.3	0.2	15.189	C
C-ABD	224	56	481	0.467	227	1.6	0.9	14.387	B
C-D	0	0			0				
C-A	500	125			500				

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	545	0.236	129	0.5	0.3	8.772	A
B-AD	45	11	234	0.192	46	0.4	0.2	19.360	C
A-BCD	31	8	553	0.056	31	0.1	0.1	6.958	A
A-B	34	8			34				
A-C	542	136			542				
D-A	42	10	551	0.076	42	0.1	0.1	7.091	A
D-BC	37	9	323	0.116	37	0.2	0.1	12.645	B
C-ABD	188	47	511	0.368	189	0.9	0.6	11.257	B
C-D	0	0			0				
C-A	419	105			419				



# 2039DS, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		5.28	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.28	A

## 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	2039DS	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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	968	100.000
B - Shorthorn Road		ONE HOUR	✓	269	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	778	100.000
D - Parish Road		ONE HOUR	✓	85	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0	19	889	60
	B - Shorthorn Road	0.73	0	229	39
	C - A140 Cromer Road (N)	630	146	0	0
	D - Parish Road	67	18	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0.00	0.02	0.92	0.06
	B - Shorthorn Road	0.00	0.00	0.85	0.15
	C - A140 Cromer Road (N)	0.81	0.19	0.00	0.00
	D - Parish Road	0.78	0.22	0.00	0.00

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	0	0
B - Shorthorn Road	0	0	1	0
C - A140 Cromer Road (N)	1	0	0	0
D - Parish Road	1	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.000	1.004	1.0
B - Shorthorn Road	1.000	1.000	1.009	1.0
C - A140 Cromer Road (N)	1.010	1.000	1.000	1.0
D - Parish Road	1.013	1.001	1.002	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A140 Cromer Road (S)	728	731
	B - Shorthorn Road	202	204
	C - A140 Cromer Road (N)	584	589
	D - Parish Road	64	65
17:00-17:15	A - A140 Cromer Road (S)	870	873
	B - Shorthorn Road	242	244
	C - A140 Cromer Road (N)	697	703
	D - Parish Road	76	77
17:15-17:30	A - A140 Cromer Road (S)	1065	1070
	B - Shorthorn Road	296	298
	C - A140 Cromer Road (N)	854	861
	D - Parish Road	94	95
17:30-17:45	A - A140 Cromer Road (S)	1065	1070
	B - Shorthorn Road	296	298
	C - A140 Cromer Road (N)	854	861
	D - Parish Road	94	95
17:45-18:00	A - A140 Cromer Road (S)	870	873
	B - Shorthorn Road	242	244
	C - A140 Cromer Road (N)	697	703
	D - Parish Road	76	77
18:00-18:15	A - A140 Cromer Road (S)	728	731
	B - Shorthorn Road	202	204
	C - A140 Cromer Road (N)	584	589
	D - Parish Road	64	65

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.62	22.66	1.6	C	212	318
B-AD	0.41	57.29	0.7	F	36	55
A-BCD	0.14	8.66	0.2	A	55	82
A-B					17	26
A-C					819	1229
D-A	0.14	8.07	0.2	A	62	93
D-BC	0.12	24.35	0.1	C	17	25
C-ABD	0.39	14.55	0.8	B	134	201
C-D					0	0
C-A					584	876

## Main Results for each time segment

### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	174	44	538	0.324	172	0.0	0.5	9.888	A
B-AD	30	7	219	0.138	29	0.0	0.2	18.888	C
A-BCD	45	11	542	0.083	45	0.0	0.1	7.240	A
A-B	14	4			14				
A-C	872	168			872				
D-A	51	13	800	0.085	50	0.0	0.1	8.631	A
D-BC	14	3	287	0.052	14	0.0	0.1	14.208	B
C-ABD	110	27	489	0.224	109	0.0	0.3	9.428	A
C-D	0	0			0				
C-A	479	120			479				

### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	208	52	492	0.423	207	0.5	0.7	12.709	B
B-AD	38	9	173	0.208	35	0.2	0.3	28.055	D
A-BCD	54	13	517	0.104	54	0.1	0.1	7.778	A
A-B	17	4			17				
A-C	803	201			803				
D-A	61	15	570	0.107	61	0.1	0.1	7.158	A
D-BC	17	4	226	0.073	16	0.1	0.1	17.219	C
C-ABD	131	33	455	0.288	131	0.3	0.4	11.079	B
C-D	0	0			0				
C-A	572	143			572				

### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	255	64	417	0.611	252	0.7	1.5	21.608	C
B-AD	44	11	107	0.409	42	0.3	0.6	54.561	F
A-BCD	66	16	482	0.137	66	0.1	0.2	8.650	A
A-B	21	5			21				
A-C	983	246			983				
D-A	74	19	527	0.141	74	0.1	0.2	8.052	A
D-BC	20	5	188	0.120	20	0.1	0.1	24.257	C
C-ABD	160	40	408	0.393	160	0.4	0.8	14.448	B
C-D	0	0			0				
C-A	701	175			701				

Table 10.10.1.1519



**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	255	84	414	0.615	254	1.5	1.6	22.684	C
B-AD	44	11	106	0.411	43	0.6	0.7	57.290	F
A-BCD	66	16	481	0.137	66	0.2	0.2	8.665	A
A-B	21	5			21				
A-C	983	246			983				
D-A	74	19	526	0.141	74	0.2	0.2	8.067	A
D-BC	20	5	168	0.120	20	0.1	0.1	24.347	C
C-ABD	160	40	408	0.393	160	0.6	0.6	14.554	B
C-D	0	0			0				
C-A	701	175			701				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	208	52	490	0.425	211	1.6	0.8	13.181	B
B-AD	36	9	173	0.206	37	0.7	0.3	26.879	D
A-BCD	54	13	516	0.104	54	0.2	0.1	7.795	A
A-B	17	4			17				
A-C	803	201			803				
D-A	61	15	569	0.107	61	0.2	0.1	7.175	A
D-BC	17	4	225	0.073	17	0.1	0.1	17.284	C
C-ABD	131	33	455	0.288	132	0.6	0.4	11.175	B
C-D	0	0			0				
C-A	572	143			572				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	174	44	537	0.324	175	0.8	0.5	10.078	B
B-AD	30	7	219	0.136	30	0.3	0.2	19.137	C
A-BCD	45	11	542	0.083	45	0.1	0.1	7.256	A
A-B	14	4			14				
A-C	672	168			672				
D-A	51	13	600	0.085	51	0.1	0.1	6.647	A
D-BC	14	3	267	0.052	14	0.1	0.1	14.250	B
C-ABD	110	27	489	0.224	110	0.4	0.3	9.509	A
C-D	0	0			0				
C-A	479	120			479				

# 2039DS\_Mitigation, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		2.25	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.25	A

## 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	2039DS_Mitigation	AM	ONE HOUR	07:15	08:45	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 (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	905	100.000
B - Shorthorn Road		ONE HOUR	✓	79	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	683	100.000
D - Parish Road		ONE HOUR	✓	98	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0	19	832	54
	B - Shorthorn Road	43	0	34	2
	C - A140 Cromer Road (N)	623	59	0	0
	D - Parish Road	70	28	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
From	A - A140 Cromer Road (S)	0.00	0.02	0.92	0.01
	B - Shorthorn Road	0.55	0.00	0.43	0.01
	C - A140 Cromer Road (N)	0.91	0.09	0.00	0.01
	D - Parish Road	0.71	0.29	0.00	0.01

## Vehicle Mix

### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	1	1	1
B - Shorthorn Road	1	0	1	20
C - A140 Cromer Road (N)	3	0	0	0
D - Parish Road	0	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.010	1.009	1.0
B - Shorthorn Road	1.005	1.000	1.011	1.2
C - A140 Cromer Road (N)	1.025	1.003	1.000	1.0
D - Parish Road	1.002	1.000	1.002	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - A140 Cromer Road (S)	681	687
	B - Shorthorn Road	59	60
	C - A140 Cromer Road (N)	514	526
	D - Parish Road	74	74
07:30-07:45	A - A140 Cromer Road (S)	814	821
	B - Shorthorn Road	71	72
	C - A140 Cromer Road (N)	614	628
	D - Parish Road	88	88
07:45-08:00	A - A140 Cromer Road (S)	997	1005
	B - Shorthorn Road	87	88
	C - A140 Cromer Road (N)	752	769
	D - Parish Road	108	108
08:00-08:15	A - A140 Cromer Road (S)	997	1005
	B - Shorthorn Road	87	88
	C - A140 Cromer Road (N)	752	769
	D - Parish Road	108	108
08:15-08:30	A - A140 Cromer Road (S)	814	821
	B - Shorthorn Road	71	72
	C - A140 Cromer Road (N)	614	628
	D - Parish Road	88	88
08:30-08:45	A - A140 Cromer Road (S)	681	687
	B - Shorthorn Road	59	60
	C - A140 Cromer Road (N)	514	526
	D - Parish Road	74	74

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.10	10.57	0.1	B	31	47
B-AD	0.28	28.18	0.4	D	42	62
A-BCD	0.13	8.67	0.1	A	50	76
A-B					17	26
A-C					770	1155
D-A	0.15	8.66	0.2	A	64	96
D-BC	0.18	25.07	0.2	D	26	39
C-ABD	0.16	10.19	0.2	B	55	82
C-D					0	0
C-A					588	880



### Main Results for each time segment

#### 07:15 - 07:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	6	471	0.055	26	0.0	0.1	8.158	A
B-AD	34	9	292	0.117	34	0.0	0.1	14.094	B
A-BCD	41	10	540	0.077	41	0.0	0.1	7.272	A
A-B	14	4			14				
A-C	632	158			632				
D-A	52	13	578	0.091	52	0.0	0.1	6.855	A
D-BC	21	5	275	0.077	21	0.0	0.1	14.146	B
C-ABD	45	11	498	0.090	44	0.0	0.1	7.962	A
C-D	0	0			0				
C-A	481	120			481				

#### 07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	436	0.071	31	0.1	0.1	8.988	A
B-AD	41	10	244	0.166	40	0.1	0.2	17.848	C
A-BCD	49	12	515	0.096	49	0.1	0.1	7.802	A
A-B	17	4			17				
A-C	755	189			755				
D-A	63	16	546	0.115	63	0.1	0.1	7.462	A
D-BC	25	6	233	0.109	25	0.1	0.1	17.318	C
C-ABD	53	13	465	0.115	53	0.1	0.1	8.771	A
C-D	0	0			0				
C-A	575	144			575				

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	9	383	0.099	38	0.1	0.1	10.539	B
B-AD	50	12	179	0.278	49	0.2	0.4	27.920	D
A-BCD	60	15	480	0.126	60	0.1	0.1	8.662	A
A-B	21	5			21				
A-C	924	231			924				
D-A	77	19	499	0.154	77	0.1	0.2	8.534	A
D-BC	31	8	175	0.178	31	0.1	0.2	24.940	C
C-ABD	66	16	420	0.156	65	0.1	0.2	10.180	B
C-D	0	0			0				
C-A	704	176			704				

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	9	382	0.099	38	0.1	0.1	10.571	B
B-AD	50	12	179	0.278	50	0.4	0.4	28.182	D
A-BCD	60	15	479	0.126	60	0.1	0.1	8.671	A
A-B	21	5			21				
A-C	924	231			924				
D-A	77	19	498	0.154	77	0.2	0.2	8.558	A
D-BC	31	8	175	0.178	31	0.2	0.2	25.072	D
C-ABD	66	16	420	0.156	66	0.2	0.2	10.194	B
C-D	0	0			0				
C-A	704	176			704				

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	434	0.071	31	0.1	0.1	9.028	A
B-AD	41	10	245	0.166	41	0.4	0.2	17.992	C
A-BCD	49	12	514	0.096	50	0.1	0.1	7.817	A
A-B	17	4			17				
A-C	755	189			755				
D-A	63	16	545	0.115	63	0.2	0.1	7.489	A
D-BC	25	6	233	0.109	26	0.2	0.1	17.405	C
C-ABD	53	13	465	0.115	54	0.2	0.1	8.788	A
C-D	0	0			0				
C-A	575	144			575				

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	6	470	0.055	26	0.1	0.1	8.190	A
B-AD	34	9	292	0.117	34	0.2	0.1	14.172	B
A-BCD	41	10	540	0.077	41	0.1	0.1	7.286	A
A-B	14	4			14				
A-C	632	158			632				
D-A	52	13	577	0.091	53	0.1	0.1	6.880	A
D-BC	21	5	275	0.077	21	0.1	0.1	14.201	B
C-ABD	45	11	498	0.090	45	0.1	0.1	7.981	A
C-D	0	0			0				
C-A	481	120			481				

# 2039DS\_Mitigation, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Shorthorn Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Minor arm visibility to right	D - Parish Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J31	Cromer Road/ Parish Road/ Shorthorn Road	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		1.75	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.75	A

## 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	2039DS_Mitigation	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

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 Cromer Road (S)		ONE HOUR	✓	1144	100.000
B - Shorthorn Road		ONE HOUR	✓	66	100.000
C - A140 Cromer Road (N)		ONE HOUR	✓	798	100.000
D - Parish Road		ONE HOUR	✓	83	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0	13	1048	83
	B - Shorthorn Road	27	0	37	2
	C - A140 Cromer Road (N)	772	27	0	0
	D - Parish Road	82	0.84	0	0

### Proportions

From		To			
		A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
	A - A140 Cromer Road (S)	0.00	0.01	0.92	0.01
	B - Shorthorn Road	0.42	0.00	0.56	0.01
	C - A140 Cromer Road (N)	0.97	0.03	0.00	0.01
	D - Parish Road	0.99	0.01	0.00	0.01

## Vehicle Mix



### Heavy Vehicle Percentages

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	0	0	0	0
B - Shorthorn Road	0	0	0	1
C - A140 Cromer Road (N)	1	0	0	0
D - Parish Road	1	0	0	0

### Average PCU Per Veh

From	To			
	A - A140 Cromer Road (S)	B - Shorthorn Road	C - A140 Cromer Road (N)	D - Parish Road
A - A140 Cromer Road (S)	1.000	1.000	1.004	1.0
B - Shorthorn Road	1.000	1.000	1.000	1.0
C - A140 Cromer Road (N)	1.010	1.000	1.000	1.0
D - Parish Road	1.011	1.001	1.002	1.0

## Detailed Demand Data

### Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A140 Cromer Road (S)	861	864
	B - Shorthorn Road	49	49
	C - A140 Cromer Road (N)	601	607
	D - Parish Road	62	63
17:00-17:15	A - A140 Cromer Road (S)	1028	1032
	B - Shorthorn Road	59	59
	C - A140 Cromer Road (N)	718	724
	D - Parish Road	74	75
17:15-17:30	A - A140 Cromer Road (S)	1259	1263
	B - Shorthorn Road	72	72
	C - A140 Cromer Road (N)	879	887
	D - Parish Road	91	92
17:30-17:45	A - A140 Cromer Road (S)	1259	1263
	B - Shorthorn Road	72	72
	C - A140 Cromer Road (N)	879	887
	D - Parish Road	91	92
17:45-18:00	A - A140 Cromer Road (S)	1028	1032
	B - Shorthorn Road	59	59
	C - A140 Cromer Road (N)	718	724
	D - Parish Road	74	75
18:00-18:15	A - A140 Cromer Road (S)	861	864
	B - Shorthorn Road	49	49
	C - A140 Cromer Road (N)	601	607
	D - Parish Road	62	63

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.12	11.60	0.1	B	34	51
B-AD	0.29	46.47	0.4	E	27	40
A-BCD	0.21	10.21	0.3	B	77	115
A-B					12	17
A-C					965	1447
D-A	0.19	9.06	0.2	A	76	114
D-BC	0.01	37.61	0.0	E	0.77	1
C-ABD	0.08	10.55	0.1	B	24	38
C-D					0	0
C-A					715	1073

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	466	0.059	27	0.0	0.1	8.204	A
B-AD	22	5	234	0.093	21	0.0	0.1	16.919	C
A-BCD	63	16	517	0.122	62	0.0	0.1	7.919	A
A-B	10	2			10				
A-C	792	198			792				
D-A	62	16	573	0.109	62	0.0	0.1	7.109	A
D-BC	0.63	0.16	213	0.003	0.62	0.0	0.0	16.958	C
C-ABD	20	5	464	0.043	20	0.0	0.0	8.101	A
C-D	0	0			0				
C-A	587	147			587				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	421	0.079	33	0.1	0.1	9.276	A
B-AD	26	7	182	0.143	26	0.1	0.2	23.085	C
A-BCD	75	19	486	0.154	75	0.1	0.2	8.746	A
A-B	11	3			11				
A-C	945	236			945				
D-A	74	19	540	0.138	74	0.1	0.2	7.815	A
D-BC	0.75	0.19	164	0.005	0.75	0.0	0.0	22.033	C
C-ABD	24	6	425	0.056	24	0.0	0.1	8.978	A
C-D	0	0			0				
C-A	701	175			701				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	353	0.115	40	0.1	0.1	11.521	B
B-AD	32	8	109	0.292	31	0.2	0.4	45.688	E
A-BCD	92	23	445	0.207	92	0.2	0.3	10.182	B
A-B	14	3			14				
A-C	1158	289			1158				
D-A	91	23	493	0.185	91	0.2	0.2	9.041	A
D-BC	0.92	0.23	97	0.010	0.90	0.0	0.0	37.483	E
C-ABD	29	7	371	0.079	29	0.1	0.1	10.540	B
C-D	0	0			0				
C-A	858	215			858				

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	351	0.115	40	0.1	0.1	11.595	B
B-AD	32	8	109	0.292	32	0.4	0.4	46.473	E
A-BCD	92	23	445	0.207	92	0.3	0.3	10.208	B
A-B	14	3			14				
A-C	1158	289			1158				
D-A	91	23	493	0.185	91	0.2	0.2	9.057	A
D-BC	0.92	0.23	97	0.010	0.92	0.0	0.0	37.609	E
C-ABD	29	7	370	0.079	29	0.1	0.1	10.548	B
C-D	0	0			0				
C-A	858	215			858				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	419	0.079	33	0.1	0.1	9.344	A
B-AD	26	7	182	0.143	27	0.4	0.2	23.316	C
A-BCD	75	19	486	0.154	75	0.3	0.2	8.774	A
A-B	11	3			11				
A-C	945	236			945				
D-A	74	19	539	0.138	75	0.2	0.2	7.834	A
D-BC	0.75	0.19	164	0.005	0.77	0.0	0.0	22.091	C
C-ABD	24	6	425	0.056	24	0.1	0.1	8.987	A
C-D	0	0			0				
C-A	701	175			701				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	465	0.060	28	0.1	0.1	8.240	A
B-AD	22	5	234	0.093	22	0.2	0.1	16.987	C
A-BCD	63	16	516	0.122	63	0.2	0.1	7.947	A
A-B	10	2			10				
A-C	792	198			792				
D-A	62	16	573	0.109	63	0.2	0.1	7.130	A
D-BC	0.63	0.16	213	0.003	0.64	0.0	0.0	16.987	C
C-ABD	20	5	464	0.043	20	0.1	0.0	8.111	A
C-D	0	0			0				
C-A	587	147			587				

