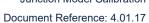# Norwich Western Link Transport Assessment

Appendix 17: Transport Assessment Junction Model Calibration

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Contents

1   Transport Assessment Junction Model Calibration

1.1.1   The calibration used for the Transport Assessment junction models is presented, setting out the differences between the observed and modelled queue lengths. Notes are provided setting out the reasoning for any manual calibration.

Table 1.1 A47/ Taverham Road/ Blind Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	A47 (E)	4	1	-3	1	0	-1
B	Blind Lane	1	0	-1	1	0	-1
C	A47 (W)	0	0	0	1	0	-1
D	Taverham Road RT	1	0	-1	1	0	-1
D	Taverham Road LT	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.2 Porter's Lane/ Norwich Road/ Fakenham Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	A47 (E)	1	0	-1	1	0	-1
B	Access Road RT Ahead	10	1	-9	5	0	-5
B	Access Road LT Ahead	0	1	0	0	1	0
C	A47 (W)	2	1	-1	1	1	0

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
D	Porter's Lane RT Ahead	2	0	-2	3	0	-3
D	Porter's Lane LT Ahead	0	0	0	0	0	0

Notes: For access road right turn, queue differences are higher than 5 PCUs, but no further adjustment can be done. This difference can be due to the natural fluctuation in the traffic flows. Video footage could provide further evidence.

Table 1.3 Fakenham Road/ The Street/ Marl Hill Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Fakenham Road (E)	0	0	0	0	0	0
B	Marl Hill Road RT	4	1	-3	5	1	-4
B	Marl Hill Road LT	1	0	0	0	0	0
C	Fakenham Road (W)	2	0	-2	2	0	-2
D	The Street	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.4 Marl Hill Road/ Church Street/ Morton Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Marl Hill Road	1	0	-1	1	0	-1
B	Morton Lane	1	0	-1	0	0	0
C	Church Street	0	0	0	0	0	0
D	Access Road	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.5 Barnham Broom Road/ Mattishall Road/ Berrys Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Mattishall Road (E)	0	0	0	0	0	0
B	Barnham Broom Road	1	0	-1	2	0	-2
C	Mattishall Road (W)	0	0	0	0	0	0
D	Berrys Lane LT & Ahead	2	0	-2	1	0	-1
D	Berrys Lane RT & Ahead	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.6 A47/ Norwich Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	A47 (W)	6	10	3	1	3	2
B	A47 (E)	0	4	4	0	4	4
C	Norwich Road	4	1	-3	2	0	-2

Notes: Direct intercept adjustments (PCU/hr) of 280 and 300 have been done in Arm A and Arm B respectively. It is recommended to recheck observed queue data with video recordings.

Table 1.7 A47/ Berrys Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	Berry's Lane RT	2	0	-1	2	0	-2
B	Berry's Lane LT	0	0	0	0	0	0
C	A47 (W)	1	0	-1	1	0	-1

Notes: Modelled queues have a good match with the observed queues.

Table 1.8 A47/ Wood Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	Wood Lane RT	8	1	-6	6	1	-5
B	Wood Lane LT	1	1	0	1	1	0
C	A47 (E)	3	1	-2	3	1	-2

Notes: For Wood lane right turn, queue differences are higher than 5 PCUs, but no further adjustment can be done. This difference can be due to the natural fluctuation in the traffic flows. Video footage could provide further evidence.

Table 1.9 A47/ Berrys Lane Left Turn

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	A47 LT Slip	0	0	0	0	0	0
C	Berry's Lane (S)	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.10 A47/ Wood Lane Left Turn

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	A47 LT Slip	0	0	0	0	0	0
C	Wood Lane (N)	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.11 Honingham Road/ Norwich Road/ Mill Road/ Bell Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Norwich Road	0	0	0	0	0	0
B	Bell Road RT & Ahead	1	0	-1	1	0	-1
B	Bell Road LT & Ahead	0	0	0	0	0	0
C	Mill Road	0	0	0	0	0	0
D	Honingham Road RT & Ahead	1	0	-1	1	0	-1
D	Honingham Road LT & Ahead	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.12 B1108/ Bell Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	Bell Road	1	0	-1	1	0	-1
C	B1108 (E) RT	1	0	-1	1	0	-1

Notes: Modelled queues have a good match with the observed queues.

Table 1.13 Bell Road/ Dark Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	Dark Lane	1	0	-1	1	0	-1
C	Bell Road (N) RT	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.14 Longwater Lane/ Dereham Road/ Bawburgh Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Longwater Lane LT Ahead (Ln 1)	16	0	-16	8	0	-8
A	Longwater Lane RT (Ln 2)	7	0	-7	8	0	-8
B	Dereham Road (E) LT Ahead (Ln 1)	22	0	-22	15	0	-14
B	Dereham Road (E) RT Ahead (Ln 2 & 3)	11	0	-11	9	0	-9
C	Bawburgh Lane (Ln 1 & 2)	5	0	-5	2	0	-2
D	Dereham Road (W) LT Ahead (Ln 1)	18	0	-18	14	0	-14
D	Dereham Road (W) RT Ahead (Ln 2 & 3)	16	0	-16	11	0	-11

Notes: Fixed signal timings provided from the LHA input into the model resulted in significant difference from the observed situation.

Potential difference from 'normal' peak situation in observed data due to difference in fixed signal timings provided from the LHA.

Table 1.15 NDR Fakenham Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Broadland Northway	1	0	-1	2	0	-1
B	A1067 Fakenham Road (E)	1	0	0	1	0	-1
C	A1067 Fakenham Road (W)	0	1	1	0	1	1

Notes: Modelled queues have a good match with the observed queues.

Table 1.16 Fakenham Road/ Beech Avenue/ Fir Covert Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Fakenham Road (W)	7	3	-4	1	0	-1
B	Fir Covert Road RT	7	0	-7	4	0	-4
B	Fir Covert Road LT	0	1	1	0	1	1
C	Fakenham Road (E)	3	3	0	1	2	1
D	Beech Avenue RT	0	0	0	0	0	0
D	Beech Avenue LT	3	1	-3	0	1	1

Notes: For Fir Covert Road, Right turn queues are higher than Right turn traffic. Video footage is needed for further evidence.

Table 1.17 NDR Fir Covert Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Fir Covert Road (N)	2	0	-2	2	0	-1
B	Broadland Northway (E)	2	0	-1	1	0	-1
C	Fir Covert Road (S)	3	0	-2	3	0	-3
D	Broadland Northway (W)	1	0	-1	1	0	-1

Notes: Modelled queues have a good match with the observed queues.

Table 1.18 Fakenham Road/ Sandy Lane/ Breck Farm Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Fakenham Road (E)	2	0	-2	1	0	-1
B	Sandy Lane RT Ahead	6	0	-6	6	0	-5
B	Sandy Lane LT Ahead	1	1	0	1	1	0
C	Fakenham Road (W)	3	1	-2	3	1	-2
D	Breck Farm Lane	1	0	-1	0	0	0

Notes: For Sandy lanr right turn, queue differences are higher than 5 PCUs, but no further adjustment can be done. This difference can be due to the natural fluctuation in the traffic flows. Video footage could provide further evidence.

Table 1.19 NDR Reepham Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Reepham Road (N)	3	0	-3	2	0	-2
B	Broadland Northway (E)	1	0	-1	0	0	0
C	Reepham Road (S)	4	0	-3	2	0	-1
D	Broadland Northway (W)	1	0	-1	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.20 - OS NDR Brewery Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Drayton Lane (N)	15	11	-4	7	1	-6
B	Broadland Northway (E)	7	1	-6	3	1	-2
C	Drayton Lane (S)	8	2	-7	8	3	-5
D	Broadland Northway (W)	4	0	-4	2	0	-1

Notes: Direct intercept adjustment (PCU/hr) of -390 and - 400 has been done in Arms A and C. Video footage could provide further evidence.

Table 1.21 - TA NDR Brewery Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Drayton Lane (N)	15	12	-3	7	1	-6
B	Broadland Northway (E)	7	1	-6	3	1	-2
C	Drayton Lane (S)	8	2	-6	8	4	-4
D	Broadland Northway (W)	4	0	-4	2	0	-1

Notes: Direct intercept adjustment (PCU/hr) of -200 and - 400 has been done in Arms A and C. Video footage could provide further evidence.

Table 1.22 - TA A140 Cromer Road/ Holt Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	A140 North	4	1	-3	3	1	-3
C	A140 South	0	0	0	0	1	1
D	A1270 Off slip	4	1	-3	5	0	-4

Notes: Modelled queues have a good match with the observed queues.

Table 1.23 - TA Fakenham Road/ Sandy Lane/ Breck Farm Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Connector Link	0	1	1	0	1	1
B	EB On Slip	6	1	-5	3	1	-2
C	A140 (S)	2	1	-1	1	2	1
D	Access Road	0	0	0	0	0	0
E	EB Off slip	0	0	0	0	0	0

Notes: Direct intercept adjustment (PCU/hr) of -450 has been done in Arm B. Modelled queues have a good match with the observed queues.

Table 1.24 Weston Road/ Honingham Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	Honingham Road	0	0	0	1	0	0
C	Weston Road (W)	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.25 The Street/ Field Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	The Street (E)	0	0	0	0	0	0
B	Field Road	0	0	0	0	0	0
C	Weston Road	0	0	0	0	0	0
D	The Street (W)	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.26 Berrys Lane/ Dereham Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	Dereham Road	0	0	0	0	0	0
C	Berrys Lane (S)	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.27 Honingham Road/ Paddys Lane/ Weston Green Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Honingham Road	0	0	0	0	0	0
B	Weston Green Road (E)	0	0	0	0	0	0
C	Paddy's Lane	0	0	0	0	0	0
D	Weston Green Road (W)	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.28 A1067 Fakenham Road/ Old Fakenham Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	A1067 Fakenham Road (N)	0	0	0	0	0	0
B	Old Fakenham Road Slip Road	1	0	-1	0	0	0
C	A1067 Fakenham Road (S)	1	0	-1	1	0	-1
D	Access Road	0	0	0	0	0	0
A	A1067 Fakenham Road (N)	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.29 A1067 Fakenham Road/ Old Fakenham Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	Old Fakenham Road Slip Road	0	0	0	0	0	0
C	Old Fakenham Road (N)	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.30 A1067 Fakenham Road/ Old Fakenham Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
B	Old Fakenham Road (N)	2	0	-2	1	0	-1
C	A1067 Fakenham Road (N)	0	0	0	0	1	1

Notes: Modelled queues have a good match with the observed queues.

Table 1.31 A47 / Dereham Road / Church Lane

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Church Lane	7	3	-4	3	0	-2
B	A47 (E)	1	1	0	1	1	0
C	Dereham Road	2	0	-2	2	0	-2
D	A47 (W)	1	2	0	2	1	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.32 Mill Lane/ The Street/ Taverham Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	The Street (E)	0	0	0	0	0	0
B	Taverham Road	2	1	-1	2	1	-2
C	The Street (W)	0	0	0	0	0	0
D	Mill Lane	1	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.33 Haveringland Road/ Shorthorn Road/ The Street

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	Shorthorn Road	0	0	0	0	0	0
B	Haveringland Road (S)	1	0	-1	1	0	-1
C	The Street	0	0	0	0	0	0
D	Haveringland Road (N)	1	0	-1	0	0	0

Notes: Modelled queues have a good match with the observed queues.

Table 1.34 Cromer Road/ Parish Road/ Shortthorn Road

Arm	Description	AM Peak (7:30-8:30) Observed (PCU)	AM Peak (7:30-8:30) Modelled (PCU)	AM Peak (7:30-8:30) Difference (PCU)	PM Peak (17:00-18:00) Observed (PCU)	PM Peak (17:00-18:00) Modelled (PCU)	PM Peak (17:00-18:00) Difference (PCU)
A	A140 Cromer Road (S)	0	0	0	1	0	0
B	Shortthorn Road RT	2	0	-2	2	0	-1
B	Shortthorn Road LT	0	0	0	0	0	0
C	A140 Cromer Road (N)	1	0	0	0	0	0
D	Parish Road RT	2	0	-2	1	0	-1
D	Parish Road LT	0	0	0	0	0	0

Notes: Modelled queues have a good match with the observed queues.