TRANSYT 14

Version: 14.1.3.331 [17-10-13 (Interim)]

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Last run: 09/07/2014 12:13:44
Analysis Set used for last run: A1 - (untitled)

Filename: Shaw Waterloo 2019 AM Peak DTPC Scen 3 Dev plus SBA Dev No Ped Stage.t14
Path: A:\Project_008_02 Clitheroe DTPC\5 July 2014\TRANSYT
Report generation date: 09/07/2014 12:15:10

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	07/12/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Administrator
Description	

Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units
kph	m	mpg	l/h

Network Diagrams

A1 - (untitled) : D1 - (untitled) *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	Network Within Capacity
08:00	70	15.33	86.69	11	0	0	✓

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
(untitled)				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Time Segment Length (min)
70	60

Signals Options

Start Displacement (s)	End Displacement (s)
2	3

Traffic Options

Traffic Model	Flow Scaling Factor (%)	Cruise Times Or Speeds
Quick PDM	100	Cruise Speeds

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level
✓	Hill Climb (Fast)	Offsets And Green Splits

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Links

Links

Link	Name	Description	Traffic Node	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Is Pedestrian	Is Minor Shared	Major Link
11	Shawbridge Street		1	100.00	[QuickPDM]	✓	1864	✓	1	11					
12	Waterloo Road s		1	100.00	[QuickPDM]	✓	1895	✓	1	12		✓			
13	Waterloo Road n		1	100.00	[QuickPDM]	✓	1844	✓	1	13		✓			
Out11	Shawbridge Street		1	100.00	[QuickPDM]	✓	1864	✓	1	Out11					
Out12	Waterloo Road sb		1	100.00	[QuickPDM]	✓	1895	✓	1	Out12					
Out13	Waterloo Road nb		1	100.00	[QuickPDM]	✓	1844	✓	1	Out13					

Modelling

Link	Stop Weighting (%)	Delay Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit
11	100	100		0.00	
12	100	100		0.00	
13	100	100		0.00	
Out11	100	100		0.00	
Out12	100	100		0.00	
Out13	100	100		0.00	

Flows

Link	Total Flow (On Link) (PCU/hr)	Upstream Flow (Into Link) (PCU/hr)
11	554	554
12	475	475
13	854	854
Out11	518	518
Out12	664	664
Out13	701	701

Sources - default sources for entry links

Link	Entry Source Traffic Type	Entry Cruise Time (seconds)	Entry Cruise Speed (kph)	Entry Profile Type
11	Normal	12.00	30.00	FLAT
12	Normal	12.00	30.00	FLAT
13	Normal	12.00	30.00	FLAT

Sources - sources for internal links

Link	Source	Source Type	Source Link	Source Traffic Type	Source Flow (PCU/hr)	Cruise Time (seconds)	Cruise Speed (kph)
Out11	1	Link	12	Normal	164	12.00	30.00
Out11	2	Link	13	Normal	354	12.00	30.00
Out12	1	Link	11	Normal	164	12.00	30.00
Out12	2	Link	13	Normal	500	12.00	30.00
Out13	1	Link	11	Normal	390	12.00	30.00
Out13	2	Link	12	Normal	311	12.00	30.00

Give Way Data

Link	Same As Major Link	Percentage Opposed (%)	Opposed By Conflict 1 Only (%)	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Use Step-wise Opposed Turn Model	Number Of Storage Spaces	Radius Of Turn (m)
12	✓	40	40		1895	✓	1	8.00
13	✓	100	0	0	1844			

Give Way Data - Conflicts

Link	Conflict	Description	Controlling Type	Controlling Link	Percentage Opposing (%)	Slope Coefficient	Upstream Signals Visible	Conflict Shift	Conflict Duration
12	1		Link	13	40		✓	0	0

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	164	390
	2	164	0	311
	3	354	500	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	1	(untitled)	11	Out11	554	554	0	0	518	518	0	0
1	2	(untitled)	12	Out12	475	475	0	0	664	664	0	0
1	3	(untitled)	13	Out13	854	854	0	0	701	701	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		11,Out13	390
1	2		11,Out12	164
1	3		12,Out13	311
1	4		12,Out11	164
1	5		13,Out11	354
1	6		13,Out12	500

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal			390
1	2	✓	Normal			164
1	3	✓	Normal			311
1	4	✓	Normal			164
1	5	✓	Normal			354
1	6	✓	Normal			500

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage
1	1	✓	1	12,13,Out13,Out11,Out12
1	2	✓	2	11,Out13,Out12

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	12,13,Out13,Out11,Out12	63	5	12
1	2	✓	2	11,Out13,Out12	35	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	11	1	2	1	5	0
1	12	1	1	2	5	0
1	13	1	1	2	5	0
1	Out11	1	1	2	0	0
1	Out12	1	1	1	7	7
1	Out13	1	1	1	7	7

Stage Timings (TRANSYT 12 timings)

70s cycle time; 70 steps

Controller Stream	Number of Stages	Stage 1	Stage 2
1	2	63	35

Link Green Times

Link	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
					Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
11	1	1	11	0	40	63	23									
12	1	1	12	0	68	35	37									
13	1	1	13	0	68	35	37									
Out11	1	1	Out11	0	63	35	42									
Out12	1	1	Out12	0	0	0	70									
Out13	1	1	Out13	0	0	0	70									

Final Prediction Table

Link Results

				SIGNALS		FLOWS		PERFORMANCE			PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Link	Name	Major Link	Traffic Node	Controller Stream	Phase	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Delay Weighting (%)	Stop Weighting (%)	Cost Of Penalties (£ per hr)	P.I.
11	Shawbridge Street		1	1	11	554	1864	23.00	87	4	50.47	38.47	113.05	12.61	100	100	0.00	91.91
12	Waterloo Road s		1	1	12	475	1207	37.00	73	24	32.06	20.06	86.61	8.33	100	100	0.00	42.75
13	Waterloo Road n		1	1	13	854	1844	37.00	85	5	35.63	23.63	94.50	16.37	100	100	0.00	89.72
Out11	Shawbridge Street		1	1	Out11	518	1864	42.00	45	99	18.60	6.60	25.17	2.54	100	100	0.00	15.11
Out12	Waterloo Road sb		1	1	Out12	664	1895	70.00	35	157	12.51	0.51	0.00	0.09	100	100	0.00	1.34
Out13	Waterloo Road nb		1	1	Out13	701	1844	70.00	38	137	12.60	0.60	0.00	0.12	100	100	0.00	1.65

Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
TOTAL	376.60	27.89	13.50	9.01	6.32	217.72	24.76	0.00	242.49
BUSES									
TRAMS									
OTHER (NORMAL)	376.60	27.89	13.50	9.01	6.32	217.72	24.76	0.00	242.49

- *B = at least one source for this link carries buses*
- *T = at least one source for this link carries trams*
- *P = this link is a pedestrian link*
- *< = adjusted flow warning (upstream links are over-saturated)*
- *! = DOS threshold exceeded*
- *f = average saturation flow for flared link*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

Link Results

Link Results: Summary

Time Segment	Link	Major Link	Calculated Flow Entering LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	11		554	0		1864	639	87		4	23.00	24.00	0.00	91.91
08:00-09:00	12		475	0		1207	655	73		24	37.00	38.00	0.00	42.75
08:00-09:00	13		854	0		1844	1001	85		5	37.00	38.00	0.00	89.72
08:00-09:00	Out11		518	0		1864	1145	45		99	42.00	43.00	0.00	15.11
08:00-09:00	Out12		664	0		1895	1895	35		157	70.00	70.00	0.00	1.34
08:00-09:00	Out13		701	0		1844	1844	38		137	70.00	70.00	0.00	1.65

Link Results: Stops And Delays

Time Segment	Link	Major Link	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	11		12.00	D	38.47	3.31	84.06	113.05	499.93	126.38	7.85
08:00-09:00	12		12.00	C	20.06	1.71	37.59	86.61	364.30	47.10	5.16
08:00-09:00	13		12.00	C	23.63	3.23	79.60	94.50	689.20	117.81	10.12
08:00-09:00	Out11		12.00	A	6.60	0.76	13.48	25.17	120.84	9.55	1.63
08:00-09:00	Out12		12.00	A	0.51	0.00	1.34	0.00	0.00	0.00	0.00
08:00-09:00	Out13		12.00	A	0.60	0.00	1.65	0.00	0.00	0.00	0.00

Link Results: Queues And Blocking

Time Segment	Link	Major Link	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)
08:00-09:00	11		12.61	17.52	0.00	0.00	0.00
08:00-09:00	12		8.33	17.81	0.00	0.00	0.00
08:00-09:00	13		16.37	17.33	0.00	0.00	0.00
08:00-09:00	Out11		2.54	17.52	0.00	0.00	0.00
08:00-09:00	Out12		0.09	17.81	0.00	0.00	0.00
08:00-09:00	Out13		0.12	17.33	0.00	0.00	0.00

Link Results: Journey Times

Time Segment	Link	Major Link	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	11		55.40	7.77	7.13	50.47
08:00-09:00	12		47.50	4.23	11.23	32.06
08:00-09:00	13		85.40	8.45	10.10	35.63
08:00-09:00	Out11		51.80	2.68	19.36	18.60
08:00-09:00	Out12		66.40	2.31	28.77	12.51
08:00-09:00	Out13		70.10	2.45	28.58	12.60

Network Results

Run Summary

Time Segment	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	Network Within Capacity
08:00-09:00	08:00	70	15.33	86.69	11	0	0	✓

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	3766	0		0	0	87		4	279.00	283.00	0.00	242.49

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	12.00	B	14.66	9.01	217.72	52.45	1674.27	300.83	24.76

Network Results: Queues And Blocking

Time Segment	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)
08:00-09:00	0.00	105.34	0.00	0.00	0.00

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	376.60	27.89	13.50	26.66

TRANSYT 14

Version: 14.1.3.331 [17-10-13 (Interim)]

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Last run: 09/07/2014 12:16:43
Analysis Set used for last run: A1 - (untitled)

Filename: Shaw Waterloo 2019 PM Peak DTPC Scen 3 Dev plus SBA Dev No Ped Stage.t14
Path: A:\Project_008_02 Clitheroe DTPC\5 July 2014\TRANSYT
Report generation date: 09/07/2014 12:16:48

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	07/12/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Administrator
Description	

Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units
kph	m	mpg	l/h

Network Diagrams

A1 - (untitled) : D1 - (untitled) *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	Network Within Capacity
08:00	70	16.39	89.25	13	0	0	✓

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
(untitled)				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Time Segment Length (min)
70	60

Signals Options

Start Displacement (s)	End Displacement (s)
2	3

Traffic Options

Traffic Model	Flow Scaling Factor (%)	Cruise Times Or Speeds
Quick PDM	100	Cruise Speeds

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level
✓	Hill Climb (Fast)	Offsets And Green Splits

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Links

Links

Link	Name	Description	Traffic Node	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Is Pedestrian	Is Minor Shared	Major Link
11	Shawbridge Street		1	100.00	[QuickPDM]	✓	1864	✓	1	11					
12	Waterloo Road s		1	100.00	[QuickPDM]	✓	1895	✓	1	12		✓			
13	Waterloo Road n		1	100.00	[QuickPDM]	✓	1844	✓	1	13		✓			
Out11	Shawbridge Street		1	100.00	[QuickPDM]	✓	1864	✓	1	Out11					
Out12	Waterloo Road sb		1	100.00	[QuickPDM]	✓	1895	✓	1	Out12					
Out13	Waterloo Road nb		1	100.00	[QuickPDM]	✓	1844	✓	1	Out13					

Modelling

Link	Stop Weighting (%)	Delay Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit
11	100	100		0.00	
12	100	100		0.00	
13	100	100		0.00	
Out11	100	100		0.00	
Out12	100	100		0.00	
Out13	100	100		0.00	

Flows

Link	Total Flow (On Link) (PCU/hr)	Upstream Flow (Into Link) (PCU/hr)
11	492	492
12	492	492
13	964	964
Out11	555	555
Out12	761	761
Out13	632	632

Sources - default sources for entry links

Link	Entry Source Traffic Type	Entry Cruise Time (seconds)	Entry Cruise Speed (kph)	Entry Profile Type
11	Normal	12.00	30.00	FLAT
12	Normal	12.00	30.00	FLAT
13	Normal	12.00	30.00	FLAT

Sources - sources for internal links

Link	Source	Source Type	Source Link	Source Traffic Type	Source Flow (PCU/hr)	Cruise Time (seconds)	Cruise Speed (kph)
Out11	**1**	Link	12	Normal	164	12.00	30.00
Out11	**2**	Link	13	Normal	391	12.00	30.00
Out12	**1**	Link	11	Normal	188	12.00	30.00
Out12	**2**	Link	13	Normal	573	12.00	30.00
Out13	**1**	Link	11	Normal	304	12.00	30.00
Out13	**2**	Link	12	Normal	328	12.00	30.00

Give Way Data

Link	Same As Major Link	Percentage Opposed (%)	Opposed By Conflict 1 Only (%)	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Use Step-wise Opposed Turn Model	Number Of Storage Spaces	Radius Of Turn (m)
12	✓	40	40		1895	✓	1	8.00
13	✓	100	0	0	1844			

Give Way Data - Conflicts

Link	Conflict	Description	Controlling Type	Controlling Link	Percentage Opposing (%)	Slope Coefficient	Upstream Signals Visible	Conflict Shift	Conflict Duration
12	**1**		Link	13	40		✓	0	0

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	188	304
	2	164	0	328
	3	391	573	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	1	(untitled)	11	Out11	492	492	0	0	555	555	0	0
1	2	(untitled)	12	Out12	492	492	0	0	761	761	0	0
1	3	(untitled)	13	Out13	964	964	0	0	632	632	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		11,Out13	304
1	2		11,Out12	188
1	3		12,Out13	328
1	4		12,Out11	164
1	5		13,Out11	391
1	6		13,Out12	573

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal			304
1	2	✓	Normal			188
1	3	✓	Normal			328
1	4	✓	Normal			164
1	5	✓	Normal			391
1	6	✓	Normal			573

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage
1	1	✓	1	12,13,Out13,Out11,Out12
1	2	✓	2	11,Out13,Out12

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	12,13,Out13,Out11,Out12	60	5	12
1	2	✓	2	11,Out13,Out12	35	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	11	1	2	1	5	0
1	12	1	1	2	5	0
1	13	1	1	2	5	0
1	Out11	1	1	2	0	0
1	Out12	1	1	1	10	10
1	Out13	1	1	1	10	10

Stage Timings (TRANSYT 12 timings)

70s cycle time; 70 steps

Controller Stream	Number of Stages	Stage 1	Stage 2
1	2	60	35

Link Green Times

Link	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
					Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
11	1	1	11	0	40	60	20									
12	1	1	12	0	65	35	40									
13	1	1	13	0	65	35	40									
Out11	1	1	Out11	0	60	35	45									
Out12	1	1	Out12	0	0	0	70									
Out13	1	1	Out13	0	0	0	70									

Final Prediction Table

Link Results

				SIGNALS		FLOWS		PERFORMANCE			PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Link	Name	Major Link	Traffic Node	Controller Stream	Phase	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Delay Weighting (%)	Stop Weighting (%)	Cost Of Penalties (£ per hr)	P.I.
11	Shawbridge Street		1	1	11	492	1864	20.00	88	2	56.49	44.49	120.01	11.92	100	100	0.00	93.75
12	Waterloo Road s		1	1	12	492	1177	40.00	71	26	29.34	17.34	80.00	7.98	100	100	0.00	38.58
13	Waterloo Road n		1	1	13	964	1844	40.00	89	1	37.47	25.47	99.34	19.52 +	100	100	0.00	108.85
Out11	Shawbridge Street		1	1	Out11	555	1864	45.00	45	99	17.80	5.80	24.80	2.68	100	100	0.00	14.41
Out12	Waterloo Road sb		1	1	Out12	761	1895	70.00	40	124	12.64	0.64	0.00	0.13	100	100	0.00	1.91
Out13	Waterloo Road nb		1	1	Out13	632	1844	70.00	34	163	12.51	0.51	0.00	0.09	100	100	0.00	1.27

Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
TOTAL	389.60	29.37	13.26	8.76	7.63	232.71	26.07	0.00	258.78
BUSES									
TRAMS									
OTHER (NORMAL)	389.60	29.37	13.26	8.76	7.63	232.71	26.07	0.00	258.78

- *B = at least one source for this link carries buses*
- *T = at least one source for this link carries trams*
- *P = this link is a pedestrian link*
- *< = adjusted flow warning (upstream links are over-saturated)*
- *! = DOS threshold exceeded*
- *f = average saturation flow for flared link*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

Link Results

Link Results: Summary

Time Segment	Link	Major Link	Calculated Flow Entering LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	11		492	0		1864	559	88		2	20.00	21.00	0.00	93.75
08:00-09:00	12		492	0		1177	689	71		26	40.00	41.00	0.00	38.58
08:00-09:00	13		964	0		1844	1080	89		1	40.00	41.00	0.00	108.85
08:00-09:00	Out11		555	0		1864	1225	45		99	45.00	46.00	0.00	14.41
08:00-09:00	Out12		761	0		1895	1895	40		124	70.00	70.00	0.00	1.91
08:00-09:00	Out13		632	0		1844	1844	34		163	70.00	70.00	0.00	1.27

Link Results: Stops And Delays

Time Segment	Link	Major Link	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	11		12.00	D	44.49	3.19	86.35	120.01	452.25	138.21	7.40
08:00-09:00	12		12.00	B	17.34	1.49	33.65	80.00	349.61	44.00	4.94
08:00-09:00	13		12.00	C	25.47	3.37	96.84	99.34	788.17	169.46	12.01
08:00-09:00	Out11		12.00	A	5.80	0.71	12.69	24.80	128.02	9.59	1.73
08:00-09:00	Out12		12.00	A	0.64	0.00	1.91	0.00	0.00	0.00	0.00
08:00-09:00	Out13		12.00	A	0.51	0.00	1.27	0.00	0.00	0.00	0.00

Link Results: Queues And Blocking

Time Segment	Link	Major Link	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)
08:00-09:00	11		11.92	17.52	0.00	0.00	0.00
08:00-09:00	12		7.98	17.81	0.00	0.00	0.00
08:00-09:00	13		19.52	17.33	0.14	0.00	0.00
08:00-09:00	Out11		2.68	17.52	0.00	0.00	0.00
08:00-09:00	Out12		0.13	17.81	0.00	0.00	0.00
08:00-09:00	Out13		0.09	17.33	0.00	0.00	0.00

Link Results: Journey Times

Time Segment	Link	Major Link	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	11		49.20	7.72	6.37	56.49
08:00-09:00	12		49.20	4.01	12.27	29.34
08:00-09:00	13		96.40	10.03	9.61	37.47
08:00-09:00	Out11		55.50	2.74	20.23	17.80
08:00-09:00	Out12		76.10	2.67	28.49	12.64
08:00-09:00	Out13		63.20	2.20	28.78	12.51

Network Results

Run Summary

Time Segment	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	Network Within Capacity
08:00-09:00	08:00	70	16.39	89.25	13	0	0	✓

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	3896	0		0	0	89		1	285.00	289.00	0.00	258.78

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	12.00	B	15.14	8.76	232.71	53.37	1718.06	361.26	26.07

Network Results: Queues And Blocking

Time Segment	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)
08:00-09:00	0.00	105.34	0.00	0.00	0.00

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	389.60	29.37	13.26	27.14

TRANSYT 14

Last run: 09/07/2014 12:24:51
Analysis Set used for last run: A1 - (untitled)

Filename: Shawt Waterloo Rd 2019 AM Scen 3 DTPC Dev plus SBA Dev Ped every Other.t14
Path: A:\Project_008_02 Clitheroe DTPC\5 July 2014\TRANSYT
Report generation date: 09/07/2014 12:28:43

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	07/12/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Administrator
Description	

Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units
kph	m	mpg	l/h

Network Diagrams

A1 - (untitled) : D1 - (untitled) *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	Network Within Capacity
08:00	200	31.57	89.93	13	0	0	✓

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
(untitled)				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Time Segment Length (min)
200	60

Signals Options

Start Displacement (s)	End Displacement (s)
2	3

Traffic Options

Traffic Model	Flow Scaling Factor (%)	Cruise Times Or Speeds
Quick PDM	100	Cruise Speeds

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level
✓	Hill Climb (Fast)	Offsets And Green Splits

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Links

Links

Link	Name	Description	Traffic Node	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Is Pedestrian	Is Minor Shared	Major Link
11	Shawbridge Street		1	100.00	[QuickPDM]	✓	1864	✓	1	11					
12	Waterloo Road s		1	100.00	[QuickPDM]	✓	1895	✓	1	12		✓			
13	Waterloo Road n		1	100.00	[QuickPDM]	✓	1844	✓	1	13		✓			
Out11	Shawbridge Street		1	100.00	[QuickPDM]	✓	1864	✓	1	Out11					
Out12	Waterloo Road sb		1	100.00	[QuickPDM]	✓	1895	✓	1	Out12					
Out13	Waterloo Road nb		1	100.00	[QuickPDM]	✓	1844	✓	1	Out13					
Ped12	(untitled)		1	100.00	[QuickPDM]	✓	10000	✓	1	PED12			✓		

Modelling

Link	Stop Weighting (%)	Delay Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit
11	100	100		0.00	
12	100	100		0.00	
13	100	100		0.00	
Out11	100	100		0.00	
Out12	100	100		0.00	
Out13	100	100		0.00	
Ped12	100	100		0.00	

Flows

Link	Total Flow (On Link) (PCU/hr)	Upstream Flow (Into Link) (PCU/hr)
11	554	554
12	475	475
13	854	854
Out11	518	518
Out12	664	664
Out13	701	701
Ped12	50	50

Sources - default sources for entry links

Link	Entry Source Traffic Type	Entry Cruise Time (seconds)	Entry Cruise Speed (kph)	Entry Profile Type
11	Normal	12.00	30.00	FLAT
12	Normal	12.00	30.00	FLAT
13	Normal	12.00	30.00	FLAT
Ped12	Normal	12.00	30.00	FLAT

Sources - sources for internal links

Link	Source	Source Type	Source Link	Source Traffic Type	Source Flow (PCU/hr)	Cruise Time (seconds)	Cruise Speed (kph)
Out11	**1**	Link	12	Normal	164	12.00	30.00
Out11	**2**	Link	13	Normal	354	12.00	30.00
Out12	**1**	Link	11	Normal	164	12.00	30.00
Out12	**2**	Link	13	Normal	500	12.00	30.00
Out13	**1**	Link	11	Normal	390	12.00	30.00
Out13	**2**	Link	12	Normal	311	12.00	30.00

Give Way Data

Link	Same As Major Link	Percentage Opposed (%)	Opposed By Conflict 1 Only (%)	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Use Step-wise Opposed Turn Model	Number Of Storage Spaces	Radius Of Turn (m)
12	✓	40	40		1895	✓	1	8.00
13	✓	100	0	0	1844			

Give Way Data - Conflicts

Link	Conflict	Description	Controlling Type	Controlling Link	Percentage Opposing (%)	Slope Coefficient	Upstream Signals Visible	Conflict Shift	Conflict Duration
12	**1**		Link	13	40		✓	0	0

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	164	390
	2	164	0	311
	3	354	500	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	1	(untitled)	11	Out11	554	554	0	0	518	518	0	0
1	2	(untitled)	12	Out12	475	475	0	0	664	664	0	0
1	3	(untitled)	13	Out13	854	854	0	0	701	701	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		11,Out13	390
1	2		11,Out12	164
1	3		12,Out13	311
1	4		12,Out11	164
1	5		13,Out11	354
1	6		13,Out12	500

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal			390
1	2	✓	Normal			164
1	3	✓	Normal			311
1	4	✓	Normal			164
1	5	✓	Normal			354
1	6	✓	Normal			500

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage
1	1	✓	1	12,13,Out13,Out11,Out12
1	2	✓	2	11,Out13,Out12
1	3	✓	3	PED12
1	4	✓	4	Out13,13,Out12,Out11,12
1	5	✓	5	11,Out12,Out13

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	12,13,Out13,Out11,Out12	180	5	12
1	2	✓	2	11,Out13,Out12	44	5	12
1	3	✓	3	PED12	105	5	10
1	4	✓	4	Out13,13,Out12,Out11,12	115	9	16
1	5	✓	5	11,Out12,Out13	166	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	11	1	2	3	5	0
1	11	2	5	1	5	0
1	12	1	4	5	9	0
1	12	2	1	2	5	0
1	13	1	4	5	9	0
1	13	2	1	2	5	0
1	Out11	1	4	5	0	0
1	Out11	2	1	2	0	0
1	Out12	1	4	3	0	0
1	Out13	1	4	3	0	0
1	PED12	1	3	4	5	0

Stage Timings (TRANSYT 12 timings)

200s cycle time; 200 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
1	5	180	44	105	115	166

Link Green Times

Link	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
					Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
11	1	1	11	0	49	105	56	171	180	9						
12	1	1	12	0	124	166	42	185	44	59						
13	1	1	13	0	124	166	42	185	44	59						
Out11	1	1	Out11	0	115	166	51	180	44	64						
Out12	1	1	Out12	0	115	105	190									
Out13	1	1	Out13	0	115	105	190									
Ped12	1	1	PED12	0	110	115	5									

Final Prediction Table

Link Results

				SIGNALS		FLOWS		PERFORMANCE			PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Link	Name	Major Link	Traffic Node	Controller Stream	Phase	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Delay Weighting (%)	Stop Weighting (%)	Cost Of Penalties (£ per hr)	P.I.
11	Shawbridge Street		1	1	11	554	1864	65.00	89	1	83.84	71.84	103.36	27.04 +	100	100	0.00	164.16
12	Waterloo Road s		1	1	12	475	1171	101.00	79	14	55.45	43.45	89.64	18.17 +	100	100	0.00	86.74
13	Waterloo Road n		1	1	13	854	1844	101.00	90	0	62.91	50.91	96.36	35.69 +	100	100	0.00	181.80
Out11	Shawbridge Street		1	1	Out11	518	1864	115.00	48	89	19.36	7.36	22.62	4.39	100	100	0.00	16.50
Out12	Waterloo Road sb		1	1	Out12	664	1895	190.00	37	145	12.69	0.69	2.07	0.84	100	100	0.00	1.97
Out13	Waterloo Road nb		1	1	Out13	701	1844	190.00	40	126	12.97	0.97	4.87	2.04	100	100	0.00	3.11
Ped12 P	(untitled)		1	1	PED12	50	10000	5.00	17	440	107.77	95.77	0.00	2.71	100	100	0.00	18.89

Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
TOTAL	381.60	44.29	8.62	22.89	8.68	448.26	24.91	0.00	473.17
BUSES									
TRAMS									
OTHER (NORMAL)	381.60	44.29	8.62	22.89	8.68	448.26	24.91	0.00	473.17

- *B = at least one source for this link carries buses*
- *T = at least one source for this link carries trams*
- *P = this link is a pedestrian link*
- *< = adjusted flow warning (upstream links are over-saturated)*
- *! = DOS threshold exceeded*
- *f = average saturation flow for flared link*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

Link Results

Link Results: Summary

Time Segment	Link	Major Link	Calculated Flow Entering LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	11		554	0		1864	624	89		1	65.00	67.00	0.00	164.16
08:00-09:00	12		475	0		1171	603	79		14	101.00	103.00	0.00	86.74
08:00-09:00	13		854	0		1844	950	90		0	101.00	103.00	0.00	181.80
08:00-09:00	Out11		518	0		1864	1090	48		89	115.00	117.00	0.00	16.50
08:00-09:00	Out12		664	0		1895	1810	37		145	190.00	191.00	0.00	1.97
08:00-09:00	Out13		701	0		1844	1761	40		126	190.00	191.00	0.00	3.11
08:00-09:00	Ped12		50	0		10000	300	17		440	5.00	6.00	0.00	18.89

Link Results: Stops And Delays

Time Segment	Link	Major Link	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	11		12.00	E	71.84	7.92	156.98	103.36	517.63	54.96	7.18
08:00-09:00	12		12.00	D	43.45	4.32	81.40	89.64	400.68	25.12	5.34
08:00-09:00	13		12.00	D	50.91	8.41	171.48	96.36	758.20	64.71	10.32
08:00-09:00	Out11		12.00	A	7.36	0.84	15.03	22.62	109.48	7.69	1.47
08:00-09:00	Out12		12.00	A	0.69	0.02	1.80	2.07	11.82	1.91	0.17
08:00-09:00	Out13		12.00	A	0.97	0.06	2.69	4.87	31.77	2.36	0.43
08:00-09:00	Ped12		12.00	F	95.77	1.31	18.89	0.00	0.00	0.00	0.00

Link Results: Queues And Blocking

Time Segment	Link	Major Link	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)
08:00-09:00	11		27.04	17.52	1.50	0.00	0.00
08:00-09:00	12		18.17	17.81	0.00	0.00	0.00
08:00-09:00	13		35.69	17.33	4.13	0.00	0.00
08:00-09:00	Out11		4.39	17.52	0.00	0.00	0.00
08:00-09:00	Out12		0.84	17.81	0.00	0.00	0.00
08:00-09:00	Out13		2.04	17.33	0.00	0.00	0.00
08:00-09:00	Ped12		2.71	94.01	0.00	0.00	0.00

Link Results: Journey Times

Time Segment	Link	Major Link	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	11		55.40	12.90	4.29	83.84
08:00-09:00	12		47.50	7.32	6.49	55.45
08:00-09:00	13		85.40	14.92	5.72	62.91
08:00-09:00	Out11		51.80	2.79	18.60	19.36
08:00-09:00	Out12		66.40	2.34	28.38	12.69
08:00-09:00	Out13		70.10	2.53	27.75	12.97
08:00-09:00	Ped12		5.00	1.50	3.34	107.77

Network Results

Run Summary

Time Segment	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	Network Within Capacity
08:00-09:00	08:00	200	31.57	89.93	13	0	0	✓

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	3816	0		0	0	90		0	767.00	778.00	0.00	473.17

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	12.00	C	29.78	22.89	448.26	52.05	1829.60	156.76	24.91

Network Results: Queues And Blocking

Time Segment	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)
08:00-09:00	0.00	199.35	0.00	0.00	0.00

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	381.60	44.29	8.62	41.78

TRANSYT 14

Last run: 09/07/2014 12:33:11
Analysis Set used for last run: A1 - (untitled)

Filename: Shawt Waterloo Rd 2019 PM Scen 3 DTPC Dev plus SBA Dev Ped every Other.t14
Path: A:\Project_008_02 Clitheroe DTPC\5 July 2014\TRANSYT
Report generation date: 09/07/2014 12:33:23

File summary

File Description

Title	(untitled)
Location	
Site Number	
UTCRegion	
Driving Side	Left
Date	07/12/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Administrator
Description	

Units

Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units
kph	m	mpg	l/h

Network Diagrams

A1 - (untitled) : D1 - (untitled) *

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	Network Within Capacity
08:00	240	34.41	90.92	13	1	14	

Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
(untitled)		D1	✓	

Demand Set Details

Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
(untitled)				08:00	

Network Options

Network Timings

Network Cycle Time (s)	Time Segment Length (min)
240	60

Signals Options

Start Displacement (s)	End Displacement (s)
2	3

Traffic Options

Traffic Model	Flow Scaling Factor (%)	Cruise Times Or Speeds
Quick PDM	100	Cruise Speeds

Optimisation Options

Auto Redistribute	Optimisation Type	Optimisation Level
✓	Hill Climb (Fast)	Offsets And Green Splits

Economics

Unit Of Cost	Monetary Value Of Delay (£ per PCU-hr)	Monetary Value Of Stops (£ per 100 stops)
£	14.20	2.60

Traffic Nodes

Traffic Nodes

Traffic Node	Name	Description
1	(untitled)	

Links

Links

Link	Name	Description	Traffic Node	Length (m)	Traffic Model	Has Restricted Flow	Saturation Flow (PCU/hr)	Is Signal Controlled	Controller Stream	Phase	Phase2 Enabled	Is Give Way	Is Pedestrian	Is Minor Shared	Major Link
11	Shawbridge Street		1	100.00	[QuickPDM]	✓	1864	✓	1	11					
12	Waterloo Road s		1	100.00	[QuickPDM]	✓	1895	✓	1	12		✓			
13	Waterloo Road n		1	100.00	[QuickPDM]	✓	1844	✓	1	13		✓			
Out11	Shawbridge Street		1	100.00	[QuickPDM]	✓	1864	✓	1	Out11					
Out12	Waterloo Road sb		1	100.00	[QuickPDM]	✓	1895	✓	1	Out12					
Out13	Waterloo Road nb		1	100.00	[QuickPDM]	✓	1844	✓	1	Out13					
Ped12	(untitled)		1	100.00	[QuickPDM]	✓	10000	✓	1	PED12			✓		

Modelling

Link	Stop Weighting (%)	Delay Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit
11	100	100		0.00	
12	100	100		0.00	
13	100	100		0.00	
Out11	100	100		0.00	
Out12	100	100		0.00	
Out13	100	100		0.00	
Ped12	100	100		0.00	

Flows

Link	Total Flow (On Link) (PCU/hr)	Upstream Flow (Into Link) (PCU/hr)
11	492	492
12	492	492
13	964	964
Out11	555	555
Out12	761	761
Out13	632	632
Ped12	50	50

Sources - default sources for entry links

Link	Entry Source Traffic Type	Entry Cruise Time (seconds)	Entry Cruise Speed (kph)	Entry Profile Type
11	Normal	12.00	30.00	FLAT
12	Normal	12.00	30.00	FLAT
13	Normal	12.00	30.00	FLAT
Ped12	Normal	12.00	30.00	FLAT

Sources - sources for internal links

Link	Source	Source Type	Source Link	Source Traffic Type	Source Flow (PCU/hr)	Cruise Time (seconds)	Cruise Speed (kph)
Out11	**1**	Link	12	Normal	164	12.00	30.00
Out11	**2**	Link	13	Normal	391	12.00	30.00
Out12	**1**	Link	11	Normal	188	12.00	30.00
Out12	**2**	Link	13	Normal	573	12.00	30.00
Out13	**1**	Link	11	Normal	304	12.00	30.00
Out13	**2**	Link	12	Normal	328	12.00	30.00

Give Way Data

Link	Same As Major Link	Percentage Opposed (%)	Opposed By Conflict 1 Only (%)	Max Flow (Opposed) (PCU/hr)	Max Flow (Unopposed) (PCU/hr)	Use Step-wise Opposed Turn Model	Number Of Storage Spaces	Radius Of Turn (m)
12	✓	40	40		1895	✓	1	8.00
13	✓	100	0	0	1844			

Give Way Data - Conflicts

Link	Conflict	Description	Controlling Type	Controlling Link	Percentage Opposing (%)	Slope Coefficient	Upstream Signals Visible	Conflict Shift	Conflict Duration
12	**1**		Link	13	40		✓	0	0

Flow Allocation Tool Tables - Local Matrix: 1

Normal Input Flows (PCU/hr)

		To		
		1	2	3
From	1	0	188	304
	2	164	0	328
	3	391	573	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Locations

Local Matrix	Location	Name	Entries	Exits	Total Flow In (PCU/hr)	Normal Flow In (PCU/hr)	Bus Flow In (PCU/hr)	Tram Flow In (PCU/hr)	Total Flow Out (PCU/hr)	Normal Flow Out (PCU/hr)	Bus Flow Out (PCU/hr)	Tram Flow Out (PCU/hr)
1	1	(untitled)	11	Out11	492	492	0	0	555	555	0	0
1	2	(untitled)	12	Out12	492	492	0	0	761	761	0	0
1	3	(untitled)	13	Out13	964	964	0	0	632	632	0	0

Paths

Local Matrix	Path	Description	Path Items	Calculated Total Flow (PCU/hr)
1	1		11,Out13	304
1	2		11,Out12	188
1	3		12,Out13	328
1	4		12,Out11	164
1	5		13,Out11	391
1	6		13,Out12	573

Normal Path Flows

Local Matrix	Path	Permitted Flow Type	Allocation Type	Percentage (%)	Fixed Flow (PCU/hr)	Calculated Flow (PCU/hr)
1	1	✓	Normal			304
1	2	✓	Normal			188
1	3	✓	Normal			328
1	4	✓	Normal			164
1	5	✓	Normal			391
1	6	✓	Normal			573

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage
1	1	✓	1	12,13,Out13,Out11,Out12
1	2	✓	2	11,Out13,Out12
1	3	✓	3	PED12
1	4	✓	4	Out13,13,Out12,Out11,12
1	5	✓	5	11,Out12,Out13

Signals

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	TRANSYT Stage Start (s)	TRANSYT Preceding Interstage (s)	TRANSYT Stage Minimum (s)
1	1	✓	1	12,13,Out13,Out11,Out12	207	5	12
1	2	✓	2	11,Out13,Out12	63	5	12
1	3	✓	3	PED12	129	5	10
1	4	✓	4	Out13,13,Out12,Out11,12	139	9	16
1	5	✓	5	11,Out12,Out13	193	5	12

Resultant Phase Green Periods

Controller Stream	Phase	Green Period	TRANSYT Starting Stage (s)	TRANSYT Ending Stage (s)	TRANSYT Start Lag (s)	TRANSYT End Lag (s)
1	11	1	2	3	5	0
1	11	2	5	1	5	0
1	12	1	4	5	9	0
1	12	2	1	2	5	0
1	13	1	4	5	9	0
1	13	2	1	2	5	0
1	Out11	1	4	5	0	0
1	Out11	2	1	2	0	0
1	Out12	1	4	3	0	0
1	Out13	1	4	3	0	0
1	PED12	1	3	4	5	0

Stage Timings (TRANSYT 12 timings)

240s cycle time; 240 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
1	5	207	63	129	139	193

Link Green Times

Link	Traffic Node	Controller Stream	Phase	Amber	Green Period 1			Green Period 2			Green Period 3			Green Period 4		
					Start	End	Duration	Start	End	Duration	Start	End	Duration	Start	End	Duration
11	1	1	11	0	68	129	61	198	207	9						
12	1	1	12	0	148	193	45	212	63	91						
13	1	1	13	0	148	193	45	212	63	91						
Out11	1	1	Out11	0	139	193	54	207	63	96						
Out12	1	1	Out12	0	139	129	230									
Out13	1	1	Out13	0	139	129	230									
Ped12	1	1	PED12	0	134	139	5									

Final Prediction Table

Link Results

				SIGNALS		FLOWS		PERFORMANCE			PER PCU			QUEUES	WEIGHTS		PENALTIES	P.I.
Link	Name	Major Link	Traffic Node	Controller Stream	Phase	Calculated Flow Entering LTS (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Delay Weighting (%)	Stop Weighting (%)	Cost Of Penalties (£ per hr)	P.I.
11	Shawbridge Street		1	1	11	492	1864	70.00	88	2	97.29	85.29	102.80	28.88 +	100	100	0.00	171.86
12	Waterloo Road s		1	1	12	492	1164	136.00	74	22	51.11	39.11	79.10	19.72 +	100	100	0.00	80.77
13	Waterloo Road n		1	1	13	964	1844	136.00	91 !	-1	66.21	54.21	93.89	61.16 +	100	100	0.00	217.47
Out11	Shawbridge Street		1	1	Out11	555	1864	150.00	47	91	18.34	6.34	17.52	4.26	100	100	0.00	15.10
Out12	Waterloo Road sb		1	1	Out12	761	1895	230.00	42	116	12.79	0.79	1.73	0.96	100	100	0.00	2.55
Out13	Waterloo Road nb		1	1	Out13	632	1844	230.00	36	153	12.75	0.75	3.22	1.48	100	100	0.00	2.12
Ped12 P	(untitled)		1	1	PED12	50	10000	5.00	20	350	128.50	116.50	0.00	3.27	100	100	0.00	22.98

Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
TOTAL	394.60	47.56	8.30	25.91	8.50	488.64	24.21	0.00	512.85
BUSES									
TRAMS									
OTHER (NORMAL)	394.60	47.56	8.30	25.91	8.50	488.64	24.21	0.00	512.85

- *B = at least one source for this link carries buses*
- *T = at least one source for this link carries trams*
- *P = this link is a pedestrian link*
- *< = adjusted flow warning (upstream links are over-saturated)*
- *! = DOS threshold exceeded*
- *f = average saturation flow for flared link*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

Link Results

Link Results: Summary

Time Segment	Link	Major Link	Calculated Flow Entering LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	11		492	0		1864	559	88		2	70.00	72.00	0.00	171.86
08:00-09:00	12		492	0		1164	669	74		22	136.00	138.00	0.00	80.77
08:00-09:00	13		964	0		1844	1060	91	✓	-1	136.00	138.00	0.00	217.47
08:00-09:00	Out11		555	0		1864	1181	47		91	150.00	152.00	0.00	15.10
08:00-09:00	Out12		761	0		1895	1824	42		116	230.00	231.00	0.00	2.55
08:00-09:00	Out13		632	0		1844	1775	36		153	230.00	231.00	0.00	2.12
08:00-09:00	Ped12		50	0		10000	250	20		350	5.00	6.00	0.00	22.98

Link Results: Stops And Delays

Time Segment	Link	Major Link	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	11		12.00	F	85.29	8.76	165.52	102.80	463.30	42.49	6.34
08:00-09:00	12		12.00	D	39.11	4.34	75.89	79.10	374.28	14.90	4.88
08:00-09:00	13		12.00	D	54.21	10.40	206.12	93.89	844.32	60.83	11.35
08:00-09:00	Out11		12.00	A	6.34	0.77	13.88	17.52	91.04	6.23	1.22
08:00-09:00	Out12		12.00	A	0.79	0.02	2.38	1.73	10.93	2.24	0.17
08:00-09:00	Out13		12.00	A	0.75	0.03	1.87	3.22	18.90	1.47	0.26
08:00-09:00	Ped12		12.00	F	116.50	1.59	22.98	0.00	0.00	0.00	0.00

Link Results: Queues And Blocking

Time Segment	Link	Major Link	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)
08:00-09:00	11		28.88	17.52	1.99	0.00	0.00
08:00-09:00	12		19.72	17.81	0.06	0.00	0.00
08:00-09:00	13		61.16	17.33	15.03	0.00	0.00
08:00-09:00	Out11		4.26	17.52	0.00	0.00	0.00
08:00-09:00	Out12		0.96	17.81	0.00	0.00	0.00
08:00-09:00	Out13		1.48	17.33	0.00	0.00	0.00
08:00-09:00	Ped12		3.27	94.01	0.00	0.00	0.00

Link Results: Journey Times

Time Segment	Link	Major Link	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	11		49.20	13.30	3.70	97.29
08:00-09:00	12		49.20	6.98	7.04	51.11
08:00-09:00	13		96.40	17.73	5.44	66.21
08:00-09:00	Out11		55.50	2.83	19.63	18.34
08:00-09:00	Out12		76.10	2.70	28.14	12.79
08:00-09:00	Out13		63.20	2.24	28.24	12.75
08:00-09:00	Ped12		5.00	1.78	2.80	128.50

Network Results

Run Summary

Time Segment	Modelling Start Time (HH:mm)	Cycle Time Used (s)	Total Network Delay (PCU-hr/hr)	Highest DOS (%)	LTSWith Highest DOS	Number Of Oversaturated LTS	Percentage Of Oversaturated LTS (%)	Network Within Capacity
08:00-09:00	08:00	240	34.41	90.92	13	1	14	

Network Results: Summary

Time Segment	Calculated Flow Entering LTS (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))	Cost Of Penalties (£ per hr)	Performance Index (£ per hr)
08:00-09:00	3946	0		0	0	91	✓	-1	957.00	968.00	0.00	512.85

Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Signalled LoS	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	12.00	C	31.39	25.91	488.64	48.93	1802.77	128.16	24.21

Network Results: Queues And Blocking

Time Segment	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)
08:00-09:00	0.00	199.35	0.00	0.00	0.00

Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	394.60	47.56	8.30	43.39