

TRANSPORT NOTE

FOR

**HUDDERSFIELD SOUTHERN CORRIDORS
HIGHWAY IMPROVEMENTS AT LOCKWOOD BAR**

Document Version Control

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CHAPTER 1 - INTRODUCTION

- 1.1 This transport note has been prepared in support of a full planning application for highway works to be delivered within the Huddersfield Southern Corridors (HSC) project located in Huddersfield. Figure 1 shows the location of the proposed HSC interventions. General layout plans for the Lockwood scheme is included within Appendix A.



Figure 1: Project Location

Project Background

- 1.2 In July 2014, the Government of the United Kingdom announced that the Leeds City Region, Local Enterprise Partnership (LCR LEP) had been allocated £800 million from the government's Growth Fund to support the delivery of projects contained within the 'West Yorkshire plus Transport Fund' (WY+TF) programme.
- 1.3 The WY+TF grant is allocated in 5-year blocks over 20 years, with the subsequent release of funds dependent on delivery performance and achievement of economic outputs.
- 1.4 The HSC project forms a component of the WY+TF Corridor Improvement Programme (CIP) Phase 1. The headline objective for the CIP programme is:

"To reduce congestion on priority highway corridors / junctions on the West Yorkshire Key Route Network such as the A61, A62 and A647 by

2025, which is constraining growth associated with new housing and employment sites in the Spatial Priority Areas”.

- 1.5 The WY+TF programme contains a mix of well-defined road, rail and general connectivity projects; which includes programmes of smaller projects on key transport corridors that will be delivered in a phased approach. The overall programme aim is to deliver £400 million worth of projects by 2021.
- 1.6 Within Kirklees several schemes are being progressed, some of which are planned for construction in 2021, with others to be developed, designed and let in the first 5-year block and then started on site soon after 2021.
- 1.7 As part of the programme delivery process, the WY+TF operates an Assurance Process to support, monitor and manage the overall Transport Fund programme. This 3-stage process covers:-
 - Pipeline eligibility
 - Pipeline development
 - Delivery and evaluation
- 1.8 Progression through Decision Points within and between these stages follows a logical progression through:
 - Expression of Interest and Case paper (EOI)
 - Outline business case (OBC)
 - Full business case (FBC)
 - FBC with costs (FBC +)
 - Delivery and evaluation
- 1.9 All projects within the WY+TF programme have to progress through the assurance process which is managed by the West Yorkshire Combined Authority (WYCA) Programme Appraisal Team (PAT), eventually being presented to the WYCA Investment Committee for consideration / approval at appropriate decision points based upon the value and complexity of the project.

HSC Project Specifics

1.10 The HSC project is a package of transport interventions at the following four locations described as:

1) Longroyd Lane

“Realisation of the Longroyd Lane Improvement Line”

- Widening of Longroyd Lane to accommodate an extra exit lane, improve cycle infrastructure and provide controlled pedestrian crossing facilities.
- Amendments to the traffic signal operation to benefit wider highway network operation.

2) Queensgate

“University Hub”

- A mixture of new, enhanced and relocated pedestrian / cycle crossing facilities at Alfred Street, Queensgate and Shorehead roundabout.
- A combination of new high quality bi-directional segregated cycle and shared use facilities with widening of pedestrian footways.
- Amendments to the Shorehead roundabout traffic signals to improve operational efficiency and provide improved pedestrian / cycle crossing facilities.
- Reconfiguration of access / egress arrangements to the University of Huddersfield entrance from Queensgate to improve pedestrian safety and enhance the public realm at the University entrance.

3) Lockwood Bar

“Splitting the conflicts”

- The major A616 traffic flow from Bridge Street to Lockwood Road will be abstracted from the Lockwood Bar junction via an improved Albert Street, to reappear at a new signalised junction with Lockwood Road.
- The existing Lockwood Bar junction will be improved to occupy a smaller footprint, enhance pedestrian crossing facilities, include cycle facilities, enhance the public realm, provide bus only turn facilities and improve existing bus passenger waiting facilities.
- A new traffic signal-controlled junction of Lockwood Road / realigned Crowther Street to abstract Holme Valley-bound traffic from the Lockwood Bar junction onto Albert Street.
- New and improved pedestrian crossing facilities at the new junction and existing Lockwood Bar junction.

- On-street parking reconfigurations and enhancements to cycle infrastructure.

4) Folly Hall

“Extended right-turn lanes”

- Minor road widening to enable the extension of the two centrally located right-turn lanes at Folly Hall (A616 Chapel Hill / Lockwood Road / St Thomas’ Road / Colne Road junction) from their current 40m length to about 90m to better accommodate traffic queues and enable better A616 traffic throughput.
- A prohibition of right turn vehicle movements from Colne Road to Chapel Hill to improve Folly Hall junction efficiency.
- Improvements to the pedestrian / cyclist crossing facilities across Chapel Hill.

Transport Note Content

- 1.11 This Transport Note considers the transport implications of the Lockwood Bar scheme and is required to support the planning application for a change in land use.
- 1.12 Kirklees Metropolitan Borough Council (KMBC) have acquired a site ‘181-187 Lockwood Road’, which currently provides a hand car wash and tyre sales outlet (and was formerly a petrol filling station), to accommodate the highway improvement which is a change in land use and as such requires planning consent.
- 1.13 KMBC Highways Development Control have provided comment on their expectations of the required transport submission to support the planning application for the change in land uses. These identified requirements are addressed within the report.
- 1.14 This note provides a review of relevant national and local transport policy, reviews historic road safety records, describes the proposals and provides the results of junction operational assessments, both with and without the proposed interventions, and highlights the anticipated improvements to bus operations and pedestrian and cycle facilities.

- 1.15 The note concludes that the proposal is acceptable in consideration of the safe and efficient operation of the proposed highway network.

CHAPTER 2 - POLICY CONTEXT

- 2.1 This section reviews both the national and local transport policies and describes how the proposal accords with requirements.

National Policy

Revised National Planning Policy Framework (NPPF)

- 2.2 The revised National Planning Policy Framework (NPPF) was published in July 2018. It sets out the Government's planning policies for England and how these are expected to contribute to the achievement of sustainable development.
- 2.3 In February 2019, the Ministry of Housing, Communities and Local Government published a revised National Planning Policy Framework (NPPF), which replaced the document that was published on 24 July 2018.
- 2.4 The Revised NPPF in paragraph 108 states that "In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:
- appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
 - safe and suitable access to the site can be achieved for all users; and
 - any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."
- 2.5 In paragraph 109 the revised NPPF states that "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."
- 2.6 In relation to paragraph 109 developments should be in accordance with paragraph 110, which states:

- ‘give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- Address the needs of people with disabilities and reduce mobility in relation to all modes of transport;
- Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- Allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.’

2.7 Paragraph 111 of the revised NPPF states that “all developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

2.8 The interventions do not generate significant amounts of movement, rather they seek to better accommodate existing / future transport levels. Hence a transport note was considered suitable to demonstrate compliance of the proposals to the NPPF.

Local Policy

Kirklees Local Plan

2.9 The Kirklees Local Plan was adopted on 27 February 2019. The Local Plan is the statutory development plan for Kirklees. Planning applications must be determined in accordance with the development plan unless material considerations indicate otherwise.

2.10 The Local Plan comprises the strategy and policies document, allocations and designations document and associated policies map showing the allocations and designations.

- 2.11 The Kirklees Local Plan identifies infrastructure provision as a key issue.
- 2.12 Policy TS3 of the Local Plan includes the Huddersfield Southern Gateways (now renamed Huddersfield Southern corridors) is a package of measures that seeks to address some of the causes of vehicle based congestion on the southern side of Huddersfield town centre, in order to improve journey times and journey time reliability and to provide measure to improve active and public transport facilities.
- 2.13 The proposals will help facilitate delivery of the proposed development put forward in the emerging Kirklees Local Plan within the southern Huddersfield and Kirklees Rural areas and wider afield. The package includes interventions at the following nine key strategic locations.
- A62/B6432 (Longroyd Bridge)
 - A616/B6108 (Lockwood Bar)
 - A62/B6432 (Folly Hall)
 - Newsome Road/Kings Mill Lane
 - A62 Queensgate / A616 Chapel Hill / A62 Manchester Road
 - A62Queensgate/Alfred Street
 - A62/A629 (Shorehead Roundabout)
 - A629/B6432 St Andrews Road
 - A629/Somerset Road
 - A629/A642 (Waterloo)
 - A635/A6024 (Holmfirth)
- 2.14 Delivery of the HSC schemes is a key element of the strategy to provide the Huddersfield area with the infrastructure it needs to support growth. It will enable the local road network to operate more efficiently by reducing congestion, improving journey times, providing infrastructure to support modal shift towards more sustainable modes, and providing capacity for growth.
- 2.15 The Huddersfield Southern Corridors Phase 1 project contains interventions intended to address identified issues at four of the nine locations identified in Local Plan policy TS3 at the following junctions;
- A62/B6432 (Longroyd Lane)
 - A616/B6108 (Lockwood Bar)

- A62/B6432 (Folly Hall)
- A62/A629 (Shorehead Roundabout) and Queensgate

CHAPTER 3 - EXISTING TRANSPORT CHARACTERISTICS

Existing Facilities for Pedestrians and Cyclists

- 3.1 Lockwood is designated as a Local Centre (Local Plan ID LCB27) within the Kirklees Local Plan and provides a range of retail, employment, educational residential, medical and leisure uses. As such, there is a good level of footway provision with formal pedestrian crossing facilities to enable local access by foot to the shops and facilities located therein.
- 3.2 Controlled pedestrian crossing facilities are included at the following locations which include appropriate dropped kerbs and tactile paving:
- Across the Bridge Street, Swan Lane and B6108 Meltham Road entries to the Lockwood Bar Junction;
 - Mid-block location on Lockwood Road some 60m to the east of the Lockwood Bar junction; and
 - Across the Albert Street (left turn only) to Bridge Street.
- 3.3 There are further uncontrolled crossing points at regular intervals along Lockwood Road on its approach to the Lockwood Bar junction which provide central carriageway refuges and dropped kerbs with tactile paving.
- 3.4 Kirklees Local Plan identifies a core walking, cycling and riding network which identifies an off-carriageway cycle path which connects between Lockwood Scar at its southern end, and continues along Queens Mill Road to connect to the pedestrian/ cycle bridge across the River Colne for cycle access towards Huddersfield town centre.
- 3.5 The off-road section is partially hard surfaced with a street lighting at its terminal ends. The on-road section along Queens Mill Road provides a section of shared off-carriageway footway / cycleway. This is shown in Figure 2.

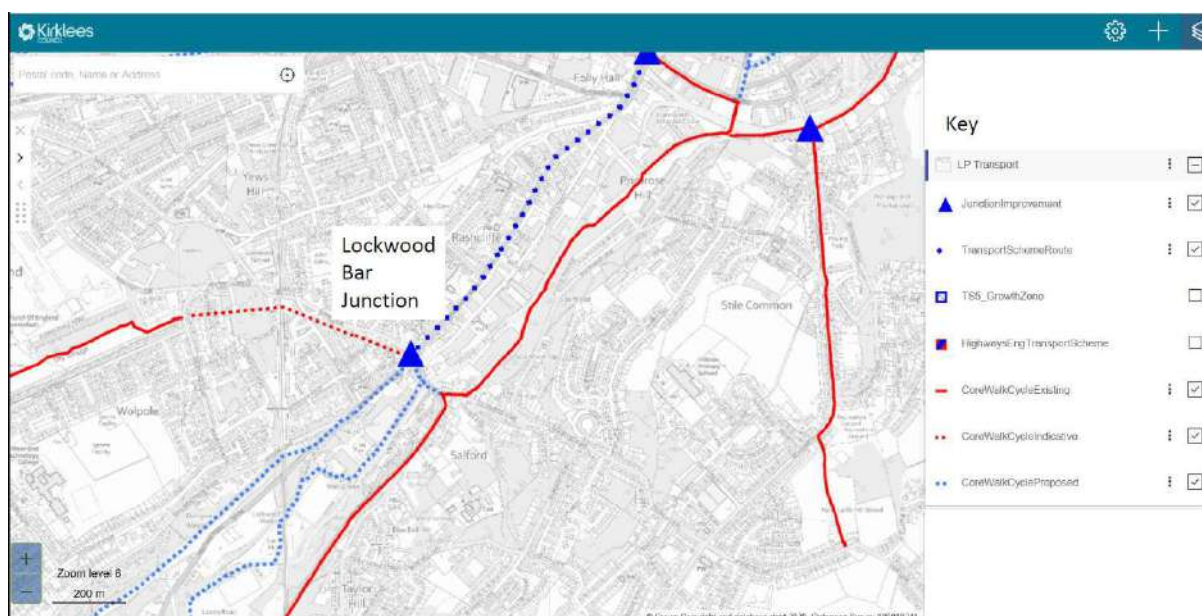


Figure 2: Core Walk / Cycle Network

- 3.6 There are limited dedicated on-carriageway cycle facilities around Lockwood. However, cyclists are permitted to use the Lockwood Road outbound bus lane in conjunction with buses between 16:00-18:30.

Existing Facilities for Public Transport

- 3.7 There are bus stops on Lockwood Road which provide public transport (bus) access to the Lockwood local shops and services. Outbound bus services (away from Huddersfield town centre) are accessible from a bus stop which provides a shelter with bus stop flag. Inbound bus services are available from a half carriageway bus layby which provides a bus stop with seat and bus information.
- 3.8 The bus service which are accessible from Lockwood Road are summarised in Table 1.

Table 1: Bus Services in Lockwood (timetable at date of report)

Service No.	Route	Frequency (mins)		
		Mon-Sat Daytime	Mon-Sat Evening	Sunday (Daytime)
310	Hepworth-Moorlands-Holmfirth-Honley-Lockwood-Huddersfield	60	120	120
314	Huddersfield-Honley-New Mill-Holmfirth-Holme	60	120	120
321	CV19 affected timetable (no details)			
323	Huddersfield-Netherton-Meltham	60	Two services	60
324	Meltham -Netherton-Huddersfield	15	60	60
355	Huddersfield-Netherton-South Crosland	2 AM services (weekday) 1 PM service Saturday	-	-

3.9 The above table shows that Lockwood is accessible by many bus services to connect between Huddersfield town centre and southern Kirklees areas.

On-Street Car Parking

3.10 There are a mixture of on-street parking restrictions on Lockwood Road between Bridge Street and Crowther Street. These include:

- Northern side - No waiting at any time restrictions with controlled bus stop and pedestrian crossing protection (zig-zag road markings). Time

restricted kerbside parking section of c.80m length (single yellow line) with parking (and loading) restricted between 07:30 and 09:30; and,

- Southern side - No waiting at any time restrictions with controlled bus stop and pedestrian crossing protection (zig-zag road markings). Unrestricted kerbside parking section of c.45m length with kerbside parking available outside of the bus lane operational hours of 16:30 and 18:30.

3.11 Albert Road, between Bridge Street and Crowther Street provides the following kerbside restrictions:

- Northern side – A short section of c.6.0m length of single yellow parking restrictions with kerbside parking restrictions between 08:00 and 18:00, c.55m unrestricted kerbside parking and no waiting at any time restrictions; and,
- Southern side - no waiting at any time restrictions, on-street parking bay of c12.0 m length.

Existing Junction Performance

3.12 The A616 Lockwood Road is identified as a component of the West Yorkshire Key Road Network which is identified since traffic levels (greater than 20,000 vehicles per day) and the strategic function that the road provides.

3.13 An analysis of the existing level of junction operation of the existing Lockwood Bar junction was undertaken using the TRANSYT and based on the results of traffic surveys undertaken in 2016. The current CV19 impact on traffic levels meant it was not possible to undertake more up to date surveys.

3.14 Table 2 provides a summary of the results of the analysis.

Table 2: Existing Lockwood Bar Junction Operational Analysis Results

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
Bridge Street Northbound	55	43.71	7.99	90	84.36	8.76
Bridge Street eastbound (nearside)	67	52.18	6.01	66	54.92	3.02
Bridge Street eastbound (offside)	90	69.22	18.2	82	58.37	7.18
Lockwood Road westbound (nearside)	59	30.07	11.74	86	24.08	9.65
Lockwood Road westbound (offside)	16	21.82	1.73	20	11.74	1.23
Swan Lane	105	199.22	25.17	103	164.47	24.47
Meltham Road eastbound (nearside)	61	30.98	6.20	45	21.77	5.9
Meltham Road eastbound (offside)	26	26.33	1.95	20	18.85	2.02

Existing Personal Injury Accident Analysis

- 3.15 A review of the most recent full five-year period Personal Injury Accident (PIA) records for the period 01.01.2014 to 31.12.2019, obtained from KMBC, was undertaken within each scheme area. This section provides a summary of the analysis.
- 3.16 The five-year PIA plot summary is shown in Figure 3.

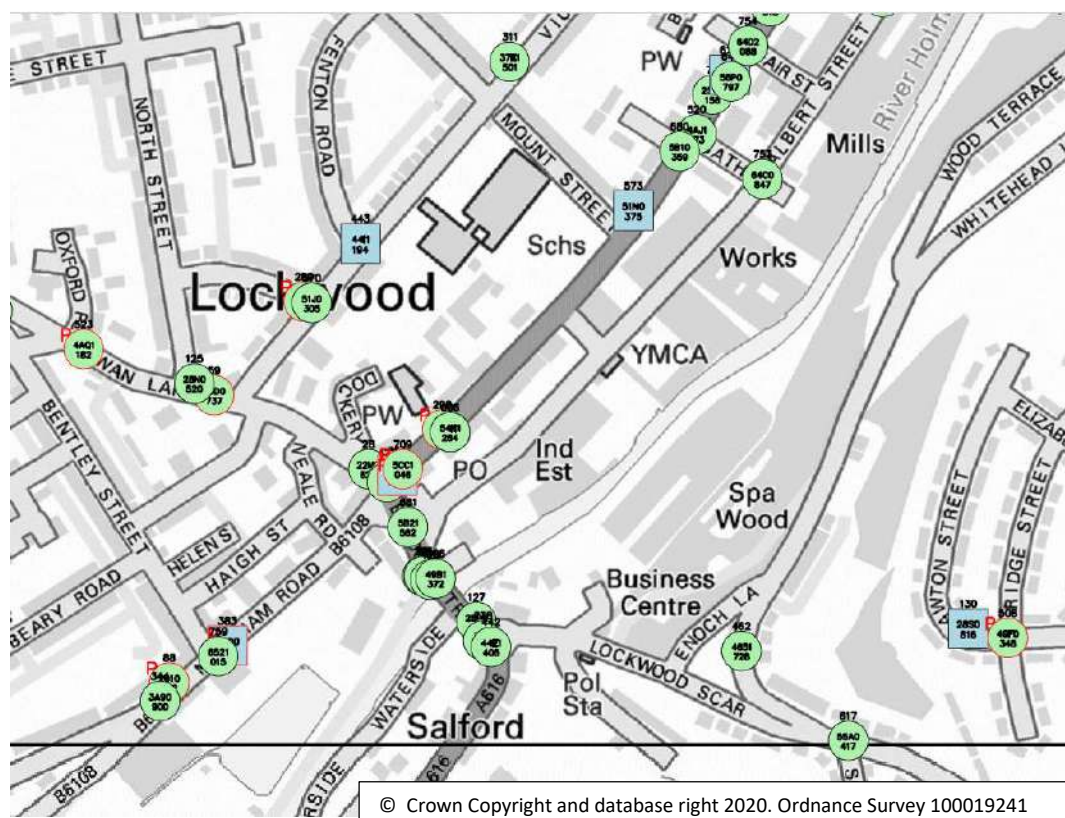


Figure 3 Lockwood Bar Five Year PIA Summary Location Plan

- 3.17 A review of the PIA records in the vicinity of the existing Lockwood Bar junction identified that there was a total of 12 PIAs recorded in the five-year summary of which 11 resulted in a serious injury and 1 resulted in a slight injury.
- 3.18 A detailed summary of the recorded PIAs is provided in

Table 3.

Table 3: Location of PIAs

Location	Number PIAs			Patterns
	Slight	Serious	Fatal	
Lockwood Bar Junction (Bridge St / Lockwood Rd / Swan Ln)	4	1	-	All accidents involve cars with no pedal cycles or motorcycles involved. One casualty was a child (under the age of 10).
Bridge St / Albert St Junction	5	-	-	Multiple accidents involving pedal bikes hit from behind by traffic due to being in close proximity. One motorcycle accident was due to lane changing issues. Other accidents only involve cars. Majority of the casualties are male, of middle-age, although two casualties were children under the age of 5.
Lockwood Road between Bridge Street and Crowther Street	2	-	-	All accidents involved either cars or buses with casualties of middle age.
Albert St between Bridge Street and Crowther Street	-	-	-	No PIAs identified at this location
Lockwood Bar Total	11	1	0	

3.19

Table 3 shows that the PIAs are typical of congested conditions and that there are no particular patterns of similar causation.

CHAPTER 4 - PROPOSED TRANSPORT INTERVENTIONS

Introduction

- 4.1 As outlined within Chapter One, the need for the proposed transport interventions has been initiated through the well-established, robust Local Plan process. The evidence base included analysis using the Kirklees Transport Model (Saturn) to assess future road network performance under the increased transport demands associated with both the existing vehicular demands and proposed future vehicle flows associated with the Local Plan development and general traffic increases.
- 4.2 Further work has been undertaken since the formulation of the evidence base for the Local Plan, which has included the preparation and subsequent approval of the HSC Outline Business Case (OBC), through the WYCA assurance framework to ensure that any funding provided by WYCA for the proposed works, meets HM treasury green book requirements.
- 4.3 During the development of the OBC, and the subsequent scheme development for the production of the Final Business Case due for submission to WYCA in Autumn 2020, there have been a series of public consultations / stakeholder engagements which have helped shape the individual transport interventions to suit local requirements and these are reflected in the proposed scheme designs.

Highway Network

- 4.4 Highway Improvements are proposed at the following locations:
 - Lockwood Road / Realigned Crowther Street junction – creation of a new link road across the KMBC acquired site ‘181-187 Lockwood Road’ to connect Albert Street and Lockwood Road. A new signal-controlled junction will be provided to regulate traffic movements between the realigned Crowther Street link and Lockwood Road. The Mount Pleasant Primary School staff car park access will also be signal controlled and slight geometric changes will be made to the access with the agreement of the School which will include some minor boundary wall changes.
 - Albert Street / Realigned Crowther Street junction - will be configured so that Albert Street has a short section of one-way restrictions for westbound traffic movements and becomes the minor arm of a new

priority controlled junction with the realigned Crowther Street. Cycle movements in the eastbound direction through the junction along Albert Street will be permitted.

- Albert Street / Bridge Street junction – Introduction of traffic signal control to regulate traffic movements between Albert and Bridge Streets
- Lockwood Bar Junction – amendments to the existing signal controlled junction will be made so that only buses and cycles can turn right from Bridge Street to Lockwood Road. Vehicles will not be permitted to turn left from Meltham Road to Swan Lane and from Lockwood Road to Bridge Street.
- Lockwood Road – the existing outbound section of bus lane on Lockwood Road between Summer Street and the Lockwood Bar junction will be removed to permit movements for general traffic at all times in the traffic lane. Kerbside parking controls will be introduced to restrict on-street parking during weekday peak periods.

Pedestrian and Cycle Facilities

- 4.5 The proposal seeks to provide improved pedestrian facilities by general improvements to the quality of the footway environment with improved surface finishes, introduction of landscaping and street furniture and localised footway widening, particularly around the Lockwood Bar junction.
- 4.6 The proposed new traffic signal-controlled junction at Lockwood Road / realigned Crowther Street is proposed to provide additional controlled pedestrian crossing facilities of Lockwood Road and the realigned Crowther Street link. Facilities will be provided across the southern and western arms of the junction. Due to operational reasons it is not possible to provide controlled pedestrian facilities across the eastern arm of the junction.
- 4.7 The mid-block pedestrian crossing at Lockwood Local Centre is to be removed but additional controlled pedestrian crossing facilities will be provided across the Lockwood Road at the new signals and at the Lockwood Bar junction.
- 4.8 Additional dedicated cycle facilities are proposed as follows:
- An advisory on carriageway cycle inbound along Lockwood Road;
 - Advance cycle stop lines at all traffic signal-controlled approaches; and,

- A cycle only entry to Albert Street is proposed at the proposed Albert Street / realigned Crowther Street priority-controlled junction.

4.9 Cyclists will also be able to turn right from Bridge Street to Lockwood Road alongside buses and will benefit from the prohibition of general traffic from this movement.

Public Transport Facilities

4.10 Improved bus passenger waiting facilities are proposed at the Lockwood Local Centre bus stops as follows:

- The outbound bus stop is to be improved by the construction of the bus shelter on a carriageway build out to enable buses better kerbside access; and,
- The inbound bus stop is to be reconfigured and the half layby arrangement removed to widen the adjacent footway.

4.11 Changes to the outbound Lockwood bus lane are also required. Currently the bus lane extends along Lockwood Road between Summer Street and Lockwood Bar for about 440m. To accommodate the proposed scheme, and as agreed with WY Metro, it is proposed to remove the outbound bus lane and instead provide timed kerbside parking restrictions to ensure that the carriageway is available for general traffic use during the weekday evening peak hour. Virtual bus detection could be provided to ensure that buses have corridor priority to ensure public transport journey time reliability on the outbound Lockwood Road movement along the scheme extents.

On-Street Car Parking

4.12 The proposal seeks to rationalise the on-street parking supply whilst attempting to broadly maintain the existing on-street car parking levels where possible.

4.13 The proposal proposes the following on-street parking provision:

- Lockwood Road southern side between Crowther Street and Bridge Street approximately 10 spaces which may be timed restricted during working hours;
- Albert Street northern side, between Crowther Street and Bridge Street, provide c.100m of on-street parking which will be time restricted to enable parking outside of weekday peak hours 07:30 – 09:30 and 15:30 – 18:30.

- The existing section of carriageway at the retained southern section of the closed Crowther Street to provide a parking module which could accommodate four electric vehicle parking spaces and one standard parking space.
- 4.14 The statutory processes to progress the scheme delivery, including the statutory consent (traffic regulation orders, highway stopping up) will be progressed if planning permission is granted and provide further public consultation opportunities to address any particular local concerns relating to the proposal.

Green Infrastructure / Urban design

- 4.15 The scheme aspirations are to provide improved landscape and urban design elements to offer a greater emphasis on people-based space within Lockwood. Landscaped areas on the eastern side of Bridge Street and adjacent to the realigned Crowther Street link will be provided. These should contribute towards improving the pedestrian environment both within and through Lockwood.

CHAPTER 5 - TRANSPORT IMPACT OF THE PROPOSED INTERVENTIONS

Road Safety Considerations

- 5.1 The design proposal has been the subject of a Stage 2 road safety audit. The audit report and designer's response are included within Appendix C.

Junction Operational Performance

- 5.2 The Lockwood Bar junction proposal was assessed using an updated TRANSYT model and the results using the 2016 existing flows is shown in Table 4. Full results are provided within Appendix B.

Table 4: Proposed Lockwood Bar Junction Operational Analysis Results (existing flows)

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
Bridge Street Northbound	55	35.32	5.81	81	49.61	7.14
Bridge Street eastbound	23	63.76	1.46	23	48.55	1.46
Lockwood Road westbound (nearside)	40	12.87	2.4	74	16.68	7.04
Lockwood Road westbound (offside)	16	14.24	1.01	22	12.83	1.16
Swan Lane	71	50.88	11.45	86	68.92	14.78
Meltham Road	63	26.73	6.24	50	25.31	5.96

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
eastbound (nearside)						
Meltham Road eastbound (offside)	27	21.89	1.95	22	21.87	2.02

5.3 Table 4 shows that the Lockwood Bar junction operation is within capacity and provides an improved level of operational performance compared to the existing layout.

5.4 An assessment was also undertaken of the performance of the proposed Lockwood Road/Realigned Crowther Street signal-controlled junction. The results of the analysis undertaken using the TRANSYT software and using the surveyed demands is shown in

Table 5.

5.5 The Mount Pleasant Primary School access is also to be incorporated within the junction under signal control. Detection at the school stopline will allow an opportunity for the staff vehicle exiting the car park to do so safely for departures to all directions. The school has provided details of their likely vehicle departure profile which indicate one exit during the weekday PM peak hour. However, limitations in the modelling software mean this situation is difficult to model and therefore the school exit demands are modelled as appearing once in every five signal cycles which may overpredict the impact of the school access on overall junction operation.

Table 5: Proposed Lockwood Road/Realigned Crowther Street Junction Operational Analysis Results (existing flows)

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
Lockwood Road eastbound	48	34.41	5.18	48	12.80	5.18
Lockwood Road westbound (nearside)	13	1.95	1.4	49	1.01	0.23
Lockwood Road westbound (offside)	73	25.34	14.83	13	1.95	1.40
Realigned Crowther Street Link	73	41.27	14.32	73	25.34	14.83

5.6

Table 5 shows that the proposed junction would operate within capacity based on the surveyed demands.

- 5.7 An assessment of the future operation using future year traffic demands at the junctions were extracted from the Kirklees Transport Model being used for the scheme economic appraisal. The future assessment year demands for 2022 (scheme opening year) and 2037 (15-year post scheme opening), was assessed using the TRANSYT local junction model.
- 5.8 The results of the assessment for the Lockwood Bar junction are shown in Table 6 and 7 for the 2022 and 2037 flow assessments respectively. Full results are provided in Appendix B.

Table 6: Proposed Lockwood Bar Junction Operational Analysis Results (2022 flows)

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
Bridge Street Northbound	73	42.78	6.46	75	30.11	9.58
Bridge Street eastbound (offside)	31	57.58	1.5	37	62.64	1.54
Lockwood Road westbound (nearside)	44	25.84	8.17	74	24.12	9.02
Lockwood Road westbound (offside)	10	20.68	1.03	21	17.35	1.62
Swan Lane	80	57.63	14.18	100	122.60	28.95
Meltham Road eastbound (nearside)	77	23.74	6.97	32	22.54	5.39
Meltham Road eastbound (offside)	19	15.80	1.93	13	20.26	1.91

5.9 Table 6 shows that the proposed junction would operate at an acceptable level of performance with the future flows. Swan Lane is shown as operating at its capacity (but at a better level of performance compared to the existing

flows analysis) and this is likely due to the strategic reassignment of traffic from the strategic model.

Table 7: Proposed Lockwood Bar Junction Operational Analysis Results (2037 flows)

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
Bridge Street Northbound	73	42.78	6.46	75	30.11	9.58
Bridge Street eastbound (offside)	31	58.63	1.50	47	69.26	1.63
Lockwood Road westbound (nearside)	60	33.21	12.23	80	38.85	13.56
Lockwood Road westbound (offside)	13	24.12	1.31	34	28.65	3.58
Swan Lane	76	49.87	14.67	98	104.25	26.57
Meltham Road eastbound (nearside)	98	84.66	15.17	28	22.46	4.64
Meltham Road eastbound (offside)	10	6.90	0.14	12	20.68	1.91

5.10 Table 7Table 6 shows that the proposed junction would operate within capacity fifteen years after scheme opening.

5.11 The results of the assessment for the proposed Lockwood Road/Realigned Crowther Street junction are shown in Tables 8 and 9 for the 2022 and 2037 flow assessments, respectively. Full results are provided in Appendix B.

Table 8: Proposed Lockwood Road/Realigned Crowther Street Junction Operational Analysis Results (2022 flows)

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
Lockwood Road eastbound	88	25.42	20.89	78	16.97	6.39
Lockwood Road westbound (nearside)	21	1.35	1.42	35	1.92	2.04
Lockwood Road westbound (offside)	44	25.34	8.04	77	32.69	15.19
Realigned Crowther Street Link	89	54.81	22.94	81	47.16	18.41

5.12 Table 8 shows that the proposed junction would operate within capacity at scheme opening.

Table 9: Proposed Lockwood Road/Realigned Crowther Street Junction Operational Analysis Results (2037 flows)

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
Lockwood Road eastbound	100	102.55	40.18	40	15.61	4.80
Lockwood Road westbound (nearside)	13	1.09	1.40	23	1.42	1.42
Lockwood Road westbound (offside)	59	33.36	10.61	99	79.68	25.10
Realigned Crowther Street Link	92	54.53	28.63	102	131.16	36.30

5.13

Table 9 shows that the proposed junction would be approaching its capacity within 15 years post scheme opening. The realigned Crowther Street link is showing marginally overcapacity although this is due to the modelling limitations and the school demand occurring every five signal cycles rather than a single appearance within the peak hour. The benefits of the proposed MOVA

installation is also not explicitly modelled but would be expected to enable more efficient operation than the modelling results suggest.

- 5.14 The performance of the proposed Albert Street / Bridge Street signals is also shown in Tables 10 and 11 for the 2022 and 2037 assessment years. Full outputs are provided in Appendix B.

Table 10: Proposed Albert Road/Bridge Street Junction Operational Analysis Results (2022 flows)

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
Bridge Street eastbound	89	63.88	18.73	51	30.11	9.58
Bridge Street southbound	38	2.83	2.28	54	7.29	3.40
Albert Street	69	45.35	12.85	93	63.47	27.96

- 5.15 Table 10 shows that proposed junction is within capacity at scheme opening year.

Table 11: Proposed Albert Road/Bridge Street Junction Operational Analysis Results (2037 flows)

Approach	Weekday AM peak hour (08:00-09:00)			Weekday PM peak hour (17:00-18:00)		
	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)	Degree of Saturation (%)	Mean delay per Vehicle (s)	Mean Max Queue (PCU)
Bridge Street eastbound	83	49.41	17.42	50	25.31	9.65
Bridge Street southbound	38	2.45	1.51	66	9.63	3.79
Albert Street	61	37.68	11.78	92	51.76	29.63

5.16 Table 11 shows that proposed Albert Road/Bridge Road junction operates within capacity at fifteen years post scheme opening year.

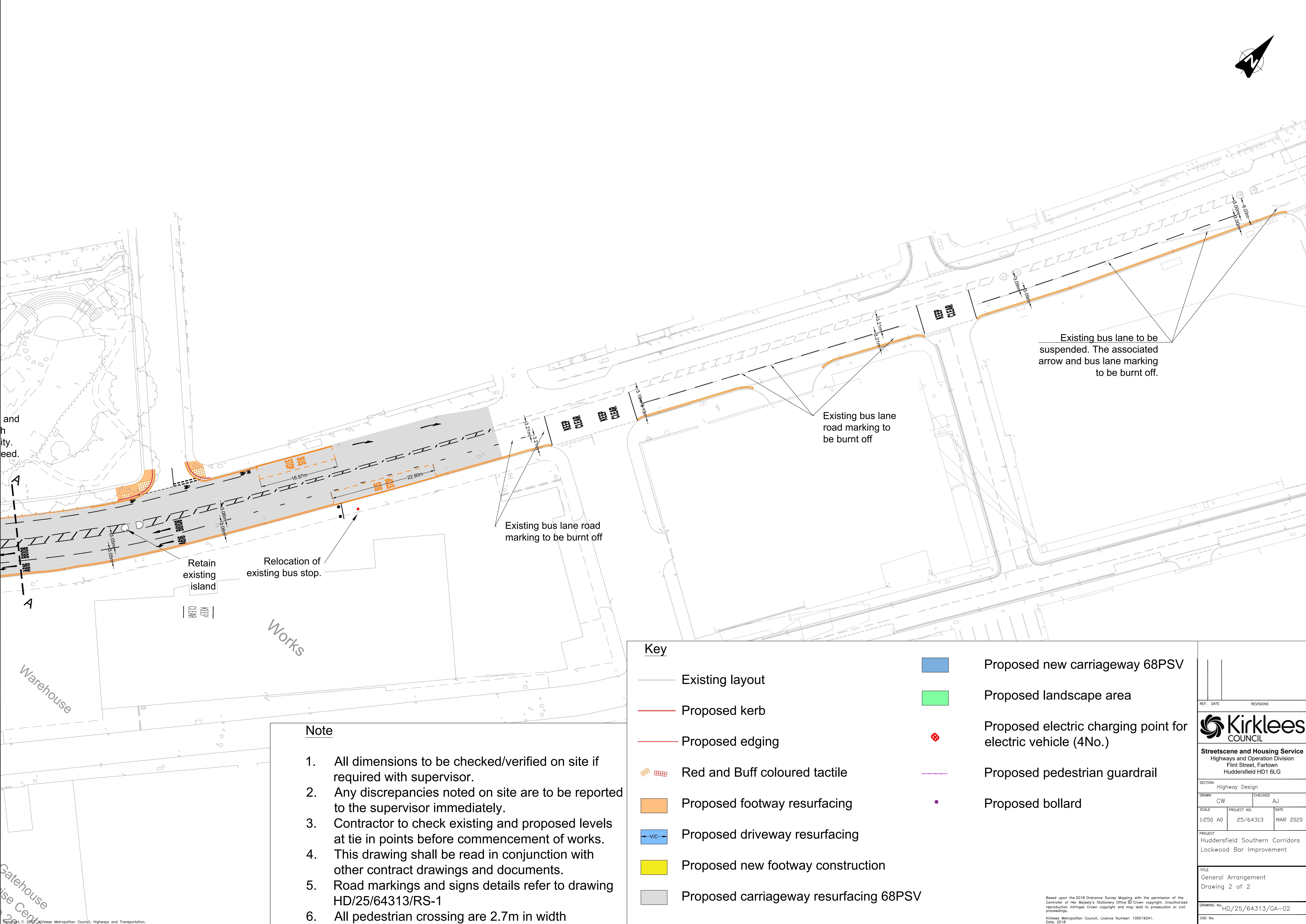
CHAPTER 6 - SUMMARY & CONCLUSIONS

- 6.1 The transport note has been prepared in support of a planning application for highway works to be delivered within the Huddersfield Southern Corridors (HSC) project located in Huddersfield. This note has detailed the Lockwood Bar proposal.
- 6.2 The need for the proposed Lockwood Bar transport intervention was identified through the Kirklees Local Plan development. Funding is being sought from the WY+TF and a final business case is due for submission to WYCA in Autumn 2020. Planning consents for the highway works are necessary to enable scheme progression through the WYCA assurance framework and to effect the highway improvement if funding is secured.
- 6.3 This Transport Note has included a review of relevant national and local transport policy, historic road safety records, describes the proposal and provides the results of junction analysis both with and without the proposed interventions. The note has also highlighted the anticipated improvements to bus operation and pedestrian and cycle facilities the scheme will provide.
- 6.4 Assessment of the future performance of the proposed schemes show acceptable levels of highway network operation.
- 6.5 The note concludes that the proposal is acceptable in consideration of the safe and efficient operation of the proposed highway network.

Appendix A

Huddersfield Southern Corridors

Lockwood Bar General Arrangement Drawings



Note

- 1. All dimensions to be checked/verified on site if required with supervisor.
- 2. Any discrepancies noted on site are to be reported to the supervisor immediately.
- 3. Contractor to check existing and proposed levels at tie in points before commencement of works.
- 4. This drawing shall be read in conjunction with other contract drawings and documents.
- 5. Road markings and signs details refer to drawing HD/25/64313/RS-1
- 6. All pedestrian crossing are 2.7m in width

Key

- Existing layout
- Proposed kerb
- Proposed edging
- Red and Buff coloured tactile
- Proposed footway resurfacing
- Proposed driveway resurfacing
- Proposed new footway construction
- Proposed carriageway resurfacing 68PSV
- Proposed new carriageway 68PSV
- Proposed landscape area
- Proposed electric charging point for electric vehicle (4No.)
- Proposed pedestrian guardrail
- Proposed bollard

REF. DATE		REVISIONS	
 Kirklees COUNCIL			
Streetscene and Housing Service Highways and Operation Division Flint Street, Fartown Huddersfield HD1 6LG			
SECTION Highway Design			
DRAWN CW		CHECKED AJ	
SCALE 1:250 A0	PROJECT NO. 25/64313		DATE MAR 2020
PROJECT Huddersfield Southern Corridors Lockwood Bar Improvement			
TITLE General Arrangement Drawing 2 of 2			
DRAWING No. HD/25/64313/GA-02			
CAD No.			

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Kirklees Metropolitan Council, Licence Number: 100019241.
Date: 2018

Appendix B

Lockwood Bar

Junction Operational Analysis Results

TRANSYT 15
Version: 15.5.0.6767 © Copyright TRL Limited, 2016
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Filename: am option 1c 2016 126.t15
Path: C:\Users\andrewrawlinson\Desktop\for Adrian for Jacobs
Report generation date: 15/05/2020 15:31:51

- »Network Diagrams
«A1 - am : D1 - am* :
»Summary
»Network Options
»Traffic Nodes
»Arms and Traffic Streams
»Pedestrian Crossings
»Local OD Matrix - Local Matrix: 1
»Signal Timings
»TRANSYT 12 Tables
»Results - Link
»Results - Traffic Stream
»Data Entry - Stage Start and End
»Data Entry - Phase
»Data Entry - Traffic Stream
»Data entry - Link
»Results - Pedestrian
»Traffic Stream Results
»Pedestrian Crossing Results
»Network Results
»Point to Point Journey Time
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITDS\AndrewRawlinson
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
			✓		✓	✓	✓	✓	✓	✓	✓		

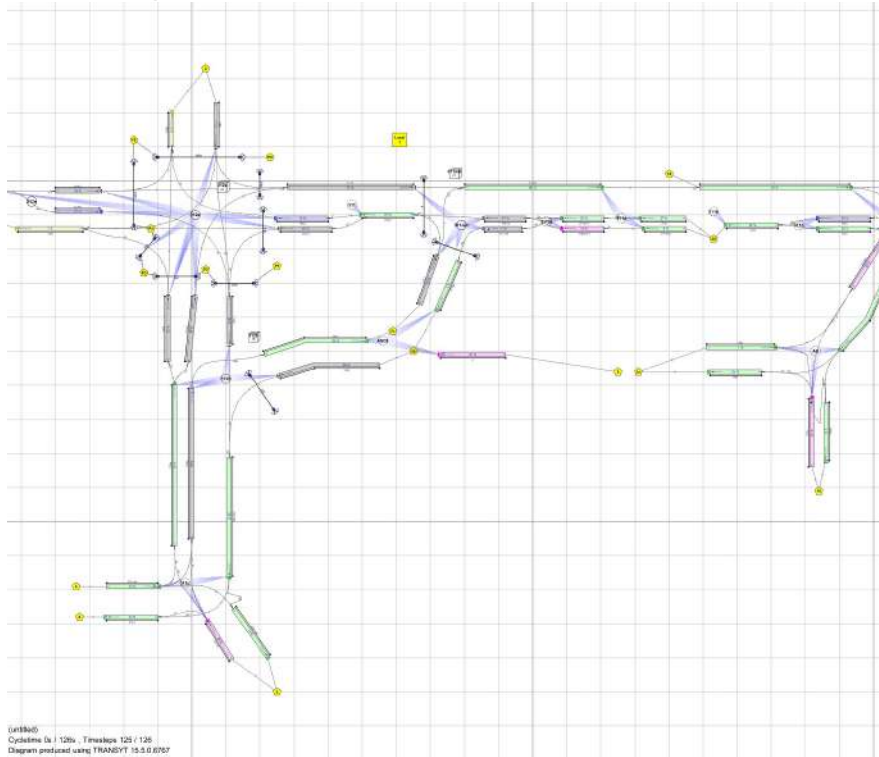
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	mph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



A1 - am

D1 - am*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	15/05/2020 15:31:32	15/05/2020 15:31:34	08:00	126	2741.01	66.56	96.00	1/1	2	3	312Be/1	1/1	1/1	

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
am	option 1	D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
am				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
126		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻²)	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.47	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻²)	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.47	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	312a, 312b, 311out

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	(untitled)		311d
308A	(untitled)		
311Ao	(untitled)		311
311C	(untitled)		311out
311Cx	(untitled)		311a
311LAS	(untitled)		311out
311a	(untitled)		311a
311aa O	(untitled)		311aa
311aa bus	(untitled)		311aa
311abus	(untitled)		311a
311b	(untitled)		311b
311cn	(untitled)		311c
311co	(untitled)		311c
311csx	(untitled)		ASCS
311dAS	(untitled)		311d
311dn	(untitled)		311d
311do	(untitled)		311d
311out	(untitled)		311out
312A	(untitled)		312a
312Ae	(untitled)		312b
312Be	(untitled)		312b
312Bo	(untitled)		312a
312Cn	(untitled)		312a
312Co	(untitled)		312a
312D	(untitled)		312a
312Dx	(untitled)		
312Eent	(untitled)		312a
312En	(untitled)		312a
312Eo	(untitled)		312a
312Ex	(untitled)		
312J	(untitled)		312b
312K	(untitled)		312b
312c BS	(untitled)		312c
312c LS	(untitled)		312c
312c ent	(untitled)		312c
312c x	(untitled)		
312x LSx	(untitled)		
4	(untitled)		ASCS
AS	(untitled)		AS
AS1	(untitled)		AS
AS2	(untitled)		
ASin	(untitled)		ASCS
CS 2	(untitled)		311out
QML	(untitled)		AS
QMLx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	(untitled)			368.00	✓	Sum of lanes	1250					Normal	
308A	2	(untitled)			120.00	✓	Sum of lanes	1700					Normal	
311Ao	1	(untitled)			118.00	✓	Sum of lanes	1500	✓	1800			Normal	
311C	1	Lockwood inbound			166.00	✓	Sum of lanes	1650			✓		Normal	
311Cx	1	(untitled)			274.00	✓	Sum of lanes	1700					Normal	
311LAS	1	(untitled)			90.00	✓	Sum of lanes	1400	✓	1800	✓		Normal	
311a	1	(untitled)			56.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa O	1	(untitled)			206.00	✓	Sum of lanes	1800					Normal	
311aa bus	2	(untitled)			206.00							✓	Normal	
311abus	1	(untitled)			56.00	✓	Sum of lanes	1000					Normal	
311b	1	(untitled)			275.00	✓	Sum of lanes	1500					Normal	
311cn	1	(untitled)			45.00	✓	Sum of lanes	1000					Normal	
311co	1	(untitled)			45.00	✓	Sum of lanes	1200				✓	Normal	
311csx	1	(untitled)			38.00	✓	Sum of lanes	1600					Normal	
311dAS	311dAS	(untitled)			28.00							✓	Normal	
311dn	1	(untitled)			115.00	✓	Sum of lanes	1300					Normal	
311do	1	(untitled)			115.00	✓	Sum of lanes	1400					Normal	
311out	1	(untitled)			90.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312A	1	(untitled)			35.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312Ae	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800			Normal	
312Be	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
312Bo	1	(untitled)			35.00	✓	Sum of lanes	1700	✓	1800	✓		Normal	
312Cn	1	(untitled)			70.00	✓	Sum of lanes	1850	✓	1800	✓		Normal	
312Co	1	(untitled)			70.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312D	1	Lockwood Road inbound			420.00	✓	Sum of lanes	1750			✓		Normal	
312Dx	1	(untitled)			100.00								Normal	
312Eent	1	(untitled)			203.00	✓	Sum of lanes	1000					Normal	
312En	1	(untitled)			35.00	✓	Sum of lanes	1600	✓	1800	✓		Normal	
312Eo	1	(untitled)			35.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312Ex	1	(untitled)			100.00								Normal	
312J	1	(untitled)			43.00	✓	Sum of lanes	1800			✓		Normal	
312K	1	(untitled)			185.00	✓	Sum of lanes	1700			✓		Normal	
312c BS	1	(untitled)			90.00	✓	Sum of lanes	1400					Normal	
312c LS	1	(untitled)			65.00							✓	Normal	
312c ent	1	(untitled)			80.00	✓	Sum of lanes	1700					Normal	
312c x	3	(untitled)			70.00	✓	Sum of lanes	1800					Normal	
312x LSx	4	(untitled)			100.00	✓	Sum of lanes	1800					Normal	
4	2	(untitled)			275.00							✓	Normal	
AS	1	(untitled)			35.00	✓	Sum of lanes	1500					Normal	
AS1	1	(untitled)			345.00	✓	Sum of lanes	1800					Normal	
AS2	1	(untitled)			345.00	✓	Sum of lanes	1500					Normal	
ASin	1	(untitled)			185.00	✓	Sum of lanes	1700					Normal	
CS 2	1	(untitled)			38.00	✓	Sum of lanes	1600			✓		Normal	
QML	1	(untitled)		✓	250.00							✓	Normal	
QMLx	1	(untitled)			100.00	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1	1	1	(untitled)			1250
308A	2	1	(untitled)			1700
311Ao	1	1	(untitled)			1500
311C	1	1	(untitled)			1650
311Cx	1	1	(untitled)			1700
311LAS	1	1	(untitled)			1400
311a	1	1	(untitled)			1500
311aa O	1	1	(untitled)			1800
311aa bus	2	1	(untitled)			
311abus	1	1	(untitled)			1000
311b	1	1	(untitled)			1500
311cn	1	1	(untitled)			1000
311co	1	1	(untitled)			1200
311csx	1	1	(untitled)			1600
311dAS	311dAS	1	(untitled)			
311dn	1	1	(untitled)			1300
311do	1	1	(untitled)			1400
311out	1	1	(untitled)			1750
312A	1	1	(untitled)			1750
312Ae	1	1	(untitled)			1800
312Be	1	1	(untitled)			1800
312Bo	1	1	(untitled)			1700
312Cn	1	1	(untitled)			1850
312Co	1	1	(untitled)			1440
312D	1	1	(untitled)			1750
312Dx	1	1	(untitled)			
312Eent	1	1	(untitled)			1000
312En	1	1	(untitled)			1600
312Eo	1	1	(untitled)			1440
312Ex	1	1	(untitled)			
312J	1	1	(untitled)			1800
312K	1	2	(untitled)			1700
312c BS	1	1	(untitled)			1400
312c LS	1	1	(untitled)			
312c ent	1	1	(untitled)			1700
312c x	3	1	(untitled)			1800
312x LSx	4	1	(untitled)			1800
4	2	1	(untitled)			
AS	1	1	(untitled)			1500
AS1	1	1	(untitled)			1800
AS2	1	1	(untitled)			1500
ASin	1	1	(untitled)			1700
CS 2	1	1	(untitled)			1600
QML	1	1	(untitled)			
QMLx	1	QMLx	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00				
308A	2	NetworkDefault	100	100	100		0.00				
311Ao	1	CTM	100	100	100		17.00	✓	17.00	0.00	
311C	1	NetworkDefault	100	100	100		0.00				
311Cx	1	NetworkDefault	100	100	100		0.00				
311LAS	1	CTM	100	100	100		15.00	✓	15.00	0.00	
311a	1	CTM	100	100	100		10.00				
311aa O	1	PDM	100	100	100		36.00				
311aa bus	2	NetworkDefault	100	100	100		0.00				
311abus	1	NetworkDefault	100	100	100		0.00				
311b	1	NetworkDefault	100	100	100		0.00				
311cn	1	NetworkDefault	100	100	100		0.00				
311co	1	NetworkDefault	100	100	100		0.00				
311csx	1	NetworkDefault	100	100	100		0.00				
311dAS	311dAS	NetworkDefault	100	100	100		0.00				
311dn	1	NetworkDefault	100	100	100		0.00				
311do	1	NetworkDefault	100	100	100		0.00				
311out	1	CTM	100	100	100		15.00	✓	15.00	0.00	
312A	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Ae	1	CTM	100	100	100		17.00	✓	18.00	0.00	
312Be	1	CTM	100	100	100		17.00	✓	17.00	0.00	
312Bo	1	CTM	100	100	100		6.00				
312Cn	1	CTM	100	100	100		8.00	✓	8.00	0.00	
312Co	1	Flare	100	100	100		8.00	✓	8.00	0.00	
312D	1	NetworkDefault	100	100	100		0.00				
312Dx	1	NetworkDefault	100	100	100		0.00				
312Eent	1	PDM	100	100	100		49.00	✓	49.00	0.00	
312En	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Eo	1	Flare	100	100	100		6.00	✓	6.00	0.00	
312Ex	1	NetworkDefault	100	100	100		0.00				
312J	1	NetworkDefault	99999	100	100		0.00				
312K	1	NetworkDefault	100	100	100		0.00				
312c BS	1	NetworkDefault	100	100	100		0.00				
312c LS	1	NetworkDefault	100	100	100		0.00				
312c ent	1	NetworkDefault	100	100	100		0.00				
312c x	3	NetworkDefault	100	100	100		0.00				
312x LSx	4	NetworkDefault	100	100	100		0.00				
4	2	NetworkDefault	100	100	100		0.00				
AS	1	NetworkDefault	100	100	100		0.00				
AS1	1	NetworkDefault	100	100	100		0.00				
AS2	1	NetworkDefault	100	100	100		0.00				
ASin	1	NetworkDefault	100	100	100		0.00				
CS 2	1	NetworkDefault	100	100	100		0.00				
QML	1	NetworkDefault	100	100	100		0.00				
QMLx	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	126

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	1200	1200
308A	2	1298	1298
311Ao	1	392	392
311C	1	521	521
311Cx	1	1120	1120
311LAS	1	108	108
311a	1	409	409
311aa O	1	409	409
311aa bus	2	50	50
311abus	1	50	50
311b	1	635	635
311cn	1	321	321
311co	1	314	314
311csx	1	108	108
311dAS	311dAS	140	140
311dn	1	624	624
311do	1	314	314
311out	1	351	351
312A	1	259	259
312Ae	1	284	284
312Be	1	599	599
312Bo	1	25	25
312Cn	1	311	311
312Co	1	81	81
312D	1	337	337
312Dx	1	281	281
312Eent	1	551	551
312En	1	415	415
312Eo	1	136	136
312Ex	1	353	353
312J	1	409	409
312K	1	376	376
312c BS	1	785	785
312c LS	1	197	197
312c ent	1	761	761
312c x	3	610	610
312x LSx	4	250	250
4	2	282	282
AS	1	345	345
AS1	1	22	22
AS2	1	361	361
ASin	1	599	599
CS 2	1	640	640
QML	1	193	193
QMLx	1	59	59

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
311C	1	311out	A	
311LAS	1	311out	C	
311out	1	311out	B	
312A	1	312a	A	
312Be	1	312b	M	
312Bo	1	312a	B	
312Cn	1	312a	C	
312Co	1	312a	C	
312D	1	312a	D	
312En	1	312a	E	
312Eo	1	312a	E	
312J	1	312b	J	
312K	1	312b	K	
CS 2	1	311out	D	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)
311a	1	6.72	18.64
311abus	1	6.72	18.64
311dn	1	11.69	22.00
311do	1	15.13	17.00
312D	1	50.40	18.64
312Eent	1	18.16	25.00
312K	1	19.36	21.38
312c LS	1	7.27	20.00
312c ent	1	7.78	23.00
4	2	33.00	18.64
AS1	1	41.40	18.64
CS 2	1	4.56	18.64
QML	1	30.00	18.64

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)	Auto turning radius	Traffic turn style	Turning radius (m)
1	1	1	311Cx/1	1/1	35.79	23.00	✓	Straight	Straight Movement
308A	2	1	311dAS/311dAS	308A/2	11.67	23.00	✓	Straight	Straight Movement
311Ao	1	1	311out/1	311Ao/1	15.53	17.00	✓	Straight	Straight Movement
311C	1	1	312D/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	1	311C/1	311Cx/1	26.65	23.00	✓	Straight	Straight Movement
311LAS	1	1	311aa O/1	311LAS/1	10.80	18.64	✓	Straight	Straight Movement
311aa O	1	1	311a/1	311aa O/1	24.72	18.64	✓	Straight	Straight Movement
311aa bus	2	1	311abus/1	311aa bus/2	24.72	18.64	✓	Straight	Straight Movement
311b	1	1	311cn/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	1	311dn/1	311cn/1	5.92	17.00	✓	Straight	Straight Movement
311co	1	1	311do/1	311co/1	5.92	17.00	✓	Straight	Straight Movement
311csx	1	1	311LAS/1	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	1	QML/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	1	311aa O/1	311out/1	10.80	18.64	✓	Straight	Straight Movement
312A	1	1	312Ae/1	312A/1	5.59	14.00	✓	Straight	Straight Movement
312Ae	1	1	312c ent/1	312Ae/1	9.73	20.00	✓	Nearside	62.50
312Be	1	1	312c ent/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Bo	1	1	312Ae/1	312Bo/1	4.20	18.64	✓	Straight	Straight Movement
312Cn	1	1	311Ao/1	312Cn/1	9.21	17.00	✓	Straight	Straight Movement
312Co	1	1	311Ao/1	312Co/1	9.21	17.00	✓	Straight	Straight Movement
312Dx	1	1	312Co/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312En	1	1	312Ent/1	312En/1	3.13	25.00	✓	Straight	Straight Movement
312Eo	1	1	312Ent/1	312Eo/1	3.13	25.00	✓	Straight	Straight Movement
312Ex	1	1	312D/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	1	312Cn/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
312c BS	1	1	312J/1	312c BS/1	10.07	20.00	✓	Straight	Straight Movement
312c x	3	1	312c BS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	1	312c BS/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
AS	1	1	311dn/1	AS/1	3.56	22.00	✓	Nearside	67.33
AS2	1	1	AS/1	AS2/1	35.08	22.00	✓	Straight	Straight Movement
ASin	1	1	312Be/1	ASin/1	22.20	18.64	✓	Straight	Straight Movement
QMLx	1	1	AS/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
308A	2	2	1/1	308A/2	11.67	23.00	✓	Straight	Straight Movement
311Ao	1	2	CS 2/1	311Ao/1	14.16	18.64	✓	Nearside	92.14
311C	1	2	312En/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	2	CS 2/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
311b	1	2	311co/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	2	311dAS/311dAS	311cn/1	5.40	18.64	✓	Nearside	13.39
311dAS	311dAS	2	AS1/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	2	311aa bus/2	311out/1	10.80	18.64	✓	Straight	Straight Movement
312Ae	1	2	312c LS/1	312Ae/1	9.73	20.00	✓	Straight	Straight Movement
312Be	1	2	312c LS/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Dx	1	2	312A/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	2	312Cn/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	2	312D/1	312J/1	4.81	20.00	✓	Straight	Straight Movement
312c BS	1	2	312K/1	312c BS/1	10.80	18.64	✓	Straight	Straight Movement
312c x	3	2	312c LS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	2	312c ent/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
AS	1	2	1/1	AS/1	4.20	18.64	✓	Straight	Straight Movement
AS2	1	2	QML/1	AS2/1	35.08	22.00	✓	Nearside	100.00
QMLx	1	2	AS1/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
311C	1	3	312Bo/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
312Dx	1	3	312En/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	3	312A/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	3	312Eo/1	312J/1	6.87	14.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	(ALL)	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2	bus exit	TrafficStream	311aa O/1	100	0.22		0	0
1		TrafficStream	311cn/1	100	0.22		0	0
311dAS		TrafficStream	311dn/1	100	0.22		0	0
		TrafficStream	311Cx/1	100	0.19		0	0
1		TrafficStream	312En/1	100	0.22	✓	0	0
		TrafficStream	312En/1	100	0.22		0	0
	outbound	TrafficStream	312c BS/1	100	0.22		0	0
		TrafficStream	312c ent/1	90	0.19		0	0
2		TrafficStream	311csx/1	100	0.22		0	0
		TrafficStream	ASin/1	5	0.19		0	0
1		TrafficStream	AS/1	100	0.22		0	0
		TrafficStream	AS1/1	100	0.19		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (mph)
312F	(untitled)		312a		Farside	5.00	3.33	3.36
312G	(untitled)				Nearside	3.00	2.00	3.36
312H	(untitled)				Farside	3.00	2.00	3.36
312I	(untitled)		312a		Farside	7.00	4.67	3.36
312K	(untitled)				Farside	3.00	2.00	3.36
312L	(untitled)				Farside	3.00	2.00	3.36
312o	(untitled)				Farside	3.00	2.00	3.36
312p	(untitled)				Farside	3.00	2.00	3.36
7	(untitled)		311out		Nearside	6.00	4.00	3.36
8	(untitled)				Farside	3.00	2.00	3.36

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
312F	312a	F	
312G	312a	I	
312H	312a	H	
312I	312a	G	
312K	312a	N	
312L	312b	L	
312o	312a	O	
312p	312a	P	
7	311out	E	
8	311out	F	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To																				
		1	2	3	4	5	10	19	20	5a	5b	5c	6	7	8	9	P1	P2	P3	P4	P5	P6
From	1	0	5	410	0	0	0	0	0	0	0	0	0	0	60	76	0	0	0	0	0	0
	2	3	0	86	0	0	0	0	0	0	0	0	0	0	149	99	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	20	117	25	0	0	0	0	0	0	0	549	0	0	0	50	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	282	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	77	0	0	0	0	42	74	0	0	0	0	0	0	0	0	0	0	0	0
	19	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20	265	61	0	0	0	0	0	0	0	108	0	0	0	25	0	0	0	0	0	0	0
	5a	0	0	21	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5b	0	0	0	0	0	0	0	0	0	0	0	0	0	351	25	0	0	0	0	0	0
	5c	21	20	599	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	314	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	58	0	279	287	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	44	78	0	0	0	0	0	0	0	0	50	0	0	25	0	0	0	0	0	0	0
	P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (PCU/hr)

		To																					
		1	2	3	4	5	10	19	20	5a	5b	5c	6	7	8	9	P1	P2	P3	P4	P5	P6	
From	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0	0		
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0		
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0		
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22		
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0		

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	312Eent/1	312Ex/1	#0000FF
	2	(untitled)	312D/1	312Dx/1	#FF0000
	3	(untitled)		308A/2	#00FF00
	4	(untitled)	312c ent/1		#FFFF00
	5	(untitled)	4/2		#FFFF00
	10	(untitled)	QML/1	QMLx/1	#B48894
	19	(untitled)	1/1		#B48894
	20	(untitled)	311a/1, 311abus/1	311b/1	#DCCA5F
	5a	(untitled)	AS1/1	AS2/1	#4A4DC6
	5b	(untitled)	312K/1	311csx/1, 4/2	#B48894
	5c	(untitled)	CS 2/1	ASin/1	#B48894
	6	(untitled)	311do/1		#6495ED
	7	(untitled)	311dn/1		#D2B48C
	8	(untitled)		312c x/3	#FFFF00
	9	(untitled)	312c LS/1	312x LSx/4	#FFFF00
	P1	(untitled)	312G:1E	312G:1X	#008000
	P2	(untitled)	312G:2E, 312I:1E	312G:2X, 312I:1X	#8A2BE2
	P3	(untitled)	312F:1E, 312I:2E	312F:1X, 312I:2X	#6495ED
	P4	(untitled)	312H:2E, 312F:2E	312H:2X, 312F:2X	#FFA500
	P5	(untitled)	312H:1E, 312K:1E	312H:1X, 312K:1X	#00FFFF
	P6	(untitled)	312K:2E	312K:2X	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	30		2	1	312D/1, 312Ex/1	Normal	3
	34		1	2	312Eent/1, 312En/1, 312Dx/1	Normal	5
	37		5b	8	312K/1, 312c BS/1, 312c x/3	Normal	351
	38		5b	9	312K/1, 312c BS/1, 312x LSx/4	Normal	25
	39		5	5b	4/2	Normal	282
	49		9	8	312c LS/1, 312c x/3	Normal	25
	56		7	10	311dn/1, AS/1, QMLx/1	Normal	58
	57		5a	10	AS1/1, QMLx/1	Normal	1
	58		9	2	312c LS/1, 312Ae/1, 312A/1, 312Dx/1	Normal	78
	59		9	1	312c LS/1, 312Ae/1, 312A/1, 312Ex/1	Normal	44
	60		20	2	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Co/1, 312Dx/1	Normal	61
	66		20	1	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Cn/1, 312Ex/1	Fixed	25
	69		4	5c	312c ent/1, 312Be/1, ASin/1	Normal	549
	70		9	5c	312c LS/1, 312Be/1, ASin/1	Normal	50
	80		9	3	312c LS/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	0
	81		5c	5a	CS 2/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	82		5c	10	CS 2/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	83		5c	3	CS 2/1, 311Cx/1, 1/1, 308A/2	Normal	599
	84		19	5a	1/1, AS/1, AS2/1	Normal	0
	85		19	10	1/1, AS/1, QMLx/1	Normal	0
	86		19	3	1/1, 308A/2	Normal	80
	108		6	20	311do/1, 311co/1, 311b/1	Normal	314
	109		7	20	311dn/1, 311cn/1, 311b/1	Normal	279
	110		5a	20	AS1/1, 311dAS/311dAS, 311cn/1, 311b/1	Normal	0
	111		10	20	QML/1, 311dAS/311dAS, 311cn/1, 311b/1	Normal	42
	191		1	8	312Eent/1, 312Eo/1, 312J/1, 312c BS/1, 312c x/3	Normal	60
	192		1	9	312Eent/1, 312Eo/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	76
	193		2	8	312D/1, 312J/1, 312c BS/1, 312c x/3	Normal	149
	194		2	9	312D/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	99
	206		4	2	312c ent/1, 312Ae/1, 312A/1, 312Dx/1	Normal	117
	207		4	1	312c ent/1, 312Ae/1, 312A/1, 312Ex/1	Normal	20
	208		4	9	312c ent/1, 312x LSx/4	Normal	50
	230		5a	3	AS1/1, 311dAS/311dAS, 308A/2	Normal	21
	232		10	3	QML/1, 311dAS/311dAS, 308A/2	Normal	77
	233		7	5a	311dn/1, AS/1, AS2/1	Normal	287
	234		10	5a	QML/1, AS2/1	Normal	74
	257		20	1	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Cn/1, 312Ex/1	Normal	240
	258		20	8	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Normal	0
	259		20	9	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Disabled	0
	262		20	8	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Fixed	25
	263		20	9	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Disabled	0
	264		20	2	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Co/1, 312Dx/1	Disabled	0
	265		20	5b	311a/1, 311aa O/1, 311LAS/1, 311csx/1	Normal	108
	267		5c	1	CS 2/1, 311Ao/1, 312Cn/1, 312Ex/1	Normal	21
	268		5c	8	CS 2/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Disabled	0
	269		5c	9	CS 2/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	0
	270		5c	2	CS 2/1, 311Ao/1, 312Co/1, 312Dx/1	Normal	20
	271		1	5a	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	272		1	10	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	273		1	3	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	410
	274		2	5a	312D/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	275		2	10	312D/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	276		2	3	312D/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	86
	277		4	5a	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	278		4	10	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	279		4	3	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	25
	280		9	5a	312c LS/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	281		9	10	312c LS/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	1		P5	P4	312H:1E, 312H:2X	Normal	22
	2		P4	P5	312H:2E, 312H:1X	Normal	22
	3		P5	P6	312K:1E, 312K:2X	Normal	22
	4		P6	P5	312K:2E, 312K:1X	Normal	22
	14		P1	P2	312G:1E, 312G:2X	Normal	22
	15		P2	P1	312G:2E, 312G:1X	Normal	22
	23		P4	P3	312F:2E, 312F:1X	Normal	22
	61		P3	P4	312F:1E, 312F:2X	Normal	22
	65		P2	P3	312I:1E, 312I:2X	Normal	22
	266		P3	P2	312I:2E, 312I:1X	Normal	22

Signal Timings

Network Default: 126s cycle time; 126 steps

Controller Stream 311out

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
311out	(untitled)		1	NetworkDefault	126

Controller Stream 311out - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
311out	Unspecified						Absolute

Controller Stream 311out - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
311out	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311out	A	(untitled)	7	300	0	0	Unknown
	B	(untitled)	7	300	0	0	Unknown
	C	(untitled)	7	300	0	0	Unknown
	D	(untitled)	7	300	0	0	Unknown
	E	(untitled)	5	5	0	0	Unknown
	F	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
311out	1	A, B, C	1
	2	D, F, C	1
	3	A, B, E	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
311out	1	Gaining	B	2	3	0	5

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
311out	1	(untitled)	Single	1, 2, 3	7, 75, 89

Intergreen Matrix for Controller Stream 311out

		To					
		A	B	C	D	E	F
From	A				5	5	
	B				6	7	
	C					9	
	D	5	5			5	
	E			7	8		
	F	7	5				

Banned Stage transitions for Controller Stream 311out

		To		
		1	2	3
From	1			
	2			
	3			

Interstage Matrix for Controller Stream 311out

		To		
		1	2	3
From	1	0	7	9
	2	7	0	9
	3	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311out	1	✓	1	A,B,C	96	7	37	1	1
	2	✓	2	D,F,C	14	75	61	1	7
	3	✓	3	A,B,E	84	89	5	1	5

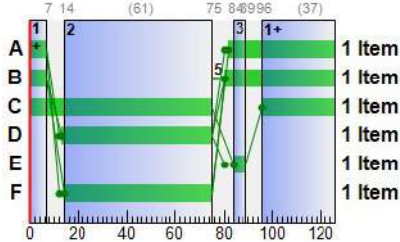
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
311out	A	1	✓	82	7	51
	B	1	✓	80	7	53
	C	1	✓	96	75	105
	D	1	✓	13	75	62
	E	1	✓	84	89	5
	F	1	✓	14	75	61

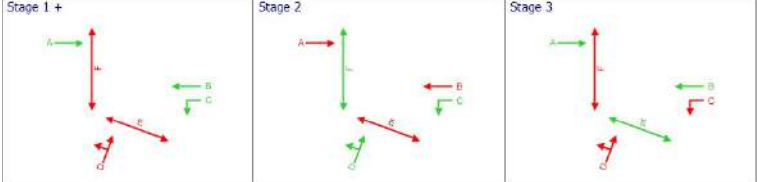
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
311C	1	311out	311out	A	82	7	51
311LAS	1	311out	311out	C	96	75	105
311out	1	311out	311out	B	80	7	53
CS 2	1	311out	311out	D	13	75	62

Phase Timings Diagram for Controller Stream 311out



Stage Sequence Diagram for Controller Stream 311out



Controller Stream 312a

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312a	(untitled)		1	NetworkDefault	126

Controller Stream 312a - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312a	Unspecified						Absolute

Controller Stream 312a - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312a	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
312a	A	(untitled)	14	40	0	0	Unknown	
	B	(untitled)	7	7	0	0	Unknown	
	C	(untitled)	7	300	0	0	Unknown	
	D	(untitled)	7	300	0	0	Unknown	
	E	(untitled)	7	300	0	0	Unknown	
	F	(untitled)	5	300	0	0	Pedestrian	0
	G	(untitled)	7	300	0	0	Unknown	
	H	(untitled)	7	300	0	0	Unknown	
	I	(untitled)	7	300	0	0	Unknown	
	N	(untitled)	1	300	0	0	Unknown	
	O	(untitled)	5	300	0	0	Pedestrian	0
	P	(untitled)	5	5	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312a	1	I, H, N, O, P, F, G	1
	2	F, E, C, G	1
	3	D, O, A	1
	4	B, N, H, I, F, O	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
312a	1	Gaining	E	1	2	0	8
	2	Losing	B	1	2	6	
	3	Losing	A	1	2	6	
	4	Losing	C	2	3	4	
	5	Losing	E	2	3	4	
	6	Losing	I	1	2	7	
	7	Gaining	A	4	1	1	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312a	1	(untitled)	Single	1, 2, 3, 4	78, 7, 52, 65

Intergreen Matrix for Controller Stream 312a

		To											
		A	B	C	D	E	F	G	H	I	N	O	P
	A			5		6	6	5			8		
	B				5			5					8
	C	8			8				9		9	5	
	D		6	6		5			9	9	5		8
	E	8			8				5		9		9
From	F	5											
	G	8	8										
	H				5	0	8						
	I					5							
	N	5			5	7	5						
	O				7								
	P		5			5	5						

Banned Stage transitions for Controller Stream 312a

From	To			
	1	2	3	4
	2			
	3			
	4			

Interstage Matrix for Controller Stream 312a

From	To			
	1	2	3	4
	1	0	8	8
	2	9	0	12
	3	9	7	0
	4	8	8	7

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312a	1	✓	1	I,H,N,O,P,F,G	73	78	5	1	5
	2	✓	2	F,E,C,G	86	7	47	1	3
	3	✓	3	D,O,A	19	52	33	1	14
	4	✓	4	B,N,H,I,F,O	61	65	4	1	4

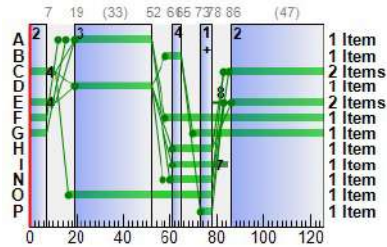
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312a	A	1	✓	19	52	33
	B	1	✓	58	65	7
	C	1	✓	85	11	52
	D	1	✓	19	52	33
	E	1	✓	86	11	51
	F	1	✓	58	7	75
	G	1	✓	70	7	63
	H	1	✓	61	78	17
	I	1	✓	61	85	24
	N	1	✓	60	78	18
	O	1	✓	16	78	62
	P	1	✓	73	78	5

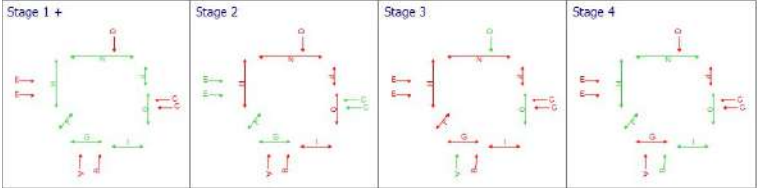
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312A	1	312a	312a	A	19	52	33
312Bo	1	312a	312a	B	58	65	7
312Cn	1	312a	312a	C	85	11	52
312Co	1	312a	312a	C	85	11	52
312D	1	312a	312a	D	19	52	33
312En	1	312a	312a	E	86	11	51
312Eo	1	312a	312a	E	86	11	51

Phase Timings Diagram for Controller Stream 312a



Stage Sequence Diagram for Controller Stream 312a



Controller Stream 312b

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312b	(untitled)		1	NetworkDefault	126

Controller Stream 312b - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312b	Unspecified						Absolute

Controller Stream 312b - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312b	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
312b	J	(untitled)	7	300	0	0	Unknown
	K	(untitled)	7	300	0	0	Unknown
	L	(untitled)	5	300	0	0	Unknown
	M	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312b	1	J, L	7
	2	K, M	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312b	1	(untitled)	Single	1, 2	39, 88

Intergreen Matrix for Controller Stream 312b

	To				
	J	K	L	M	
From	J	5		6	
	K		5		
	L	8		0	
	M	5	7		

Banned Stage transitions for Controller Stream 312b

	To	
	1	2
From	1	
	2	

Interstage Matrix for Controller Stream 312b

From	To	
	1	2
	1 0 8	2 7 0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312b	1	✓	1	J,L	95	39	70	7	7
	2	✓	2	K,M	47	88	41	7	7

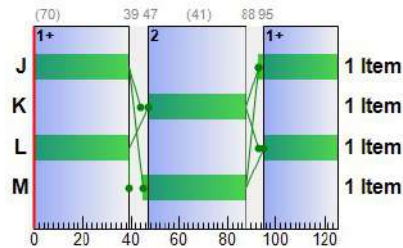
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312b	J	1	✓	93	39	72
	K	1	✓	47	88	41
	L	1	✓	95	39	70
	M	1	✓	45	88	43

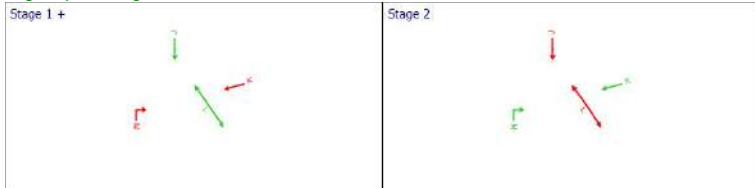
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312Be	1	312b	312b	M	45	88	43
312J	1	312b	312b	J	93	39	72
312K	1	312b	312b	K	47	88	41

Phase Timings Diagram for Controller Stream 312b



Stage Sequence Diagram for Controller Stream 312b



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	(ALL)	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
311out	1	✓	1	A,B,C	89	7	8
	2	✓	2	D,F,C	7	7	14
	3	✓	3	A,B,E	75	9	14
312a	1	✓	1	I,H,N,O,P,F,G	65	8	13
	2	✓	2	F,E,C,G	78	8	11
	3	✓	3	D,O,A	7	12	26
	4	✓	4	B,N,H,I,F,O	52	9	13
312b	1	✓	1	J,L	88	7	14
	2	✓	2	K,M	39	8	15

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
311out	A	1	3	2	7	0
	B	1	3	2	5	0
	C	1	1	3	7	0
	D	1	2	3	6	0
	E	1	3	1	9	0
	F	1	2	3	7	0
312a	A	1	3	4	12	0
	B	1	4	1	6	0
	C	1	2	3	7	4
	D	1	3	4	12	0
	E	1	2	3	8	4
	F	1	4	3	6	0
	G	1	1	3	5	0
	H	1	4	2	9	0
	I	1	4	2	9	7
	N	1	4	2	8	0
	O	1	3	2	9	0
	P	1	1	2	8	0
312b	J	1	1	2	5	0
	K	1	2	1	8	0
	L	1	1	2	7	0
	M	1	2	1	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 126s cycle time; 126 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4
311out	3	89	7	75	
312a	4	65	78	7	52
312b	2	88	39		

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	(untitled)		1200	1250	126	1250	96	-6	26.65	26.50	41.41	62.44
	308A	2	(untitled)		1298	1700	126	1700	76	18	3.39	1.22	5.85	15.06
	311Ao	1	(untitled)		392	1500	126	1500	26	244	1.43	6.76	39.78	16.81
	311C	1	Lockwood inbound	A	521	1650	51	681	77	18	32.39	9.25	32.04	48.53
	311Cx	1	(untitled)		1120	1700	126	1700	66	37	2.04	0.63	1.33	32.02
	311LAS	1	(untitled)	C	108	1400	105	1178	9	881	1.88	1.39	9.29	12.68
	311a	1	(untitled)		409	1500	126	1500	27	230	0.45	0.05	0.51	7.17
	311aa O	1	(untitled)		409	1800	126	1800	23	296	0.29	0.03	0.09	25.01
	311aa bus	2	(untitled)		50	410	126	410	12	638	0.61	0.01	0.02	25.33
	311abus	1	(untitled)		50	1000	126	1000	5	1700	0.09	0.00	0.01	6.81
	311b	1	(untitled)		635	1500	126	1500	42	113	0.88	0.16	0.32	37.07
	311cn	1	(untitled)		321	1000	126	1000	32	180	0.85	0.08	0.97	6.70
	311co	1	(untitled)		314	1368	126	1368	23	292	0.39	0.03	0.44	6.31
	311csx	1	(untitled)		108	1600	126	1600	7	1233	0.08	0.00	0.04	4.64
	311dAS	311dAS	(untitled)		140	365	126	365	38	135	3.06	0.12	2.44	6.42
	311dn	1	(untitled)		624	1300	126	1300	48	88	1.28	0.22	1.11	12.97
	311do	1	(untitled)		314	1400	126	1400	22	301	0.37	0.03	0.16	15.50
	311out	1	(untitled)	B	351	1750	53	750	47	92	27.84	8.55	56.98	38.64
	312A	1	(untitled)	A	259	1750	33	472	55	64	35.32	5.81	96.78	40.91
	312Ae	1	(untitled)		284	1800	126	1504	19	377	2.94	2.18	12.84	12.67
	312Be	1	(untitled)	M	599	1800	43	629	95	-6	77.58	22.07	129.80	87.32
	312Bo	1	(untitled)	B	25	1700	7	108	23	289	63.76	1.46	24.39	67.96
	312Cn	1	(untitled)	C	311	1850	52	778	40	125	12.87	2.40	25.75	22.08
	312Co	1	(untitled)	C	81	1222	52	514	16	471	14.24	1.01	10.87	23.45
	312D	1	Lockwood Road inbound	D	337	1750	33	472	71	26	50.88	11.45	15.67	101.28
	312Dx	1	(untitled)		281	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312Eent	1	(untitled)		551	1000	126	731	75	19	16.89	12.61	25.74	35.05
	312En	1	(untitled)	E	415	1600	51	660	63	43	26.73	6.24	104.02	29.86
	312Eo	1	(untitled)	E	136	1218	51	503	27	233	21.89	1.95	32.58	25.02
	312Ex	1	(untitled)		353	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312J	1	(untitled)	J	409	1800	72	1043	39	129	12.71	5.32	71.15	18.33
	312K	1	(untitled)	K	376	1700	41	567	66	36	42.13	11.82	36.74	61.49
	312c BS	1	(untitled)		785	1400	126	1400	56	61	2.29	10.65	68.05	12.71
	312c LS	1	(untitled)		197	265	126	229	86	5	50.74	7.65	67.68	58.01
	312c ent	1	(untitled)		761	1700	126	1434	53	70	3.87	7.70	55.33	11.65
	312c x	3	(untitled)		610	1800	126	1800	34	166	0.51	0.09	0.71	11.70
	312x LSx	4	(untitled)		250	1800	126	1800	14	548	0.16	0.01	0.06	12.16
	4	2	(untitled)		282	686	126	686	41	119	1.83	0.14	0.30	34.83
	AS	1	(untitled)		345	1500	126	1500	23	291	0.36	0.03	0.56	3.92
	AS1	1	(untitled)		22	1800	126	1800	1	7264	0.01	0.00	0.00	41.41
	AS2	1	(untitled)		361	1500	126	1500	24	274	0.38	0.04	0.06	35.46
	ASin	1	(untitled)		599	1700	126	1700	35	155	0.79	12.03	37.39	22.99
	CS 2	1	(untitled)	D	640	1600	62	800	80	13	34.99	20.04	303.29	39.55
	QML	1	(untitled)		193	520	126	520	37	142	2.04	0.11	0.25	32.04
	QMLx	1	(untitled)		59	1800	126	1800	3	2646	0.03	0.00	0.00	12.03

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311out	1	✓	1	A,B,C	96	7	37	1	1
	2	✓	2	D,F,C	14	75	61	1	7
	3	✓	3	A,B,E	84	89	5	1	5
312a	1	✓	1	I,H,N,O,P,F,G	73	78	5	1	5
	2	✓	2	F,E,C,G	86	7	47	1	3
	3	✓	3	D,O,A	19	52	33	1	14
	4	✓	4	B,N,H,I,F,O	61	65	4	1	4
312b	1	✓	1	J,L	95	39	70	7	7
	2	✓	2	K,M	47	88	41	7	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311out	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	5	5	0	0	Unknown
	F	F	7	300	0	0	Unknown
312a	A	A	14	40	0	0	Unknown
	B	B	7	7	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	5	300	0	0	Pedestrian
	G	G	7	300	0	0	Unknown
	H	H	7	300	0	0	Unknown
	I	I	7	300	0	0	Unknown
	N	N	1	300	0	0	Unknown
	O	O	5	300	0	0	Pedestrian
	P	P	5	5	0	0	Pedestrian
312b	J	J	7	300	0	0	Unknown
	K	K	7	300	0	0	Unknown
	L	L	5	300	0	0	Unknown
	M	M	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1		368.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1250	100	100
308A	2		120.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
311Ao	1		118.00	CTM	17.00	Normal	✓			Sum of lanes	1500	100	100
311C	1		166.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1650	100	100
311Cx	1		274.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
311LAS	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1400	100	100
311a	1		56.00	CTM	10.00	Normal	✓			Sum of lanes	1500	100	100
311aa O	1		206.00	PDM	36.00	Normal	✓			Sum of lanes	1800	100	100
311aa bus	2		206.00	NetworkDefault	0.00	Normal			✓			100	100
311abus	1		56.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311b	1		275.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
311cn	1		45.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311co	1		45.00	NetworkDefault	0.00	Normal	✓		✓	Sum of lanes	1200	100	100
311csx	1		38.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1600	100	100
311dAS	311dAS		28.00	NetworkDefault	0.00	Normal			✓			100	100
311dn	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1300	100	100
311do	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311out	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1750	100	100
312A	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Ae	1		87.00	CTM	17.00	Normal	✓			Sum of lanes	1800	100	100
312Be	1		87.00	CTM	17.00	Normal	✓	✓		Sum of lanes	1800	100	100
312Bo	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1700	100	100
312Cn	1		70.00	CTM	8.00	Normal	✓	✓		Sum of lanes	1850	100	100
312Co	1		70.00	Flare	8.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312D	1		420.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Dx	1		100.00	NetworkDefault	0.00	Normal						100	100
312Eent	1		203.00	PDM	49.00	Normal	✓			Sum of lanes	1000	100	100
312En	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1600	100	100
312Eo	1		35.00	Flare	6.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312Ex	1		100.00	NetworkDefault	0.00	Normal						100	100
312J	1		43.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	99999
312K	1		185.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1700	100	100
312c BS	1		90.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
312c LS	1		65.00	NetworkDefault	0.00	Normal			✓			100	100
312c ent	1		80.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
312c x	3		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
312x LSx	4		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
4	2		275.00	NetworkDefault	0.00	Normal			✓			100	100
AS	1		35.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS1	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS2	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
ASin	1		185.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
CS 2	1		38.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1600	100	100
QML	1	✓	250.00	NetworkDefault	0.00	Normal			✓			100	100
QMLx	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Pedestrian Crossings: Pedestrian summary

Time Segment	Pedestrian crossing	Side	Calculated Flow Entering (Ped/hr)	Degree of saturation (%)	Actual green (s per cycle)	Effective green (s per cycle)	Mean Delay Per Ped (s)	Mean max queue (Ped)
08:00-09:00	312F	1	22	0	75	75	10.52	0.31
		2	22	0	75	75	10.52	0.31
	312G	1	22	1	24	25	40.88	0.62
		2	22	1	24	25	40.88	0.62
	312H	1	22	1	17	18	46.71	0.66
		2	22	1	17	18	46.71	0.66
	312I	1	22	0	63	64	15.50	0.38
		2	22	0	63	64	15.50	0.38
	312K	1	22	1	18	19	45.86	0.65
		2	22	1	18	19	45.86	0.65
	312L	1	0	0	70	71	0.00	0.00
		2	0	0	70	71	0.00	0.00
	312o	1	0	0	62	62	0.00	0.00
		2	0	0	62	62	0.00	0.00
	312p	1	0	0	5	5	0.00	0.00
		2	0	0	5	5	0.00	0.00
	7	1	0	0	5	6	0.00	0.00
		2	0	0	5	6	0.00	0.00
	8	1	0	0	61	62	0.00	0.00
		2	0	0	61	62	0.00	0.00

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	96	-6	1200	1250	126	26.65	26.50	41.41	126.14	18.76	144.90
	308A	2	76	18	1298	1700	126	3.39	1.22	5.85	17.33	0.00	17.33
	311Ao	1	26	244	392	1500	126	1.43	6.76	39.78	2.21	0.39	2.60
	311C	1	77	18	521	1650	51	32.39	9.25	32.04	66.56	5.03	71.60
	311Cx	1	66	37	1120	1700	126	2.04	0.63	1.33	8.99	0.00	8.99
	311LAS	1	9	881	108	1400	105	1.88	1.39	9.29	0.80	0.22	1.02
	311a	1	27	230	409	1500	126	0.45	0.05	0.51	0.73	0.00	0.73
	311aa O	1	23	296	409	1800	126	0.29	0.03	0.09	0.47	0.00	0.47
	311aa bus	2	12	638	50	410	126	0.61	0.01	0.02	0.12	0.00	0.12
	311abus	1	5	1700	50	1000	126	0.09	0.00	0.01	0.02	0.00	0.02
	311b	1	42	113	635	1500	126	0.88	0.16	0.32	2.20	0.00	2.20
	311cn	1	32	180	321	1000	126	0.85	0.08	0.97	1.08	0.00	1.08
	311co	1	23	292	314	1368	126	0.39	0.03	0.44	0.48	0.00	0.48
	311csx	1	7	1233	108	1600	126	0.08	0.00	0.04	0.03	0.00	0.03
	311dAS	311dAS	38	135	140	365	126	3.06	0.12	2.44	1.69	0.00	1.69
	311dn	1	48	88	624	1300	126	1.28	0.22	1.11	3.14	0.00	3.14
	311do	1	22	301	314	1400	126	0.37	0.03	0.16	0.46	0.00	0.46
	311out	1	47	92	351	1750	53	27.84	8.55	56.98	38.54	2.97	41.51
	312A	1	55	64	259	1750	33	35.32	5.81	96.78	36.08	1.17	37.26
	312Ae	1	19	377	284	1800	126	2.94	2.18	12.84	3.29	0.89	4.19
	312Be	1	95	-6	599	1800	43	77.58	22.07	129.80	183.31	8.91	192.22
	312Bo	1	23	289	25	1700	7	63.76	1.46	24.39	6.29	0.32	6.61
	312Cn	1	40	125	311	1850	52	12.87	2.40	25.75	15.79	0.72	16.51
	312Co	1	16	471	81	1222	52	14.24	1.01	10.87	4.55	0.29	4.84
	312D	1	71	26	337	1750	33	50.88	11.45	15.67	67.64	4.05	71.69
	312Dx	1	0	Unrestricted	281	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	75	19	551	1000	126	16.89	12.61	25.74	36.70	7.51	44.21
	312En	1	63	43	415	1600	51	26.73	6.24	104.02	43.76	4.02	47.77
	312Eo	1	27	233	136	1218	51	21.89	1.95	32.58	11.74	1.24	12.98
	312Ex	1	0	Unrestricted	353	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	39	129	409	1800	72	12.71	5.32	71.15	20.50	1716.67	1737.17
	312K	1	66	36	376	1700	41	42.13	11.82	36.74	62.49	5.48	67.97
	312c BS	1	56	61	785	1400	126	2.29	10.65	68.05	7.10	2.69	9.79
	312c LS	1	86	5	197	265	126	50.74	7.65	67.68	39.43	2.83	42.26
	312c ent	1	53	70	761	1700	126	3.87	7.70	55.33	11.62	3.70	15.32
	312c x	3	34	166	610	1800	126	0.51	0.09	0.71	1.23	0.00	1.23
	312x LSx	4	14	548	250	1800	126	0.16	0.01	0.06	0.16	0.00	0.16
	4	2	41	119	282	686	126	1.83	0.14	0.30	2.04	0.00	2.04
	AS	1	23	291	345	1500	126	0.36	0.03	0.56	0.49	0.00	0.49
	AS1	1	1	7264	22	1800	126	0.01	0.00	0.00	0.00	0.00	0.00
	AS2	1	24	274	361	1500	126	0.38	0.04	0.06	0.54	0.00	0.54
	ASin	1	35	155	599	1700	126	0.79	12.03	37.39	1.87	0.91	2.78
	CS 2	1	80	13	640	1600	62	34.99	20.04	303.29	88.34	7.05	95.39
	QML	1	37	142	193	520	126	2.04	0.11	0.25	1.55	0.00	1.55
	QMLx	1	3	2646	59	1800	126	0.03	0.00	0.00	0.01	0.00	0.01

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (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 (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	1	1	1200	1200	0		1250	1250	96	✓	-6	0.15	126	126
	308A	2	1298	1298	0		1700	1700	76		18	0.06	126	126
	311Ao	1	392	392	0		1500	1500	26		244	0.99	126	126
	311C	1	521	521	0		1650	681	77		18	0.68	51	52
	311Cx	1	1120	1120	0		1700	1700	66		37	0.24	126	126
	311LAS	1	108	108	0		1400	1178	9		881	0.00	105	106
	311a	1	409	409	0		1500	1500	27		230	0.00	126	126
	311aa O	1	409	409	0		1800	1800	23		296	0.00	126	126
	311aa bus	2	50	50	0		410	410	12		638	0.00	126	126
	311abus	1	50	50	0		1000	1000	5		1700	0.00	126	126
	311b	1	635	635	0		1500	1500	42		113	0.00	126	126
	311cn	1	321	321	0		1000	1000	32		180	0.00	126	126
	311co	1	314	314	0		1368	1368	23		292	0.00	126	126
	311csx	1	108	108	0		1600	1600	7		1233	0.30	126	126
	311dAS	311dAS	140	140	0		365	365	38		135	0.00	126	126
	311dn	1	624	624	0		1300	1300	48		88	0.00	126	126
	311do	1	314	314	0		1400	1400	22		301	0.00	126	126
	311out	1	351	351	0		1750	750	47		92	0.00	53	54
	312A	1	259	259	0		1750	472	55		64	0.55	33	34
	312Ae	1	284	284	0		1800	1504	19		377	0.25	126	126
	312Be	1	599	599	0		1800	629	95	✓	-6	0.25	43	44
	312Bo	1	25	25	0		1700	108	23		289	0.56	7	8
	312Cn	1	311	311	0		1850	778	40		125	1.04	52	53
	312Co	1	81	81	0		1222	514	16		471	0.77	52	53
	312D	1	337	337	0		1750	472	71		26	0.00	33	34
	312Dx	1	281	281	0		Unrestricted	Unrestricted	0		Unrestricted	0.89	126	126
	312Eent	1	551	551	0		1000	731	75		19	0.00	126	126
	312En	1	415	415	0		1600	660	63		43	0.50	51	52
	312Eo	1	136	136	0		1218	503	27		233	0.50	51	52
	312Ex	1	353	353	0		Unrestricted	Unrestricted	0		Unrestricted	0.88	126	126
	312J	1	409	409	0		1800	1043	39		129	0.82	72	73
	312K	1	376	376	0		1700	567	66		36	0.00	41	42
	312c BS	1	785	785	0		1400	1400	56		61	0.62	126	126
	312c LS	1	197	197	0		265	229	86		5	0.00	126	126
	312c ent	1	761	761	0		1700	1434	53		70	0.00	126	126
	312c x	3	610	610	0		1800	1800	34		166	0.54	126	126
	312x LSx	4	250	250	0		1800	1800	14		548	0.49	126	126
	4	2	282	282	0		686	686	41		119	0.00	126	126
	AS	1	345	345	0		1500	1500	23		291	0.00	126	126
	AS1	1	22	22	0		1800	1800	1		7264	0.00	126	126
	AS2	1	361	361	0		1500	1500	24		274	0.00	126	126
	ASin	1	599	599	0		1700	1700	35		155	1.12	126	126
	CS 2	1	640	640	0		1600	800	80		13	0.00	62	63
	QML	1	193	193	0		520	520	37		142	0.00	126	126
	QMLx	1	59	59	0		1800	1800	3		2646	0.00	126	126

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	35.79	26.65	0.50	8.39	126.14	126.14	81.90	548.36	434.42	18.76	18.76
	308A	2	11.67	3.39	0.00	1.22	17.33	17.33	0.00	0.00	0.00	0.00	0.00
	311Ao	1	15.38	1.43	0.11	0.05	2.21	2.21	9.45	35.71	1.32	0.39	0.39
	311C	1	16.14	32.39	3.47	1.22	66.56	66.56	50.60	229.48	34.17	5.03	5.03
	311Cx	1	29.98	2.04	0.00	0.63	8.99	8.99	0.00	0.00	0.00	0.00	0.00
	311LAS	1	10.80	1.88	0.05	0.00	0.80	0.80	16.00	17.14	0.13	0.22	0.22
	311a	1	6.72	0.45	0.00	0.05	0.73	0.73	0.00	0.00	0.00	0.00	0.00
	311aa O	1	24.72	0.29	0.00	0.03	0.47	0.47	0.00	0.00	0.00	0.00	0.00
	311aa bus	2	24.72	0.61	0.00	0.01	0.12	0.12	0.00	0.00	0.00	0.00	0.00
	311abus	1	6.72	0.09	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
	311b	1	36.19	0.88	0.00	0.16	2.20	2.20	0.00	0.00	0.00	0.00	0.00
	311cn	1	5.85	0.85	0.00	0.08	1.08	1.08	0.00	0.00	0.00	0.00	0.00
	311co	1	5.92	0.39	0.00	0.03	0.48	0.48	0.00	0.00	0.00	0.00	0.00
	311csx	1	4.56	0.08	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
	311dAS	311dAS	3.36	3.06	0.00	0.12	1.69	1.69	0.00	0.00	0.00	0.00	0.00
	311dn	1	11.69	1.28	0.00	0.22	3.14	3.14	0.00	0.00	0.00	0.00	0.00
	311do	1	15.13	0.37	0.00	0.03	0.46	0.46	0.00	0.00	0.00	0.00	0.00
	311out	1	10.80	27.84	2.51	0.21	38.54	38.54	67.46	230.95	5.84	2.97	2.97
	312A	1	5.59	35.32	2.21	0.33	36.08	36.08	64.02	156.46	9.35	1.17	1.17
	312Ae	1	9.73	2.94	0.21	0.02	3.29	3.29	21.80	61.27	0.63	0.89	0.89
	312Be	1	9.73	77.58	6.47	6.44	183.31	183.31	103.01	446.52	170.52	8.91	8.91
	312Bo	1	4.20	63.76	0.41	0.03	6.29	6.29	103.22	24.82	0.98	0.32	0.32
	312Cn	1	9.21	12.87	0.98	0.13	15.79	15.79	22.18	65.20	3.78	0.72	0.72
	312Co	1	9.21	14.24	0.31	0.01	4.55	4.55	34.22	27.30	0.42	0.29	0.29
	312D	1	50.40	50.88	3.89	0.87	67.64	67.64	95.88	298.73	24.38	4.05	4.05
	312Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	18.16	16.89	1.45	1.13	36.70	36.70	60.47	301.35	31.85	7.51	7.51
	312En	1	3.13	26.73	2.55	0.53	43.76	43.76	42.93	163.27	14.91	4.02	4.02
	312Eo	1	3.13	21.89	0.78	0.05	11.74	11.74	40.39	53.50	1.43	1.24	1.24
	312Ex	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	5.62	12.71	1.32	0.13	20.50	20.50	36.40	145.26	3.60	1.72	1716.67
	312K	1	19.36	42.13	3.76	0.65	62.49	62.49	88.46	314.40	18.22	5.48	5.48
	312c BS	1	10.42	2.29	0.14	0.36	7.10	7.10	26.57	188.28	20.26	2.69	2.69
	312c LS	1	7.27	50.74	0.54	2.23	39.43	39.43	99.64	137.39	58.90	2.83	2.83
	312c ent	1	7.78	3.87	0.52	0.30	11.62	11.62	25.48	185.42	8.52	3.70	3.70
	312c x	3	11.18	0.51	0.00	0.09	1.23	1.23	0.00	0.00	0.00	0.00	0.00
	312x LSx	4	12.00	0.16	0.00	0.01	0.16	0.16	0.00	0.00	0.00	0.00	0.00
	4	2	33.00	1.83	0.00	0.14	2.04	2.04	0.00	0.00	0.00	0.00	0.00
	AS	1	3.56	0.36	0.00	0.03	0.49	0.49	0.00	0.00	0.00	0.00	0.00
	AS1	1	41.40	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AS2	1	35.08	0.38	0.00	0.04	0.54	0.54	0.00	0.00	0.00	0.00	0.00
	ASin	1	22.20	0.79	0.04	0.10	1.87	1.87	12.16	70.12	2.73	0.91	0.91
	CS 2	1	4.56	34.99	4.67	1.55	88.34	88.34	87.86	518.67	43.65	7.05	7.05
	QML	1	30.00	2.04	0.00	0.11	1.55	1.55	0.00	0.00	0.00	0.00	0.00
	QMLx	1	12.00	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s per cycle)	Wasted time blocking back (s per cycle)	Wasted time total (s per cycle)	Estimated blocking
08:00-09:00	1	1	0.00	26.50	64.00	41.41	0.00	0.00	0.00			0.00	0.00	0.00	
	308A	2	0.00	1.22	20.87	5.85	0.00	0.00	0.00			0.00	0.00	0.00	
	311Ao	1	0.00	6.76	17.00	39.78	0.00	0.00	0.00			30.00	0.00	30.00	
	311C	1	0.00	9.25	28.87	32.04	0.00	0.00	0.00	1.22	9.14	0.00	0.00	0.00	
	311Cx	1	0.00	0.63	47.65	1.33	0.00	0.00	0.00			0.00	0.00	0.00	
	311LAS	1	0.00	1.39	15.00	9.29	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	
	311a	1	0.00	0.05	10.00	0.51	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa O	1	0.00	0.03	36.00	0.09	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa bus	2	0.00	0.01	35.83	0.02	0.00	0.00	0.00			126.00	0.00	126.00	
	311abus	1	0.00	0.00	9.74	0.01	0.00	0.00	0.00			126.00	0.00	126.00	
	311b	1	0.00	0.16	47.83	0.32	0.00	0.00	0.00			0.00	0.00	0.00	
	311cn	1	0.00	0.08	7.83	0.97	0.00	0.00	0.00			0.00	0.00	0.00	
	311co	1	0.00	0.03	7.83	0.44	0.00	0.00	0.00			0.00	0.00	0.00	
	311csx	1	0.00	0.00	6.61	0.04	0.00	0.00	0.00			19.00	0.00	19.00	
	311dAS	311dAS	0.00	0.12	4.87	2.44	0.00	0.00	0.00			0.00	0.00	0.00	
	311dn	1	0.00	0.22	20.00	1.11	0.00	0.00	0.00			0.00	0.00	0.00	
	311do	1	0.00	0.03	20.00	0.16	0.00	0.00	0.00			0.00	0.00	0.00	
	311out	1	0.00	8.55	15.00	56.98	0.00	0.00	0.00	0.21	7.71	0.00	0.00	0.00	
	312A	1	0.00	5.81	6.00	96.78	0.00	0.00	0.00	0.33	5.81	0.00	0.00	0.00	
	312Ae	1	0.00	2.18	17.00	12.84	0.00	0.00	0.00			9.00	20.69	29.69	
	312Be	1	0.00	22.07	17.00	129.80	1.59	1.59	0.00	6.44	21.72	0.00	0.00	0.00	
	312Bo	1	0.00	1.46	6.00	24.39	0.00	0.00	0.00	0.03	0.90	6.00	0.00	6.00	
	312Cn	1	0.00	2.40	9.33	25.75	0.00	0.00	0.00	0.13	2.40	14.00	0.00	14.00	
	312Co	1	0.00	1.01	9.33	10.87	0.00	0.00	0.00	0.01	0.97	16.00	0.00	16.00	
	312D	1	0.00	11.45	73.04	15.67	0.00	0.00	0.00	0.87	9.48	0.00	0.00	0.00	
	312Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			39.00	0.00	39.00	
	312Eent	1	0.00	12.61	49.00	25.74	0.00	0.00	0.00			0.00	33.91	33.91	
	312En	1	0.00	6.24	6.00	104.02	0.06	0.06	0.00	0.53	6.24	0.00	0.00	0.00	
	312Eo	1	0.00	1.95	6.00	32.58	0.00	0.00	0.00	0.05	1.92	0.00	0.00	0.00	
	312Ex	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			36.00	0.00	36.00	
	312J	1	0.00	5.32	7.48	71.15	0.00	0.00	0.00	0.13	3.55	4.00	0.00	4.00	
	312K	1	0.00	11.82	32.17	36.74	0.00	0.00	0.00	0.65	9.42	0.00	0.00	0.00	
	312c BS	1	0.00	10.65	15.65	68.05	0.00	0.00	0.00			0.00	0.00	0.00	
	312c LS	1	0.00	7.65	11.30	67.68	0.00	0.00	0.00			0.00	10.08	10.08	
	312c ent	1	0.00	7.70	13.91	55.33	0.00	0.00	0.00			0.00	19.68	19.68	
	312c x	3	0.00	0.09	12.17	0.71	0.00	0.00	0.00			0.00	0.00	0.00	
	312x LSx	4	0.00	0.01	17.39	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
	4	2	0.00	0.14	47.83	0.30	0.00	0.00	0.00			0.00	0.00	0.00	
	AS	1	0.00	0.03	6.09	0.56	0.00	0.00	0.00			0.00	0.00	0.00	
	AS1	1	0.00	0.00	60.00	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	AS2	1	0.00	0.04	60.00	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
	ASin	1	0.00	12.03	32.17	37.39	0.00	0.00	0.00			61.00	0.00	61.00	
	CS 2	1	0.00	20.04	6.61	303.29	4.08	0.00	0.00	1.55	12.75	0.00	0.00	0.00	
	QML	1	0.00	0.11	43.48	0.25	0.00	0.00	0.00			0.00	0.00	0.00	
	QMLx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			126.00	0.00	126.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean Journey speed (mph)	JourneyTime (s)
08:00-09:00	1	1	441.60	20.81	13.18	62.44
	308A	2	155.76	5.43	17.83	15.06
	311Ao	1	46.26	1.83	15.70	16.81
	311C	1	86.49	7.02	7.65	48.53
	311Cx	1	306.88	9.96	19.14	32.02
	311LAS	1	9.72	0.38	15.87	12.68
	311a	1	22.90	0.81	17.47	7.17
	311aa O	1	84.25	2.84	18.42	25.01
	311aa bus	2	10.30	0.35	18.19	25.33
	311abus	1	2.80	0.09	18.38	6.81
	311b	1	174.63	6.54	16.60	37.07
	311cn	1	14.45	0.60	15.02	6.70
	311co	1	14.13	0.55	15.95	6.31
	311csx	1	4.10	0.14	18.31	4.64
	311dAS	311dAS	3.92	0.25	9.76	6.42
	311dn	1	71.76	2.25	19.84	12.97
	311do	1	36.11	1.35	16.59	15.50
	311out	1	31.59	3.77	5.21	38.64
	312A	1	9.06	2.94	1.91	40.91
	312Ae	1	24.71	1.00	15.36	12.67
	312Be	1	52.11	14.53	2.23	87.32
	312Bo	1	0.87	0.47	1.15	67.96
	312Cn	1	21.77	1.91	7.09	22.08
	312Co	1	5.67	0.53	6.68	23.45
	312D	1	141.54	9.48	9.28	101.28
	312Dx	1	28.10	0.94	18.64	12.00
	312Eent	1	111.85	5.36	12.96	35.05
	312En	1	14.53	3.44	2.62	29.86
	312Eo	1	4.76	0.95	3.13	25.02
	312Ex	1	35.30	1.18	18.64	12.00
	312J	1	17.59	2.08	5.25	18.33
	312K	1	69.56	6.42	6.73	61.49
	312c BS	1	70.65	2.77	15.84	12.71
	312c LS	1	12.81	3.17	2.51	58.01
	312c ent	1	60.88	2.46	15.36	11.65
	312c x	3	42.70	1.98	13.39	11.70
	312x LSx	4	25.00	0.84	18.39	12.16
	4	2	77.55	2.73	17.66	34.83
	AS	1	12.08	0.38	19.99	3.92
	AS1	1	7.59	0.25	18.64	41.41
	AS2	1	124.55	3.56	21.76	35.46
	ASin	1	110.81	3.83	18.00	22.99
	CS 2	1	24.32	7.03	2.15	39.55
	QML	1	48.25	1.72	17.46	32.04
	QMLx	1	5.90	0.20	18.59	12.03

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warned up	Warned up error	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance Index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.00	27.64			1.00	0.00	144.90	144.90
	308A	2	0.00	0.00	✓	0.00	1.23			1.00	0.00	17.33	17.33
	311Ao	1	0.00	0.00	✓	0.00	6.76			1.00	0.00	2.60	2.60
	311C	1	0.00	0.00	✓	0.00	9.26	1.23	9.16	1.00	0.00	71.60	71.60
	311Cx	1	0.00	0.00	✓	0.00	0.63			1.00	0.00	8.99	8.99
	311LAS	1	0.00	0.00	✓	0.00	1.39	0.00	0.60	1.00	0.00	1.02	1.02
	311a	1	0.00	0.00	✓	0.00	0.05			1.00	0.00	0.73	0.73
	311aa O	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.47	0.47
	311aa bus	2	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.12	0.12
	311abus	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.02	0.02
	311b	1	0.00	0.00	✓	0.00	0.16			1.00	0.00	2.20	2.20
	311cn	1	0.00	0.00	✓	0.00	0.08			1.00	0.00	1.08	1.08
	311co	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.48	0.48
	311csx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.03	0.03
	311dAS	311dAS	0.00	0.00	✓	0.00	0.12			1.00	0.00	1.69	1.69
	311dn	1	0.00	0.00	✓	0.00	0.22			1.00	0.00	3.14	3.14
	311do	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.46	0.46
	311out	1	0.00	0.00	✓	0.00	8.55	0.21	7.71	1.00	0.00	41.51	41.51
	312A	1	0.00	0.00	✓	0.00	5.81	0.33	5.81	1.00	0.00	37.26	37.26
	312Ae	1	0.00	0.00	✓	0.00	2.18			1.00	0.00	4.19	4.19
	312Be	1	0.00	0.00	✓	0.00	23.13	7.51	22.79	1.00	0.00	192.22	192.22
	312Bo	1	0.00	0.00	✓	0.00	1.46	0.03	0.90	1.00	0.00	6.61	6.61
	312Cn	1	0.00	0.00	✓	0.00	2.40	0.13	2.40	1.00	0.00	16.51	16.51
	312Co	1	0.00	0.00	✓	0.00	1.01	0.01	0.97	1.00	0.00	4.84	4.84
	312D	1	0.00	0.00	✓	0.00	11.46	0.88	9.49	1.00	0.00	71.69	71.69
	312Dx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312Eent	1	0.00	0.00	✓	0.00	12.62			1.00	0.00	44.21	44.21
	312En	1	0.00	0.00	✓	0.00	6.24	0.53	6.24	1.00	0.00	47.77	47.77
	312Eo	1	0.00	0.00	✓	0.00	1.95	0.05	1.92	1.00	0.00	12.98	12.98
	312Ex	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312J	1	0.00	0.00	✓	0.00	5.32	0.13	3.55	1.00	0.00	22.22	1737.17
	312K	1	0.00	0.00	✓	0.00	11.83	0.65	9.42	1.00	0.00	67.97	67.97
	312c BS	1	0.00	0.00	✓	0.00	10.65			1.00	0.00	9.79	9.79
	312c LS	1	0.00	0.00	✓	0.00	7.84			1.00	0.00	42.26	42.26
	312c ent	1	0.00	0.00	✓	0.00	7.70			1.00	0.00	15.32	15.32
	312c x	3	0.00	0.00	✓	0.00	0.09			1.00	0.00	1.23	1.23
	312x LSx	4	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.16	0.16
	4	2	0.00	0.00	✓	0.00	0.14			1.00	0.00	2.04	2.04
	AS	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.49	0.49
	AS1	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	AS2	1	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.54	0.54
	ASin	1	0.00	0.00	✓	0.00	12.03			1.00	0.00	2.78	2.78
	CS 2	1	0.00	0.00	✓	0.00	20.07	1.58	12.78	1.00	0.00	95.39	95.39
	QML	1	0.00	0.00	✓	0.00	0.11			1.00	0.00	1.55	1.55
	QMLx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.01	0.01

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	312F	1	0	22	11000	75	10.52	0.31	0.91	0.91
		2	0	22	11000	75	10.52	0.31	0.91	0.91
	312G	1	1	22	11000	24	40.88	0.62	3.55	3.55
		2	1	22	11000	24	40.88	0.62	3.55	3.55
	312H	1	1	22	11000	17	46.71	0.66	4.05	4.05
		2	1	22	11000	17	46.71	0.66	4.05	4.05
	312I	1	0	22	11000	63	15.50	0.38	1.35	1.35
		2	0	22	11000	63	15.50	0.38	1.35	1.35
	312K	1	1	22	11000	18	45.86	0.65	3.98	3.98
		2	1	22	11000	18	45.86	0.65	3.98	3.98
	312L	1	0	0	11000	70	0.00	0.00	0.00	0.00
		2	0	0	11000	70	0.00	0.00	0.00	0.00
	312o	1	0	0	11000	62	0.00	0.00	0.00	0.00
		2	0	0	11000	62	0.00	0.00	0.00	0.00
	312p	1	0	0	11000	5	0.00	0.00	0.00	0.00
		2	0	0	11000	5	0.00	0.00	0.00	0.00
	7	1	0	0	11000	5	0.00	0.00	0.00	0.00
		2	0	0	11000	5	0.00	0.00	0.00	0.00
	8	1	0	0	11000	61	0.00	0.00	0.00	0.00
		2	0	0	11000	61	0.00	0.00	0.00	0.00

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	312F	1	22	22	0		11000	6548	0		26686	0.00	75	75
		2	22	22	0		11000	6548	0		26686	0.00	75	75
	312G	1	22	22	0		11000	2183	1		8829	0.00	24	25
		2	22	22	0		11000	2183	1		8829	0.00	24	25
	312H	1	22	22	0		11000	1571	1		6329	0.00	17	18
		2	22	22	0		11000	1571	1		6329	0.00	17	18
	312I	1	22	22	0		11000	5587	0		22757	0.00	63	64
		2	22	22	0		11000	5587	0		22757	0.00	63	64
	312K	1	22	22	0		11000	1659	1		6686	0.00	18	19
		2	22	22	0		11000	1659	1		6686	0.00	18	19
	312L	1	0	0	0		11000	6198	0		Unrestricted	0.00	70	71
		2	0	0	0		11000	6198	0		Unrestricted	0.00	70	71
	312o	1	0	0	0		11000	5413	0		Unrestricted	0.00	62	62
		2	0	0	0		11000	5413	0		Unrestricted	0.00	62	62
	312p	1	0	0	0		11000	437	0		Unrestricted	0.00	5	5
		2	0	0	0		11000	437	0		Unrestricted	0.00	5	5
	7	1	0	0	0		11000	524	0		Unrestricted	0.00	5	6
		2	0	0	0		11000	524	0		Unrestricted	0.00	5	6
	8	1	0	0	0		11000	5413	0		Unrestricted	0.00	61	62
		2	0	0	0		11000	5413	0		Unrestricted	0.00	61	62

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)
08:00-09:00	312F	1	4.33	10.52	0.06	0.00	0.91	0.91
		2	4.33	10.52	0.06	0.00	0.91	0.91
	312G	1	3.00	40.88	0.25	0.00	3.55	3.55
		2	3.00	40.88	0.25	0.00	3.55	3.55
	312H	1	3.00	46.71	0.29	0.00	4.05	4.05
		2	3.00	46.71	0.29	0.00	4.05	4.05
	312I	1	5.67	15.50	0.09	0.00	1.35	1.35
		2	5.67	15.50	0.09	0.00	1.35	1.35
	312K	1	3.00	45.86	0.28	0.00	3.98	3.98
		2	3.00	45.86	0.28	0.00	3.98	3.98
	312L	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312o	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312p	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	7	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	8	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
08:00-09:00	312F	1	0.31	10.00	3.12	0.00	0.00	0.00
		2	0.31	10.00	3.12	0.00	0.00	0.00
	312G	1	0.62	10.00	6.17	0.00	0.00	0.00
		2	0.62	10.00	6.17	0.00	0.00	0.00
	312H	1	0.66	10.00	6.60	0.00	0.00	0.00
		2	0.66	10.00	6.60	0.00	0.00	0.00
	312I	1	0.38	10.00	3.79	0.00	0.00	0.00
		2	0.38	10.00	3.79	0.00	0.00	0.00
	312K	1	0.65	10.00	6.54	0.00	0.00	0.00
		2	0.65	10.00	6.54	0.00	0.00	0.00
	312L	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312o	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312p	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	7	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	8	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
08:00-09:00	312F	1	0.13	0.09	0.90	14.86
		2	0.13	0.09	0.90	14.86
	312G	1	0.09	0.27	0.20	43.88
		2	0.09	0.27	0.20	43.88
	312H	1	0.09	0.30	0.18	49.71
		2	0.09	0.30	0.18	49.71
	312I	1	0.18	0.13	0.85	21.17
		2	0.18	0.13	0.85	21.17
	312K	1	0.09	0.30	0.18	48.86
		2	0.09	0.30	0.18	48.86
	312L	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EotS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	312F	1	0.00	0.00	0.31	1.00	0.00	0.91	0.91
		2	0.00	0.00	0.31	1.00	0.00	0.91	0.91
	312G	1	0.00	0.00	0.62	1.00	0.00	3.55	3.55
		2	0.00	0.00	0.62	1.00	0.00	3.55	3.55
	312H	1	0.00	0.00	0.66	1.00	0.00	4.05	4.05
		2	0.00	0.00	0.66	1.00	0.00	4.05	4.05
	312I	1	0.00	0.00	0.38	1.00	0.00	1.35	1.35
		2	0.00	0.00	0.38	1.00	0.00	1.35	1.35
	312K	1	0.00	0.00	0.65	1.00	0.00	3.98	3.98
		2	0.00	0.00	0.65	1.00	0.00	3.98	3.98
	312L	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	15/05/2020 15:31:32	15/05/2020 15:31:34	08:00	126	2741.01	66.56	96.00	1/1	2	3	312Be/1	1/1	1/1	

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	96	-6	17885	4612	13.01	917.50	1795.84	2713.34

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	220	800	31.90	27.68	27.68

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	18105	18105	0		96	✓	-6	5412	5440

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	16.45	13.24	38.83	27.73	945.18	945.18	28.22	4219.60	890.00	80.89	1795.84

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	303.29	0.00	738.00	84.37	822.37

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)
08:00-09:00	2679.29	149.31	11.15

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	0.00	1.00	0.00	0.00	1026.07	2741.01

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To																				
		1	2	3	4	5	10	19	20	5a	5b	5c	6	7	8	9	P1	P2	P3	P4	P5	P6
From	1	0.0	76.9	215.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.8	94.3	0.0	0.0	0.0	0.0	0.0	0.0
	2	113.3	0.0	277.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	148.5	149.0	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4	80.2	80.2	244.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	121.1	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10	0.0	0.0	53.5	0.0	0.0	0.0	0.0	81.8	67.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19	0.0	0.0	77.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20	120.9	119.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.5	0.0	0.0	0.0	0.0	141.4	0.0	0.0	0.0	0.0	0.0	0.0
	5a	0.0	0.0	62.9	0.0	0.0	53.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.9	87.3	0.0	0.0	0.0	0.0	0.0
	5c	103.0	100.3	151.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	0.0	0.0	0.0	0.0	0.0	28.9	0.0	56.8	52.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	9	120.4	120.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	178.1	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	P1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	0.0	0.0	0.0	0.0
P2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	0.0	21.2	0.0	0.0	0.0	
P3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.2	0.0	14.9	0.0	0.0	
P4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.9	0.0	49.7	0.0	
P5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7	0.0	48.9	
P6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.9	0.0	

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	P5	P4		22		49.71	22	49.71
2	P4	P5		22		49.71	22	49.71
3	P5	P6		22		48.86	22	48.86
4	P6	P5		22		48.86	22	48.86
14	P1	P2		22		43.88	22	43.88
15	P2	P1		22		43.88	22	43.88
23	P4	P3		22		14.86	22	14.86
30	2	1	3		113.28		3	113.28
34	1	2	5		76.91		5	76.91
37	5b	8	351		86.85		351	86.85
38	5b	9	25		87.32		25	87.32
39	5	5b	282		34.83		282	34.83
49	9	8	25		69.70		25	69.70
56	7	10	58		28.92		58	28.92
57	5a	10	1		53.45		1	53.45
58	9	2	78		120.40		78	120.40
59	9	1	44		120.40		44	120.40
60	20	2	61		119.84		61	119.84
61	P3	P4		22		14.86	22	14.86
65	P2	P3		22		21.17	22	21.17
66	20	1	25		120.86		25	120.86
69	4	5c	549		121.06		549	121.06
70	9	5c	50		178.11		50	178.11
80	9	3	0		0.00		0	0.00
81	5c	5a	0		0.00		0	0.00
82	5c	10	0		0.00		0	0.00
83	5c	3	599		151.80		599	151.80
84	19	5a	0		0.00		0	0.00
85	19	10	0		0.00		0	0.00
86	19	3	80		77.44		80	77.44
108	6	20	314		58.88		314	58.88
109	7	20	279		56.81		279	56.81
110	5a	20	0		0.00		0	0.00
111	10	20	42		81.77		42	81.77
191	1	8	60		93.85		60	93.85
192	1	9	76		94.31		76	94.31
193	2	8	149		148.52		149	148.52
194	2	9	99		148.99		99	148.99
206	4	2	117		80.19		117	80.19
207	4	1	20		80.19		20	80.19
208	4	9	50		23.81		50	23.81
230	5a	3	21		62.89		21	62.89
232	10	3	77		53.51		77	53.51
233	7	5a	287		52.34		287	52.34
234	10	5a	74		67.50		74	67.50
257	20	1	240		120.90		240	120.90
258	20	8	0		0.00		0	0.00
259	20	9	0		0.00		0	0.00
262	20	8	25		141.39		25	141.39
263	20	9	0		0.00		0	0.00
264	20	2	0		0.00		0	0.00
265	20	5b	108		49.51		108	49.51
266	P3	P2		22		21.17	22	21.17
267	5c	1	21		103.04		21	103.04
268	5c	8	0		0.00		0	0.00
269	5c	9	0		0.00		0	0.00
270	5c	2	20		100.27		20	100.27
271	1	5a	0		0.00		0	0.00
272	1	10	0		0.00		0	0.00
273	1	3	410		215.55		410	215.55
274	2	5a	0		0.00		0	0.00
275	2	10	0		0.00		0	0.00
276	2	3	86		277.13		86	277.13
277	4	5a	0		0.00		0	0.00
278	4	10	0		0.00		0	0.00
279	4	3	25		244.67		25	244.67
280	9	5a	0		0.00		0	0.00
281	9	10	0		0.00		0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1	(untitled)	311d			1200	1250	126	0.00	96	-6	62.44	26.65	81.90	26.50		100	100	0.00	144.90
308A	2	(untitled)				1298	1700	126	0.00	76	18	15.06	3.39	0.00	1.22		100	100	0.00	17.33
311Ao	1	(untitled)	311			392	1500	126	30.00	26	244	16.81	1.43	9.45	6.76		100	100	0.00	2.60
311C	1	Lockwood inbound	311out	311out	A	521	1650	51	0.00	77	18	48.53	32.39	50.60	9.25	9.14	100	100	0.00	71.60
311Cx	1	(untitled)	311a			1120	1700	126	0.00	66	37	32.02	2.04	0.00	0.63		100	100	0.00	8.99
311LAS	1	(untitled)	311out	311out	C	108	1400	105	0.00	9	881	12.68	1.88	16.00	1.39	0.60	100	100	0.00	1.02
311a	1	(untitled)	311a			409	1500	126	0.00	27	230	7.17	0.45	0.00	0.05		100	100	0.00	0.73
311aa O	1	(untitled)	311aa			409	1800	126	0.00	23	296	25.01	0.29	0.00	0.03		100	100	0.00	0.47
311aa bus	2	(untitled)	311aa			50	410	126	126.00	12	638	25.33	0.61	0.00	0.01		100	100	0.00	0.12
311abus	1	(untitled)	311a			50	1000	126	126.00	5	1700	6.81	0.09	0.00	0.00		100	100	0.00	0.02
311b	1	(untitled)	311b			635	1500	126	0.00	42	113	37.07	0.88	0.00	0.16		100	100	0.00	2.20
311cn	1	(untitled)	311c			321	1000	126	0.00	32	180	6.70	0.85	0.00	0.08		100	100	0.00	1.08
311co	1	(untitled)	311c			314	1368	126	0.00	23	292	6.31	0.39	0.00	0.03		100	100	0.00	0.48
311csx	1	(untitled)	ASCS			108	1600	126	19.00	7	1233	4.64	0.08	0.00	0.00		100	100	0.00	0.03
311dAS	311dAS	(untitled)	311d			140	365	126	0.00	38	135	6.42	3.06	0.00	0.12		100	100	0.00	1.69
311dn	1	(untitled)	311d			624	1300	126	0.00	48	88	12.97	1.28	0.00	0.22		100	100	0.00	3.14
311do	1	(untitled)	311d			314	1400	126	0.00	22	301	15.50	0.37	0.00	0.03		100	100	0.00	0.46
311out	1	(untitled)	311out	311out	B	351	1750	53	0.00	47	92	38.64	27.84	67.46	8.55	7.71	100	100	0.00	41.51
312A	1	(untitled)	312a	312a	A	259	1750	33	0.00	55	64	40.91	35.32	64.02	5.81		100	100	0.00	37.26
312Ae	1	(untitled)	312b			284	1800	126	29.69	19	377	12.67	2.94	21.80	2.18		100	100	0.00	4.19
312Be	1	(untitled)	312b	312b	M	599 <	1800	43	0.00	95	-6	87.32	77.58	103.01	22.07 +	21.72	100	100	0.00	192.22
312Bo	1	(untitled)	312a	312a	B	25	1700	7	6.00	23	289	67.96	63.76	103.22	1.46	0.90	100	100	0.00	6.61
312Cn	1	(untitled)	312a	312a	C	311	1850	52	14.00	40	125	22.08	12.87	22.18	2.40	2.40	100	100	0.00	16.51
312Co	1	(untitled)	312a	312a	C	81	1222	52	16.00	16	471	23.45	14.24	34.22	1.01	0.97	100	100	0.00	4.84
312D	1	Lockwood Road inbound	312a	312a	D	337	1750	33	0.00	71	26	101.28	50.88	95.88	11.45	9.48	100	100	0.00	71.69
312Dx	1	(untitled)				281	Unrestricted	126	39.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312Eent	1	(untitled)	312a			551	1000	126	33.91	75	19	35.05	16.89	60.47	12.61		100	100	0.00	44.21
312En	1	(untitled)	312a	312a	E	415 <	1600	51	0.00	63	43	29.86	26.73	42.93	6.24 +	6.24	100	100	0.00	47.77
312Eo	1	(untitled)	312a	312a	E	136	1218	51	0.00	27	233	25.02	21.89	40.39	1.95	1.92	100	100	0.00	12.98
312Ex	1	(untitled)				353	Unrestricted	126	36.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312J	1	(untitled)	312b	312b	J	409	1800	72	4.00	39	129	18.33	12.71	36.40	5.32	3.55	100	99999	0.00	1737.17
312K	1	(untitled)	312b	312b	K	376	1700	41	0.00	66	36	61.49	42.13	88.46	11.82	9.42	100	100	0.00	67.97
312c BS	1	(untitled)	312c			785	1400	126	0.00	56	61	12.71	2.29	26.57	10.65		100	100	0.00	9.79
312c LS	1	(untitled)	312c			197	265	126	10.08	86	5	58.01	50.74	99.64	7.65		100	100	0.00	42.26
312c ent	1	(untitled)	312c			761	1700	126	19.68	53	70	11.65	3.87	25.48	7.70		100	100	0.00	15.32
312c x	3	(untitled)				610	1800	126	0.00	34	166	11.70	0.51	0.00	0.09		100	100	0.00	1.23
312x LSx	4	(untitled)				250	1800	126	0.00	14	548	12.16	0.16	0.00	0.01		100	100	0.00	0.16
4	2	(untitled)	ASCS			282	686	126	0.00	41	119	34.83	1.83	0.00	0.14		100	100	0.00	2.04
AS	1	(untitled)	AS			345	1500	126	0.00	23	291	3.92	0.36	0.00	0.03		100	100	0.00	0.49
AS1	1	(untitled)	AS			22	1800	126	126.00	1	7264	41.41	0.01	0.00	0.00		100	100	0.00	0.00
AS2	1	(untitled)				361	1500	126	0.00	24	274	35.46	0.38	0.00	0.04		100	100	0.00	0.54
ASin	1	(untitled)	ASCS			599	1700	126	61.00	35	155	22.99	0.79	12.16	12.03		100	100	0.00	2.78
CS 2	1	(untitled)	311out	311out	D	640 <	1600	62	0.00	80	13	39.55	34.99	87.86	20.04 +	12.75	100	100	0.00	95.39
QML	1	(untitled)	AS			193	520	126	0.00	37	142	32.04	2.04	0.00	0.11		100	100	0.00	1.55
QMLx	1	(untitled)				59	1800	126	126.00	3	2646	12.03	0.03	0.00	0.00		100	100	0.00	0.01

Pedestrian Crossing Results

				SIGNALS		FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PENALTIES	P.I.
Pedestrian	Side	Name	Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay weighting (%)	Cost of traffic penalties (£ per hr)	P.I.
312F	1	(untitled)	312a	312a	F	22	11000	75	0	26686	14.86	10.52	0.31	100	0.00	0.91
	2	(untitled)	312a	312a	F	22	11000	75	0	26686	14.86	10.52	0.31	100	0.00	0.91
312G	1	(untitled)		312a	I	22	11000	24	1	8829	43.88	40.88	0.62	100	0.00	3.55
	2	(untitled)		312a	I	22	11000	24	1	8829	43.88	40.88	0.62	100	0.00	3.55
312H	1	(untitled)		312a	H	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05
	2	(untitled)		312a	H	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05
312I	1	(untitled)	312a	312a	G	22	11000	63	0	22757	21.17	15.50	0.38	100	0.00	1.35
	2	(untitled)	312a	312a	G	22	11000	63	0	22757	21.17	15.50	0.38	100	0.00	1.35
312K	1	(untitled)		312a	N	22	11000	18	1	6686	48.86	45.86	0.65	100	0.00	3.98
	2	(untitled)		312a	N	22	11000	18	1	6686	48.86	45.86	0.65	100	0.00	3.98
312L	1	(untitled)		312b	L	0	11000	70	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312b	L	0	11000	70	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312o	1	(untitled)		312a	O	0	11000	62	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	O	0	11000	62	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312p	1	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
7	1	(untitled)	311out	311out	E	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)	311out	311out	E	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
8	1	(untitled)		311out	F	0	11000	61	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		311out	F	0	11000	61	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	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)
Normal traffic	2678.15	147.13	11.31	36.88	27.73	917.50	1795.84	0.00	2713.34
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians	1.14	2.18	0.33	1.95	0.00	27.68	0.00	0.00	27.68
TOTAL	2679.29	149.31	11.15	38.83	27.73	945.18	1795.84	0.00	2741.01

TRANSYT 15	
Version: 15.5.0.6767 © Copyright TRL Limited, 2016	
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Filename: do DD4+lags+AR+CTM 312K.t15

Path: G:\UTCGRP\A616 Lockwood Bar 2017\Transyt\2020 work\new T15 312K

Report generation date: 06/05/2020 12:22:14

»Network Diagrams

«A1 - pm : D1 - pm* :

»Summary

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»Arms and Traffic Streams

»Pedestrian Crossings

»Local OD Matrix - Local Matrix: 1

»Signal Timings

»TRANSYT 12 Tables

»Results - Link

»Results - Traffic Stream

»Data Entry - Stage Start and End

»Data Entry - Phase

»Data Entry - Traffic Stream

»Data entry - Link

»Results - Pedestrian

»Traffic Stream Results

»Pedestrian Crossing Results

»Network Results

»Point to Point Journey Time

»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITDS\AndrewRawlinson
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
			✓		✓	✓	✓	✓	✓	✓	✓		

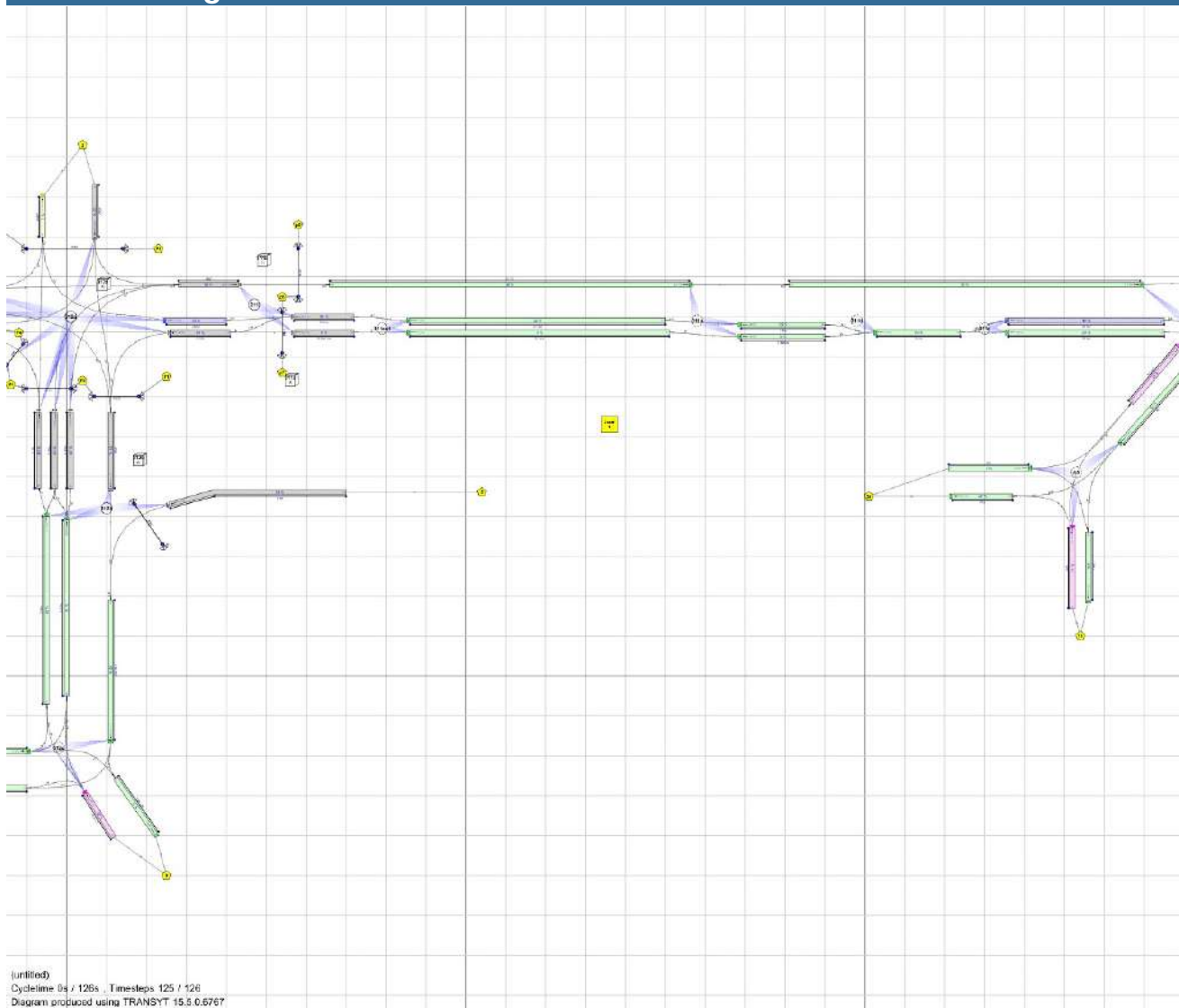
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	mph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



A1 - pm D1 - pm*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	06/05/2020 12:16:41	06/05/2020 12:16:45	17:00	126	3013.32	89.28	102.74	312D/1	5	9	312D/1	312c LS/1	312

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
pm		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
pm				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
126		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻²)	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.47	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻²)	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.47	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
	✓		✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order
				✓	

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	(untitled)		311d
308A	(untitled)		
311An bus	(untitled)		311
311Ao	(untitled)		311
311C	(untitled)		311
311Cx	(untitled)		311a
311a	(untitled)		311a
311abus	(untitled)		311a
311b	(untitled)		311b
311bus	(untitled)		311out
311cn	(untitled)		311c
311co	(untitled)		311c
311dAS	(untitled)		311d
311dn	(untitled)		311d
311do	(untitled)		311d
311out	(untitled)		311out
312A	(untitled)		312a
312Ae	(untitled)		312b
312Be	(untitled)		312b
312Bn	(untitled)		312a
312Bo	(untitled)		312a
312Cn	(untitled)		312a
312Co	(untitled)		312a
312D	(untitled)		312a
312Dx	(untitled)		
312Eent	(untitled)		312a
312En	(untitled)		312a
312Eo	(untitled)		312a
312Ex	(untitled)		
312J	(untitled)		312b
312K	(untitled)		312b
312c BS	(untitled)		312c
312c LS	(untitled)		312c
312c ent	(untitled)		312c
312c x	(untitled)		
312x LSx	(untitled)		
AS	(untitled)		AS
AS1	(untitled)		AS
AS2	(untitled)		
QML	(untitled)		AS
QMLx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	2	(untitled)			368.00	✓	Sum of lanes	1050					Normal	
308A	2	(untitled)			120.00	✓	Sum of lanes	1200					Normal	
311An bus	1	(untitled)			118.00	✓	Sum of lanes	1800			✓		Normal	
311Ao	1	(untitled)			118.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	

311C	1	Lockwood inbound			62.00	✓	Sum of lanes	1650			✓		Normal	
311Cx	1	(untitled)			378.00	✓	Sum of lanes	1700					Normal	
311a	1	(untitled)			56.00	✓	Sum of lanes	1500					Normal	
311abus	1	(untitled)			56.00	✓	Sum of lanes	1000					Normal	
311b	1	(untitled)			275.00	✓	Sum of lanes	1500					Normal	
311bus	1	(untitled)			273.00	✓	Sum of lanes	1400					Normal	
311cn	1	(untitled)			45.00	✓	Sum of lanes	1000					Normal	
311co	1	(untitled)			45.00	✓	Sum of lanes	1200				✓	Normal	
311dAS	311dAS	(untitled)			28.00							✓	Normal	
311dn	1	(untitled)			115.00	✓	Sum of lanes	1300					Normal	
311do	1	(untitled)			115.00	✓	Sum of lanes	1400					Normal	
311out	1	(untitled)			273.00	✓	Sum of lanes	1750					Normal	
312A	1	(untitled)			35.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312Ae	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800			Normal	
312Be	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800			Normal	
312Bn	1	(untitled)			35.00	✓	Sum of lanes	900	✓	1800	✓		Normal	
312Bo	1	(untitled)			35.00	✓	Sum of lanes	1700	✓	1800	✓		Normal	
312Cn	1	(untitled)			50.00	✓	Sum of lanes	1850	✓	1800	✓		Normal	
312Co	1	(untitled)			50.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312D	1	Lockwood Road inbound			420.00	✓	Sum of lanes	1750			✓		Normal	
312Dx	1	(untitled)			100.00								Normal	
312Eent	1	(untitled)			203.00	✓	Sum of lanes	800					Normal	
312En	1	(untitled)			35.00	✓	Sum of lanes	1600	✓	1800	✓		Normal	
312Eo	1	(untitled)			35.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312Ex	1	(untitled)			100.00								Normal	
312J	1	(untitled)			43.00	✓	Sum of lanes	1800			✓		Normal	
312K	1	(untitled)			460.00	✓	Sum of lanes	1700			✓		Normal	
312c BS	1	(untitled)			90.00	✓	Sum of lanes	1400					Normal	
312c LS	1	(untitled)			65.00							✓	Normal	
312c ent	1	(untitled)			80.00	✓	Sum of lanes	1700					Normal	
312c x	3	(untitled)			70.00	✓	Sum of lanes	1800					Normal	
312x LSx	4	(untitled)			100.00	✓	Sum of lanes	1800					Normal	
AS	1	(untitled)			35.00	✓	Sum of lanes	1500					Normal	
AS1	1	(untitled)			345.00	✓	Sum of lanes	1800					Normal	
AS2	1	(untitled)			345.00	✓	Sum of lanes	1500					Normal	

QML	1	(untitled)		✓	250.00						✓	Normal	
QMLx	1	(untitled)			100.00	✓	Sum of lanes	1800				Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1	2	1	(untitled)			1050
308A	2	1	(untitled)			1200
311An bus	1	1	(untitled)			1800
311Ao	1	1	(untitled)			1750
311C	1	1	(untitled)			1650
311Cx	1	1	(untitled)			1700
311a	1	1	(untitled)			1500
311abus	1	1	(untitled)			1000
311b	1	1	(untitled)			1500
311bus	1	1	(untitled)			1400
311cn	1	1	(untitled)			1000
311co	1	1	(untitled)			1200
311dAS	311dAS	1	(untitled)			
311dn	1	1	(untitled)			1300
311do	1	1	(untitled)			1400
311out	1	1	(untitled)			1750
312A	1	1	(untitled)			1750
312Ae	1	1	(untitled)			1800
312Be	1	1	(untitled)			1800
312Bn	1	1	(untitled)			900
312Bo	1	1	(untitled)			1700
312Cn	1	1	(untitled)			1850
312Co	1	1	(untitled)			1440
312D	1	1	(untitled)			1750
312Dx	1	1	(untitled)			
312Eent	1	1	(untitled)			800
312En	1	1	(untitled)			1600
312Eo	1	1	(untitled)			1440
312Ex	1	1	(untitled)			
312J	1	1	(untitled)			1800
312K	1	1	(untitled)			1700
312c BS	1	1	(untitled)			1400
312c LS	1	1	(untitled)			
312c ent	1	1	(untitled)			1700
312c x	3	1	(untitled)			1800
312x LSx	4	1	(untitled)			1800
AS	1	1	(untitled)			1500
AS1	1	1	(untitled)			1800
AS2	1	1	(untitled)			1500
QML	1	1	(untitled)			
QMLx	1	QMLx	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
1	2	NetworkDefault	100	100	100		0.00				
308A	2	NetworkDefault	100	100	100		0.00				
311An bus	1	NetworkDefault	100	100	100		0.00				
311Ao	1	CTM	100	100	100		17.00	✓	17.00	0.00	
311C	1	NetworkDefault	100	100	100		0.00				
311Cx	1	NetworkDefault	100	100	100		0.00				
311a	1	NetworkDefault	100	100	100		0.00				
311abus	1	NetworkDefault	100	100	100		0.00				
311b	1	NetworkDefault	100	100	100		0.00				
311bus	1	NetworkDefault	100	100	100		0.00				
311cn	1	NetworkDefault	100	100	100		0.00				
311co	1	NetworkDefault	100	100	100		0.00				
311dAS	311dAS	NetworkDefault	100	100	100		0.00				
311dn	1	NetworkDefault	100	100	100		0.00				
311do	1	NetworkDefault	100	100	100		0.00				
311out	1	NetworkDefault	100	100	100		0.00				
312A	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Ae	1	CTM	100	100	100		17.00	✓	18.00	0.00	
312Be	1	CTM	100	100	100		17.00	✓	17.00	0.00	
312Bn	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Bo	1	CTM	100	100	100		6.00				
312Cn	1	CTM	100	100	100		8.00	✓	8.00	0.00	
312Co	1	Flare	100	100	100		8.00	✓	8.00	0.00	
312D	1	NetworkDefault	100	100	100		0.00				
312Dx	1	NetworkDefault	100	100	100		0.00				
312Eent	1	PDM	100	100	100		49.00	✓	49.00	0.00	
312En	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Eo	1	Flare	100	100	100		6.00	✓	6.00	0.00	
312Ex	1	NetworkDefault	100	100	100		0.00				
312J	1	NetworkDefault	99999	100	100		0.00				
312K	1	NetworkDefault	100	100	100		0.00				
312c BS	1	NetworkDefault	100	100	100		0.00				
312c LS	1	NetworkDefault	100	100	100		0.00				
312c ent	1	NetworkDefault	100	100	100		0.00				
312c x	3	NetworkDefault	100	100	100		0.00				
312x LSx	4	NetworkDefault	100	100	100		0.00				
AS	1	NetworkDefault	100	100	100		0.00				
AS1	1	NetworkDefault	100	100	100		0.00				
AS2	1	NetworkDefault	100	100	100		0.00				
QML	1	NetworkDefault	100	100	100		0.00				
QMLx	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	126

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	2	820	820
308A	2	868	868
311An bus	1	50	50
311Ao	1	842	842
311C	1	820	820
311Cx	1	820	820
311a	1	842	842
311abus	1	50	50
311b	1	892	892
311bus	1	50	50
311cn	1	204	204
311co	1	688	688
311dAS	311dAS	48	48
311dn	1	979	979
311do	1	688	688
311out	1	842	842
312A	1	276	276
312Ae	1	311	311
312Be	1	389	389
312Bn	1	127	127
312Bo	1	297	297
312Cn	1	768	768
312Co	1	124	124
312D	1	371	371
312Dx	1	336	336
312Eent	1	472	472
312En	1	350	350
312Eo	1	122	122
312Ex	1	668	668
312J	1	611	611
312K	1	592	592
312c BS	1	1203	1203
312c LS	1	220	220
312c ent	1	530	530
312c x	3	1142	1142
312x LSx	4	111	111
AS	1	775	775
AS1	1	81	81
AS2	1	698	698
QML	1	58	58
QMLx	1	168	168

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
311An bus	1	311a	A	
311Ao	1	311a	A	
311C	1	311b	C	
312A	1	312a	A	
312Bn	1	312a	B	
312Bo	1	312a	B	
312Cn	1	312a	C	
312Co	1	312a	C	
312D	1	312a	D	
312En	1	312a	E	
312Eo	1	312a	E	
312J	1	312b	J	
312K	1	312b	K	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)
311dn	1	11.69	22.00
311do	1	15.13	17.00
312D	1	50.40	18.64
312Eent	1	18.16	25.00
312K	1	48.14	21.38
312c LS	1	7.27	20.00
312c ent	1	7.78	23.00
AS1	1	41.40	18.64
QML	1	30.00	18.64

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)	Auto turning radius	Traffic turn style	Turning radius (m)
1	2	1	311Cx/1	1/2	35.79	23.00	✓	Straight	Straight Movement
308A	2	1	311dAS/311dAS	308A/2	11.67	23.00	✓	Straight	Straight Movement
311An bus	1	1	311bus/1	311An bus/1	15.53	17.00	✓	Straight	Straight Movement
311Ao	1	1	311out/1	311Ao/1	15.53	17.00	✓	Straight	Straight Movement
311C	1	1	312D/1	311C/1	6.03	23.00	✓	Straight	Straight Movement
311Cx	1	1	311C/1	311Cx/1	36.76	23.00	✓	Straight	Straight Movement
311a	1	1	311b/1	311a/1	6.72	18.64	✓	Straight	Straight Movement
311abus	1	1	311b/1	311abus/1	6.72	18.64	✓	Straight	Straight Movement
311b	1	1	311cn/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311bus	1	1	311abus/1	311bus/1	35.92	17.00	✓	Straight	Straight Movement
311cn	1	1	311dn/1	311cn/1	5.92	17.00	✓	Straight	Straight Movement
311co	1	1	311do/1	311co/1	5.92	17.00	✓	Straight	Straight Movement
311dAS	311dAS	1	QML/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	1	311a/1	311out/1	35.92	17.00	✓	Straight	Straight Movement
312A	1	1	312Ae/1	312A/1	5.59	14.00	✓	Straight	Straight Movement
312Ae	1	1	312c ent/1	312Ae/1	9.73	20.00	✓	Nearside	62.50

312Be	1	1	312c ent/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Bn	1	1	312Be/1	312Bn/1	5.59	14.00	✓	Straight	Straight Movement
312Bo	1	1	312Be/1	312Bo/1	5.59	14.00	✓	Straight	Straight Movement
312Cn	1	1	311Ao/1	312Cn/1	6.58	17.00	✓	Straight	Straight Movement
312Co	1	1	311Ao/1	312Co/1	6.58	17.00	✓	Straight	Straight Movement
312Dx	1	1	312Co/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312En	1	1	312Eent/1	312En/1	3.13	25.00	✓	Straight	Straight Movement
312Eo	1	1	312Eent/1	312Eo/1	3.13	25.00	✓	Straight	Straight Movement
312Ex	1	1	312D/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	1	312Cn/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
312c BS	1	1	312K/1	312c BS/1	10.07	20.00	✓	Straight	Straight Movement
312c x	3	1	312c BS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	1	312c BS/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
AS	1	1	311dn/1	AS/1	3.56	22.00	✓	Straight	Straight Movement
AS2	1	1	AS/1	AS2/1	35.08	22.00	✓	Straight	Straight Movement
QMLx	1	1	AS/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
308A	2	2	1/2	308A/2	11.67	23.00	✓	Straight	Straight Movement
311C	1	2	312En/1	311C/1	6.03	23.00	✓	Straight	Straight Movement
311b	1	2	311co/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311dAS	311dAS	2	AS1/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
312Ae	1	2	312c LS/1	312Ae/1	9.73	20.00	✓	Straight	Straight Movement
312Be	1	2	312c LS/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Bn	1	2	312Ae/1	312Bn/1	5.59	14.00	✓	Straight	Straight Movement
312Cn	1	2	311An bus/1	312Cn/1	6.58	17.00	✓	Straight	Straight Movement
312Dx	1	2	312A/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	2	312Cn/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	2	312D/1	312J/1	4.81	20.00	✓	Straight	Straight Movement
312c BS	1	2	312J/1	312c BS/1	10.07	20.00	✓	Straight	Straight Movement
312c x	3	2	312c LS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	2	312c ent/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
AS2	1	2	QML/1	AS2/1	35.08	22.00	✓	Nearside	100.00
QMLx	1	2	AS1/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
311C	1	3	312Bn/1	311C/1	6.03	23.00	✓	Straight	Straight Movement
312Dx	1	3	312En/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement

312Ex	1	3	312A/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	3	312Eo/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
311C	1	4	312Bo/1	311C/1	6.03	23.00	✓	Straight	Straight Movement

Give Way Data

Am	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	(ALL)	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	311cn/1	100	0.22		0	0
311dAS		TrafficStream	311dn/1	100	0.22		0	0
		TrafficStream	311Cx/1	100	0.19		0	0
		TrafficStream	312En/1	100	0.22	✓	0	0
1		TrafficStream	312En/1	100	0.22		0	0
	outbound	TrafficStream	312c BS/1	100	0.22		0	0
		TrafficStream	312c ent/1	90	0.19		0	0
		TrafficStream	AS/1	100	0.22		0	0
		TrafficStream	AS1/1	100	0.19		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (mph)
311B	(untitled)				Nearside	3.00	2.00	3.36
311D	(untitled)				Nearside	4.00	2.67	3.36
312-1	(untitled)		312a		Farside	7.00	4.67	3.36
312F	(untitled)		312a		Farside	5.00	3.33	3.36
312G	(untitled)				Nearside	3.00	2.00	3.36
312H	(untitled)				Farside	3.00	2.00	3.36
312K	(untitled)				Farside	3.00	2.00	3.36
312L	(untitled)				Farside	3.00	2.00	3.36

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
311B	311a	B	
311D	311b	D	
312-1	312a	G	
312F	312a	F	
312G	312a	I	
312H	312a	H	
312K	312a	N	
312L	312b	L	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

	To																				
From		1	2	3	4	5	6	7	8	9	10	5a	P1	P2	P3	P4	P5	P6	p7	p8	p9
	1	0	15	335	0	0	0	0	101	21	0	0	0	0	0	0	0	0	0	0	0
	2	5	0	61	0	0	0	0	285	20	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	49	82	374	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	567	25	0	0	0	0	0	0	0	0	0	0	0
	6	467	62	0	0	0	0	0	139	20	0	0	0	0	0	0	0	0	0	0	0
	7	117	62	0	0	0	0	0	25	0	111	664	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	30	115	50	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	24	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0
	5a	0	0	24	0	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0
	P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	p7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
p8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
p9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (PCU/hr)

	To																				
From		1	2	3	4	5	6	7	8	9	10	5a	P1	P2	P3	P4	P5	P6	p7	p8	p9
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0
	P2	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0	0	0	0
	P3	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0	0	0
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0	0	
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0	
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	
p7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	
p8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	
p9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	312Ent/1	312Ex/1	#0000FF
	2	(untitled)	312D/1	312Dx/1	#FF0000
	3	(untitled)		308A/2	#00FF00
	4	(untitled)	312c ent/1		#FFFF00
	5	(untitled)	312K/1		#FFFF00
	6	(untitled)	311do/1		#6495ED
	7	(untitled)	311dn/1		#D2B48C
	8	(untitled)		312c x/3	#FFFF00
	9	(untitled)	312c LS/1	312x LSx/4	#FFFF00
	10	(untitled)	QML/1	QMLx/1	#B48894
	5a	(untitled)	AS1/1	AS2/1	#4A4DC6
	P1	(untitled)	312G:1E	312G:1X	#008000
	P2	(untitled)	312G:2E, 312-1:1E	312G:2X, 312-1:1X	#8A2BE2
	P3	(untitled)	312F:1E, 312-1:2E	312F:1X, 312-1:2X	#6495ED
	P4	(untitled)	312H:2E, 312F:2E	312H:2X, 312F:2X	#FFA500
	P5	(untitled)	312H:1E, 312K:1E	312H:1X, 312K:1X	#00FFFF
	P6	(untitled)	312K:2E	312K:2X	#FF00FF
	p7	(untitled)	311B:2E	311B:2X	#B48894
	p8	(untitled)	311B:1E, 311D:2E	311B:1X, 311D:2X	#4A4DC6
	p9	(untitled)	311D:1E	311D:1X	#04C2D0

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	No Calc FI (PC)
1	30		2	1	312D/1, 312Ex/1	Normal	
	34		1	2	312Eent/1, 312En/1, 312Dx/1	Normal	
	44		6	1	311do/1, 311co/1, 311b/1, 311a/1, 311out/1, 311Ao/1, 312Cn/1, 312Ex/1	Normal	4
	45		6	8	311do/1, 311co/1, 311b/1, 311a/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Normal	1
	46		6	9	311do/1, 311co/1, 311b/1, 311a/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	
	47		6	2	311do/1, 311co/1, 311b/1, 311a/1, 311out/1, 311Ao/1, 312Co/1, 312Dx/1	Normal	
	48		7	1	311dn/1, 311cn/1, 311b/1, 311a/1, 311out/1, 311Ao/1, 312Cn/1, 312Ex/1	Normal	1
	49		9	8	312c LS/1, 312c x/3	Normal	
	53		4	3	312c ent/1, 312Be/1, 312Bo/1, 311C/1, 311Cx/1, 1/2, 308A/2	Percentage	2
	54		5	8	312K/1, 312c BS/1, 312c x/3	Normal	5
	55		9	3	312c LS/1, 312Be/1, 312Bo/1, 311C/1, 311Cx/1, 1/2, 308A/2	Normal	
	56		7	10	311dn/1, AS/1, QMLx/1	Normal	1
	57		5a	10	AS1/1, QMLx/1	Normal	
	58		9	2	312c LS/1, 312Ae/1, 312A/1, 312Dx/1	Normal	1
	59		9	1	312c LS/1, 312Ae/1, 312A/1, 312Ex/1	Normal	
	60		7	1	311dn/1, 311cn/1, 311b/1, 311abus/1, 311bus/1, 311An bus/1, 312Cn/1, 312Ex/1	Disabled	
	64		9	3	312c LS/1, 312Ae/1, 312Bn/1, 311C/1, 311Cx/1, 1/2, 308A/2	Normal	
	191		1	8	312Eent/1, 312Eo/1, 312J/1, 312c BS/1, 312c x/3	Normal	1
	192		1	9	312Eent/1, 312Eo/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	
	193		2	8	312D/1, 312J/1, 312c BS/1, 312c x/3	Normal	2
	194		2	9	312D/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	
	195		5	9	312K/1, 312c BS/1, 312x LSx/4	Normal	
	206		4	2	312c ent/1, 312Ae/1, 312A/1, 312Dx/1	Normal	
	207		4	1	312c ent/1, 312Ae/1, 312A/1, 312Ex/1	Normal	
	208		4	9	312c ent/1, 312x LSx/4	Normal	
	220		7	8	311dn/1, 311cn/1, 311b/1, 311a/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Normal	
	221		7	9	311dn/1, 311cn/1, 311b/1, 311a/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	
	222		7	2	311dn/1, 311cn/1, 311b/1, 311a/1, 311out/1, 311Ao/1, 312Co/1, 312Dx/1	Normal	
	230		5a	3	AS1/1, 311dAS/311dAS, 308A/2	Normal	
	232		10	3	QML/1, 311dAS/311dAS, 308A/2	Normal	
	233		7	5a	311dn/1, AS/1, AS2/1	Normal	6
	234		10	5a	QML/1, AS2/1	Normal	
	235		1	3	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/2, 308A/2	Normal	3
	236		2	3	312D/1, 311C/1, 311Cx/1, 1/2, 308A/2	Normal	
	238		4	3	312c ent/1, 312Ae/1, 312Bn/1, 311C/1, 311Cx/1, 1/2, 308A/2	Percentage	
	239		4	3	312c ent/1, 312Be/1, 312Bn/1, 311C/1, 311Cx/1, 1/2, 308A/2	Percentage	
	240		9	3	312c LS/1, 312Be/1, 312Bn/1, 311C/1, 311Cx/1, 1/2, 308A/2	Normal	
	241		6	1	311do/1, 311co/1, 311b/1, 311abus/1, 311bus/1, 311An bus/1, 312Cn/1, 312Ex/1	Fixed	
	242		6	8	311do/1, 311co/1, 311b/1, 311abus/1, 311bus/1, 311An bus/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Fixed	
	243		6	9	311do/1, 311co/1, 311b/1, 311abus/1, 311bus/1, 311An bus/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Disabled	
	244		7	8	311dn/1, 311cn/1, 311b/1, 311abus/1, 311bus/1, 311An bus/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Disabled	
	245		7	9	311dn/1, 311cn/1, 311b/1, 311abus/1, 311bus/1, 311An bus/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	1		P5	P4	312H:1E, 312H:2X	Normal	22
	2		P4	P5	312H:2E, 312H:1X	Normal	22
	3		P5	P6	312K:1E, 312K:2X	Normal	22
	4		P6	P5	312K:2E, 312K:1X	Normal	22
	14		P1	P2	312G:1E, 312G:2X	Normal	22
	15		P2	P1	312G:2E, 312G:1X	Normal	22
	23		P4	P3	312F:2E, 312F:1X	Normal	22
	26		P3	P2	312-1:2E, 312-1:1X	Normal	22
	27		p8	p9	311D:2E, 311D:1X	Normal	22
	61		P3	P4	312F:1E, 312F:2X	Normal	22
	62		P2	P3	312-1:1E, 312-1:2X	Normal	22
	90		p7	p8	311B:2E, 311B:1X	Normal	22
	91		p8	p7	311B:1E, 311B:2X	Normal	22
	92		p9	p8	311D:1E, 311D:2X	Normal	22

Signal Timings

Network Default: 126s cycle time; 126 steps

Controller Stream 311a

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
311a	ped outbound		1	NetworkDefault	126

Controller Stream 311a - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
311a	Unspecified						Absolute

Controller Stream 311a - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
311a	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311a	A	(untitled)	7	300	0	0	Unknown
	B	(untitled)	5	100	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
311a	1	A	7
	2	B	5

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
311a	1	(untitled)	Single	1, 2	51, 63

Intergreen Matrix for Controller Stream 311a

From	To	
	A	B
	6	

Banned Stage transitions for Controller Stream 311a

From	To	
	1	2
	1	
2		

Interstage Matrix for Controller Stream 311a

From	To	
	1	2
	1	0 6
2	6	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311a	1	✓	1	A	69	51	108	7	7
	2	✓	2	B	57	63	6	5	5

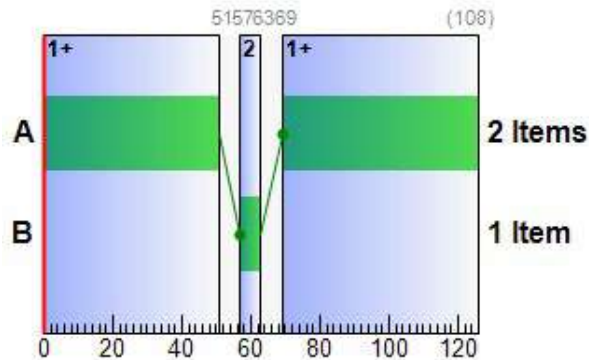
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
311a	A	1	✓	69	51	108
	B	1	✓	57	63	6

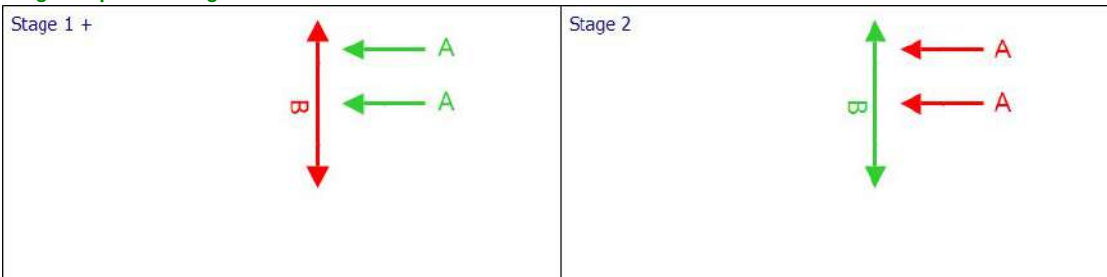
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
311An bus	1	311	311a	A	69	51	108
311Ao	1	311	311a	A	69	51	108

Phase Timings Diagram for Controller Stream 311a



Stage Sequence Diagram for Controller Stream 311a



Controller Stream 311b

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
311b	Ped inbound		1	NetworkDefault	126

Controller Stream 311b - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
311b	Unspecified						Absolute

Controller Stream 311b - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
311b	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311b	C	(untitled)	7	300	0	0	Unknown
	D	(untitled)	5	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
311b	1	C	5
	2	D	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
311b	1	(untitled)	Single	1, 2	64, 77

Intergreen Matrix for Controller Stream 311b

	To		
		C	D
	From	C	D
			6
		D	6

Banned Stage transitions for Controller Stream 311b

	To		
		1	2
	From	1	2
		2	

Interstage Matrix for Controller Stream 311b

	To		
		1	2
	From	1	2
		0	6
		6	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311b	1	✓	1	C	83	64	107	5	7
	2	✓	2	D	70	77	7	7	7

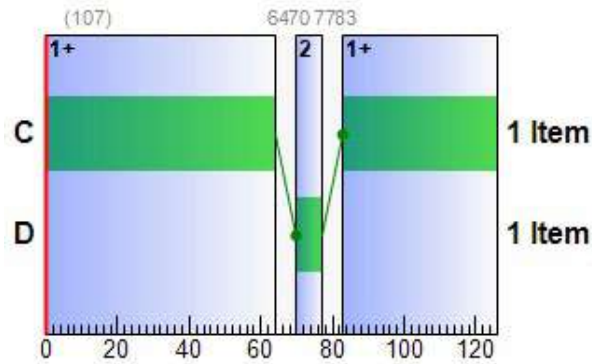
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
311b	C	1	✓	83	64	107
	D	1	✓	70	77	7

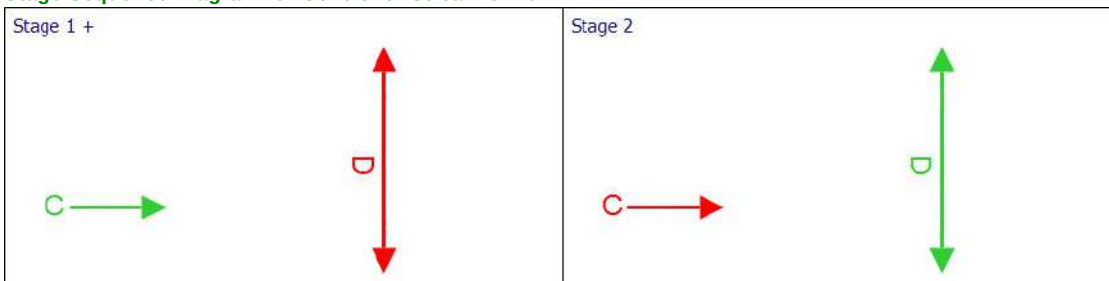
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
311C	1	311	311b	C	83	64	107

Phase Timings Diagram for Controller Stream 311b



Stage Sequence Diagram for Controller Stream 311b



Controller Stream 312a

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312a	(untitled)		1	NetworkDefault	126

Controller Stream 312a - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312a	Unspecified						Absolute

Controller Stream 312a - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312a	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
312a	A	(untitled)	14	30	0	0	Unknown
	B	(untitled)	7	30	0	0	Unknown
	C	(untitled)	56	300	0	0	Unknown
	D	(untitled)	18	30	0	0	Unknown
	E	(untitled)	56	300	0	0	Unknown
	F	(untitled)	7	300	0	0	Unknown
	G	(untitled)	7	300	0	0	Unknown
	H	(untitled)	7	300	0	0	Unknown
	I	(untitled)	7	300	0	0	Unknown
	N	(untitled)	1	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312a	1	B, A, H, I	1
	2	F, E, C, G	1
	3	F, D, G	1
	4	B, N, H, I, F	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
312a	1	Gaining	E	1	2	0	8
	2	Losing	B	1	2	6	
	3	Losing	A	1	2	6	
	4	Losing	C	2	3	4	
	5	Losing	E	2	3	4	
	6	Losing	I	1	2	7	
	7	Gaining	A	4	1	0	1
	8	Losing	D	3	4	7	

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312a	1	(untitled)	Single	1, 2, 3, 4	111, 51, 81, 95

Intergreen Matrix for Controller Stream 312a

	To										
From		A	B	C	D	E	F	G	H	I	N
	A			4	5		4	0			0
	B			4	6	4		4			
	C	6	6		8				7	0	1
	D	5	3	5		4			5	0	5
	E		5		8				5	9	
	F	1									
	G	10	10								
	H			8	8	8					
	I			3	3	0					
N	1			0	0						

Banned Stage transitions for Controller Stream 312a

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 312a

		To			
		1	2	3	4
From	1	0	10	8	4
	2	10	0	12	10
	3	10	5	0	12
	4	1	8	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312a	1	✓	1	B,A,H,I	96	111	15	1	8
	2	✓	2	F,E,C,G	121	51	56	1	52
	3	✓	3	F,D,G	63	81	18	1	11
	4	✓	4	B,N,H,I,F	93	95	2	1	1

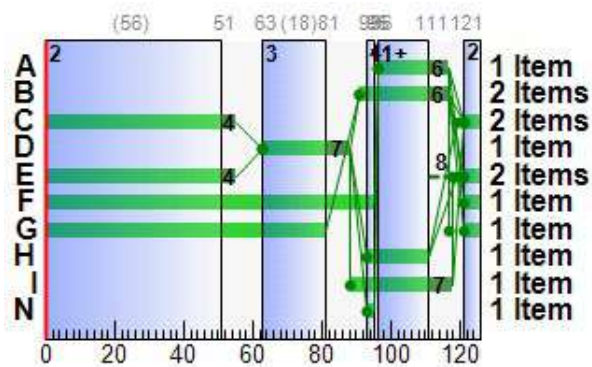
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312a	A	1	✓	96	117	21
	B	1	✓	91	117	26
	C	1	✓	121	55	60
	D	1	✓	63	88	25
	E	1	✓	121	55	60
	F	1	✓	121	95	100
	G	1	✓	121	81	86
	H	1	✓	93	111	18
	I	1	✓	88	118	30
	N	1	✓	93	95	2

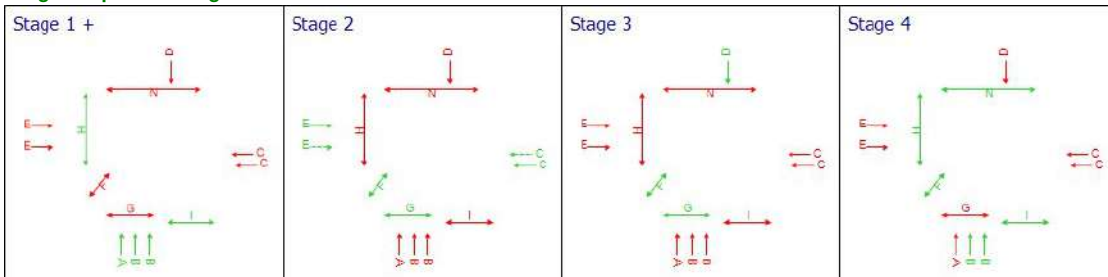
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312A	1	312a	312a	A	96	117	21
312Bn	1	312a	312a	B	91	117	26
312Bo	1	312a	312a	B	91	117	26
312Cn	1	312a	312a	C	121	55	60
312Co	1	312a	312a	C	121	55	60
312D	1	312a	312a	D	63	88	25
312En	1	312a	312a	E	121	55	60
312Eo	1	312a	312a	E	121	55	60

Phase Timings Diagram for Controller Stream 312a



Stage Sequence Diagram for Controller Stream 312a



Controller Stream 312b

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312b	(untitled)		1	NetworkDefault	126

Controller Stream 312b - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312b	Unspecified						Absolute

Controller Stream 312b - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312b	✓	✓	None		

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
312b	J	(untitled)	10	300	0	0	Unknown
	K	(untitled)	44	300	0	0	Unknown
	L	(untitled)	5	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312b	1	L, J	7
	2	K	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312b	1	(untitled)	Single	1, 2	96, 19

Intergreen Matrix for Controller Stream 312b

	To			
	J	K	L	
From	J	5		
	K	5		5
	L	5		

Banned Stage transitions for Controller Stream 312b

	To	
	1	2
From	1	
	2	

Interstage Matrix for Controller Stream 312b

	To	
	1	2
From	1	0 5
	2	5 0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312b	1	✓	1	L,J	24	96	72	7	10
	2	✓	2	K	101	19	44	7	44

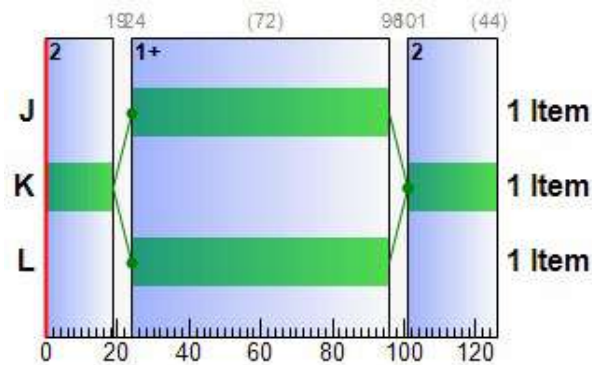
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312b	J	1	✓	24	96	72
	K	1	✓	101	19	44
	L	1	✓	24	96	72

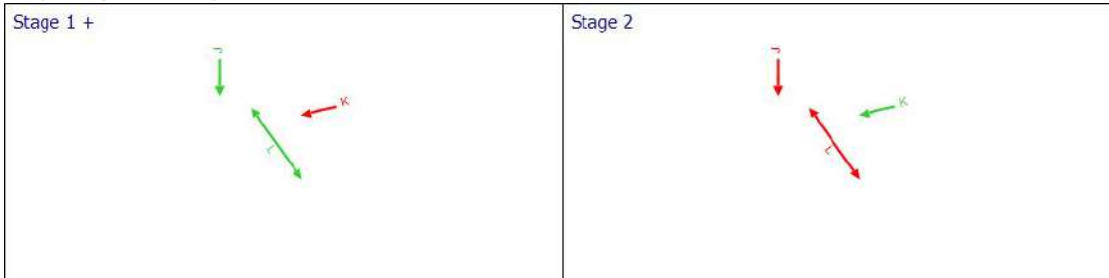
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312J	1	312b	312b	J	24	96	72
312K	1	312b	312b	K	101	19	44

Phase Timings Diagram for Controller Stream 312b



Stage Sequence Diagram for Controller Stream 312b



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
17:00-18:00	(ALL)	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
311a	1	✓	1	A	63	6	13
	2	✓	2	B	51	6	11
311b	1	✓	1	C	77	6	13
	2	✓	2	D	64	6	13
312a	1	✓	1	B,A,H,I	95	1	9
	2	✓	2	F,E,C,G	111	10	62
	3	✓	3	F,D,G	51	12	23
	4	✓	4	B,N,H,I,F	81	12	13
312b	1	✓	1	L,J	19	5	15
	2	✓	2	K	96	5	49

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
311a	A	1	1	2	6	0
	B	1	2	1	6	0
311b	C	1	1	2	6	0
	D	1	2	1	6	0
312a	A	1	1	2	1	6
	B	1	4	2	10	6
	C	1	2	3	10	4
	D	1	3	4	12	7
	E	1	2	3	10	4
	F	1	2	1	10	0
	G	1	2	4	10	0
	H	1	4	2	12	0
	I	1	4	2	7	7
	N	1	4	1	12	0
312b	J	1	1	2	5	0
	K	1	2	1	5	0
	L	1	1	2	5	0

Stage Timings (TRANSYT 12 timings)

Network Default: 126s cycle time; 126 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4
311a	2	63	51		
311b	2	77	64		
312a	4	95	111	51	81
312b	2	19	96		

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
17:00-18:00	1	2	(untitled)		820	1050	126	1050	78	15	12.22	24.81	38.77	48.01
	308A	2	(untitled)		868	1200	126	1200	72	24	3.89	0.94	4.49	15.56
	311An bus	1	(untitled)	A	50	1800	108	942	5	1596	8.36	0.61	2.99	23.89
	311Ao	1	(untitled)	A	842	1750	108	875	96	-6	52.28	24.16	142.14	67.80
	311C	1	Lockwood inbound	C	820	1650	107	1414	58	55	4.29	20.69	191.90	10.32
	311Cx	1	(untitled)		820	1700	126	1700	48	87	0.99	0.22	0.34	37.75
	311a	1	(untitled)		842	1500	126	1500	56	60	1.53	0.36	3.68	8.25
	311abus	1	(untitled)		50	1000	126	1000	5	1700	0.09	0.00	0.01	6.81
	311b	1	(untitled)		892	1500	126	1500	59	51	1.75	0.43	0.91	37.94
	311bus	1	(untitled)		50	1400	126	1400	4	2420	0.05	0.00	0.00	35.97
	311cn	1	(untitled)		204	1000	126	1000	20	341	0.46	0.03	0.33	6.38
	311co	1	(untitled)		688	1394	126	1394	49	82	1.26	0.24	3.07	7.18
	311dAS	311dAS	(untitled)		48	344	126	344	14	545	0.85	0.01	0.23	4.21
	311dn	1	(untitled)		979	1300	126	1300	75	20	4.17	1.14	5.68	15.87
	311do	1	(untitled)		688	1400	126	1400	49	83	1.24	0.24	1.18	16.37
	311out	1	(untitled)		842	1750	126	1609	52	72	1.92	4.73	9.96	37.84
	312A	1	(untitled)	A	276	1750	21	306	90	0	84.36	8.76	146.06	89.95
	312Ae	1	(untitled)		312	1800	126	1220	26	252	9.19	4.13	24.32	18.92
	312Be	1	(untitled)		390	1800	126	1179	33	172	10.29	5.55	32.64	20.02
	312Bn	1	(untitled)	B	128	900	26	193	66	36	54.92	3.02	50.36	60.51
	312Bo	1	(untitled)	B	298	1700	26	364	82	10	58.37	7.18	119.75	63.96
	312Cn	1	(untitled)	C	768	1850	60	896	86	5	24.08	9.65	120.66	30.66
	312Co	1	(untitled)	C	124	1280	60	620	20	350	11.74	1.23	15.31	18.32
	312D	1	Lockwood Road inbound	D	371	1750	25	361	103	-12	164.47	24.47	33.50	214.87
	312Dx	1	(untitled)		336	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312Eent	1	(untitled)		472	800	126	703	67	34	7.10	5.53	11.28	25.27
	312En	1	(untitled)	E	350	1600	60	775	45	99	21.77	5.90	98.32	24.91
	312Eo	1	(untitled)	E	122	1280	60	620	20	357	18.85	2.02	33.59	21.98
	312Ex	1	(untitled)		668	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312J	1	(untitled)	J	603	1800	72	1043	58	56	8.11	8.11	108.48	13.97
	312K	1	(untitled)	K	592	1700	44	607	98	-8	91.53	28.87	36.09	139.67
	312c BS	1	(untitled)		1195	1400	126	1400	85	5	10.18	31.03	198.22	20.25
	312c LS	1	(untitled)		221	241	126	241	92	-2	59.65	8.64	76.39	66.92
	312c ent	1	(untitled)		531	1700	126	1700	31	188	0.48	0.07	0.51	8.26
	312c x	3	(untitled)		1134	1800	126	1800	63	43	1.70	0.54	4.40	12.88
	312x LSx	4	(untitled)		110	1800	126	1800	6	1367	0.07	0.00	0.01	12.07
	AS	1	(untitled)		775	1500	126	1500	52	74	1.28	0.28	4.53	4.84
	AS1	1	(untitled)		81	1800	126	1800	4	1900	0.05	0.00	0.00	41.45
	AS2	1	(untitled)		698	1500	126	1500	47	93	1.04	0.20	0.34	36.12
	QML	1	(untitled)		58	414	126	414	14	543	0.71	0.01	0.03	30.71
	QMLx	1	(untitled)		168	1800	126	1800	9	864	0.10	0.00	0.03	12.10

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311a	1	✓	1	A	69	51	108	7	7
	2	✓	2	B	57	63	6	5	5
311b	1	✓	1	C	83	64	107	5	7
	2	✓	2	D	70	77	7	7	7
312a	1	✓	1	B,A,H,I	96	111	15	1	8
	2	✓	2	F,E,C,G	121	51	56	1	52
	3	✓	3	F,D,G	63	81	18	1	11
	4	✓	4	B,N,H,I,F	93	95	2	1	1
312b	1	✓	1	L,J	24	96	72	7	10
	2	✓	2	K	101	19	44	7	44

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311a	A	A	7	300	0	0	Unknown
	B	B	5	100	0	0	Unknown
311b	C	C	7	300	0	0	Unknown
	D	D	5	300	0	0	Unknown
312a	A	A	14	30	0	0	Unknown
	B	B	7	30	0	0	Unknown
	C	C	56	300	0	0	Unknown
	D	D	18	30	0	0	Unknown
	E	E	56	300	0	0	Unknown
	F	F	7	300	0	0	Unknown
	G	G	7	300	0	0	Unknown
	H	H	7	300	0	0	Unknown
	I	I	7	300	0	0	Unknown
	N	N	1	300	0	0	Unknown
312b	J	J	10	300	0	0	Unknown
	K	K	44	300	0	0	Unknown
	L	L	5	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	2		368.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1050	100	100
308A	2		120.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1200	100	100
311An bus	1		118.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	100
311Ao	1		118.00	CTM	17.00	Normal	✓	✓		Sum of lanes	1750	100	100
311C	1		62.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1650	100	100
311Cx	1		378.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100

311a	1		56.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
311abus	1		56.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311b	1		275.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
311bus	1		273.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311cn	1		45.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311co	1		45.00	NetworkDefault	0.00	Normal	✓		✓	Sum of lanes	1200	100	100
311dAS	311dAS		28.00	NetworkDefault	0.00	Normal			✓			100	100
311dn	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1300	100	100
311do	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311out	1		273.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1750	100	100
312A	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Ae	1		87.00	CTM	17.00	Normal	✓			Sum of lanes	1800	100	100
312Be	1		87.00	CTM	17.00	Normal	✓			Sum of lanes	1800	100	100
312Bn	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	900	100	100
312Bo	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1700	100	100
312Cn	1		50.00	CTM	8.00	Normal	✓	✓		Sum of lanes	1850	100	100
312Co	1		50.00	Flare	8.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312D	1		420.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Dx	1		100.00	NetworkDefault	0.00	Normal						100	100
312Eent	1		203.00	PDM	49.00	Normal	✓			Sum of lanes	800	100	100
312En	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1600	100	100
312Eo	1		35.00	Flare	6.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312Ex	1		100.00	NetworkDefault	0.00	Normal						100	100
312J	1		43.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	99999
312K	1		460.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1700	100	100
312c BS	1		90.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
312c LS	1		65.00	NetworkDefault	0.00	Normal			✓			100	100
312c ent	1		80.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
312c x	3		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
312x LSx	4		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS	1		35.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS1	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS2	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
QML	1	✓	250.00	NetworkDefault	0.00	Normal			✓			100	100
QMLx	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Pedestrian Crossings: Pedestrian summary

Time Segment	Pedestrian crossing	Side	Calculated Flow Entering (Ped/hr)	Degree of saturation (%)	Actual green (s (per cycle))	Effective green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)
17:00-18:00	311B	1	22	4	6	7	56.67	0.73
		2	22	4	6	7	56.67	0.73
	311D	1	22	3	7	8	55.72	0.72
		2	22	3	7	8	55.72	0.72
	312-1	1	22	0	86	87	6.19	0.24
		2	22	0	86	87	6.19	0.24
	312F	1	22	0	100	101	2.58	0.15
		2	22	0	100	101	2.58	0.15
	312G	1	22	1	30	31	36.19	0.58
		2	22	1	30	31	36.19	0.58
	312H	1	22	1	18	19	45.86	0.65
		2	22	1	18	19	45.86	0.65
	312K	1	22	8	2	3	60.52	0.75
		2	22	8	2	3	60.52	0.75
	312L	1	0	0	72	73	0.00	0.00
		2	0	0	72	73	0.00	0.00

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	2	78	15	820	1050	126	12.22	24.81	38.77	39.53	11.36	50.89
	308A	2	72	24	868	1200	126	3.89	0.94	4.49	13.32	0.00	13.32
	311An bus	1	5	1596	50	1800	108	8.36	0.61	2.99	1.65	0.24	1.89
	311Ao	1	96	-6	842	1750	108	52.28	24.16	142.14	173.62	9.04	182.67
	311C	1	58	55	820	1650	107	4.29	20.69	191.90	13.88	8.34	22.23
	311Cx	1	48	87	820	1700	126	0.99	0.22	0.34	3.19	0.00	3.19
	311a	1	56	60	842	1500	126	1.53	0.36	3.68	5.09	0.00	5.09
	311abus	1	5	1700	50	1000	126	0.09	0.00	0.01	0.02	0.00	0.02
	311b	1	59	51	892	1500	126	1.75	0.43	0.91	6.17	0.00	6.17
	311bus	1	4	2420	50	1400	126	0.05	0.00	0.00	0.01	0.00	0.01
	311cn	1	20	341	204	1000	126	0.46	0.03	0.33	0.37	0.00	0.37
	311co	1	49	82	688	1394	126	1.26	0.24	3.07	3.41	0.00	3.41
	311dAS	311dAS	14	545	48	344	126	0.85	0.01	0.23	0.16	0.00	0.16
	311dn	1	75	20	979	1300	126	4.17	1.14	5.68	16.12	0.00	16.12
	311do	1	49	83	688	1400	126	1.24	0.24	1.18	3.36	0.00	3.36
	311out	1	52	72	842	1750	126	1.92	4.73	9.96	6.36	1.19	7.55
	312A	1	90	0	276	1750	21	84.36	8.76	146.06	91.84	1.72	93.56
	312Ae	1	26	252	312	1800	126	9.19	4.13	24.32	11.31	1.70	13.02
	312Be	1	33	172	390	1800	126	10.29	5.55	32.64	15.83	2.24	18.06
	312Bn	1	66	36	128	900	26	54.92	3.02	50.36	27.73	0.61	28.33
	312Bo	1	82	10	298	1700	26	58.37	7.18	119.75	68.61	1.44	70.05
	312Cn	1	86	5	768	1850	60	24.08	9.65	120.66	72.94	2.86	75.80
	312Co	1	20	350	124	1280	60	11.74	1.23	15.31	5.74	0.35	6.10
	312D	1	103	-12	371	1750	25	164.47	24.47	33.50	240.69	7.94	248.63
	312Dx	1	0	Unrestricted	336	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	67	34	472	800	126	7.10	5.53	11.28	13.22	2.95	16.18
	312En	1	45	99	350	1600	60	21.77	5.90	98.32	30.06	3.80	33.86
	312Eo	1	20	357	122	1280	60	18.85	2.02	33.59	9.07	1.30	10.37
	312Ex	1	0	Unrestricted	668	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	58	56	603	1800	72	8.11	8.11	108.48	19.29	1659.73	1679.02
	312K	1	98	-8	592	1700	44	91.53	28.87	36.09	213.72	13.02	226.74
	312c BS	1	85	5	1195	1400	126	10.18	31.03	198.22	47.99	11.49	59.48
	312c LS	1	92	-2	221	241	126	59.65	8.64	76.39	52.00	4.23	56.23
	312c ent	1	31	188	531	1700	126	0.48	0.07	0.51	1.01	0.00	1.01
	312c x	3	63	43	1134	1800	126	1.70	0.54	4.40	7.60	0.00	7.60
	312x LSx	4	6	1367	110	1800	126	0.07	0.00	0.01	0.03	0.00	0.03
	AS	1	52	74	775	1500	126	1.28	0.28	4.53	3.91	0.00	3.91
	AS1	1	4	1900	81	1800	126	0.05	0.00	0.00	0.02	0.00	0.02
	AS2	1	47	93	698	1500	126	1.04	0.20	0.34	2.87	0.00	2.87
	QML	1	14	543	58	414	126	0.71	0.01	0.03	0.16	0.00	0.16
	QMLx	1	9	864	168	1800	126	0.10	0.00	0.03	0.07	0.00	0.07

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (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 (%)	Mean modulus of error	Actual green (s (per cycle))
17:00-18:00	1	2	820	820	0	✓	1050	1050	78		15	0.51	126
	308A	2	868	868	0	✓	1200	1200	72		24	0.33	126
	311An bus	1	50	50	0		1800	942	5		1596	0.00	108
	311Ao	1	842	842	0		1750	875	96	✓	-6	0.12	108
	311C	1	820	820	0	✓	1650	1414	58		55	0.78	107
	311Cx	1	820	820	0	✓	1700	1700	48		87	0.60	126
	311a	1	842	842	0		1500	1500	56		60	0.00	126
	311abus	1	50	50	0		1000	1000	5		1700	0.00	126
	311b	1	892	892	0		1500	1500	59		51	0.00	126
	311bus	1	50	50	0		1400	1400	4		2420	0.00	126
	311cn	1	204	204	0		1000	1000	20		341	0.00	126
	311co	1	688	688	0		1394	1394	49		82	0.00	126
	311dAS	311dAS	48	48	0		344	344	14		545	0.00	126
	311dn	1	979	979	0		1300	1300	75		20	0.00	126
	311do	1	688	688	0		1400	1400	49		83	0.00	126
	311out	1	842	842	0		1750	1609	52		72	0.00	126
	312A	1	276	276	0		1750	306	90	✓	0	0.69	21
	312Ae	1	312	312	-1		1800	1220	26		252	0.08	126
	312Be	1	390	390	-1	✓	1800	1179	33		172	0.01	126
	312Bn	1	128	128	-1		900	193	66		36	0.67	26
	312Bo	1	298	298	-1	✓	1700	364	82		10	0.68	26
	312Cn	1	768	768	0		1850	896	86		5	0.94	60
	312Co	1	124	124	0		1280	620	20		350	0.96	60
	312D	1	371	361	0		1750	361	103	✓	-12	0.00	25
	312Dx	1	336	336	0		Unrestricted	Unrestricted	0		Unrestricted	0.82	126
	312Eent	1	472	472	0		800	703	67		34	0.00	126
	312En	1	350	350	0		1600	775	45		99	0.21	60
	312Eo	1	122	122	0		1280	620	20		357	0.21	60
	312Ex	1	668	668	0		Unrestricted	Unrestricted	0		Unrestricted	0.73	126
	312J	1	603	603	8	✓	1800	1043	58		56	0.67	72
	312K	1	592	592	0		1700	607	98	✓	-8	0.00	44
	312c BS	1	1195	1195	8	✓	1400	1400	85		5	0.39	126
	312c LS	1	221	221	-1		241	241	92	✓	-2	0.00	126
	312c ent	1	531	531	-1	✓	1700	1700	31		188	0.00	126
	312c x	3	1134	1134	8	✓	1800	1800	63		43	0.22	126
	312x LSx	4	110	110	1	✓	1800	1800	6		1367	0.32	126
	AS	1	775	775	0		1500	1500	52		74	0.00	126
	AS1	1	81	81	0		1800	1800	4		1900	0.00	126
	AS2	1	698	698	0		1500	1500	47		93	0.00	126
	QML	1	58	58	0		414	414	14		543	0.00	126
	QMLx	1	168	168	0		1800	1800	9		864	0.00	126

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	1	2	35.79	12.22	1.41	1.37	39.53	39.53	72.56	556.58	38.68	11.36	11.36
	308A	2	11.67	3.89	0.00	0.94	13.32	13.32	0.00	0.00	0.00	0.00	0.00
	311An bus	1	15.53	8.36	0.11	0.00	1.65	1.65	46.30	23.11	0.04	0.24	0.24
	311Ao	1	15.53	52.28	4.27	7.96	173.62	173.62	103.00	654.61	212.65	9.04	9.04
	311C	1	6.03	4.29	0.58	0.40	13.88	13.88	53.28	414.45	22.66	8.34	8.34
	311Cx	1	36.76	0.99	0.00	0.22	3.19	3.19	0.00	0.00	0.00	0.00	0.00
	311a	1	6.72	1.53	0.00	0.36	5.09	5.09	0.00	0.00	0.00	0.00	0.00
	311abus	1	6.72	0.09	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
	311b	1	36.19	1.75	0.00	0.43	6.17	6.17	0.00	0.00	0.00	0.00	0.00
	311bus	1	35.92	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
	311cn	1	5.92	0.46	0.00	0.03	0.37	0.37	0.00	0.00	0.00	0.00	0.00
	311co	1	5.92	1.26	0.00	0.24	3.41	3.41	0.00	0.00	0.00	0.00	0.00
	311dAS	311dAS	3.36	0.85	0.00	0.01	0.16	0.16	0.00	0.00	0.00	0.00	0.00
	311dn	1	11.69	4.17	0.00	1.14	16.12	16.12	0.00	0.00	0.00	0.00	0.00
	311do	1	15.13	1.24	0.00	0.24	3.36	3.36	0.00	0.00	0.00	0.00	0.00
	311out	1	35.92	1.92	0.16	0.29	6.36	6.36	13.58	106.16	8.18	1.19	1.19
	312A	1	5.59	84.36	3.18	3.29	91.84	91.84	87.98	156.46	86.37	1.72	1.72
	312Ae	1	9.73	9.19	0.75	0.04	11.31	11.31	37.82	116.74	1.25	1.70	1.70
	312Be	1	9.73	10.29	1.03	0.08	15.83	15.83	39.77	152.76	2.33	2.24	2.24
	312Bn	1	5.59	54.92	1.32	0.63	27.73	27.73	66.97	68.34	17.38	0.61	0.61
	312Bo	1	5.59	58.37	3.12	1.71	68.61	68.61	68.23	156.46	46.88	1.44	1.44
	312Cn	1	6.58	24.08	2.68	2.45	72.94	72.94	35.71	205.71	68.50	2.86	2.86
	312Co	1	6.58	11.74	0.38	0.03	5.74	5.74	27.13	32.93	0.71	0.35	0.35
	312D	1	50.40	164.47	5.02	11.93	240.69	240.69	175.39	359.96	273.38	7.94	7.94
	312Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	18.16	7.10	0.25	0.68	13.22	13.22	27.75	111.83	19.15	2.95	2.95
	312En	1	3.13	21.77	1.93	0.19	30.06	30.06	48.15	163.24	5.28	3.80	3.80
	312Eo	1	3.13	18.85	0.61	0.02	9.07	9.07	47.19	56.88	0.69	1.30	1.30
	312Ex	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	5.86	8.11	0.96	0.39	19.29	19.29	37.69	215.99	11.21	1.66	1659.73
	312K	1	48.14	91.53	6.57	8.48	213.72	213.72	133.37	570.40	219.14	13.02	13.02
	312c BS	1	10.07	10.18	0.97	2.41	47.99	47.99	66.62	662.24	133.78	11.49	11.49
	312c LS	1	7.27	59.65	0.18	3.48	52.00	52.00	132.64	133.06	160.09	4.23	4.23
	312c ent	1	7.78	0.48	0.00	0.07	1.01	1.01	0.00	0.00	0.00	0.00	0.00
	312c x	3	11.18	1.70	0.00	0.54	7.60	7.60	0.00	0.00	0.00	0.00	0.00
	312x LSx	4	12.00	0.07	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
	AS	1	3.56	1.28	0.00	0.28	3.91	3.91	0.00	0.00	0.00	0.00	0.00
	AS1	1	41.40	0.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
	AS2	1	35.08	1.04	0.00	0.20	2.87	2.87	0.00	0.00	0.00	0.00	0.00
	QML	1	30.00	0.71	0.00	0.01	0.16	0.16	0.00	0.00	0.00	0.00	0.00
	QMLx	1	12.00	0.10	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking
17:00-18:00	1	2	0.00	24.81	64.00	38.77	0.00	0.00	0.00			0.00	0.00	0.00	
	308A	2	0.00	0.94	20.87	4.49	0.00	0.00	0.00			0.00	0.00	0.00	
	311An bus	1	0.00	0.61	20.52	2.99	0.00	0.00	0.00	0.00	0.24	63.00	43.03	106.03	
	311Ao	1	0.00	24.16	17.00	142.14	1.84	1.84	0.00	7.96	12.87	0.00	45.99	45.99	
	311C	1	0.00	20.69	10.78	191.90	1.11	0.00	0.00	0.40	1.49	1.00	0.00	1.00	
	311Cx	1	0.00	0.22	65.74	0.34	0.00	0.00	0.00			2.00	0.00	2.00	
	311a	1	0.00	0.36	9.74	3.68	0.00	0.00	0.00			0.00	0.00	0.00	
	311abus	1	0.00	0.00	9.74	0.01	0.00	0.00	0.00			126.00	0.00	126.00	
	311b	1	0.00	0.43	47.83	0.91	0.00	0.00	0.00			0.00	0.00	0.00	
	311bus	1	0.00	0.00	47.48	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	311cn	1	0.00	0.03	7.83	0.33	0.00	0.00	0.00			0.00	0.00	0.00	
	311co	1	0.00	0.24	7.83	3.07	0.00	0.00	0.00			0.00	0.00	0.00	
	311dAS	311dAS	0.00	0.01	4.87	0.23	0.00	0.00	0.00			126.00	0.00	126.00	
	311dn	1	0.00	1.14	20.00	5.68	0.00	0.00	0.00			0.00	0.00	0.00	
	311do	1	0.00	0.24	20.00	1.18	0.00	0.00	0.00			0.00	0.00	0.00	
	311out	1	0.00	4.73	47.48	9.96	0.00	0.00	0.00			0.00	10.18	10.18	
	312A	1	0.00	8.76	6.00	146.06	1.32	1.32	0.00	3.29	8.76	0.00	0.00	0.00	
	312Ae	1	0.00	4.13	17.00	24.32	0.00	0.00	0.00			0.00	40.63	40.63	
	312Be	1	0.00	5.55	17.00	32.64	0.00	0.00	0.00			0.00	43.46	43.46	
	312Bn	1	0.00	3.02	6.00	50.36	0.00	0.00	0.00	0.63	3.02	0.00	4.00	4.00	
	312Bo	1	0.00	7.18	6.00	119.75	0.45	0.00	0.00	1.71	7.18	0.00	4.00	4.00	
	312Cn	1	0.00	9.65	8.00	120.66	0.54	0.54	0.00	2.45	9.65	0.00	5.00	5.00	
	312Co	1	0.00	1.23	8.00	15.31	0.00	0.00	0.00	0.03	1.18	10.00	0.00	10.00	
	312D	1	0.00	24.47	73.04	33.50	0.00	0.00	0.00	11.93	21.97	0.00	0.00	0.00	
	312Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			36.00	0.00	36.00	
	312Eent	1	0.00	5.53	49.00	11.28	0.00	0.00	0.00			0.00	15.24	15.24	
	312En	1	0.00	5.90	6.00	98.32	0.00	0.00	0.00	0.19	5.90	0.00	21.00	21.00	
	312Eo	1	0.00	2.02	6.00	33.59	0.00	0.00	0.00	0.02	2.01	0.00	5.00	5.00	
	312Ex	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			29.00	0.00	29.00	
	312J	1	0.00	8.11	7.48	108.48	0.01	0.00	0.00	0.39	5.97	2.00	37.00	39.00	
	312K	1	0.00	28.87	80.00	36.09	0.00	0.00	0.00	8.48	21.80	0.00	4.00	4.00	
	312c BS	1	0.00	31.03	15.65	198.22	3.10	0.00	0.00			0.00	0.00	0.00	
	312c LS	1	0.00	8.64	11.30	76.39	0.00	0.00	0.00			0.00	0.00	0.00	
	312c ent	1	0.00	0.07	13.91	0.51	0.00	0.00	0.00			0.00	0.00	0.00	
	312c x	3	0.00	0.54	12.17	4.40	0.00	0.00	0.00			0.00	0.00	0.00	
	312x LSx	4	0.00	0.00	17.39	0.01	0.00	0.00	0.00			0.00	0.00	0.00	
	AS	1	0.00	0.28	6.09	4.53	0.00	0.00	0.00			0.00	0.00	0.00	
	AS1	1	0.00	0.00	60.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
	AS2	1	0.00	0.20	60.00	0.34	0.00	0.00	0.00			0.00	0.00	0.00	
	QML	1	0.00	0.01	43.48	0.03	0.00	0.00	0.00			126.00	0.00	126.00	
	QMLx	1	0.00	0.00	17.39	0.03	0.00	0.00	0.00			0.00	0.00	0.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
17:00-18:00	1	2	301.90	10.94	17.15	48.01
	308A	2	104.20	3.75	17.25	15.56
	311An bus	1	5.90	0.33	11.05	23.89
	311Ao	1	99.36	15.86	3.89	67.80
	311C	1	50.86	2.35	13.44	10.32
	311Cx	1	310.10	8.60	22.40	37.75
	311a	1	47.15	1.93	15.18	8.25
	311abus	1	2.80	0.09	18.38	6.81
	311b	1	245.30	9.40	16.21	37.94
	311bus	1	13.65	0.50	16.98	35.97
	311cn	1	9.18	0.36	15.77	6.38
	311co	1	30.96	1.37	14.03	7.18
	311dAS	311dAS	1.34	0.06	14.88	4.21
	311dn	1	112.59	4.31	16.21	15.87
	311do	1	79.12	3.13	15.71	16.37
	311out	1	229.87	8.85	16.14	37.84
	312A	1	9.66	6.90	0.87	89.95
	312Ae	1	27.14	1.64	10.28	18.92
	312Be	1	33.93	2.17	9.72	20.02
	312Bn	1	4.48	2.15	1.29	60.51
	312Bo	1	10.43	5.29	1.22	63.96
	312Cn	1	38.40	6.54	3.65	30.66
	312Co	1	6.20	0.63	6.10	18.32
	312D	1	155.82	22.14	4.37	214.87
	312Dx	1	33.60	1.12	18.64	12.00
	312Eent	1	95.82	3.31	17.97	25.27
	312En	1	12.25	2.42	3.14	24.91
	312Eo	1	4.27	0.74	3.56	21.98
	312Ex	1	66.79	2.23	18.64	12.00
	312J	1	25.92	2.34	6.89	13.97
	312K	1	272.32	22.97	7.37	139.67
	312c BS	1	107.54	6.72	9.94	20.25
	312c LS	1	14.37	4.11	2.17	66.92
	312c ent	1	42.48	1.22	21.66	8.26
	312c x	3	79.41	4.06	12.15	12.88
	312x LSx	4	11.05	0.37	18.54	12.07
	AS	1	27.13	1.04	16.18	4.84
	AS1	1	27.95	0.93	18.62	41.45
	AS2	1	240.81	7.00	21.36	36.12
	QML	1	14.50	0.49	18.21	30.71
	QMLx	1	16.80	0.56	18.48	12.10

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	2	0.00	0.00	✓	0.00	24.82			1.00	0.00	50.89	50.89
	308A	2	0.00	0.00	✓	0.00	0.94			1.00	0.00	13.32	13.32
	311An bus	1	0.00	0.00	✓	0.00	0.61	0.00	0.24	1.00	0.00	1.89	1.89
	311Ao	1	0.00	0.00	✓	0.00	25.54	9.34	14.25	1.00	0.00	182.67	182.67
	311C	1	0.00	0.00	✓	0.00	20.69	0.40	1.49	1.00	0.00	22.23	22.23
	311Cx	1	0.00	0.00	✓	0.00	0.22			1.00	0.00	3.19	3.19
	311a	1	0.00	0.00	✓	0.00	0.36			1.00	0.00	5.09	5.09
	311abus	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.02	0.02
	311b	1	0.00	0.00	✓	0.00	0.44			1.00	0.00	6.17	6.17
	311bus	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.01	0.01
	311cn	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.37	0.37
	311co	1	0.00	0.00	✓	0.00	0.24			1.00	0.00	3.41	3.41
	311dAS	311dAS	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.16	0.16
	311dn	1	0.00	0.00	✓	0.00	1.14			1.00	0.00	16.12	16.12
	311do	1	0.00	0.00	✓	0.00	0.24			1.00	0.00	3.36	3.36
	311out	1	0.00	0.00	✓	0.00	4.73			1.00	0.00	7.55	7.55
	312A	1	0.00	0.00	✓	0.00	9.13	3.65	9.13	1.00	0.00	93.56	93.56
	312Ae	1	0.00	0.00	✓	0.00	4.13			1.00	0.00	13.02	13.02
	312Be	1	0.00	0.00	✓	0.00	5.55			1.00	0.00	18.06	18.06
	312Bn	1	0.00	0.00	✓	0.00	3.03	0.64	3.03	1.00	0.00	28.33	28.33
	312Bo	1	0.00	0.00	✓	0.00	7.25	1.77	7.25	1.00	0.00	70.05	70.05
	312Cn	1	0.00	0.00	✓	0.00	9.71	2.51	9.71	1.00	0.00	75.80	75.80
	312Co	1	0.00	0.00	✓	0.00	1.23	0.03	1.18	1.00	0.00	6.10	6.10
	312D	1	0.00	0.00	✓	0.00	31.49	18.95	28.98	1.00	0.00	248.63	248.63
	312Dx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312Eent	1	0.00	0.00	✓	0.00	5.53			1.00	0.00	16.18	16.18
	312En	1	0.00	0.00	✓	0.00	5.90	0.19	5.90	1.00	0.00	33.86	33.86
	312Eo	1	0.00	0.00	✓	0.00	2.02	0.02	2.01	1.00	0.00	10.37	10.37
	312Ex	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312J	1	0.00	0.00	✓	0.00	8.11	0.40	5.97	1.00	0.00	20.95	1679.02
	312K	1	0.00	0.00	✓	0.00	31.14	10.75	24.07	1.00	0.00	226.74	226.74
	312c BS	1	0.00	0.00	✓	0.00	31.06			1.00	0.00	59.48	59.48
	312c LS	1	0.00	0.00	✓	0.00	9.16			1.00	0.00	56.23	56.23
	312c ent	1	0.00	0.00	✓	0.00	0.07			1.00	0.00	1.01	1.01
	312c x	3	0.00	0.00	✓	0.00	0.54			1.00	0.00	7.60	7.60
	312x LSx	4	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.03	0.03
	AS	1	0.00	0.00	✓	0.00	0.28			1.00	0.00	3.91	3.91
	AS1	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.02	0.02
	AS2	1	0.00	0.00	✓	0.00	0.20			1.00	0.00	2.87	2.87
	QML	1	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.16	0.16
	QMLx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.07	0.07

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	311B	1	4	22	11000	6	56.67	0.73	4.92	4.92
		2	4	22	11000	6	56.67	0.73	4.92	4.92
	311D	1	3	22	11000	7	55.72	0.72	4.84	4.84
		2	3	22	11000	7	55.72	0.72	4.84	4.84
	312-1	1	0	22	11000	86	6.19	0.24	0.54	0.54
		2	0	22	11000	86	6.19	0.24	0.54	0.54
	312F	1	0	22	11000	100	2.58	0.15	0.22	0.22
		2	0	22	11000	100	2.58	0.15	0.22	0.22
	312G	1	1	22	11000	30	36.19	0.58	3.14	3.14
		2	1	22	11000	30	36.19	0.58	3.14	3.14
	312H	1	1	22	11000	18	45.86	0.65	3.98	3.98
		2	1	22	11000	18	45.86	0.65	3.98	3.98
	312K	1	8	22	11000	2	60.52	0.75	5.25	5.25
		2	8	22	11000	2	60.52	0.75	5.25	5.25
	312L	1	0	0	11000	72	0.00	0.00	0.00	0.00
		2	0	0	11000	72	0.00	0.00	0.00	0.00

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Eff gre (cy)
17:00-18:00	311B	1	22	22	0		11000	611	4		2400	0.00	6	
		2	22	22	0		11000	611	4		2400	0.00	6	
	311D	1	22	22	0		11000	698	3		2757	0.00	7	
		2	22	22	0		11000	698	3		2757	0.00	7	
	312-1	1	22	22	0		11000	7595	0		30971	0.00	86	
		2	22	22	0		11000	7595	0		30971	0.00	86	
	312F	1	22	22	0		11000	8817	0		35971	0.00	100	
		2	22	22	0		11000	8817	0		35971	0.00	100	
	312G	1	22	22	0		11000	2706	1		10971	0.00	30	
		2	22	22	0		11000	2706	1		10971	0.00	30	
	312H	1	22	22	0		11000	1659	1		6686	0.00	18	
		2	22	22	0		11000	1659	1		6686	0.00	18	
	312K	1	22	22	0		11000	262	8		971	0.00	2	
		2	22	22	0		11000	262	8		971	0.00	2	
	312L	1	0	0	0		11000	6373	0		Unrestricted	0.00	72	
		2	0	0	0		11000	6373	0		Unrestricted	0.00	72	

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)
17:00-18:00	311B	1	3.00	56.67	0.35	0.00	4.92	4.92
		2	3.00	56.67	0.35	0.00	4.92	4.92
	311D	1	3.67	55.72	0.34	0.00	4.84	4.84
		2	3.67	55.72	0.34	0.00	4.84	4.84
	312-1	1	5.67	6.19	0.04	0.00	0.54	0.54
		2	5.67	6.19	0.04	0.00	0.54	0.54
	312F	1	4.33	2.58	0.02	0.00	0.22	0.22
		2	4.33	2.58	0.02	0.00	0.22	0.22
	312G	1	3.00	36.19	0.22	0.00	3.14	3.14
		2	3.00	36.19	0.22	0.00	3.14	3.14
	312H	1	3.00	45.86	0.28	0.00	3.98	3.98
		2	3.00	45.86	0.28	0.00	3.98	3.98
	312K	1	3.00	60.52	0.37	0.00	5.25	5.25
		2	3.00	60.52	0.37	0.00	5.25	5.25
	312L	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
17:00-18:00	311B	1	0.73	10.00	7.27	0.00	0.00	0.00
		2	0.73	10.00	7.27	0.00	0.00	0.00
	311D	1	0.72	10.00	7.21	0.00	0.00	0.00
		2	0.72	10.00	7.21	0.00	0.00	0.00
	312-1	1	0.24	10.00	2.38	0.00	0.00	0.00
		2	0.24	10.00	2.38	0.00	0.00	0.00
	312F	1	0.15	10.00	1.53	0.00	0.00	0.00
		2	0.15	10.00	1.53	0.00	0.00	0.00
	312G	1	0.58	10.00	5.81	0.00	0.00	0.00
		2	0.58	10.00	5.81	0.00	0.00	0.00
	312H	1	0.65	10.00	6.54	0.00	0.00	0.00
		2	0.65	10.00	6.54	0.00	0.00	0.00
	312K	1	0.75	10.00	7.52	0.00	0.00	0.00
		2	0.75	10.00	7.52	0.00	0.00	0.00
	312L	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
17:00-18:00	311B	1	0.09	0.36	0.15	59.67
		2	0.09	0.36	0.15	59.67
	311D	1	0.11	0.36	0.19	59.39
		2	0.11	0.36	0.19	59.39
	312-1	1	0.18	0.07	1.51	11.86
		2	0.18	0.07	1.51	11.86
	312F	1	0.13	0.04	1.94	6.91
		2	0.13	0.04	1.94	6.91
	312G	1	0.09	0.24	0.23	39.19
		2	0.09	0.24	0.23	39.19
	312H	1	0.09	0.30	0.18	48.86
		2	0.09	0.30	0.18	48.86
	312K	1	0.09	0.39	0.14	63.52
		2	0.09	0.39	0.14	63.52
	312L	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EoTS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	311B	1	0.00	0.00	0.73	1.00	0.00	4.92	4.92
		2	0.00	0.00	0.73	1.00	0.00	4.92	4.92
	311D	1	0.00	0.00	0.72	1.00	0.00	4.84	4.84
		2	0.00	0.00	0.72	1.00	0.00	4.84	4.84
	312-1	1	0.00	0.00	0.24	1.00	0.00	0.54	0.54
		2	0.00	0.00	0.24	1.00	0.00	0.54	0.54
	312F	1	0.00	0.00	0.15	1.00	0.00	0.22	0.22
		2	0.00	0.00	0.15	1.00	0.00	0.22	0.22
	312G	1	0.00	0.00	0.58	1.00	0.00	3.14	3.14
		2	0.00	0.00	0.58	1.00	0.00	3.14	3.14
	312H	1	0.00	0.00	0.65	1.00	0.00	3.98	3.98
		2	0.00	0.00	0.65	1.00	0.00	3.98	3.98
	312K	1	0.00	0.00	0.75	1.00	0.00	5.25	5.25
		2	0.00	0.00	0.75	1.00	0.00	5.25	5.25
	312L	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over PR
1	06/05/2020 12:16:41	06/05/2020 12:16:45	17:00	126	3013.32	89.28	102.74	312D/1	5	9	312D/1	312c LS/1	312

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	103	-12	20286	4305	15.27	1221.99	1745.55	2967.54

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s per cycle)	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	8	308	642	37.68	45.77	45.77

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)	Effective green (s per cycle)
17:00-18:00	20594	20584	17	✓	103	✓	-12	4947	4976

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	16.64	15.61	38.74	50.54	1267.76	1267.76	30.41	4917.91	1328.36	87.49	1745.55

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
17:00-18:00	198.22	0.00	647.00	278.54	925.54

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)
17:00-18:00	3024.87	184.50	10.19

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	0.00	0.00	✓	0.00	1.00	0.00	0.00	1355.25	3013.32

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

	To																			
	1	2	3	4	5	6	7	8	9	10	5a	P1	P2	P3	P4	P5	P6	p7	p8	p9
From	2	226.9	0.0	322.8	0.0	0.0	0.0	0.0	252.6	251.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4	129.8	129.8	202.9	0.0	0.0	0.0	0.0	0.0	20.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	173.4	172.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6	215.5	205.7	0.0	0.0	0.0	0.0	0.0	250.7	257.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	216.6	204.4	0.0	0.0	0.0	0.0	0.0	256.7	0.0	32.8	56.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	9	187.2	187.2	259.2	0.0	0.0	0.0	0.0	79.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10	0.0	0.0	50.5	0.0	0.0	0.0	0.0	0.0	0.0	66.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5a	0.0	0.0	61.2	0.0	0.0	0.0	0.0	0.0	0.0	53.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	P1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	P2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.2	0.0	11.9	0.0	0.0	0.0	0.0	0.0	0.0
	P3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	0.0	6.9	0.0	0.0	0.0	0.0	0.0
	P4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	0.0	48.9	0.0	0.0	0.0	0.0
	P5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.9	0.0	63.5	0.0	0.0	0.0
	P6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.5	0.0	0.0	0.0	0.0
	p7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.7	0.0
	p8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.7	0.0	59.4
	p9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59.4	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	P5	P4		22		48.86	22	48.86
2	P4	P5		22		48.86	22	48.86
3	P5	P6		22		63.52	22	63.52
4	P6	P5		22		63.52	22	63.52
14	P1	P2		22		39.19	22	39.19
15	P2	P1		22		39.19	22	39.19
23	P4	P3		22		6.91	22	6.91
26	P3	P2		22		11.86	22	11.86
27	p8	p9		22		59.39	22	59.39
30	2	1	5		226.87		5	226.87
34	1	2	15		62.17		15	62.17
44	6	1	442		217.92		442	217.92
45	6	8	114		257.97		114	257.97
46	6	9	20		257.15		20	257.15
47	6	2	62		205.71		62	205.71
48	7	1	117		216.62		117	216.62
49	9	8	25		79.80		25	79.80
53	4	3	281		203.88		281	203.88
54	5	8	567		173.44		567	173.44
55	9	3	17		261.46		17	261.46
56	7	10	111		32.81		111	32.81
57	5a	10	57		53.55		57	53.55
58	9	2	115		187.19		115	187.19
59	9	1	30		187.19		30	187.19
60	7	1	0		0.00		0	0.00
61	P3	P4		22		6.91	22	6.91
62	P2	P3		22		11.86	22	11.86
64	9	3	17		258.70		17	258.70
90	p7	p8		22		59.67	22	59.67
91	p8	p7		22		59.67	22	59.67
92	p9	p8		22		59.39	22	59.39
191	1	8	101		105.48		101	105.48
192	1	9	21		104.67		21	104.67
193	2	8	285		252.63		285	252.63
194	2	9	20		251.81		20	251.81
195	5	9	25		172.62		25	172.62
206	4	2	82		129.82		82	129.82
207	4	1	49		129.82		49	129.82
208	4	9	25		20.33		25	20.33
220	7	8	25		256.67		25	256.67
221	7	9	0		0.00		0	0.00
222	7	2	62		204.41		62	204.41
230	5a	3	24		61.22		24	61.22
232	10	3	24		50.48		24	50.48
233	7	5a	664		56.83		664	56.83
234	10	5a	34		66.83		34	66.83
235	1	3	335		162.63		335	162.63
236	2	3	61		322.81		61	322.81
238	4	3	19		200.73		19	200.73
239	4	3	75		199.76		75	199.76
240	9	3	17		257.47		17	257.47
241	6	1	25		172.55		25	172.55
242	6	8	25		217.66		25	217.66
243	6	9	0		0.00		0	0.00
244	7	8	0		0.00		0	0.00
245	7	9	0		0.00		0	0.00

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			Q
Am	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mea ma que (PC
1	2	(untitled)	311d			820	1050	126	0.00	78	15	48.01	12.22	72.56	24.8
308A	2	(untitled)				868	1200	126	0.00	72	24	15.56	3.89	0.00	0.9
311An bus	1	(untitled)	311	311a	A	50	1800	108	106.03	5	1596	23.89	8.36	46.30	0.6
311Ao	1	(untitled)	311	311a	A	842 <	1750	108	45.99	96	-6	67.80	52.28	103.00	24.1 +
311C	1	Lockwood inbound	311	311b	C	820 <	1650	107	1.00	58	55	10.32	4.29	53.28	20.6 +
311Cx	1	(untitled)	311a			820	1700	126	2.00	48	87	37.75	0.99	0.00	0.2
311a	1	(untitled)	311a			842	1500	126	0.00	56	60	8.25	1.53	0.00	0.3
311abus	1	(untitled)	311a			50	1000	126	126.00	5	1700	6.81	0.09	0.00	0.0
311b	1	(untitled)	311b			892	1500	126	0.00	59	51	37.94	1.75	0.00	0.4
311bus	1	(untitled)	311out			50	1400	126	126.00	4	2420	35.97	0.05	0.00	0.0
311cn	1	(untitled)	311c			204	1000	126	0.00	20	341	6.38	0.46	0.00	0.0
311co	1	(untitled)	311c			688	1394	126	0.00	49	82	7.18	1.26	0.00	0.2
311dAS	311dAS	(untitled)	311d			48	344	126	126.00	14	545	4.21	0.85	0.00	0.0
311dn	1	(untitled)	311d			979	1300	126	0.00	75	20	15.87	4.17	0.00	1.1
311do	1	(untitled)	311d			688	1400	126	0.00	49	83	16.37	1.24	0.00	0.2
311out	1	(untitled)	311out			842	1750	126	10.18	52	72	37.84	1.92	13.58	4.7
312A	1	(untitled)	312a	312a	A	276 <	1750	21	0.00	90	0	89.95	84.36	87.98	8.76
312Ae	1	(untitled)	312b			312	1800	126	40.63	26	252	18.92	9.19	37.82	4.1
312Be	1	(untitled)	312b			390	1800	126	43.46	33	172	20.02	10.29	39.77	5.5
312Bn	1	(untitled)	312a	312a	B	128	900	26	4.00	66	36	60.51	54.92	66.97	3.0
312Bo	1	(untitled)	312a	312a	B	298 <	1700	26	4.00	82	10	63.96	58.37	68.23	7.18
312Cn	1	(untitled)	312a	312a	C	768 <	1850	60	5.00	86	5	30.66	24.08	35.71	9.65
312Co	1	(untitled)	312a	312a	C	124	1280	60	10.00	20	350	18.32	11.74	27.13	1.2
312D	1	Lockwood Road inbound	312a	312a	D	371	1750	25	0.00	103	-12	214.87	164.47	175.39	24.4
312Dx	1	(untitled)				336	Unrestricted	126	36.00	0	Unrestricted	12.00	0.00	0.00	0.0
312Eent	1	(untitled)	312a			472	800	126	15.24	67	34	25.27	7.10	27.75	5.5
312En	1	(untitled)	312a	312a	E	350	1600	60	21.00	45	99	24.91	21.77	48.15	5.9
312Eo	1	(untitled)	312a	312a	E	122	1280	60	5.00	20	357	21.98	18.85	47.19	2.0
312Ex	1	(untitled)				668	Unrestricted	126	29.00	0	Unrestricted	12.00	0.00	0.00	0.0
312J	1	(untitled)	312b	312b	J	603 <	1800	72	39.00	58	56	13.97	8.11	37.69	8.11
312K	1	(untitled)	312b	312b	K	592	1700	44	4.00	98	-8	139.67	91.53	133.37	28.8
312c BS	1	(untitled)	312c			1195 <	1400	126	0.00	85	5	20.25	10.18	66.62	31.0 +
312c LS	1	(untitled)	312c			221	241	126	0.00	92	-2	66.92	59.65	132.64	8.6
312c ent	1	(untitled)	312c			531	1700	126	0.00	31	188	8.26	0.48	0.00	0.0
312c x	3	(untitled)				1134	1800	126	0.00	63	43	12.88	1.70	0.00	0.5
312x LSx	4	(untitled)				110	1800	126	0.00	6	1367	12.07	0.07	0.00	0.0
AS	1	(untitled)	AS			775	1500	126	0.00	52	74	4.84	1.28	0.00	0.2
AS1	1	(untitled)	AS			81	1800	126	0.00	4	1900	41.45	0.05	0.00	0.0
AS2	1	(untitled)				698	1500	126	0.00	47	93	36.12	1.04	0.00	0.2
QML	1	(untitled)	AS			58	414	126	126.00	14	543	30.71	0.71	0.00	0.0
QMLx	1	(untitled)				168	1800	126	0.00	9	864	12.10	0.10	0.00	0.0

Pedestrian Crossing Results

				SIGNALS		FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	P
Pedestrian	Side	Name	Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay weighting (%)	P
311B	1	(untitled)		311a	B	22	11000	6	4	2400	59.67	56.67	0.73	100	
	2	(untitled)		311a	B	22	11000	6	4	2400	59.67	56.67	0.73	100	
311D	1	(untitled)		311b	D	22	11000	7	3	2757	59.39	55.72	0.72	100	
	2	(untitled)		311b	D	22	11000	7	3	2757	59.39	55.72	0.72	100	
312-1	1	(untitled)	312a	312a	G	22	11000	86	0	30971	11.86	6.19	0.24	100	
	2	(untitled)	312a	312a	G	22	11000	86	0	30971	11.86	6.19	0.24	100	
312F	1	(untitled)	312a	312a	F	22	11000	100	0	35971	6.91	2.58	0.15	100	
	2	(untitled)	312a	312a	F	22	11000	100	0	35971	6.91	2.58	0.15	100	
312G	1	(untitled)		312a	I	22	11000	30	1	10971	39.19	36.19	0.58	100	
	2	(untitled)		312a	I	22	11000	30	1	10971	39.19	36.19	0.58	100	
312H	1	(untitled)		312a	H	22	11000	18	1	6686	48.86	45.86	0.65	100	
	2	(untitled)		312a	H	22	11000	18	1	6686	48.86	45.86	0.65	100	
312K	1	(untitled)		312a	N	22	11000	2	8	971	63.52	60.52	0.75	100	
	2	(untitled)		312a	N	22	11000	2	8	971	63.52	60.52	0.75	100	
312L	1	(untitled)		312b	L	0	11000	72	0	Unrestricted	0.00	0.00	0.00	100	
	2	(untitled)		312b	L	0	11000	72	0	Unrestricted	0.00	0.00	0.00	100	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	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)
Normal traffic	3023.33	180.96	10.38	35.52	50.54	1221.99	1745.55	0.00	2967.54
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians	1.54	3.54	0.27	3.22	0.00	45.77	0.00	0.00	45.77
TOTAL	3024.87	184.50	10.19	38.74	50.54	1267.76	1745.55	0.00	3013.32

- | < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- | * = 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/traffic stream excess queue is greater than 0
- | **P.I. = PERFORMANCE INDEX**



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Path: C:\Users\andrewrawlinson\Desktop\for Adrian for Jacobs
Report generation date: 15/05/2020 15:31:51

- »Network Diagrams
- «A1 - am : D1 - am* :
 - »Summary
 - »Network Options
 - »Traffic Nodes
 - »Arms and Traffic Streams
 - »Pedestrian Crossings
 - »Local OD Matrix - Local Matrix: 1
 - »Signal Timings
 - »TRANSYT 12 Tables
 - »Results - Link
 - »Results - Traffic Stream
 - »Data Entry - Stage Start and End
 - »Data Entry - Phase
 - »Data Entry - Traffic Stream
 - »Data entry - Link
 - »Results - Pedestrian
 - »Traffic Stream Results
 - »Pedestrian Crossing Results
 - »Network Results
 - »Point to Point Journey Time
 - »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITDS\AndrewRawlinson
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
			✓		✓	✓	✓	✓	✓	✓	✓		

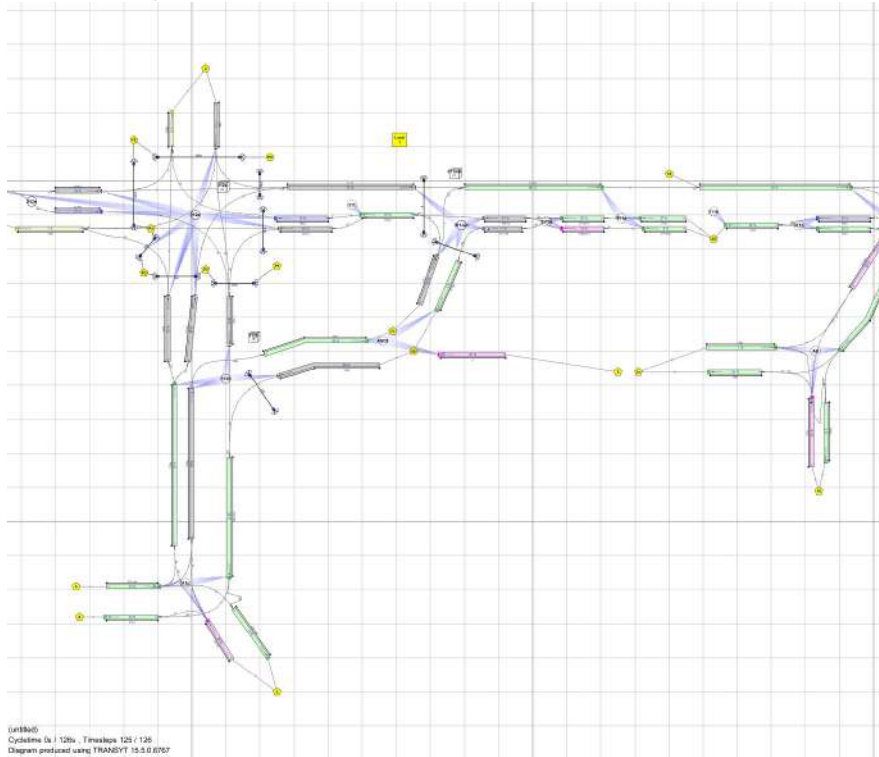
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	mph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



A1 - am

D1 - am*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	15/05/2020 15:31:32	15/05/2020 15:31:34	08:00	126	2741.01	66.56	96.00	1/1	2	3	312Be/1	1/1	1/1	

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
am	option 1	D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
am				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
126		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻²)	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.47	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻²)	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.47	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	312a, 312b, 311out

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	(untitled)		311d
308A	(untitled)		
311Ao	(untitled)		311
311C	(untitled)		311out
311Cx	(untitled)		311a
311LAS	(untitled)		311out
311a	(untitled)		311a
311aa O	(untitled)		311aa
311aa bus	(untitled)		311aa
311abus	(untitled)		311a
311b	(untitled)		311b
311cn	(untitled)		311c
311co	(untitled)		311c
311csx	(untitled)		ASCS
311dAS	(untitled)		311d
311dn	(untitled)		311d
311do	(untitled)		311d
311out	(untitled)		311out
312A	(untitled)		312a
312Ae	(untitled)		312b
312Be	(untitled)		312b
312Bo	(untitled)		312a
312Cn	(untitled)		312a
312Co	(untitled)		312a
312D	(untitled)		312a
312Dx	(untitled)		
312Eent	(untitled)		312a
312En	(untitled)		312a
312Eo	(untitled)		312a
312Ex	(untitled)		
312J	(untitled)		312b
312K	(untitled)		312b
312c BS	(untitled)		312c
312c LS	(untitled)		312c
312c ent	(untitled)		312c
312c x	(untitled)		
312x LSx	(untitled)		
4	(untitled)		ASCS
AS	(untitled)		AS
AS1	(untitled)		AS
AS2	(untitled)		
ASin	(untitled)		ASCS
CS 2	(untitled)		311out
QML	(untitled)		AS
QMLx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	(untitled)			368.00	✓	Sum of lanes	1250					Normal	
308A	2	(untitled)			120.00	✓	Sum of lanes	1700					Normal	
311Ao	1	(untitled)			118.00	✓	Sum of lanes	1500	✓	1800			Normal	
311C	1	Lockwood inbound			166.00	✓	Sum of lanes	1650			✓		Normal	
311Cx	1	(untitled)			274.00	✓	Sum of lanes	1700					Normal	
311LAS	1	(untitled)			90.00	✓	Sum of lanes	1400	✓	1800	✓		Normal	
311a	1	(untitled)			56.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa O	1	(untitled)			206.00	✓	Sum of lanes	1800					Normal	
311aa bus	2	(untitled)			206.00							✓	Normal	
311abus	1	(untitled)			56.00	✓	Sum of lanes	1000					Normal	
311b	1	(untitled)			275.00	✓	Sum of lanes	1500					Normal	
311cn	1	(untitled)			45.00	✓	Sum of lanes	1000					Normal	
311co	1	(untitled)			45.00	✓	Sum of lanes	1200				✓	Normal	
311csx	1	(untitled)			38.00	✓	Sum of lanes	1600					Normal	
311dAS	311dAS	(untitled)			28.00							✓	Normal	
311dn	1	(untitled)			115.00	✓	Sum of lanes	1300					Normal	
311do	1	(untitled)			115.00	✓	Sum of lanes	1400					Normal	
311out	1	(untitled)			90.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312A	1	(untitled)			35.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312Ae	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800			Normal	
312Be	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
312Bo	1	(untitled)			35.00	✓	Sum of lanes	1700	✓	1800	✓		Normal	
312Cn	1	(untitled)			70.00	✓	Sum of lanes	1850	✓	1800	✓		Normal	
312Co	1	(untitled)			70.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312D	1	Lockwood Road inbound			420.00	✓	Sum of lanes	1750			✓		Normal	
312Dx	1	(untitled)			100.00								Normal	
312Eent	1	(untitled)			203.00	✓	Sum of lanes	1000					Normal	
312En	1	(untitled)			35.00	✓	Sum of lanes	1600	✓	1800	✓		Normal	
312Eo	1	(untitled)			35.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312Ex	1	(untitled)			100.00								Normal	
312J	1	(untitled)			43.00	✓	Sum of lanes	1800			✓		Normal	
312K	1	(untitled)			185.00	✓	Sum of lanes	1700			✓		Normal	
312c BS	1	(untitled)			90.00	✓	Sum of lanes	1400					Normal	
312c LS	1	(untitled)			65.00							✓	Normal	
312c ent	1	(untitled)			80.00	✓	Sum of lanes	1700					Normal	
312c x	3	(untitled)			70.00	✓	Sum of lanes	1800					Normal	
312x LSx	4	(untitled)			100.00	✓	Sum of lanes	1800					Normal	
4	2	(untitled)			275.00							✓	Normal	
AS	1	(untitled)			35.00	✓	Sum of lanes	1500					Normal	
AS1	1	(untitled)			345.00	✓	Sum of lanes	1800					Normal	
AS2	1	(untitled)			345.00	✓	Sum of lanes	1500					Normal	
ASin	1	(untitled)			185.00	✓	Sum of lanes	1700					Normal	
CS 2	1	(untitled)			38.00	✓	Sum of lanes	1600			✓		Normal	
QML	1	(untitled)		✓	250.00							✓	Normal	
QMLx	1	(untitled)			100.00	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1	1	1	(untitled)			1250
308A	2	1	(untitled)			1700
311Ao	1	1	(untitled)			1500
311C	1	1	(untitled)			1650
311Cx	1	1	(untitled)			1700
311LAS	1	1	(untitled)			1400
311a	1	1	(untitled)			1500
311aa O	1	1	(untitled)			1800
311aa bus	2	1	(untitled)			
311abus	1	1	(untitled)			1000
311b	1	1	(untitled)			1500
311cn	1	1	(untitled)			1000
311co	1	1	(untitled)			1200
311csx	1	1	(untitled)			1600
311dAS	311dAS	1	(untitled)			
311dn	1	1	(untitled)			1300
311do	1	1	(untitled)			1400
311out	1	1	(untitled)			1750
312A	1	1	(untitled)			1750
312Ae	1	1	(untitled)			1800
312Be	1	1	(untitled)			1800
312Bo	1	1	(untitled)			1700
312Cn	1	1	(untitled)			1850
312Co	1	1	(untitled)			1440
312D	1	1	(untitled)			1750
312Dx	1	1	(untitled)			
312Eent	1	1	(untitled)			1000
312En	1	1	(untitled)			1600
312Eo	1	1	(untitled)			1440
312Ex	1	1	(untitled)			
312J	1	1	(untitled)			1800
312K	1	2	(untitled)			1700
312c BS	1	1	(untitled)			1400
312c LS	1	1	(untitled)			
312c ent	1	1	(untitled)			1700
312c x	3	1	(untitled)			1800
312x LSx	4	1	(untitled)			1800
4	2	1	(untitled)			
AS	1	1	(untitled)			1500
AS1	1	1	(untitled)			1800
AS2	1	1	(untitled)			1500
ASin	1	1	(untitled)			1700
CS 2	1	1	(untitled)			1600
QML	1	1	(untitled)			
QMLx	1	QMLx	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00				
308A	2	NetworkDefault	100	100	100		0.00				
311Ao	1	CTM	100	100	100		17.00	✓	17.00	0.00	
311C	1	NetworkDefault	100	100	100		0.00				
311Cx	1	NetworkDefault	100	100	100		0.00				
311LAS	1	CTM	100	100	100		15.00	✓	15.00	0.00	
311a	1	CTM	100	100	100		10.00				
311aa O	1	PDM	100	100	100		36.00				
311aa bus	2	NetworkDefault	100	100	100		0.00				
311abus	1	NetworkDefault	100	100	100		0.00				
311b	1	NetworkDefault	100	100	100		0.00				
311cn	1	NetworkDefault	100	100	100		0.00				
311co	1	NetworkDefault	100	100	100		0.00				
311csx	1	NetworkDefault	100	100	100		0.00				
311dAS	311dAS	NetworkDefault	100	100	100		0.00				
311dn	1	NetworkDefault	100	100	100		0.00				
311do	1	NetworkDefault	100	100	100		0.00				
311out	1	CTM	100	100	100		15.00	✓	15.00	0.00	
312A	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Ae	1	CTM	100	100	100		17.00	✓	18.00	0.00	
312Be	1	CTM	100	100	100		17.00	✓	17.00	0.00	
312Bo	1	CTM	100	100	100		6.00				
312Cn	1	CTM	100	100	100		8.00	✓	8.00	0.00	
312Co	1	Flare	100	100	100		8.00	✓	8.00	0.00	
312D	1	NetworkDefault	100	100	100		0.00				
312Dx	1	NetworkDefault	100	100	100		0.00				
312Eent	1	PDM	100	100	100		49.00	✓	49.00	0.00	
312En	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Eo	1	Flare	100	100	100		6.00	✓	6.00	0.00	
312Ex	1	NetworkDefault	100	100	100		0.00				
312J	1	NetworkDefault	99999	100	100		0.00				
312K	1	NetworkDefault	100	100	100		0.00				
312c BS	1	NetworkDefault	100	100	100		0.00				
312c LS	1	NetworkDefault	100	100	100		0.00				
312c ent	1	NetworkDefault	100	100	100		0.00				
312c x	3	NetworkDefault	100	100	100		0.00				
312x LSx	4	NetworkDefault	100	100	100		0.00				
4	2	NetworkDefault	100	100	100		0.00				
AS	1	NetworkDefault	100	100	100		0.00				
AS1	1	NetworkDefault	100	100	100		0.00				
AS2	1	NetworkDefault	100	100	100		0.00				
ASin	1	NetworkDefault	100	100	100		0.00				
CS 2	1	NetworkDefault	100	100	100		0.00				
QML	1	NetworkDefault	100	100	100		0.00				
QMLx	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	126

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	1200	1200
308A	2	1298	1298
311Ao	1	392	392
311C	1	521	521
311Cx	1	1120	1120
311LAS	1	108	108
311a	1	409	409
311aa O	1	409	409
311aa bus	2	50	50
311abus	1	50	50
311b	1	635	635
311cn	1	321	321
311co	1	314	314
311csx	1	108	108
311dAS	311dAS	140	140
311dn	1	624	624
311do	1	314	314
311out	1	351	351
312A	1	259	259
312Ae	1	284	284
312Be	1	599	599
312Bo	1	25	25
312Cn	1	311	311
312Co	1	81	81
312D	1	337	337
312Dx	1	281	281
312Eent	1	551	551
312En	1	415	415
312Eo	1	136	136
312Ex	1	353	353
312J	1	409	409
312K	1	376	376
312c BS	1	785	785
312c LS	1	197	197
312c ent	1	761	761
312c x	3	610	610
312x LSx	4	250	250
4	2	282	282
AS	1	345	345
AS1	1	22	22
AS2	1	361	361
ASin	1	599	599
CS 2	1	640	640
QML	1	193	193
QMLx	1	59	59

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
311C	1	311out	A	
311LAS	1	311out	C	
311out	1	311out	B	
312A	1	312a	A	
312Be	1	312b	M	
312Bo	1	312a	B	
312Cn	1	312a	C	
312Co	1	312a	C	
312D	1	312a	D	
312En	1	312a	E	
312Eo	1	312a	E	
312J	1	312b	J	
312K	1	312b	K	
CS 2	1	311out	D	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)
311a	1	6.72	18.64
311abus	1	6.72	18.64
311dn	1	11.69	22.00
311do	1	15.13	17.00
312D	1	50.40	18.64
312Eent	1	18.16	25.00
312K	1	19.36	21.38
312c LS	1	7.27	20.00
312c ent	1	7.78	23.00
4	2	33.00	18.64
AS1	1	41.40	18.64
CS 2	1	4.56	18.64
QML	1	30.00	18.64

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)	Auto turning radius	Traffic turn style	Turning radius (m)
1	1	1	311Cx/1	1/1	35.79	23.00	✓	Straight	Straight Movement
308A	2	1	311dAS/311dAS	308A/2	11.67	23.00	✓	Straight	Straight Movement
311Ao	1	1	311out/1	311Ao/1	15.53	17.00	✓	Straight	Straight Movement
311C	1	1	312D/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	1	311C/1	311Cx/1	26.65	23.00	✓	Straight	Straight Movement
311LAS	1	1	311aa O/1	311LAS/1	10.80	18.64	✓	Straight	Straight Movement
311aa O	1	1	311a/1	311aa O/1	24.72	18.64	✓	Straight	Straight Movement
311aa bus	2	1	311abus/1	311aa bus/2	24.72	18.64	✓	Straight	Straight Movement
311b	1	1	311cn/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	1	311dn/1	311cn/1	5.92	17.00	✓	Straight	Straight Movement
311co	1	1	311do/1	311co/1	5.92	17.00	✓	Straight	Straight Movement
311csx	1	1	311LAS/1	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	1	QML/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	1	311aa O/1	311out/1	10.80	18.64	✓	Straight	Straight Movement
312A	1	1	312Ae/1	312A/1	5.59	14.00	✓	Straight	Straight Movement
312Ae	1	1	312c ent/1	312Ae/1	9.73	20.00	✓	Nearside	62.50
312Be	1	1	312c ent/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Bo	1	1	312Ae/1	312Bo/1	4.20	18.64	✓	Straight	Straight Movement
312Cn	1	1	311Ao/1	312Cn/1	9.21	17.00	✓	Straight	Straight Movement
312Co	1	1	311Ao/1	312Co/1	9.21	17.00	✓	Straight	Straight Movement
312Dx	1	1	312Co/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312En	1	1	312Ent/1	312En/1	3.13	25.00	✓	Straight	Straight Movement
312Eo	1	1	312Ent/1	312Eo/1	3.13	25.00	✓	Straight	Straight Movement
312Ex	1	1	312D/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	1	312Cn/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
312c BS	1	1	312J/1	312c BS/1	10.07	20.00	✓	Straight	Straight Movement
312c x	3	1	312c BS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	1	312c BS/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
AS	1	1	311dn/1	AS/1	3.56	22.00	✓	Nearside	67.33
AS2	1	1	AS/1	AS2/1	35.08	22.00	✓	Straight	Straight Movement
ASin	1	1	312Be/1	ASin/1	22.20	18.64	✓	Straight	Straight Movement
QMLx	1	1	AS/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
308A	2	2	1/1	308A/2	11.67	23.00	✓	Straight	Straight Movement
311Ao	1	2	CS 2/1	311Ao/1	14.16	18.64	✓	Nearside	92.14
311C	1	2	312En/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	2	CS 2/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
311b	1	2	311co/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	2	311dAS/311dAS	311cn/1	5.40	18.64	✓	Nearside	13.39
311dAS	311dAS	2	AS1/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	2	311aa bus/2	311out/1	10.80	18.64	✓	Straight	Straight Movement
312Ae	1	2	312c LS/1	312Ae/1	9.73	20.00	✓	Straight	Straight Movement
312Be	1	2	312c LS/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Dx	1	2	312A/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	2	312Cn/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	2	312D/1	312J/1	4.81	20.00	✓	Straight	Straight Movement
312c BS	1	2	312K/1	312c BS/1	10.80	18.64	✓	Straight	Straight Movement
312c x	3	2	312c LS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	2	312c ent/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
AS	1	2	1/1	AS/1	4.20	18.64	✓	Straight	Straight Movement
AS2	1	2	QML/1	AS2/1	35.08	22.00	✓	Nearside	100.00
QMLx	1	2	AS1/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
311C	1	3	312Bo/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
312Dx	1	3	312En/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	3	312A/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	3	312Eo/1	312J/1	6.87	14.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	(ALL)	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2	bus exit	TrafficStream	311aa O/1	100	0.22		0	0
1		TrafficStream	311cn/1	100	0.22		0	0
311dAS		TrafficStream	311dn/1	100	0.22		0	0
		TrafficStream	311Cx/1	100	0.19		0	0
1		TrafficStream	312En/1	100	0.22	✓	0	0
		TrafficStream	312En/1	100	0.22		0	0
	outbound	TrafficStream	312c BS/1	100	0.22		0	0
		TrafficStream	312c ent/1	90	0.19		0	0
2		TrafficStream	311csx/1	100	0.22		0	0
		TrafficStream	ASin/1	5	0.19		0	0
1		TrafficStream	AS/1	100	0.22		0	0
		TrafficStream	AS1/1	100	0.19		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (mph)
312F	(untitled)		312a		Farside	5.00	3.33	3.36
312G	(untitled)				Nearside	3.00	2.00	3.36
312H	(untitled)				Farside	3.00	2.00	3.36
312I	(untitled)		312a		Farside	7.00	4.67	3.36
312K	(untitled)				Farside	3.00	2.00	3.36
312L	(untitled)				Farside	3.00	2.00	3.36
312o	(untitled)				Farside	3.00	2.00	3.36
312p	(untitled)				Farside	3.00	2.00	3.36
7	(untitled)		311out		Nearside	6.00	4.00	3.36
8	(untitled)				Farside	3.00	2.00	3.36

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
312F	312a	F	
312G	312a	I	
312H	312a	H	
312I	312a	G	
312K	312a	N	
312L	312b	L	
312o	312a	O	
312p	312a	P	
7	311out	E	
8	311out	F	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To																				
		1	2	3	4	5	10	19	20	5a	5b	5c	6	7	8	9	P1	P2	P3	P4	P5	P6
From	1	0	5	410	0	0	0	0	0	0	0	0	0	0	60	76	0	0	0	0	0	0
	2	3	0	86	0	0	0	0	0	0	0	0	0	0	149	99	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	20	117	25	0	0	0	0	0	0	0	549	0	0	0	50	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	282	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	77	0	0	0	0	42	74	0	0	0	0	0	0	0	0	0	0	0	0
	19	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20	265	61	0	0	0	0	0	0	0	108	0	0	0	25	0	0	0	0	0	0	0
	5a	0	0	21	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5b	0	0	0	0	0	0	0	0	0	0	0	0	0	351	25	0	0	0	0	0	0
	5c	21	20	599	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	314	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	58	0	279	287	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	44	78	0	0	0	0	0	0	0	0	50	0	0	25	0	0	0	0	0	0	0
	P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (PCU/hr)

		To																					
		1	2	3	4	5	10	19	20	5a	5b	5c	6	7	8	9	P1	P2	P3	P4	P5	P6	
From	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0	0		
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0		
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0		
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22		
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0		

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	312Eent/1	312Ex/1	#0000FF
	2	(untitled)	312D/1	312Dx/1	#FF0000
	3	(untitled)		308A/2	#00FF00
	4	(untitled)	312c ent/1		#FFFF00
	5	(untitled)	4/2		#FFFF00
	10	(untitled)	QML/1	QMLx/1	#B48894
	19	(untitled)	1/1		#B48894
	20	(untitled)	311a/1, 311abus/1	311b/1	#DCCA5F
	5a	(untitled)	AS1/1	AS2/1	#4A4DC6
	5b	(untitled)	312K/1	311csx/1, 4/2	#B48894
	5c	(untitled)	CS 2/1	ASin/1	#B48894
	6	(untitled)	311do/1		#6495ED
	7	(untitled)	311dn/1		#D2B48C
	8	(untitled)		312c x/3	#FFFF00
	9	(untitled)	312c LS/1	312x LSx/4	#FFFF00
	P1	(untitled)	312G:1E	312G:1X	#008000
	P2	(untitled)	312G:2E, 312I:1E	312G:2X, 312I:1X	#8A2BE2
	P3	(untitled)	312F:1E, 312I:2E	312F:1X, 312I:2X	#6495ED
	P4	(untitled)	312H:2E, 312F:2E	312H:2X, 312F:2X	#FFA500
	P5	(untitled)	312H:1E, 312K:1E	312H:1X, 312K:1X	#00FFFF
	P6	(untitled)	312K:2E	312K:2X	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	30		2	1	312D/1, 312Ex/1	Normal	3
	34		1	2	312Eent/1, 312En/1, 312Dx/1	Normal	5
	37		5b	8	312K/1, 312c BS/1, 312c x/3	Normal	351
	38		5b	9	312K/1, 312c BS/1, 312x LSx/4	Normal	25
	39		5	5b	4/2	Normal	282
	49		9	8	312c LS/1, 312c x/3	Normal	25
	56		7	10	311dn/1, AS/1, QMLx/1	Normal	58
	57		5a	10	AS1/1, QMLx/1	Normal	1
	58		9	2	312c LS/1, 312Ae/1, 312A/1, 312Dx/1	Normal	78
	59		9	1	312c LS/1, 312Ae/1, 312A/1, 312Ex/1	Normal	44
	60		20	2	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Co/1, 312Dx/1	Normal	61
	66		20	1	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Cn/1, 312Ex/1	Fixed	25
	69		4	5c	312c ent/1, 312Be/1, ASin/1	Normal	549
	70		9	5c	312c LS/1, 312Be/1, ASin/1	Normal	50
	80		9	3	312c LS/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	0
	81		5c	5a	CS 2/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	82		5c	10	CS 2/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	83		5c	3	CS 2/1, 311Cx/1, 1/1, 308A/2	Normal	599
	84		19	5a	1/1, AS/1, AS2/1	Normal	0
	85		19	10	1/1, AS/1, QMLx/1	Normal	0
	86		19	3	1/1, 308A/2	Normal	80
	108		6	20	311do/1, 311co/1, 311b/1	Normal	314
	109		7	20	311dn/1, 311cn/1, 311b/1	Normal	279
	110		5a	20	AS1/1, 311dAS/311dAS, 311cn/1, 311b/1	Normal	0
	111		10	20	QML/1, 311dAS/311dAS, 311cn/1, 311b/1	Normal	42
	191		1	8	312Eent/1, 312Eo/1, 312J/1, 312c BS/1, 312c x/3	Normal	60
	192		1	9	312Eent/1, 312Eo/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	76
	193		2	8	312D/1, 312J/1, 312c BS/1, 312c x/3	Normal	149
	194		2	9	312D/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	99
	206		4	2	312c ent/1, 312Ae/1, 312A/1, 312Dx/1	Normal	117
	207		4	1	312c ent/1, 312Ae/1, 312A/1, 312Ex/1	Normal	20
	208		4	9	312c ent/1, 312x LSx/4	Normal	50
	230		5a	3	AS1/1, 311dAS/311dAS, 308A/2	Normal	21
	232		10	3	QML/1, 311dAS/311dAS, 308A/2	Normal	77
	233		7	5a	311dn/1, AS/1, AS2/1	Normal	287
	234		10	5a	QML/1, AS2/1	Normal	74
	257		20	1	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Cn/1, 312Ex/1	Normal	240
	258		20	8	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Normal	0
	259		20	9	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Disabled	0
	262		20	8	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Fixed	25
	263		20	9	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Disabled	0
	264		20	2	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Co/1, 312Dx/1	Disabled	0
	265		20	5b	311a/1, 311aa O/1, 311LAS/1, 311csx/1	Normal	108
	267		5c	1	CS 2/1, 311Ao/1, 312Cn/1, 312Ex/1	Normal	21
	268		5c	8	CS 2/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Disabled	0
	269		5c	9	CS 2/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	0
	270		5c	2	CS 2/1, 311Ao/1, 312Co/1, 312Dx/1	Normal	20
	271		1	5a	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	272		1	10	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	273		1	3	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	410
	274		2	5a	312D/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	275		2	10	312D/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	276		2	3	312D/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	86
	277		4	5a	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	278		4	10	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	279		4	3	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	25
	280		9	5a	312c LS/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	281		9	10	312c LS/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	1		P5	P4	312H:1E, 312H:2X	Normal	22
	2		P4	P5	312H:2E, 312H:1X	Normal	22
	3		P5	P6	312K:1E, 312K:2X	Normal	22
	4		P6	P5	312K:2E, 312K:1X	Normal	22
	14		P1	P2	312G:1E, 312G:2X	Normal	22
	15		P2	P1	312G:2E, 312G:1X	Normal	22
	23		P4	P3	312F:2E, 312F:1X	Normal	22
	61		P3	P4	312F:1E, 312F:2X	Normal	22
	65		P2	P3	312I:1E, 312I:2X	Normal	22
	266		P3	P2	312I:2E, 312I:1X	Normal	22

Signal Timings

Network Default: 126s cycle time; 126 steps

Controller Stream 311out

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
311out	(untitled)		1	NetworkDefault	126

Controller Stream 311out - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
311out	Unspecified						Absolute

Controller Stream 311out - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
311out	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311out	A	(untitled)	7	300	0	0	Unknown
	B	(untitled)	7	300	0	0	Unknown
	C	(untitled)	7	300	0	0	Unknown
	D	(untitled)	7	300	0	0	Unknown
	E	(untitled)	5	5	0	0	Unknown
	F	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
311out	1	A, B, C	1
	2	D, F, C	1
	3	A, B, E	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
311out	1	Gaining	B	2	3	0	5

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
311out	1	(untitled)	Single	1, 2, 3	7, 75, 89

Intergreen Matrix for Controller Stream 311out

		To					
		A	B	C	D	E	F
From	A				5	5	
	B				6	7	
	C					9	
	D	5	5			5	
	E			7	8		
	F	7	5				

Banned Stage transitions for Controller Stream 311out

		To		
		1	2	3
From	1			
	2			
	3			

Interstage Matrix for Controller Stream 311out

		To		
		1	2	3
From	1	0	7	9
	2	7	0	9
	3	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311out	1	✓	1	A,B,C	96	7	37	1	1
	2	✓	2	D,F,C	14	75	61	1	7
	3	✓	3	A,B,E	84	89	5	1	5

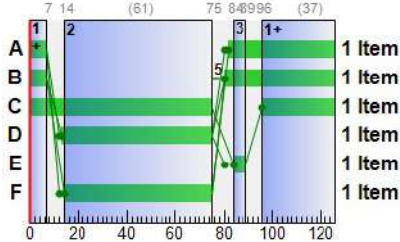
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
311out	A	1	✓	82	7	51
	B	1	✓	80	7	53
	C	1	✓	96	75	105
	D	1	✓	13	75	62
	E	1	✓	84	89	5
	F	1	✓	14	75	61

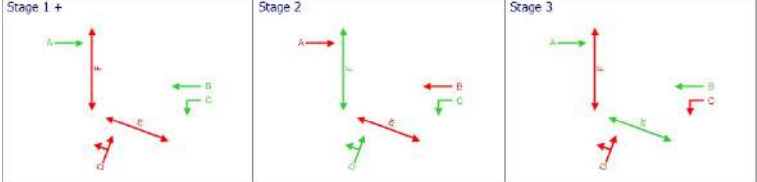
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
311C	1	311out	311out	A	82	7	51
311LAS	1	311out	311out	C	96	75	105
311out	1	311out	311out	B	80	7	53
CS 2	1	311out	311out	D	13	75	62

Phase Timings Diagram for Controller Stream 311out



Stage Sequence Diagram for Controller Stream 311out



Controller Stream 312a

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312a	(untitled)		1	NetworkDefault	126

Controller Stream 312a - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312a	Unspecified						Absolute

Controller Stream 312a - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312a	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
312a	A	(untitled)	14	40	0	0	Unknown	
	B	(untitled)	7	7	0	0	Unknown	
	C	(untitled)	7	300	0	0	Unknown	
	D	(untitled)	7	300	0	0	Unknown	
	E	(untitled)	7	300	0	0	Unknown	
	F	(untitled)	5	300	0	0	Pedestrian	0
	G	(untitled)	7	300	0	0	Unknown	
	H	(untitled)	7	300	0	0	Unknown	
	I	(untitled)	7	300	0	0	Unknown	
	N	(untitled)	1	300	0	0	Unknown	
	O	(untitled)	5	300	0	0	Pedestrian	0
	P	(untitled)	5	5	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312a	1	I, H, N, O, P, F, G	1
	2	F, E, C, G	1
	3	D, O, A	1
	4	B, N, H, I, F, O	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
312a	1	Gaining	E	1	2	0	8
	2	Losing	B	1	2	6	
	3	Losing	A	1	2	6	
	4	Losing	C	2	3	4	
	5	Losing	E	2	3	4	
	6	Losing	I	1	2	7	
	7	Gaining	A	4	1	1	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312a	1	(untitled)	Single	1, 2, 3, 4	78, 7, 52, 65

Intergreen Matrix for Controller Stream 312a

		To											
		A	B	C	D	E	F	G	H	I	N	O	P
From	A			5		6	6	5			8		
	B				5			5					8
	C	8			8				9		9	5	
	D		6	6		5			9	9	5		8
	E	8			8				5		9		9
	F	5											
	G	8	8										
	H				5	0	8						
	I					5							
	N	5			5	7	5						
	O				7								
	P		5			5	5						

Banned Stage transitions for Controller Stream 312a

From	To			
	1	2	3	4
	2			
	3			
	4			

Interstage Matrix for Controller Stream 312a

From	To			
	1	2	3	4
	1	0	8	8
	2	9	0	12
	3	9	7	0
	4	8	8	7

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312a	1	✓	1	I,H,N,O,P,F,G	73	78	5	1	5
	2	✓	2	F,E,C,G	86	7	47	1	3
	3	✓	3	D,O,A	19	52	33	1	14
	4	✓	4	B,N,H,I,F,O	61	65	4	1	4

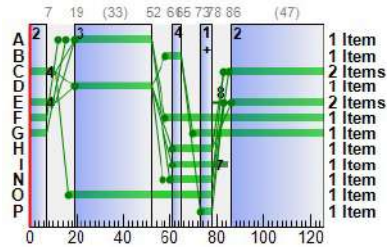
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312a	A	1	✓	19	52	33
	B	1	✓	58	65	7
	C	1	✓	85	11	52
	D	1	✓	19	52	33
	E	1	✓	86	11	51
	F	1	✓	58	7	75
	G	1	✓	70	7	63
	H	1	✓	61	78	17
	I	1	✓	61	85	24
	N	1	✓	60	78	18
	O	1	✓	16	78	62
	P	1	✓	73	78	5

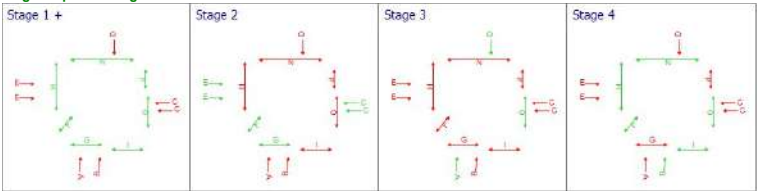
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312A	1	312a	312a	A	19	52	33
312Bo	1	312a	312a	B	58	65	7
312Cn	1	312a	312a	C	85	11	52
312Co	1	312a	312a	C	85	11	52
312D	1	312a	312a	D	19	52	33
312En	1	312a	312a	E	86	11	51
312Eo	1	312a	312a	E	86	11	51

Phase Timings Diagram for Controller Stream 312a



Stage Sequence Diagram for Controller Stream 312a



Controller Stream 312b

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312b	(untitled)		1	NetworkDefault	126

Controller Stream 312b - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312b	Unspecified						Absolute

Controller Stream 312b - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312b	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
312b	J	(untitled)	7	300	0	0	Unknown
	K	(untitled)	7	300	0	0	Unknown
	L	(untitled)	5	300	0	0	Unknown
	M	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312b	1	J, L	7
	2	K, M	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312b	1	(untitled)	Single	1, 2	39, 88

Intergreen Matrix for Controller Stream 312b

	To				
	J	K	L	M	
From	J	5		6	
	K		5		
	L	8		0	
	M	5	7		

Banned Stage transitions for Controller Stream 312b

	To	
	1	2
From	1	
	2	

Interstage Matrix for Controller Stream 312b

From	To	
	1	2
	1 0 8	2 7 0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312b	1	✓	1	J,L	95	39	70	7	7
	2	✓	2	K,M	47	88	41	7	7

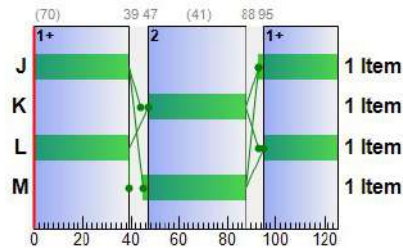
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312b	J	1	✓	93	39	72
	K	1	✓	47	88	41
	L	1	✓	95	39	70
	M	1	✓	45	88	43

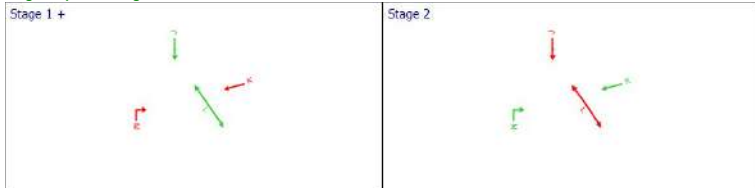
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312Be	1	312b	312b	M	45	88	43
312J	1	312b	312b	J	93	39	72
312K	1	312b	312b	K	47	88	41

Phase Timings Diagram for Controller Stream 312b



Stage Sequence Diagram for Controller Stream 312b



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	(ALL)	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
311out	1	✓	1	A,B,C	89	7	8
	2	✓	2	D,F,C	7	7	14
	3	✓	3	A,B,E	75	9	14
312a	1	✓	1	I,H,N,O,P,F,G	65	8	13
	2	✓	2	F,E,C,G	78	8	11
	3	✓	3	D,O,A	7	12	26
	4	✓	4	B,N,H,I,F,O	52	9	13
312b	1	✓	1	J,L	88	7	14
	2	✓	2	K,M	39	8	15

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
311out	A	1	3	2	7	0
	B	1	3	2	5	0
	C	1	1	3	7	0
	D	1	2	3	6	0
	E	1	3	1	9	0
	F	1	2	3	7	0
312a	A	1	3	4	12	0
	B	1	4	1	6	0
	C	1	2	3	7	4
	D	1	3	4	12	0
	E	1	2	3	8	4
	F	1	4	3	6	0
	G	1	1	3	5	0
	H	1	4	2	9	0
	I	1	4	2	9	7
	N	1	4	2	8	0
	O	1	3	2	9	0
	P	1	1	2	8	0
312b	J	1	1	2	5	0
	K	1	2	1	8	0
	L	1	1	2	7	0
	M	1	2	1	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 126s cycle time; 126 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4
311out	3	89	7	75	
312a	4	65	78	7	52
312b	2	88	39		

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	(untitled)		1200	1250	126	1250	96	-6	26.65	26.50	41.41	62.44
	308A	2	(untitled)		1298	1700	126	1700	76	18	3.39	1.22	5.85	15.06
	311Ao	1	(untitled)		392	1500	126	1500	26	244	1.43	6.76	39.78	16.81
	311C	1	Lockwood inbound	A	521	1650	51	681	77	18	32.39	9.25	32.04	48.53
	311Cx	1	(untitled)		1120	1700	126	1700	66	37	2.04	0.63	1.33	32.02
	311LAS	1	(untitled)	C	108	1400	105	1178	9	881	1.88	1.39	9.29	12.68
	311a	1	(untitled)		409	1500	126	1500	27	230	0.45	0.05	0.51	7.17
	311aa O	1	(untitled)		409	1800	126	1800	23	296	0.29	0.03	0.09	25.01
	311aa bus	2	(untitled)		50	410	126	410	12	638	0.61	0.01	0.02	25.33
	311abus	1	(untitled)		50	1000	126	1000	5	1700	0.09	0.00	0.01	6.81
	311b	1	(untitled)		635	1500	126	1500	42	113	0.88	0.16	0.32	37.07
	311cn	1	(untitled)		321	1000	126	1000	32	180	0.85	0.08	0.97	6.70
	311co	1	(untitled)		314	1368	126	1368	23	292	0.39	0.03	0.44	6.31
	311csx	1	(untitled)		108	1600	126	1600	7	1233	0.08	0.00	0.04	4.64
	311dAS	311dAS	(untitled)		140	365	126	365	38	135	3.06	0.12	2.44	6.42
	311dn	1	(untitled)		624	1300	126	1300	48	88	1.28	0.22	1.11	12.97
	311do	1	(untitled)		314	1400	126	1400	22	301	0.37	0.03	0.16	15.50
	311out	1	(untitled)	B	351	1750	53	750	47	92	27.84	8.55	56.98	38.64
	312A	1	(untitled)	A	259	1750	33	472	55	64	35.32	5.81	96.78	40.91
	312Ae	1	(untitled)		284	1800	126	1504	19	377	2.94	2.18	12.84	12.67
	312Be	1	(untitled)	M	599	1800	43	629	95	-6	77.58	22.07	129.80	87.32
	312Bo	1	(untitled)	B	25	1700	7	108	23	289	63.76	1.46	24.39	67.96
	312Cn	1	(untitled)	C	311	1850	52	778	40	125	12.87	2.40	25.75	22.08
	312Co	1	(untitled)	C	81	1222	52	514	16	471	14.24	1.01	10.87	23.45
	312D	1	Lockwood Road inbound	D	337	1750	33	472	71	26	50.88	11.45	15.67	101.28
	312Dx	1	(untitled)		281	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312Eent	1	(untitled)		551	1000	126	731	75	19	16.89	12.61	25.74	35.05
	312En	1	(untitled)	E	415	1600	51	660	63	43	26.73	6.24	104.02	29.86
	312Eo	1	(untitled)	E	136	1218	51	503	27	233	21.89	1.95	32.58	25.02
	312Ex	1	(untitled)		353	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312J	1	(untitled)	J	409	1800	72	1043	39	129	12.71	5.32	71.15	18.33
	312K	1	(untitled)	K	376	1700	41	567	66	36	42.13	11.82	36.74	61.49
	312c BS	1	(untitled)		785	1400	126	1400	56	61	2.29	10.65	68.05	12.71
	312c LS	1	(untitled)		197	265	126	229	86	5	50.74	7.65	67.68	58.01
	312c ent	1	(untitled)		761	1700	126	1434	53	70	3.87	7.70	55.33	11.65
	312c x	3	(untitled)		610	1800	126	1800	34	166	0.51	0.09	0.71	11.70
	312x LSx	4	(untitled)		250	1800	126	1800	14	548	0.16	0.01	0.06	12.16
	4	2	(untitled)		282	686	126	686	41	119	1.83	0.14	0.30	34.83
	AS	1	(untitled)		345	1500	126	1500	23	291	0.36	0.03	0.56	3.92
	AS1	1	(untitled)		22	1800	126	1800	1	7264	0.01	0.00	0.00	41.41
	AS2	1	(untitled)		361	1500	126	1500	24	274	0.38	0.04	0.06	35.46
	ASin	1	(untitled)		599	1700	126	1700	35	155	0.79	12.03	37.39	22.99
	CS 2	1	(untitled)	D	640	1600	62	800	80	13	34.99	20.04	303.29	39.55
	QML	1	(untitled)		193	520	126	520	37	142	2.04	0.11	0.25	32.04
	QMLx	1	(untitled)		59	1800	126	1800	3	2646	0.03	0.00	0.00	12.03

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311out	1	✓	1	A,B,C	96	7	37	1	1
	2	✓	2	D,F,C	14	75	61	1	7
	3	✓	3	A,B,E	84	89	5	1	5
312a	1	✓	1	I,H,N,O,P,F,G	73	78	5	1	5
	2	✓	2	F,E,C,G	86	7	47	1	3
	3	✓	3	D,O,A	19	52	33	1	14
	4	✓	4	B,N,H,I,F,O	61	65	4	1	4
312b	1	✓	1	J,L	95	39	70	7	7
	2	✓	2	K,M	47	88	41	7	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311out	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	5	5	0	0	Unknown
	F	F	7	300	0	0	Unknown
312a	A	A	14	40	0	0	Unknown
	B	B	7	7	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	5	300	0	0	Pedestrian
	G	G	7	300	0	0	Unknown
	H	H	7	300	0	0	Unknown
	I	I	7	300	0	0	Unknown
	N	N	1	300	0	0	Unknown
	O	O	5	300	0	0	Pedestrian
	P	P	5	5	0	0	Pedestrian
312b	J	J	7	300	0	0	Unknown
	K	K	7	300	0	0	Unknown
	L	L	5	300	0	0	Unknown
	M	M	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1		368.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1250	100	100
308A	2		120.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
311Ao	1		118.00	CTM	17.00	Normal	✓			Sum of lanes	1500	100	100
311C	1		166.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1650	100	100
311Cx	1		274.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
311LAS	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1400	100	100
311a	1		56.00	CTM	10.00	Normal	✓			Sum of lanes	1500	100	100
311aa O	1		206.00	PDM	36.00	Normal	✓			Sum of lanes	1800	100	100
311aa bus	2		206.00	NetworkDefault	0.00	Normal			✓			100	100
311abus	1		56.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311b	1		275.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
311cn	1		45.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311co	1		45.00	NetworkDefault	0.00	Normal	✓		✓	Sum of lanes	1200	100	100
311csx	1		38.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1600	100	100
311dAS	311dAS		28.00	NetworkDefault	0.00	Normal			✓			100	100
311dn	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1300	100	100
311do	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311out	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1750	100	100
312A	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Ae	1		87.00	CTM	17.00	Normal	✓			Sum of lanes	1800	100	100
312Be	1		87.00	CTM	17.00	Normal	✓	✓		Sum of lanes	1800	100	100
312Bo	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1700	100	100
312Cn	1		70.00	CTM	8.00	Normal	✓	✓		Sum of lanes	1850	100	100
312Co	1		70.00	Flare	8.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312D	1		420.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Dx	1		100.00	NetworkDefault	0.00	Normal						100	100
312Eent	1		203.00	PDM	49.00	Normal	✓			Sum of lanes	1000	100	100
312En	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1600	100	100
312Eo	1		35.00	Flare	6.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312Ex	1		100.00	NetworkDefault	0.00	Normal						100	100
312J	1		43.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	99999
312K	1		185.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1700	100	100
312c BS	1		90.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
312c LS	1		65.00	NetworkDefault	0.00	Normal			✓			100	100
312c ent	1		80.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
312c x	3		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
312x LSx	4		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
4	2		275.00	NetworkDefault	0.00	Normal			✓			100	100
AS	1		35.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS1	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS2	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
ASin	1		185.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
CS 2	1		38.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1600	100	100
QML	1	✓	250.00	NetworkDefault	0.00	Normal			✓			100	100
QMLx	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Pedestrian Crossings: Pedestrian summary

Time Segment	Pedestrian crossing	Side	Calculated Flow Entering (Ped/hr)	Degree of saturation (%)	Actual green (s per cycle)	Effective green (s per cycle)	Mean Delay Per Ped (s)	Mean max queue (Ped)
08:00-09:00	312F	1	22	0	75	75	10.52	0.31
		2	22	0	75	75	10.52	0.31
	312G	1	22	1	24	25	40.88	0.62
		2	22	1	24	25	40.88	0.62
	312H	1	22	1	17	18	46.71	0.66
		2	22	1	17	18	46.71	0.66
	312I	1	22	0	63	64	15.50	0.38
		2	22	0	63	64	15.50	0.38
	312K	1	22	1	18	19	45.86	0.65
		2	22	1	18	19	45.86	0.65
	312L	1	0	0	70	71	0.00	0.00
		2	0	0	70	71	0.00	0.00
	312o	1	0	0	62	62	0.00	0.00
		2	0	0	62	62	0.00	0.00
	312p	1	0	0	5	5	0.00	0.00
		2	0	0	5	5	0.00	0.00
	7	1	0	0	5	6	0.00	0.00
		2	0	0	5	6	0.00	0.00
	8	1	0	0	61	62	0.00	0.00
		2	0	0	61	62	0.00	0.00

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	96	-6	1200	1250	126	26.65	26.50	41.41	126.14	18.76	144.90
	308A	2	76	18	1298	1700	126	3.39	1.22	5.85	17.33	0.00	17.33
	311Ao	1	26	244	392	1500	126	1.43	6.76	39.78	2.21	0.39	2.60
	311C	1	77	18	521	1650	51	32.39	9.25	32.04	66.56	5.03	71.60
	311Cx	1	66	37	1120	1700	126	2.04	0.63	1.33	8.99	0.00	8.99
	311LAS	1	9	881	108	1400	105	1.88	1.39	9.29	0.80	0.22	1.02
	311a	1	27	230	409	1500	126	0.45	0.05	0.51	0.73	0.00	0.73
	311aa O	1	23	296	409	1800	126	0.29	0.03	0.09	0.47	0.00	0.47
	311aa bus	2	12	638	50	410	126	0.61	0.01	0.02	0.12	0.00	0.12
	311abus	1	5	1700	50	1000	126	0.09	0.00	0.01	0.02	0.00	0.02
	311b	1	42	113	635	1500	126	0.88	0.16	0.32	2.20	0.00	2.20
	311cn	1	32	180	321	1000	126	0.85	0.08	0.97	1.08	0.00	1.08
	311co	1	23	292	314	1368	126	0.39	0.03	0.44	0.48	0.00	0.48
	311csx	1	7	1233	108	1600	126	0.08	0.00	0.04	0.03	0.00	0.03
	311dAS	311dAS	38	135	140	365	126	3.06	0.12	2.44	1.69	0.00	1.69
	311dn	1	48	88	624	1300	126	1.28	0.22	1.11	3.14	0.00	3.14
	311do	1	22	301	314	1400	126	0.37	0.03	0.16	0.46	0.00	0.46
	311out	1	47	92	351	1750	53	27.84	8.55	56.98	38.54	2.97	41.51
	312A	1	55	64	259	1750	33	35.32	5.81	96.78	36.08	1.17	37.26
	312Ae	1	19	377	284	1800	126	2.94	2.18	12.84	3.29	0.89	4.19
	312Be	1	95	-6	599	1800	43	77.58	22.07	129.80	183.31	8.91	192.22
	312Bo	1	23	289	25	1700	7	63.76	1.46	24.39	6.29	0.32	6.61
	312Cn	1	40	125	311	1850	52	12.87	2.40	25.75	15.79	0.72	16.51
	312Co	1	16	471	81	1222	52	14.24	1.01	10.87	4.55	0.29	4.84
	312D	1	71	26	337	1750	33	50.88	11.45	15.67	67.64	4.05	71.69
	312Dx	1	0	Unrestricted	281	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	75	19	551	1000	126	16.89	12.61	25.74	36.70	7.51	44.21
	312En	1	63	43	415	1600	51	26.73	6.24	104.02	43.76	4.02	47.77
	312Eo	1	27	233	136	1218	51	21.89	1.95	32.58	11.74	1.24	12.98
	312Ex	1	0	Unrestricted	353	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	39	129	409	1800	72	12.71	5.32	71.15	20.50	1716.67	1737.17
	312K	1	66	36	376	1700	41	42.13	11.82	36.74	62.49	5.48	67.97
	312c BS	1	56	61	785	1400	126	2.29	10.65	68.05	7.10	2.69	9.79
	312c LS	1	86	5	197	265	126	50.74	7.65	67.68	39.43	2.83	42.26
	312c ent	1	53	70	761	1700	126	3.87	7.70	55.33	11.62	3.70	15.32
	312c x	3	34	166	610	1800	126	0.51	0.09	0.71	1.23	0.00	1.23
	312x LSx	4	14	548	250	1800	126	0.16	0.01	0.06	0.16	0.00	0.16
	4	2	41	119	282	686	126	1.83	0.14	0.30	2.04	0.00	2.04
	AS	1	23	291	345	1500	126	0.36	0.03	0.56	0.49	0.00	0.49
	AS1	1	1	7264	22	1800	126	0.01	0.00	0.00	0.00	0.00	0.00
	AS2	1	24	274	361	1500	126	0.38	0.04	0.06	0.54	0.00	0.54
	ASin	1	35	155	599	1700	126	0.79	12.03	37.39	1.87	0.91	2.78
	CS 2	1	80	13	640	1600	62	34.99	20.04	303.29	88.34	7.05	95.39
	QML	1	37	142	193	520	126	2.04	0.11	0.25	1.55	0.00	1.55
	QMLx	1	3	2646	59	1800	126	0.03	0.00	0.00	0.01	0.00	0.01

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (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 (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	1	1	1200	1200	0		1250	1250	96	✓	-6	0.15	126	126
	308A	2	1298	1298	0		1700	1700	76		18	0.06	126	126
	311Ao	1	392	392	0		1500	1500	26		244	0.99	126	126
	311C	1	521	521	0		1650	681	77		18	0.68	51	52
	311Cx	1	1120	1120	0		1700	1700	66		37	0.24	126	126
	311LAS	1	108	108	0		1400	1178	9		881	0.00	105	106
	311a	1	409	409	0		1500	1500	27		230	0.00	126	126
	311aa O	1	409	409	0		1800	1800	23		296	0.00	126	126
	311aa bus	2	50	50	0		410	410	12		638	0.00	126	126
	311abus	1	50	50	0		1000	1000	5		1700	0.00	126	126
	311b	1	635	635	0		1500	1500	42		113	0.00	126	126
	311cn	1	321	321	0		1000	1000	32		180	0.00	126	126
	311co	1	314	314	0		1368	1368	23		292	0.00	126	126
	311csx	1	108	108	0		1600	1600	7		1233	0.30	126	126
	311dAS	311dAS	140	140	0		365	365	38		135	0.00	126	126
	311dn	1	624	624	0		1300	1300	48		88	0.00	126	126
	311do	1	314	314	0		1400	1400	22		301	0.00	126	126
	311out	1	351	351	0		1750	750	47		92	0.00	53	54
	312A	1	259	259	0		1750	472	55		64	0.55	33	34
	312Ae	1	284	284	0		1800	1504	19		377	0.25	126	126
	312Be	1	599	599	0		1800	629	95	✓	-6	0.25	43	44
	312Bo	1	25	25	0		1700	108	23		289	0.56	7	8
	312Cn	1	311	311	0		1850	778	40		125	1.04	52	53
	312Co	1	81	81	0		1222	514	16		471	0.77	52	53
	312D	1	337	337	0		1750	472	71		26	0.00	33	34
	312Dx	1	281	281	0		Unrestricted	Unrestricted	0		Unrestricted	0.89	126	126
	312Eent	1	551	551	0		1000	731	75		19	0.00	126	126
	312En	1	415	415	0		1600	660	63		43	0.50	51	52
	312Eo	1	136	136	0		1218	503	27		233	0.50	51	52
	312Ex	1	353	353	0		Unrestricted	Unrestricted	0		Unrestricted	0.88	126	126
	312J	1	409	409	0		1800	1043	39		129	0.82	72	73
	312K	1	376	376	0		1700	567	66		36	0.00	41	42
	312c BS	1	785	785	0		1400	1400	56		61	0.62	126	126
	312c LS	1	197	197	0		265	229	86		5	0.00	126	126
	312c ent	1	761	761	0		1700	1434	53		70	0.00	126	126
	312c x	3	610	610	0		1800	1800	34		166	0.54	126	126
	312x LSx	4	250	250	0		1800	1800	14		548	0.49	126	126
	4	2	282	282	0		686	686	41		119	0.00	126	126
	AS	1	345	345	0		1500	1500	23		291	0.00	126	126
	AS1	1	22	22	0		1800	1800	1		7264	0.00	126	126
	AS2	1	361	361	0		1500	1500	24		274	0.00	126	126
	ASin	1	599	599	0		1700	1700	35		155	1.12	126	126
	CS 2	1	640	640	0		1600	800	80		13	0.00	62	63
	QML	1	193	193	0		520	520	37		142	0.00	126	126
	QMLx	1	59	59	0		1800	1800	3		2646	0.00	126	126

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	35.79	26.65	0.50	8.39	126.14	126.14	81.90	548.36	434.42	18.76	18.76
	308A	2	11.67	3.39	0.00	1.22	17.33	17.33	0.00	0.00	0.00	0.00	0.00
	311Ao	1	15.38	1.43	0.11	0.05	2.21	2.21	9.45	35.71	1.32	0.39	0.39
	311C	1	16.14	32.39	3.47	1.22	66.56	66.56	50.60	229.48	34.17	5.03	5.03
	311Cx	1	29.98	2.04	0.00	0.63	8.99	8.99	0.00	0.00	0.00	0.00	0.00
	311LAS	1	10.80	1.88	0.05	0.00	0.80	0.80	16.00	17.14	0.13	0.22	0.22
	311a	1	6.72	0.45	0.00	0.05	0.73	0.73	0.00	0.00	0.00	0.00	0.00
	311aa O	1	24.72	0.29	0.00	0.03	0.47	0.47	0.00	0.00	0.00	0.00	0.00
	311aa bus	2	24.72	0.61	0.00	0.01	0.12	0.12	0.00	0.00	0.00	0.00	0.00
	311abus	1	6.72	0.09	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
	311b	1	36.19	0.88	0.00	0.16	2.20	2.20	0.00	0.00	0.00	0.00	0.00
	311cn	1	5.85	0.85	0.00	0.08	1.08	1.08	0.00	0.00	0.00	0.00	0.00
	311co	1	5.92	0.39	0.00	0.03	0.48	0.48	0.00	0.00	0.00	0.00	0.00
	311csx	1	4.56	0.08	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
	311dAS	311dAS	3.36	3.06	0.00	0.12	1.69	1.69	0.00	0.00	0.00	0.00	0.00
	311dn	1	11.69	1.28	0.00	0.22	3.14	3.14	0.00	0.00	0.00	0.00	0.00
	311do	1	15.13	0.37	0.00	0.03	0.46	0.46	0.00	0.00	0.00	0.00	0.00
	311out	1	10.80	27.84	2.51	0.21	38.54	38.54	67.46	230.95	5.84	2.97	2.97
	312A	1	5.59	35.32	2.21	0.33	36.08	36.08	64.02	156.46	9.35	1.17	1.17
	312Ae	1	9.73	2.94	0.21	0.02	3.29	3.29	21.80	61.27	0.63	0.89	0.89
	312Be	1	9.73	77.58	6.47	6.44	183.31	183.31	103.01	446.52	170.52	8.91	8.91
	312Bo	1	4.20	63.76	0.41	0.03	6.29	6.29	103.22	24.82	0.98	0.32	0.32
	312Cn	1	9.21	12.87	0.98	0.13	15.79	15.79	22.18	65.20	3.78	0.72	0.72
	312Co	1	9.21	14.24	0.31	0.01	4.55	4.55	34.22	27.30	0.42	0.29	0.29
	312D	1	50.40	50.88	3.89	0.87	67.64	67.64	95.88	298.73	24.38	4.05	4.05
	312Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	18.16	16.89	1.45	1.13	36.70	36.70	60.47	301.35	31.85	7.51	7.51
	312En	1	3.13	26.73	2.55	0.53	43.76	43.76	42.93	163.27	14.91	4.02	4.02
	312Eo	1	3.13	21.89	0.78	0.05	11.74	11.74	40.39	53.50	1.43	1.24	1.24
	312Ex	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	5.62	12.71	1.32	0.13	20.50	20.50	36.40	145.26	3.60	1.72	1716.67
	312K	1	19.36	42.13	3.76	0.65	62.49	62.49	88.46	314.40	18.22	5.48	5.48
	312c BS	1	10.42	2.29	0.14	0.36	7.10	7.10	26.57	188.28	20.26	2.69	2.69
	312c LS	1	7.27	50.74	0.54	2.23	39.43	39.43	99.64	137.39	58.90	2.83	2.83
	312c ent	1	7.78	3.87	0.52	0.30	11.62	11.62	25.48	185.42	8.52	3.70	3.70
	312c x	3	11.18	0.51	0.00	0.09	1.23	1.23	0.00	0.00	0.00	0.00	0.00
	312x LSx	4	12.00	0.16	0.00	0.01	0.16	0.16	0.00	0.00	0.00	0.00	0.00
	4	2	33.00	1.83	0.00	0.14	2.04	2.04	0.00	0.00	0.00	0.00	0.00
	AS	1	3.56	0.36	0.00	0.03	0.49	0.49	0.00	0.00	0.00	0.00	0.00
	AS1	1	41.40	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AS2	1	35.08	0.38	0.00	0.04	0.54	0.54	0.00	0.00	0.00	0.00	0.00
	ASin	1	22.20	0.79	0.04	0.10	1.87	1.87	12.16	70.12	2.73	0.91	0.91
	CS 2	1	4.56	34.99	4.67	1.55	88.34	88.34	87.86	518.67	43.65	7.05	7.05
	QML	1	30.00	2.04	0.00	0.11	1.55	1.55	0.00	0.00	0.00	0.00	0.00
	QMLx	1	12.00	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s per cycle)	Wasted time blocking back (s per cycle)	Wasted time total (s per cycle)	Estimated blocking
08:00-09:00	1	1	0.00	26.50	64.00	41.41	0.00	0.00	0.00			0.00	0.00	0.00	
	308A	2	0.00	1.22	20.87	5.85	0.00	0.00	0.00			0.00	0.00	0.00	
	311Ao	1	0.00	6.76	17.00	39.78	0.00	0.00	0.00			30.00	0.00	30.00	
	311C	1	0.00	9.25	28.87	32.04	0.00	0.00	0.00	1.22	9.14	0.00	0.00	0.00	
	311Cx	1	0.00	0.63	47.65	1.33	0.00	0.00	0.00			0.00	0.00	0.00	
	311LAS	1	0.00	1.39	15.00	9.29	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	
	311a	1	0.00	0.05	10.00	0.51	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa O	1	0.00	0.03	36.00	0.09	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa bus	2	0.00	0.01	35.83	0.02	0.00	0.00	0.00			126.00	0.00	126.00	
	311abus	1	0.00	0.00	9.74	0.01	0.00	0.00	0.00			126.00	0.00	126.00	
	311b	1	0.00	0.16	47.83	0.32	0.00	0.00	0.00			0.00	0.00	0.00	
	311cn	1	0.00	0.08	7.83	0.97	0.00	0.00	0.00			0.00	0.00	0.00	
	311co	1	0.00	0.03	7.83	0.44	0.00	0.00	0.00			0.00	0.00	0.00	
	311csx	1	0.00	0.00	6.61	0.04	0.00	0.00	0.00			19.00	0.00	19.00	
	311dAS	311dAS	0.00	0.12	4.87	2.44	0.00	0.00	0.00			0.00	0.00	0.00	
	311dn	1	0.00	0.22	20.00	1.11	0.00	0.00	0.00			0.00	0.00	0.00	
	311do	1	0.00	0.03	20.00	0.16	0.00	0.00	0.00			0.00	0.00	0.00	
	311out	1	0.00	8.55	15.00	56.98	0.00	0.00	0.00	0.21	7.71	0.00	0.00	0.00	
	312A	1	0.00	5.81	6.00	96.78	0.00	0.00	0.00	0.33	5.81	0.00	0.00	0.00	
	312Ae	1	0.00	2.18	17.00	12.84	0.00	0.00	0.00			9.00	20.69	29.69	
	312Be	1	0.00	22.07	17.00	129.80	1.59	1.59	0.00	6.44	21.72	0.00	0.00	0.00	
	312Bo	1	0.00	1.46	6.00	24.39	0.00	0.00	0.00	0.03	0.90	6.00	0.00	6.00	
	312Cn	1	0.00	2.40	9.33	25.75	0.00	0.00	0.00	0.13	2.40	14.00	0.00	14.00	
	312Co	1	0.00	1.01	9.33	10.87	0.00	0.00	0.00	0.01	0.97	16.00	0.00	16.00	
	312D	1	0.00	11.45	73.04	15.67	0.00	0.00	0.00	0.87	9.48	0.00	0.00	0.00	
	312Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			39.00	0.00	39.00	
	312Eent	1	0.00	12.61	49.00	25.74	0.00	0.00	0.00			0.00	33.91	33.91	
	312En	1	0.00	6.24	6.00	104.02	0.06	0.06	0.00	0.53	6.24	0.00	0.00	0.00	
	312Eo	1	0.00	1.95	6.00	32.58	0.00	0.00	0.00	0.05	1.92	0.00	0.00	0.00	
	312Ex	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			36.00	0.00	36.00	
	312J	1	0.00	5.32	7.48	71.15	0.00	0.00	0.00	0.13	3.55	4.00	0.00	4.00	
	312K	1	0.00	11.82	32.17	36.74	0.00	0.00	0.00	0.65	9.42	0.00	0.00	0.00	
	312c BS	1	0.00	10.65	15.65	68.05	0.00	0.00	0.00			0.00	0.00	0.00	
	312c LS	1	0.00	7.65	11.30	67.68	0.00	0.00	0.00			0.00	10.08	10.08	
	312c ent	1	0.00	7.70	13.91	55.33	0.00	0.00	0.00			0.00	19.68	19.68	
	312c x	3	0.00	0.09	12.17	0.71	0.00	0.00	0.00			0.00	0.00	0.00	
	312x LSx	4	0.00	0.01	17.39	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
	4	2	0.00	0.14	47.83	0.30	0.00	0.00	0.00			0.00	0.00	0.00	
	AS	1	0.00	0.03	6.09	0.56	0.00	0.00	0.00			0.00	0.00	0.00	
	AS1	1	0.00	0.00	60.00	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	AS2	1	0.00	0.04	60.00	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
	ASin	1	0.00	12.03	32.17	37.39	0.00	0.00	0.00			61.00	0.00	61.00	
	CS 2	1	0.00	20.04	6.61	303.29	4.08	0.00	0.00	1.55	12.75	0.00	0.00	0.00	
	QML	1	0.00	0.11	43.48	0.25	0.00	0.00	0.00			0.00	0.00	0.00	
	QMLx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			126.00	0.00	126.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean Journey speed (mph)	JourneyTime (s)
08:00-09:00	1	1	441.60	20.81	13.18	62.44
	308A	2	155.76	5.43	17.83	15.06
	311Ao	1	46.26	1.83	15.70	16.81
	311C	1	86.49	7.02	7.65	48.53
	311Cx	1	306.88	9.96	19.14	32.02
	311LAS	1	9.72	0.38	15.87	12.68
	311a	1	22.90	0.81	17.47	7.17
	311aa O	1	84.25	2.84	18.42	25.01
	311aa bus	2	10.30	0.35	18.19	25.33
	311abus	1	2.80	0.09	18.38	6.81
	311b	1	174.63	6.54	16.60	37.07
	311cn	1	14.45	0.60	15.02	6.70
	311co	1	14.13	0.55	15.95	6.31
	311csx	1	4.10	0.14	18.31	4.64
	311dAS	311dAS	3.92	0.25	9.76	6.42
	311dn	1	71.76	2.25	19.84	12.97
	311do	1	36.11	1.35	16.59	15.50
	311out	1	31.59	3.77	5.21	38.64
	312A	1	9.06	2.94	1.91	40.91
	312Ae	1	24.71	1.00	15.36	12.67
	312Be	1	52.11	14.53	2.23	87.32
	312Bo	1	0.87	0.47	1.15	67.96
	312Cn	1	21.77	1.91	7.09	22.08
	312Co	1	5.67	0.53	6.68	23.45
	312D	1	141.54	9.48	9.28	101.28
	312Dx	1	28.10	0.94	18.64	12.00
	312Eent	1	111.85	5.36	12.96	35.05
	312En	1	14.53	3.44	2.62	29.86
	312Eo	1	4.76	0.95	3.13	25.02
	312Ex	1	35.30	1.18	18.64	12.00
	312J	1	17.59	2.08	5.25	18.33
	312K	1	69.56	6.42	6.73	61.49
	312c BS	1	70.65	2.77	15.84	12.71
	312c LS	1	12.81	3.17	2.51	58.01
	312c ent	1	60.88	2.46	15.36	11.65
	312c x	3	42.70	1.98	13.39	11.70
	312x LSx	4	25.00	0.84	18.39	12.16
	4	2	77.55	2.73	17.66	34.83
	AS	1	12.08	0.38	19.99	3.92
	AS1	1	7.59	0.25	18.64	41.41
	AS2	1	124.55	3.56	21.76	35.46
	ASin	1	110.81	3.83	18.00	22.99
	CS 2	1	24.32	7.03	2.15	39.55
	QML	1	48.25	1.72	17.46	32.04
	QMLx	1	5.90	0.20	18.59	12.03

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warned up	Warned up error	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance Index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.00	27.64			1.00	0.00	144.90	144.90
	308A	2	0.00	0.00	✓	0.00	1.23			1.00	0.00	17.33	17.33
	311Ao	1	0.00	0.00	✓	0.00	6.76			1.00	0.00	2.60	2.60
	311C	1	0.00	0.00	✓	0.00	9.26	1.23	9.16	1.00	0.00	71.60	71.60
	311Cx	1	0.00	0.00	✓	0.00	0.63			1.00	0.00	8.99	8.99
	311LAS	1	0.00	0.00	✓	0.00	1.39	0.00	0.60	1.00	0.00	1.02	1.02
	311a	1	0.00	0.00	✓	0.00	0.05			1.00	0.00	0.73	0.73
	311aa O	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.47	0.47
	311aa bus	2	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.12	0.12
	311abus	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.02	0.02
	311b	1	0.00	0.00	✓	0.00	0.16			1.00	0.00	2.20	2.20
	311cn	1	0.00	0.00	✓	0.00	0.08			1.00	0.00	1.08	1.08
	311co	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.48	0.48
	311csx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.03	0.03
	311dAS	311dAS	0.00	0.00	✓	0.00	0.12			1.00	0.00	1.69	1.69
	311dn	1	0.00	0.00	✓	0.00	0.22			1.00	0.00	3.14	3.14
	311do	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.46	0.46
	311out	1	0.00	0.00	✓	0.00	8.55	0.21	7.71	1.00	0.00	41.51	41.51
	312A	1	0.00	0.00	✓	0.00	5.81	0.33	5.81	1.00	0.00	37.26	37.26
	312Ae	1	0.00	0.00	✓	0.00	2.18			1.00	0.00	4.19	4.19
	312Be	1	0.00	0.00	✓	0.00	23.13	7.51	22.79	1.00	0.00	192.22	192.22
	312Bo	1	0.00	0.00	✓	0.00	1.46	0.03	0.90	1.00	0.00	6.61	6.61
	312Cn	1	0.00	0.00	✓	0.00	2.40	0.13	2.40	1.00	0.00	16.51	16.51
	312Co	1	0.00	0.00	✓	0.00	1.01	0.01	0.97	1.00	0.00	4.84	4.84
	312D	1	0.00	0.00	✓	0.00	11.46	0.88	9.49	1.00	0.00	71.69	71.69
	312Dx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312Eent	1	0.00	0.00	✓	0.00	12.62			1.00	0.00	44.21	44.21
	312En	1	0.00	0.00	✓	0.00	6.24	0.53	6.24	1.00	0.00	47.77	47.77
	312Eo	1	0.00	0.00	✓	0.00	1.95	0.05	1.92	1.00	0.00	12.98	12.98
	312Ex	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312J	1	0.00	0.00	✓	0.00	5.32	0.13	3.55	1.00	0.00	22.22	1737.17
	312K	1	0.00	0.00	✓	0.00	11.83	0.65	9.42	1.00	0.00	67.97	67.97
	312c BS	1	0.00	0.00	✓	0.00	10.65			1.00	0.00	9.79	9.79
	312c LS	1	0.00	0.00	✓	0.00	7.84			1.00	0.00	42.26	42.26
	312c ent	1	0.00	0.00	✓	0.00	7.70			1.00	0.00	15.32	15.32
	312c x	3	0.00	0.00	✓	0.00	0.09			1.00	0.00	1.23	1.23
	312x LSx	4	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.16	0.16
	4	2	0.00	0.00	✓	0.00	0.14			1.00	0.00	2.04	2.04
	AS	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.49	0.49
	AS1	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	AS2	1	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.54	0.54
	ASin	1	0.00	0.00	✓	0.00	12.03			1.00	0.00	2.78	2.78
	CS 2	1	0.00	0.00	✓	0.00	20.07	1.58	12.78	1.00	0.00	95.39	95.39
	QML	1	0.00	0.00	✓	0.00	0.11			1.00	0.00	1.55	1.55
	QMLx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.01	0.01

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	312F	1	0	22	11000	75	10.52	0.31	0.91	0.91
		2	0	22	11000	75	10.52	0.31	0.91	0.91
	312G	1	1	22	11000	24	40.88	0.62	3.55	3.55
		2	1	22	11000	24	40.88	0.62	3.55	3.55
	312H	1	1	22	11000	17	46.71	0.66	4.05	4.05
		2	1	22	11000	17	46.71	0.66	4.05	4.05
	312I	1	0	22	11000	63	15.50	0.38	1.35	1.35
		2	0	22	11000	63	15.50	0.38	1.35	1.35
	312K	1	1	22	11000	18	45.86	0.65	3.98	3.98
		2	1	22	11000	18	45.86	0.65	3.98	3.98
	312L	1	0	0	11000	70	0.00	0.00	0.00	0.00
		2	0	0	11000	70	0.00	0.00	0.00	0.00
	312o	1	0	0	11000	62	0.00	0.00	0.00	0.00
		2	0	0	11000	62	0.00	0.00	0.00	0.00
	312p	1	0	0	11000	5	0.00	0.00	0.00	0.00
		2	0	0	11000	5	0.00	0.00	0.00	0.00
	7	1	0	0	11000	5	0.00	0.00	0.00	0.00
		2	0	0	11000	5	0.00	0.00	0.00	0.00
	8	1	0	0	11000	61	0.00	0.00	0.00	0.00
		2	0	0	11000	61	0.00	0.00	0.00	0.00

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	312F	1	22	22	0		11000	6548	0		26686	0.00	75	75
		2	22	22	0		11000	6548	0		26686	0.00	75	75
	312G	1	22	22	0		11000	2183	1		8829	0.00	24	25
		2	22	22	0		11000	2183	1		8829	0.00	24	25
	312H	1	22	22	0		11000	1571	1		6329	0.00	17	18
		2	22	22	0		11000	1571	1		6329	0.00	17	18
	312I	1	22	22	0		11000	5587	0		22757	0.00	63	64
		2	22	22	0		11000	5587	0		22757	0.00	63	64
	312K	1	22	22	0		11000	1659	1		6686	0.00	18	19
		2	22	22	0		11000	1659	1		6686	0.00	18	19
	312L	1	0	0	0		11000	6198	0		Unrestricted	0.00	70	71
		2	0	0	0		11000	6198	0		Unrestricted	0.00	70	71
	312o	1	0	0	0		11000	5413	0		Unrestricted	0.00	62	62
		2	0	0	0		11000	5413	0		Unrestricted	0.00	62	62
	312p	1	0	0	0		11000	437	0		Unrestricted	0.00	5	5
		2	0	0	0		11000	437	0		Unrestricted	0.00	5	5
	7	1	0	0	0		11000	524	0		Unrestricted	0.00	5	6
		2	0	0	0		11000	524	0		Unrestricted	0.00	5	6
	8	1	0	0	0		11000	5413	0		Unrestricted	0.00	61	62
		2	0	0	0		11000	5413	0		Unrestricted	0.00	61	62

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)
08:00-09:00	312F	1	4.33	10.52	0.06	0.00	0.91	0.91
		2	4.33	10.52	0.06	0.00	0.91	0.91
	312G	1	3.00	40.88	0.25	0.00	3.55	3.55
		2	3.00	40.88	0.25	0.00	3.55	3.55
	312H	1	3.00	46.71	0.29	0.00	4.05	4.05
		2	3.00	46.71	0.29	0.00	4.05	4.05
	312I	1	5.67	15.50	0.09	0.00	1.35	1.35
		2	5.67	15.50	0.09	0.00	1.35	1.35
	312K	1	3.00	45.86	0.28	0.00	3.98	3.98
		2	3.00	45.86	0.28	0.00	3.98	3.98
	312L	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312o	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312p	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	7	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	8	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
08:00-09:00	312F	1	0.31	10.00	3.12	0.00	0.00	0.00
		2	0.31	10.00	3.12	0.00	0.00	0.00
	312G	1	0.62	10.00	6.17	0.00	0.00	0.00
		2	0.62	10.00	6.17	0.00	0.00	0.00
	312H	1	0.66	10.00	6.60	0.00	0.00	0.00
		2	0.66	10.00	6.60	0.00	0.00	0.00
	312I	1	0.38	10.00	3.79	0.00	0.00	0.00
		2	0.38	10.00	3.79	0.00	0.00	0.00
	312K	1	0.65	10.00	6.54	0.00	0.00	0.00
		2	0.65	10.00	6.54	0.00	0.00	0.00
	312L	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312o	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312p	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	7	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	8	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
08:00-09:00	312F	1	0.13	0.09	0.90	14.86
		2	0.13	0.09	0.90	14.86
	312G	1	0.09	0.27	0.20	43.88
		2	0.09	0.27	0.20	43.88
	312H	1	0.09	0.30	0.18	49.71
		2	0.09	0.30	0.18	49.71
	312I	1	0.18	0.13	0.85	21.17
		2	0.18	0.13	0.85	21.17
	312K	1	0.09	0.30	0.18	48.86
		2	0.09	0.30	0.18	48.86
	312L	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EotS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	312F	1	0.00	0.00	0.31	1.00	0.00	0.91	0.91
		2	0.00	0.00	0.31	1.00	0.00	0.91	0.91
	312G	1	0.00	0.00	0.62	1.00	0.00	3.55	3.55
		2	0.00	0.00	0.62	1.00	0.00	3.55	3.55
	312H	1	0.00	0.00	0.66	1.00	0.00	4.05	4.05
		2	0.00	0.00	0.66	1.00	0.00	4.05	4.05
	312I	1	0.00	0.00	0.38	1.00	0.00	1.35	1.35
		2	0.00	0.00	0.38	1.00	0.00	1.35	1.35
	312K	1	0.00	0.00	0.65	1.00	0.00	3.98	3.98
		2	0.00	0.00	0.65	1.00	0.00	3.98	3.98
	312L	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	15/05/2020 15:31:32	15/05/2020 15:31:34	08:00	126	2741.01	66.56	96.00	1/1	2	3	312Be/1	1/1	1/1	

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	96	-6	17885	4612	13.01	917.50	1795.84	2713.34

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	220	800	31.90	27.68	27.68

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	18105	18105	0		96	✓	-6	5412	5440

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	16.45	13.24	38.83	27.73	945.18	945.18	28.22	4219.60	890.00	80.89	1795.84

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	303.29	0.00	738.00	84.37	822.37

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)
08:00-09:00	2679.29	149.31	11.15

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	0.00	1.00	0.00	0.00	1026.07	2741.01

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To																				
		1	2	3	4	5	10	19	20	5a	5b	5c	6	7	8	9	P1	P2	P3	P4	P5	P6
From	1	0.0	76.9	215.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.8	94.3	0.0	0.0	0.0	0.0	0.0	0.0
	2	113.3	0.0	277.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	148.5	149.0	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4	80.2	80.2	244.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	121.1	0.0	0.0	23.8	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10	0.0	0.0	53.5	0.0	0.0	0.0	0.0	81.8	67.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19	0.0	0.0	77.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20	120.9	119.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.5	0.0	0.0	0.0	0.0	141.4	0.0	0.0	0.0	0.0	0.0	0.0
	5a	0.0	0.0	62.9	0.0	0.0	53.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.9	87.3	0.0	0.0	0.0	0.0	0.0
	5c	103.0	100.3	151.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	0.0	0.0	0.0	0.0	0.0	28.9	0.0	56.8	52.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	9	120.4	120.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	178.1	0.0	0.0	69.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	P1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	0.0	0.0	0.0	0.0
P2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	0.0	21.2	0.0	0.0	0.0	
P3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.2	0.0	14.9	0.0	0.0	
P4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.9	0.0	49.7	0.0	
P5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7	0.0	48.9	
P6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.9	0.0	

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	P5	P4		22		49.71	22	49.71
2	P4	P5		22		49.71	22	49.71
3	P5	P6		22		48.86	22	48.86
4	P6	P5		22		48.86	22	48.86
14	P1	P2		22		43.88	22	43.88
15	P2	P1		22		43.88	22	43.88
23	P4	P3		22		14.86	22	14.86
30	2	1	3		113.28		3	113.28
34	1	2	5		76.91		5	76.91
37	5b	8	351		86.85		351	86.85
38	5b	9	25		87.32		25	87.32
39	5	5b	282		34.83		282	34.83
49	9	8	25		69.70		25	69.70
56	7	10	58		28.92		58	28.92
57	5a	10	1		53.45		1	53.45
58	9	2	78		120.40		78	120.40
59	9	1	44		120.40		44	120.40
60	20	2	61		119.84		61	119.84
61	P3	P4		22		14.86	22	14.86
65	P2	P3		22		21.17	22	21.17
66	20	1	25		120.86		25	120.86
69	4	5c	549		121.06		549	121.06
70	9	5c	50		178.11		50	178.11
80	9	3	0		0.00		0	0.00
81	5c	5a	0		0.00		0	0.00
82	5c	10	0		0.00		0	0.00
83	5c	3	599		151.80		599	151.80
84	19	5a	0		0.00		0	0.00
85	19	10	0		0.00		0	0.00
86	19	3	80		77.44		80	77.44
108	6	20	314		58.88		314	58.88
109	7	20	279		56.81		279	56.81
110	5a	20	0		0.00		0	0.00
111	10	20	42		81.77		42	81.77
191	1	8	60		93.85		60	93.85
192	1	9	76		94.31		76	94.31
193	2	8	149		148.52		149	148.52
194	2	9	99		148.99		99	148.99
206	4	2	117		80.19		117	80.19
207	4	1	20		80.19		20	80.19
208	4	9	50		23.81		50	23.81
230	5a	3	21		62.89		21	62.89
232	10	3	77		53.51		77	53.51
233	7	5a	287		52.34		287	52.34
234	10	5a	74		67.50		74	67.50
257	20	1	240		120.90		240	120.90
258	20	8	0		0.00		0	0.00
259	20	9	0		0.00		0	0.00
262	20	8	25		141.39		25	141.39
263	20	9	0		0.00		0	0.00
264	20	2	0		0.00		0	0.00
265	20	5b	108		49.51		108	49.51
266	P3	P2		22		21.17	22	21.17
267	5c	1	21		103.04		21	103.04
268	5c	8	0		0.00		0	0.00
269	5c	9	0		0.00		0	0.00
270	5c	2	20		100.27		20	100.27
271	1	5a	0		0.00		0	0.00
272	1	10	0		0.00		0	0.00
273	1	3	410		215.55		410	215.55
274	2	5a	0		0.00		0	0.00
275	2	10	0		0.00		0	0.00
276	2	3	86		277.13		86	277.13
277	4	5a	0		0.00		0	0.00
278	4	10	0		0.00		0	0.00
279	4	3	25		244.67		25	244.67
280	9	5a	0		0.00		0	0.00
281	9	10	0		0.00		0	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1	(untitled)	311d			1200	1250	126	0.00	96	-6	62.44	26.65	81.90	26.50		100	100	0.00	144.90
308A	2	(untitled)				1298	1700	126	0.00	76	18	15.06	3.39	0.00	1.22		100	100	0.00	17.33
311Ao	1	(untitled)	311			392	1500	126	30.00	26	244	16.81	1.43	9.45	6.76		100	100	0.00	2.60
311C	1	Lockwood inbound	311out	311out	A	521	1650	51	0.00	77	18	48.53	32.39	50.60	9.25	9.14	100	100	0.00	71.60
311Cx	1	(untitled)	311a			1120	1700	126	0.00	66	37	32.02	2.04	0.00	0.63		100	100	0.00	8.99
311LAS	1	(untitled)	311out	311out	C	108	1400	105	0.00	9	881	12.68	1.88	16.00	1.39	0.60	100	100	0.00	1.02
311a	1	(untitled)	311a			409	1500	126	0.00	27	230	7.17	0.45	0.00	0.05		100	100	0.00	0.73
311aa O	1	(untitled)	311aa			409	1800	126	0.00	23	296	25.01	0.29	0.00	0.03		100	100	0.00	0.47
311aa bus	2	(untitled)	311aa			50	410	126	126.00	12	638	25.33	0.61	0.00	0.01		100	100	0.00	0.12
311abus	1	(untitled)	311a			50	1000	126	126.00	5	1700	6.81	0.09	0.00	0.00		100	100	0.00	0.02
311b	1	(untitled)	311b			635	1500	126	0.00	42	113	37.07	0.88	0.00	0.16		100	100	0.00	2.20
311cn	1	(untitled)	311c			321	1000	126	0.00	32	180	6.70	0.85	0.00	0.08		100	100	0.00	1.08
311co	1	(untitled)	311c			314	1368	126	0.00	23	292	6.31	0.39	0.00	0.03		100	100	0.00	0.48
311csx	1	(untitled)	ASCS			108	1600	126	19.00	7	1233	4.64	0.08	0.00	0.00		100	100	0.00	0.03
311dAS	311dAS	(untitled)	311d			140	365	126	0.00	38	135	6.42	3.06	0.00	0.12		100	100	0.00	1.69
311dn	1	(untitled)	311d			624	1300	126	0.00	48	88	12.97	1.28	0.00	0.22		100	100	0.00	3.14
311do	1	(untitled)	311d			314	1400	126	0.00	22	301	15.50	0.37	0.00	0.03		100	100	0.00	0.46
311out	1	(untitled)	311out	311out	B	351	1750	53	0.00	47	92	38.64	27.84	67.46	8.55	7.71	100	100	0.00	41.51
312A	1	(untitled)	312a	312a	A	259	1750	33	0.00	55	64	40.91	35.32	64.02	5.81		100	100	0.00	37.26
312Ae	1	(untitled)	312b			284	1800	126	29.69	19	377	12.67	2.94	21.80	2.18		100	100	0.00	4.19
312Be	1	(untitled)	312b	312b	M	599 <	1800	43	0.00	95	-6	87.32	77.58	103.01	22.07 +	21.72	100	100	0.00	192.22
312Bo	1	(untitled)	312a	312a	B	25	1700	7	6.00	23	289	67.96	63.76	103.22	1.46	0.90	100	100	0.00	6.61
312Cn	1	(untitled)	312a	312a	C	311	1850	52	14.00	40	125	22.08	12.87	22.18	2.40	2.40	100	100	0.00	16.51
312Co	1	(untitled)	312a	312a	C	81	1222	52	16.00	16	471	23.45	14.24	34.22	1.01	0.97	100	100	0.00	4.84
312D	1	Lockwood Road inbound	312a	312a	D	337	1750	33	0.00	71	26	101.28	50.88	95.88	11.45	9.48	100	100	0.00	71.69
312Dx	1	(untitled)				281	Unrestricted	126	39.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312Eent	1	(untitled)	312a			551	1000	126	33.91	75	19	35.05	16.89	60.47	12.61		100	100	0.00	44.21
312En	1	(untitled)	312a	312a	E	415 <	1600	51	0.00	63	43	29.86	26.73	42.93	6.24 +	6.24	100	100	0.00	47.77
312Eo	1	(untitled)	312a	312a	E	136	1218	51	0.00	27	233	25.02	21.89	40.39	1.95	1.92	100	100	0.00	12.98
312Ex	1	(untitled)				353	Unrestricted	126	36.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312J	1	(untitled)	312b	312b	J	409	1800	72	4.00	39	129	18.33	12.71	36.40	5.32	3.55	100	99999	0.00	1737.17
312K	1	(untitled)	312b	312b	K	376	1700	41	0.00	66	36	61.49	42.13	88.46	11.82	9.42	100	100	0.00	67.97
312c BS	1	(untitled)	312c			785	1400	126	0.00	56	61	12.71	2.29	26.57	10.65		100	100	0.00	9.79
312c LS	1	(untitled)	312c			197	265	126	10.08	86	5	58.01	50.74	99.64	7.65		100	100	0.00	42.26
312c ent	1	(untitled)	312c			761	1700	126	19.68	53	70	11.65	3.87	25.48	7.70		100	100	0.00	15.32
312c x	3	(untitled)				610	1800	126	0.00	34	166	11.70	0.51	0.00	0.09		100	100	0.00	1.23
312x LSx	4	(untitled)				250	1800	126	0.00	14	548	12.16	0.16	0.00	0.01		100	100	0.00	0.16
4	2	(untitled)	ASCS			282	686	126	0.00	41	119	34.83	1.83	0.00	0.14		100	100	0.00	2.04
AS	1	(untitled)	AS			345	1500	126	0.00	23	291	3.92	0.36	0.00	0.03		100	100	0.00	0.49
AS1	1	(untitled)	AS			22	1800	126	126.00	1	7264	41.41	0.01	0.00	0.00		100	100	0.00	0.00
AS2	1	(untitled)				361	1500	126	0.00	24	274	35.46	0.38	0.00	0.04		100	100	0.00	0.54
ASin	1	(untitled)	ASCS			599	1700	126	61.00	35	155	22.99	0.79	12.16	12.03		100	100	0.00	2.78
CS 2	1	(untitled)	311out	311out	D	640 <	1600	62	0.00	80	13	39.55	34.99	87.86	20.04 +	12.75	100	100	0.00	95.39
QML	1	(untitled)	AS			193	520	126	0.00	37	142	32.04	2.04	0.00	0.11		100	100	0.00	1.55
QMLx	1	(untitled)				59	1800	126	126.00	3	2646	12.03	0.03	0.00	0.00		100	100	0.00	0.01

Pedestrian Crossing Results

				SIGNALS		FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PENALTIES	P.I.
Pedestrian	Side	Name	Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay weighting (%)	Cost of traffic penalties (£ per hr)	P.I.
312F	1	(untitled)	312a	312a	F	22	11000	75	0	26686	14.86	10.52	0.31	100	0.00	0.91
	2	(untitled)	312a	312a	F	22	11000	75	0	26686	14.86	10.52	0.31	100	0.00	0.91
312G	1	(untitled)		312a	I	22	11000	24	1	8829	43.88	40.88	0.62	100	0.00	3.55
	2	(untitled)		312a	I	22	11000	24	1	8829	43.88	40.88	0.62	100	0.00	3.55
312H	1	(untitled)		312a	H	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05
	2	(untitled)		312a	H	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05
312I	1	(untitled)	312a	312a	G	22	11000	63	0	22757	21.17	15.50	0.38	100	0.00	1.35
	2	(untitled)	312a	312a	G	22	11000	63	0	22757	21.17	15.50	0.38	100	0.00	1.35
312K	1	(untitled)		312a	N	22	11000	18	1	6686	48.86	45.86	0.65	100	0.00	3.98
	2	(untitled)		312a	N	22	11000	18	1	6686	48.86	45.86	0.65	100	0.00	3.98
312L	1	(untitled)		312b	L	0	11000	70	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312b	L	0	11000	70	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312o	1	(untitled)		312a	O	0	11000	62	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	O	0	11000	62	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312p	1	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
7	1	(untitled)	311out	311out	E	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)	311out	311out	E	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
8	1	(untitled)		311out	F	0	11000	61	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		311out	F	0	11000	61	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	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)
Normal traffic	2678.15	147.13	11.31	36.88	27.73	917.50	1795.84	0.00	2713.34
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians	1.14	2.18	0.33	1.95	0.00	27.68	0.00	0.00	27.68
TOTAL	2679.29	149.31	11.15	38.83	27.73	945.18	1795.84	0.00	2741.01

TRANSYT 15
Version: 15.5.0.6767 © Copyright TRL Limited, 2016
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Filename: option 1c PM 2016 126.t15
Path: C:\Users\andrewrawlinson\Desktop\for Adrian for Jacobs
Report generation date: 15/05/2020 15:40:47

- »Network Diagrams
- «A1 - pm : D1 - pm* :
 - »Summary
 - »Network Options
 - »Traffic Nodes
 - »Arms and Traffic Streams
 - »Pedestrian Crossings
 - »Local OD Matrix - Local Matrix: 1
 - »Signal Timings
 - »TRANSYT 12 Tables
 - »Results - Link
 - »Results - Traffic Stream
 - »Data Entry - Stage Start and End
 - »Data Entry - Phase
 - »Data Entry - Traffic Stream
 - »Data entry - Link
 - »Results - Pedestrian
 - »Traffic Stream Results
 - »Pedestrian Crossing Results
 - »Network Results
 - »Point to Point Journey Time
 - »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITDS\AndrewRawlinson
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
			✓		✓	✓	✓	✓	✓	✓	✓		

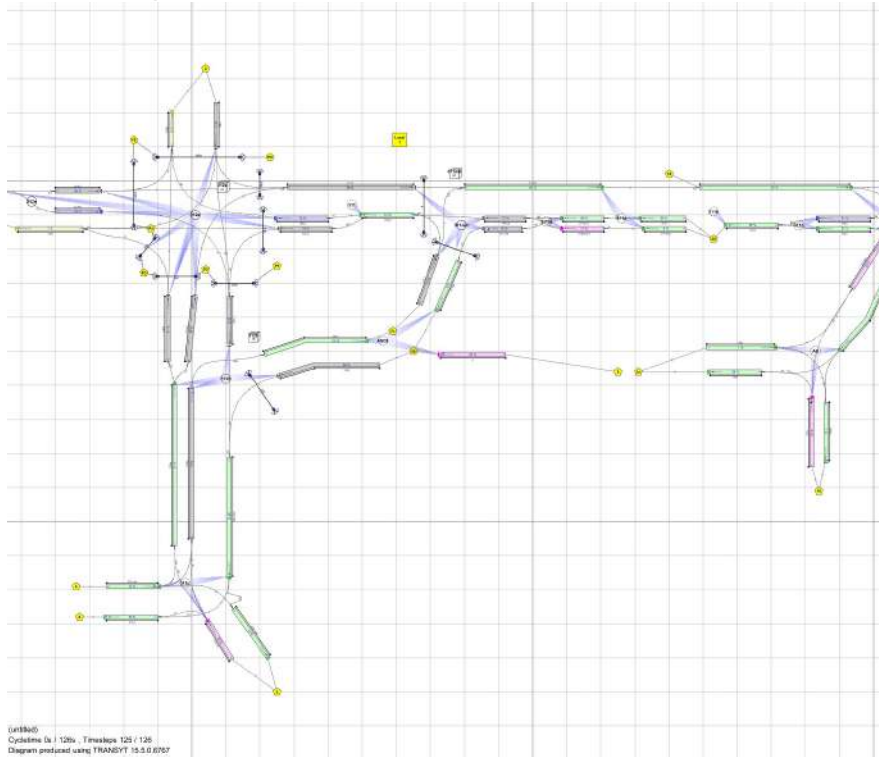
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	mph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



A1 - pm

D1 - pm*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	15/05/2020 15:40:30	15/05/2020 15:40:32	17:00	126	2129.17	61.48	87.33	4/2	0	0	312D/1	4/2	4/2	✓

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
pm		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
pm				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
126		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻²)	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.47	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻²)	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.47	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	312a, 312b, 311out

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	(untitled)		311d
308A	(untitled)		
311Ao	(untitled)		311
311C	(untitled)		311out
311Cx	(untitled)		311a
311LAS	(untitled)		311out
311a	(untitled)		311a
311aa O	(untitled)		311aa
311aa bus	(untitled)		311aa
311abus	(untitled)		311a
311b	(untitled)		311b
311cn	(untitled)		311c
311co	(untitled)		311c
311csx	(untitled)		ASCS
311dAS	(untitled)		311d
311dn	(untitled)		311d
311do	(untitled)		311d
311out	(untitled)		311out
312A	(untitled)		312a
312Ae	(untitled)		312b
312Be	(untitled)		312b
312Bo	(untitled)		312a
312Cn	(untitled)		312a
312Co	(untitled)		312a
312D	(untitled)		312a
312Dx	(untitled)		
312Eent	(untitled)		312a
312En	(untitled)		312a
312Eo	(untitled)		312a
312Ex	(untitled)		
312J	(untitled)		312b
312K	(untitled)		312b
312c BS	(untitled)		312c
312c LS	(untitled)		312c
312c ent	(untitled)		312c
312c x	(untitled)		
312x LSx	(untitled)		
4	(untitled)		ASCS
AS	(untitled)		AS
AS1	(untitled)		AS
AS2	(untitled)		
ASin	(untitled)		ASCS
CS 2	(untitled)		311out
QML	(untitled)		AS
QMLx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	(untitled)			368.00	✓	Sum of lanes	1050					Normal	
308A	2	(untitled)			120.00	✓	Sum of lanes	1200					Normal	
311Ao	1	(untitled)			118.00	✓	Sum of lanes	1500	✓	1800			Normal	
311C	1	Lockwood inbound			166.00	✓	Sum of lanes	1650			✓		Normal	
311Cx	1	(untitled)			274.00	✓	Sum of lanes	1700					Normal	
311LAS	1	(untitled)			90.00	✓	Sum of lanes	1400	✓	1800	✓		Normal	
311a	1	(untitled)			56.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa O	1	(untitled)			206.00	✓	Sum of lanes	1800					Normal	
311aa bus	2	(untitled)			206.00							✓	Normal	
311abus	1	(untitled)			56.00	✓	Sum of lanes	1000					Normal	
311b	1	(untitled)			275.00	✓	Sum of lanes	1500					Normal	
311cn	1	(untitled)			45.00	✓	Sum of lanes	1000					Normal	
311co	1	(untitled)			45.00	✓	Sum of lanes	1200				✓	Normal	
311csx	1	(untitled)			38.00	✓	Sum of lanes	1600					Normal	
311dAS	311dAS	(untitled)			28.00							✓	Normal	
311dn	1	(untitled)			115.00	✓	Sum of lanes	1300					Normal	
311do	1	(untitled)			115.00	✓	Sum of lanes	1400					Normal	
311out	1	(untitled)			90.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312A	1	(untitled)			35.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312Ae	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800			Normal	
312Be	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
312Bo	1	(untitled)			35.00	✓	Sum of lanes	1700	✓	1800	✓		Normal	
312Cn	1	(untitled)			70.00	✓	Sum of lanes	1850	✓	1800	✓		Normal	
312Co	1	(untitled)			70.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312D	1	Lockwood Road inbound			420.00	✓	Sum of lanes	1750			✓		Normal	
312Dx	1	(untitled)			100.00								Normal	
312Eent	1	(untitled)			203.00	✓	Sum of lanes	1000					Normal	
312En	1	(untitled)			35.00	✓	Sum of lanes	1600	✓	1800	✓		Normal	
312Eo	1	(untitled)			35.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312Ex	1	(untitled)			100.00								Normal	
312J	1	(untitled)			43.00	✓	Sum of lanes	1800			✓		Normal	
312K	1	(untitled)			185.00	✓	Sum of lanes	1700			✓		Normal	
312c BS	1	(untitled)			90.00	✓	Sum of lanes	1400					Normal	
312c LS	1	(untitled)			65.00							✓	Normal	
312c ent	1	(untitled)			80.00	✓	Sum of lanes	1700					Normal	
312c x	3	(untitled)			70.00	✓	Sum of lanes	1800					Normal	
312x LSx	4	(untitled)			100.00	✓	Sum of lanes	1800					Normal	
4	2	(untitled)			275.00							✓	Normal	
AS	1	(untitled)			35.00	✓	Sum of lanes	1500					Normal	
AS1	1	(untitled)			345.00	✓	Sum of lanes	1800					Normal	
AS2	1	(untitled)			345.00	✓	Sum of lanes	1500					Normal	
ASin	1	(untitled)			185.00	✓	Sum of lanes	1700					Normal	
CS 2	1	(untitled)			38.00	✓	Sum of lanes	1600			✓		Normal	
QML	1	(untitled)		✓	250.00							✓	Normal	
QMLx	1	(untitled)			100.00	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1	1	1	(untitled)			1050
308A	2	1	(untitled)			1200
311Ao	1	1	(untitled)			1500
311C	1	1	(untitled)			1650
311Cx	1	1	(untitled)			1700
311LAS	1	1	(untitled)			1400
311a	1	1	(untitled)			1500
311aa O	1	1	(untitled)			1800
311aa bus	2	1	(untitled)			
311abus	1	1	(untitled)			1000
311b	1	1	(untitled)			1500
311cn	1	1	(untitled)			1000
311co	1	1	(untitled)			1200
311csx	1	1	(untitled)			1600
311dAS	311dAS	1	(untitled)			
311dn	1	1	(untitled)			1300
311do	1	1	(untitled)			1400
311out	1	1	(untitled)			1750
312A	1	1	(untitled)			1750
312Ae	1	1	(untitled)			1800
312Be	1	1	(untitled)			1800
312Bo	1	1	(untitled)			1700
312Cn	1	1	(untitled)			1850
312Co	1	1	(untitled)			1440
312D	1	1	(untitled)			1750
312Dx	1	1	(untitled)			
312Eent	1	1	(untitled)			1000
312En	1	1	(untitled)			1600
312Eo	1	1	(untitled)			1440
312Ex	1	1	(untitled)			
312J	1	1	(untitled)			1800
312K	1	2	(untitled)			1700
312c BS	1	1	(untitled)			1400
312c LS	1	1	(untitled)			
312c ent	1	1	(untitled)			1700
312c x	3	1	(untitled)			1800
312x LSx	4	1	(untitled)			1800
4	2	1	(untitled)			
AS	1	1	(untitled)			1500
AS1	1	1	(untitled)			1800
AS2	1	1	(untitled)			1500
ASin	1	1	(untitled)			1700
CS 2	1	1	(untitled)			1600
QML	1	1	(untitled)			
QMLx	1	QMLx	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00				
308A	2	NetworkDefault	100	100	100		0.00				
311Ao	1	CTM	100	100	100		17.00	✓	17.00	0.00	
311C	1	NetworkDefault	100	100	100		0.00				
311Cx	1	NetworkDefault	100	100	100		0.00				
311LAS	1	CTM	100	100	100		15.00	✓	15.00	0.00	
311a	1	CTM	100	100	100		10.00				
311aa O	1	PDM	100	100	100		36.00				
311aa bus	2	NetworkDefault	100	100	100		0.00				
311abus	1	NetworkDefault	100	100	100		0.00				
311b	1	NetworkDefault	100	100	100		0.00				
311cn	1	NetworkDefault	100	100	100		0.00				
311co	1	NetworkDefault	100	100	100		0.00				
311csx	1	NetworkDefault	100	100	100		0.00				
311dAS	311dAS	NetworkDefault	100	100	100		0.00				
311dn	1	NetworkDefault	100	100	100		0.00				
311do	1	NetworkDefault	100	100	100		0.00				
311out	1	CTM	100	100	100		15.00	✓	15.00	0.00	
312A	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Ae	1	CTM	100	100	100		17.00	✓	18.00	0.00	
312Be	1	CTM	100	100	100		17.00	✓	17.00	0.00	
312Bo	1	CTM	100	100	100		6.00				
312Cn	1	CTM	100	100	100		8.00	✓	8.00	0.00	
312Co	1	Flare	100	100	100		8.00	✓	8.00	0.00	
312D	1	NetworkDefault	100	100	100		0.00				
312Dx	1	NetworkDefault	100	100	100		0.00				
312Eent	1	PDM	100	100	100		49.00	✓	49.00	0.00	
312En	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Eo	1	Flare	100	100	100		6.00	✓	6.00	0.00	
312Ex	1	NetworkDefault	100	100	100		0.00				
312J	1	NetworkDefault	99999	100	100		0.00				
312K	1	NetworkDefault	100	100	100		0.00				
312c BS	1	NetworkDefault	100	100	100		0.00				
312c LS	1	NetworkDefault	100	100	100		0.00				
312c ent	1	NetworkDefault	100	100	100		0.00				
312c x	3	NetworkDefault	100	100	100		0.00				
312x LSx	4	NetworkDefault	100	100	100		0.00				
4	2	NetworkDefault	100	100	100		0.00				
AS	1	NetworkDefault	100	100	100		0.00				
AS1	1	NetworkDefault	100	100	100		0.00				
AS2	1	NetworkDefault	100	100	100		0.00				
ASin	1	NetworkDefault	100	100	100		0.00				
CS 2	1	NetworkDefault	100	100	100		0.00				
QML	1	NetworkDefault	100	100	100		0.00				
QMLx	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	126

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	895	895
308A	2	917	917
311Ao	1	733	733
311C	1	421	421
311Cx	1	829	829
311LAS	1	151	151
311a	1	797	797
311aa O	1	797	797
311aa bus	2	50	50
311abus	1	50	50
311b	1	980	980
311cn	1	272	272
311co	1	708	708
311csx	1	151	151
311dAS	311dAS	54	54
311dn	1	915	915
311do	1	708	708
311out	1	696	696
312A	1	350	350
312Ae	1	375	375
312Be	1	408	408
312Bo	1	25	25
312Cn	1	609	609
312Co	1	124	124
312D	1	371	371
312Dx	1	410	410
312Eent	1	472	472
312En	1	350	350
312Eo	1	122	122
312Ex	1	668	668
312J	1	452	452
312K	1	743	743
312c BS	1	1195	1195
312c LS	1	204	204
312c ent	1	629	629
312c x	3	1037	1037
312x LSx	4	208	208
4	2	592	592
AS	1	675	675
AS1	1	10	10
AS2	1	587	587
ASin	1	408	408
CS 2	1	445	445
QML	1	79	79
QMLx	1	123	123

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
311C	1	311out	A	
311LAS	1	311out	C	
311out	1	311out	B	
312A	1	312a	A	
312Be	1	312b	M	
312Bo	1	312a	B	
312Cn	1	312a	C	
312Co	1	312a	C	
312D	1	312a	D	
312En	1	312a	E	
312Eo	1	312a	E	
312J	1	312b	J	
312K	1	312b	K	
CS 2	1	311out	D	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)
311a	1	6.72	18.64
311abus	1	6.72	18.64
311dn	1	11.69	22.00
311do	1	15.13	17.00
312D	1	50.40	18.64
312Eent	1	18.16	25.00
312K	1	19.36	21.38
312c LS	1	7.27	20.00
312c ent	1	7.78	23.00
4	2	33.00	18.64
AS1	1	41.40	18.64
CS 2	1	4.56	18.64
QML	1	30.00	18.64

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)	Auto turning radius	Traffic turn style	Turning radius (m)
1	1	1	311Cx/1	1/1	35.79	23.00	✓	Straight	Straight Movement
308A	2	1	311dAS/311dAS	308A/2	11.67	23.00	✓	Straight	Straight Movement
311Ao	1	1	311out/1	311Ao/1	15.53	17.00	✓	Straight	Straight Movement
311C	1	1	312D/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	1	311C/1	311Cx/1	26.65	23.00	✓	Straight	Straight Movement
311LAS	1	1	311aa O/1	311LAS/1	10.80	18.64	✓	Straight	Straight Movement
311aa O	1	1	311a/1	311aa O/1	24.72	18.64	✓	Straight	Straight Movement
311aa bus	2	1	311abus/1	311aa bus/2	24.72	18.64	✓	Straight	Straight Movement
311b	1	1	311cn/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	1	311dn/1	311cn/1	5.92	17.00	✓	Straight	Straight Movement
311co	1	1	311do/1	311co/1	5.92	17.00	✓	Straight	Straight Movement
311csx	1	1	311LAS/1	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	1	QML/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	1	311aa O/1	311out/1	10.80	18.64	✓	Straight	Straight Movement
312A	1	1	312Ae/1	312A/1	5.59	14.00	✓	Straight	Straight Movement
312Ae	1	1	312c ent/1	312Ae/1	9.73	20.00	✓	Nearside	62.50
312Be	1	1	312c ent/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Bo	1	1	312Ae/1	312Bo/1	4.20	18.64	✓	Straight	Straight Movement
312Cn	1	1	311Ao/1	312Cn/1	9.21	17.00	✓	Straight	Straight Movement
312Co	1	1	311Ao/1	312Co/1	9.21	17.00	✓	Straight	Straight Movement
312Dx	1	1	312Co/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312En	1	1	312Ent/1	312En/1	3.13	25.00	✓	Straight	Straight Movement
312Eo	1	1	312Ent/1	312Eo/1	3.13	25.00	✓	Straight	Straight Movement
312Ex	1	1	312D/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	1	312Cn/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
312c BS	1	1	312J/1	312c BS/1	10.07	20.00	✓	Straight	Straight Movement
312c x	3	1	312c BS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	1	312c BS/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
AS	1	1	311dn/1	AS/1	3.56	22.00	✓	Nearside	67.33
AS2	1	1	AS/1	AS2/1	35.08	22.00	✓	Straight	Straight Movement
ASin	1	1	312Be/1	ASin/1	22.20	18.64	✓	Straight	Straight Movement
QMLx	1	1	AS/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
308A	2	2	1/1	308A/2	11.67	23.00	✓	Straight	Straight Movement
311Ao	1	2	CS 2/1	311Ao/1	14.16	18.64	✓	Nearside	92.14
311C	1	2	312En/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	2	CS 2/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
311b	1	2	311co/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	2	311dAS/311dAS	311cn/1	5.40	18.64	✓	Nearside	13.39
311dAS	311dAS	2	AS1/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	2	311aa bus/2	311out/1	10.80	18.64	✓	Straight	Straight Movement
312Ae	1	2	312c LS/1	312Ae/1	9.73	20.00	✓	Straight	Straight Movement
312Be	1	2	312c LS/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Dx	1	2	312A/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	2	312Cn/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	2	312D/1	312J/1	4.81	20.00	✓	Straight	Straight Movement
312c BS	1	2	312K/1	312c BS/1	10.80	18.64	✓	Straight	Straight Movement
312c x	3	2	312c LS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	2	312c ent/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
AS	1	2	1/1	AS/1	4.20	18.64	✓	Straight	Straight Movement
AS2	1	2	QML/1	AS2/1	35.08	22.00	✓	Nearside	100.00
QMLx	1	2	AS1/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
311C	1	3	312Bo/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
312Dx	1	3	312En/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	3	312A/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	3	312Eo/1	312J/1	6.87	14.00	✓	Straight	Straight Movement

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	(ALL)	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
2	bus exit	TrafficStream	311aa O/1	100	0.22		0	0
1		TrafficStream	311cn/1	100	0.22		0	0
311dAS		TrafficStream	311dn/1	100	0.22		0	0
		TrafficStream	311Cx/1	100	0.19		0	0
1		TrafficStream	312En/1	100	0.22	✓	0	0
		TrafficStream	312En/1	100	0.22		0	0
	outbound	TrafficStream	312c BS/1	100	0.22		0	0
		TrafficStream	312c ent/1	90	0.19		0	0
2		TrafficStream	311csx/1	100	0.22		0	0
		TrafficStream	ASin/1	5	0.19		0	0
1		TrafficStream	AS/1	100	0.22		0	0
		TrafficStream	AS1/1	100	0.19		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (mph)
312F	(untitled)		312a		Farside	5.00	3.33	3.36
312G	(untitled)				Nearside	3.00	2.00	3.36
312H	(untitled)				Farside	3.00	2.00	3.36
312I	(untitled)		312a		Farside	7.00	4.67	3.36
312K	(untitled)				Farside	3.00	2.00	3.36
312L	(untitled)				Farside	3.00	2.00	3.36
312o	(untitled)				Farside	3.00	2.00	3.36
312p	(untitled)				Farside	3.00	2.00	3.36
7	(untitled)		311out		Nearside	6.00	4.00	3.36
8	(untitled)				Farside	3.00	2.00	3.36

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
312F	312a	F	
312G	312a	I	
312H	312a	H	
312I	312a	G	
312K	312a	N	
312L	312b	L	
312o	312a	O	
312p	312a	P	
7	311out	E	
8	311out	F	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To																			
		1	2	3	4	5	10	19	20	5a	5b	5c	6	7	8	9	P1	P2	P3	P4	P5
From	1	0	15	324	0	0	11	0	0	0	0	0	0	101	21	0	0	0	0	0	0
	2	5	0	61	0	0	0	0	0	0	0	0	0	285	20	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	49	172	25	0	0	0	0	0	0	0	358	0	0	0	25	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	592	0	0	0	0	0	0	0	0	0	0
	10	0	0	24	0	0	0	0	21	34	0	0	0	0	0	0	0	0	0	0	0
	19	0	0	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20	563	108	0	0	0	0	0	0	151	0	0	0	0	25	0	0	0	0	0	0
	5a	0	0	9	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5b	0	0	0	0	0	0	0	0	0	0	0	0	0	601	142	0	0	0	0	0
	5c	21	16	408	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	708	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	111	0	251	553	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	30	99	0	0	0	0	0	0	0	50	0	0	25	0	0	0	0	0	0	0
	P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (PCU/hr)

		To																					
		1	2	3	4	5	10	19	20	5a	5b	5c	6	7	8	9	P1	P2	P3	P4	P5	P6	
From	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0	0		
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0	0		
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22	0		
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	22		
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0		

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1	(untitled)	312Eent/1	312Ex/1	#0000FF
	2	(untitled)	312D/1	312Dx/1	#FF0000
	3	(untitled)		308A/2	#00FF00
	4	(untitled)	312c ent/1		#FFFF00
	5	(untitled)	4/2		#FFFF00
	10	(untitled)	QML/1	QMLx/1	#B48894
	19	(untitled)	1/1		#B48894
	20	(untitled)	311a/1, 311abus/1	311b/1	#DCCA5F
	5a	(untitled)	AS1/1	AS2/1	#4A4DC6
	5b	(untitled)	312K/1	311csx/1, 4/2	#B48894
	5c	(untitled)	CS 2/1	ASin/1	#B48894
	6	(untitled)	311do/1		#6495ED
	7	(untitled)	311dn/1		#D2B48C
	8	(untitled)		312c x/3	#FFFF00
	9	(untitled)	312c LS/1	312x LSx/4	#FFFF00
	P1	(untitled)	312G:1E	312G:1X	#008000
	P2	(untitled)	312G:2E, 312I:1E	312G:2X, 312I:1X	#8A2BE2
	P3	(untitled)	312F:1E, 312I:2E	312F:1X, 312I:2X	#6495ED
	P4	(untitled)	312H:2E, 312F:2E	312H:2X, 312F:2X	#FFA500
	P5	(untitled)	312H:1E, 312K:1E	312H:1X, 312K:1X	#00FFFF
	P6	(untitled)	312K:2E	312K:2X	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	30		2	1	312D/1, 312Ex/1	Normal	5
	34		1	2	312Eent/1, 312En/1, 312Dx/1	Normal	15
	37		5b	8	312K/1, 312c BS/1, 312c x/3	Normal	601
	38		5b	9	312K/1, 312c BS/1, 312x LSx/4	Normal	142
	39		5	5b	4/2	Normal	592
	49		9	8	312c LS/1, 312c x/3	Normal	25
	56		7	10	311dn/1, AS/1, QMLx/1	Normal	111
	57		5a	10	AS1/1, QMLx/1	Normal	1
	58		9	2	312c LS/1, 312Ae/1, 312A/1, 312Dx/1	Normal	99
	59		9	1	312c LS/1, 312Ae/1, 312A/1, 312Ex/1	Normal	30
	60		20	2	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Co/1, 312Dx/1	Normal	108
	66		20	1	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Cn/1, 312Ex/1	Fixed	25
	69		4	5c	312c ent/1, 312Be/1, ASin/1	Normal	358
	70		9	5c	312c LS/1, 312Be/1, ASin/1	Normal	50
	80		9	3	312c LS/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	0
	81		5c	5a	CS 2/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	82		5c	10	CS 2/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	83		5c	3	CS 2/1, 311Cx/1, 1/1, 308A/2	Normal	408
	84		19	5a	1/1, AS/1, AS2/1	Normal	0
	85		19	10	1/1, AS/1, QMLx/1	Normal	0
	86		19	3	1/1, 308A/2	Normal	66
	108		6	20	311do/1, 311co/1, 311b/1	Normal	708
	109		7	20	311dn/1, 311cn/1, 311b/1	Normal	251
	110		5a	20	AS1/1, 311dAS/311dAS, 311cn/1, 311b/1	Normal	0
	111		10	20	QML/1, 311dAS/311dAS, 311cn/1, 311b/1	Normal	21
	191		1	8	312Eent/1, 312Eo/1, 312J/1, 312c BS/1, 312c x/3	Normal	101
	192		1	9	312Eent/1, 312Eo/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	21
	193		2	8	312D/1, 312J/1, 312c BS/1, 312c x/3	Normal	285
	194		2	9	312D/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	20
	206		4	2	312c ent/1, 312Ae/1, 312A/1, 312Dx/1	Normal	172
	207		4	1	312c ent/1, 312Ae/1, 312A/1, 312Ex/1	Normal	49
	208		4	9	312c ent/1, 312x LSx/4	Normal	25
	230		5a	3	AS1/1, 311dAS/311dAS, 308A/2	Normal	9
	232		10	3	QML/1, 311dAS/311dAS, 308A/2	Normal	24
	233		7	5a	311dn/1, AS/1, AS2/1	Normal	553
	234		10	5a	QML/1, AS2/1	Normal	34
	257		20	1	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Cn/1, 312Ex/1	Normal	538
	258		20	8	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Normal	0
	259		20	9	311a/1, 311aa O/1, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Disabled	0
	262		20	8	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Fixed	25
	263		20	9	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Disabled	0
	264		20	2	311abus/1, 311aa bus/2, 311out/1, 311Ao/1, 312Co/1, 312Dx/1	Disabled	0
	265		20	5b	311a/1, 311aa O/1, 311LAS/1, 311csx/1	Normal	151
	267		5c	1	CS 2/1, 311Ao/1, 312Cn/1, 312Ex/1	Normal	21
	268		5c	8	CS 2/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312c x/3	Disabled	0
	269		5c	9	CS 2/1, 311Ao/1, 312Cn/1, 312J/1, 312c BS/1, 312x LSx/4	Normal	0
	270		5c	2	CS 2/1, 311Ao/1, 312Co/1, 312Dx/1	Normal	16
	271		1	5a	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	272		1	10	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	11
	273		1	3	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	324
	274		2	5a	312D/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	275		2	10	312D/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	276		2	3	312D/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	61
	277		4	5a	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	278		4	10	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	279		4	3	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	25
	280		9	5a	312c LS/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	281		9	10	312c LS/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	1		P5	P4	312H:1E, 312H:2X	Normal	22
	2		P4	P5	312H:2E, 312H:1X	Normal	22
	3		P5	P6	312K:1E, 312K:2X	Normal	22
	4		P6	P5	312K:2E, 312K:1X	Normal	22
	14		P1	P2	312G:1E, 312G:2X	Normal	22
	15		P2	P1	312G:2E, 312G:1X	Normal	22
	23		P4	P3	312F:2E, 312F:1X	Normal	22
	61		P3	P4	312F:1E, 312F:2X	Normal	22
	65		P2	P3	312I:1E, 312I:2X	Normal	22
	266		P3	P2	312I:2E, 312I:1X	Normal	22

Signal Timings

Network Default: 126s cycle time; 126 steps

Controller Stream 311out

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
311out	(untitled)		1	NetworkDefault	126

Controller Stream 311out - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
311out	Unspecified						Absolute

Controller Stream 311out - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
311out	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311out	A	(untitled)	7	300	0	0	Unknown
	B	(untitled)	7	300	0	0	Unknown
	C	(untitled)	7	300	0	0	Unknown
	D	(untitled)	7	300	0	0	Unknown
	E	(untitled)	5	5	0	0	Unknown
	F	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
311out	1	A, B, C	1
	2	D, F, C	1
	3	A, B, E	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
311out	1	Gaining	B	2	3	0	5

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
311out	1	(untitled)	Single	1, 2, 3	88, 15, 29

Intergreen Matrix for Controller Stream 311out

		To					
		A	B	C	D	E	F
From	A				5		5
	B				6		7
	C					9	
	D	5	5			5	
	E			7	8		
	F	7	5				

Banned Stage transitions for Controller Stream 311out

		To		
		1	2	3
From	1			
	2			
	3			

Interstage Matrix for Controller Stream 311out

		To		
		1	2	3
From	1	0	7	9
	2	7	0	9
	3	7	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311out	1	✓	1	A,B,C	36	88	52	1	1
	2	✓	2	D,F,C	95	15	46	1	7
	3	✓	3	A,B,E	24	29	5	1	5

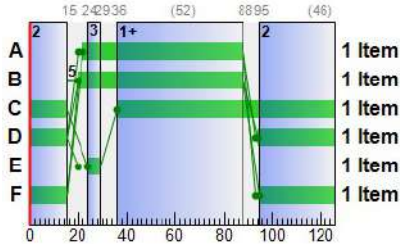
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
311out	A	1	✓	22	88	66
	B	1	✓	20	88	68
	C	1	✓	36	15	105
	D	1	✓	94	15	47
	E	1	✓	24	29	5
	F	1	✓	95	15	46

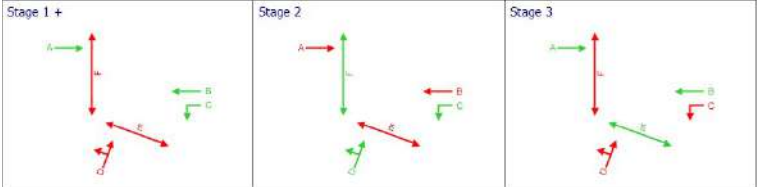
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
311C	1	311out	311out	A	22	88	66
311LAS	1	311out	311out	C	36	15	105
311out	1	311out	311out	B	20	88	68
CS 2	1	311out	311out	D	94	15	47

Phase Timings Diagram for Controller Stream 311out



Stage Sequence Diagram for Controller Stream 311out



Controller Stream 312a

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312a	(untitled)		1	NetworkDefault	126

Controller Stream 312a - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312a	Unspecified						Absolute

Controller Stream 312a - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312a	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
312a	A	(untitled)	14	40	0	0	Unknown	
	B	(untitled)	7	7	0	0	Unknown	
	C	(untitled)	7	300	0	0	Unknown	
	D	(untitled)	7	300	0	0	Unknown	
	E	(untitled)	7	300	0	0	Unknown	
	F	(untitled)	5	300	0	0	Pedestrian	0
	G	(untitled)	7	300	0	0	Unknown	
	H	(untitled)	7	300	0	0	Unknown	
	I	(untitled)	7	300	0	0	Unknown	
	N	(untitled)	1	300	0	0	Unknown	
	O	(untitled)	5	300	0	0	Pedestrian	0
	P	(untitled)	5	5	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312a	1	I, H, N, O, P, F, G	1
	2	F, E, C, G	1
	3	D, O, A	1
	4	B, N, H, I, F, O	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
312a	1	Gaining	E	1	2	0	8
	2	Losing	B	1	2	6	
	3	Losing	A	1	2	6	
	4	Losing	C	2	3	4	
	5	Losing	E	2	3	4	
	6	Losing	I	1	2	7	
	7	Gaining	A	4	1	1	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312a	1	(untitled)	Single	1, 2, 3, 4	31, 89, 5, 18

Intergreen Matrix for Controller Stream 312a

	To											
	A	B	C	D	E	F	G	H	I	N	O	P
From	A			5		6	6	5			8	
	B				5			5				8
	C	8				8						
	D		6	6		5						
	E	8				8			9	9	5	8
	F	5							5		9	9
	G	8	8									
	H				5	0	8					
	I					5						
	N	5			5	7	5					
	O				7							
	P		5			5	5					

Banned Stage transitions for Controller Stream 312a

From	To			
	1	2	3	4

Interstage Matrix for Controller Stream 312a

From	To			
	1	2	3	4
	1	0	8	8
	2	9	0	12
	3	9	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312a	1	✓	1	I,H,N,O,P,F,G	26	31	5	1	5
	2	✓	2	F,E,C,G	39	89	50	1	3
	3	✓	3	D,O,A	101	5	30	1	14
	4	✓	4	B,N,H,I,F,O	14	18	4	1	4

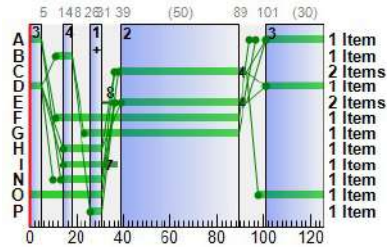
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312a	A	1	✓	101	5	30
	B	1	✓	11	18	7
	C	1	✓	38	93	55
	D	1	✓	101	5	30
	E	1	✓	39	93	54
	F	1	✓	11	89	78
	G	1	✓	23	89	66
	H	1	✓	14	31	17
	I	1	✓	14	38	24
	N	1	✓	13	31	18
	O	1	✓	98	31	59
	P	1	✓	26	31	5

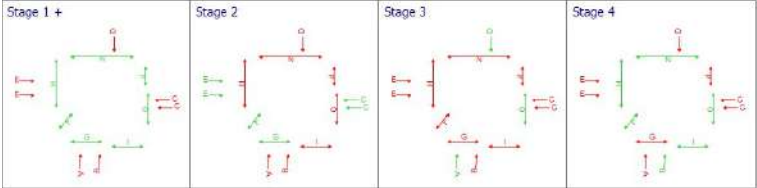
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312A	1	312a	312a	A	101	5	30
312Bo	1	312a	312a	B	11	18	7
312Cn	1	312a	312a	C	38	93	55
312Co	1	312a	312a	C	38	93	55
312D	1	312a	312a	D	101	5	30
312En	1	312a	312a	E	39	93	54
312Eo	1	312a	312a	E	39	93	54

Phase Timings Diagram for Controller Stream 312a



Stage Sequence Diagram for Controller Stream 312a



Controller Stream 312b

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312b	(untitled)		1	NetworkDefault	126

Controller Stream 312b - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312b	Unspecified						Absolute

Controller Stream 312b - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312b	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
312b	J	(untitled)	7	300	0	0	Unknown
	K	(untitled)	7	300	0	0	Unknown
	L	(untitled)	5	300	0	0	Unknown
	M	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312b	1	J, L	7
	2	K, M	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312b	1	(untitled)	Single	1, 2	13, 84

Intergreen Matrix for Controller Stream 312b

	To				
	J	K	L	M	
From	J	5		6	
	K		5		
	L	8		0	
	M	5	7		

Banned Stage transitions for Controller Stream 312b

	To	
	1	2
From	1	
	2	

Interstage Matrix for Controller Stream 312b

From	To	
	1	2
	1 0 8	2 7 0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312b	1	✓	1	J,L	91	13	48	7	7
	2	✓	2	K,M	21	84	63	7	7

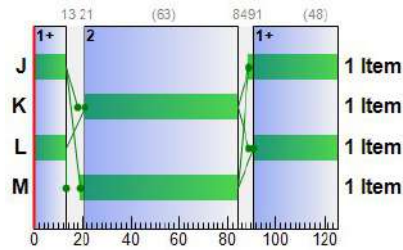
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312b	J	1	✓	89	13	50
	K	1	✓	21	84	63
	L	1	✓	91	13	48
	M	1	✓	19	84	65

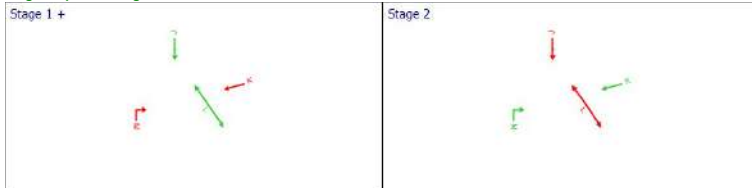
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312Be	1	312b	312b	M	19	84	65
312J	1	312b	312b	J	89	13	50
312K	1	312b	312b	K	21	84	63

Phase Timings Diagram for Controller Stream 312b



Stage Sequence Diagram for Controller Stream 312b



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
17:00-18:00	(ALL)	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
311out	1	✓	1	A,B,C	29	7	8
	2	✓	2	D,F,C	88	7	14
	3	✓	3	A,B,E	15	9	14
312a	1	✓	1	I,H,N,O,P,F,G	18	8	13
	2	✓	2	F,E,C,G	31	8	11
	3	✓	3	D,O,A	89	12	26
	4	✓	4	B,N,H,I,F,O	5	9	13
312b	1	✓	1	J,L	84	7	14
	2	✓	2	K,M	13	8	15

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
311out	A	1	3	2	7	0
	B	1	3	2	5	0
	C	1	1	3	7	0
	D	1	2	3	6	0
	E	1	3	1	9	0
	F	1	2	3	7	0
312a	A	1	3	4	12	0
	B	1	4	1	6	0
	C	1	2	3	7	4
	D	1	3	4	12	0
	E	1	2	3	8	4
	F	1	4	3	6	0
	G	1	1	3	5	0
	H	1	4	2	9	0
	I	1	4	2	9	7
	N	1	4	2	8	0
	O	1	3	2	9	0
	P	1	1	2	8	0
312b	J	1	1	2	5	0
	K	1	2	1	8	0
	L	1	1	2	7	0
	M	1	2	1	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 126s cycle time; 126 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4
311out	3	29	88	15	
312a	4	18	31	89	5
312b	2	84	13		

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
17:00-18:00	1	1	(untitled)		895	1050	126	1050	85	6	10.42	18.75	29.30	46.21
	308A	2	(untitled)		917	1200	126	1200	76	18	4.79	1.22	5.85	16.46
	311Ao	1	(untitled)		733	1500	126	1500	49	84	3.66	15.49	91.10	19.12
	311C	1	Lockwood inbound	A	421	1650	66	877	48	88	12.80	5.18	17.96	28.94
	311Cx	1	(untitled)		829	1700	126	1700	49	85	1.01	0.23	0.49	30.72
	311LAS	1	(untitled)	C	151	1400	105	1178	13	602	1.95	1.40	9.32	12.75
	311a	1	(untitled)		797	1500	126	1500	53	69	1.36	0.30	3.00	8.08
	311aa O	1	(untitled)		797	1800	126	1618	49	83	2.13	5.11	14.19	26.85
	311aa bus	2	(untitled)		50	325	126	293	17	427	1.46	0.14	0.40	26.18
	311abus	1	(untitled)		50	1000	126	1000	5	1700	0.09	0.00	0.01	6.81
	311b	1	(untitled)		980	1500	126	1500	65	38	2.25	0.61	1.28	38.44
	311cn	1	(untitled)		272	1000	126	1000	27	231	0.67	0.05	0.65	6.55
	311co	1	(untitled)		708	1379	126	1379	51	75	1.37	0.27	3.45	7.29
	311csx	1	(untitled)		151	1600	126	1600	9	854	0.12	0.00	0.07	4.68
	311dAS	311dAS	(untitled)		54	356	126	356	15	494	0.90	0.01	0.28	4.26
	311dn	1	(untitled)		915	1300	126	1300	70	28	3.26	0.83	4.15	14.96
	311do	1	(untitled)		708	1400	126	1400	51	78	1.31	0.26	1.29	16.44
	311out	1	(untitled)	B	696	1750	68	958	73	24	25.34	14.83	98.90	36.14
	312A	1	(untitled)	A	350	1750	30	431	81	11	49.61	7.14	119.00	55.21
	312Ae	1	(untitled)		375	1800	126	1089	34	161	13.14	5.93	34.88	22.87
	312Be	1	(untitled)	M	408	1800	65	943	43	108	19.93	8.06	47.42	29.66
	312Bo	1	(untitled)	B	25	1700	7	108	23	289	48.85	1.46	24.39	53.05
	312Cn	1	(untitled)	C	609	1850	55	822	74	22	16.68	7.04	75.43	25.89
	312Co	1	(untitled)	C	124	1266	55	563	22	308	12.83	1.16	12.44	22.04
	312D	1	Lockwood Road inbound	D	371	1750	30	431	86	4	68.92	14.78	20.24	119.32
	312Dx	1	(untitled)		410	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312Eent	1	(untitled)		472	1000	126	825	57	57	6.07	5.76	11.75	24.23
	312En	1	(untitled)	E	350	1600	54	698	50	80	25.31	5.96	99.41	28.44
	312Eo	1	(untitled)	E	122	1263	54	551	22	307	21.87	2.02	33.72	25.00
	312Ex	1	(untitled)		668	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312J	1	(untitled)	J	452	1800	50	729	62	45	14.03	5.57	74.53	19.51
	312K	1	(untitled)	K	743	1700	63	863	86	5	39.27	25.22	78.37	58.63
	312c BS	1	(untitled)		1195	1400	126	1400	85	5	9.85	26.96	172.27	20.37
	312c LS	1	(untitled)		204	345	126	345	59	52	7.48	0.42	3.75	14.75
	312c ent	1	(untitled)		629	1700	126	1700	37	143	0.62	0.11	0.78	8.40
	312c x	3	(untitled)		1037	1800	126	1800	58	56	1.36	0.39	3.21	12.54
	312x LSx	4	(untitled)		208	1800	126	1800	12	679	0.13	0.01	0.04	12.13
	4	2	(untitled)		592	678	126	678	87	3	16.87	3.60	7.52	49.87
	AS	1	(untitled)		675	1500	126	1500	45	100	0.98	0.18	3.02	4.55
	AS1	1	(untitled)		10	1800	126	1800	1	16100	0.01	0.00	0.00	41.41
	AS2	1	(untitled)		587	1500	126	1500	39	130	0.77	0.13	0.21	35.85
	ASin	1	(untitled)		408	1700	126	1700	24	275	0.33	0.04	0.12	22.53
	CS 2	1	(untitled)	D	445	1600	47	610	73	23	41.27	14.32	216.64	45.83
	QML	1	(untitled)		79	450	126	450	18	412	0.85	0.02	0.04	30.85
	QMLx	1	(untitled)		123	1800	126	1800	7	1217	0.07	0.00	0.01	12.07

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311out	1	✓	1	A,B,C	36	88	52	1	1
	2	✓	2	D,F,C	95	15	46	1	7
	3	✓	3	A,B,E	24	29	5	1	5
312a	1	✓	1	I,H,N,O,P,F,G	26	31	5	1	5
	2	✓	2	F,E,C,G	39	89	50	1	3
	3	✓	3	D,O,A	101	5	30	1	14
	4	✓	4	B,N,H,I,F,O	14	18	4	1	4
312b	1	✓	1	J,L	91	13	48	7	7
	2	✓	2	K,M	21	84	63	7	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311out	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	5	5	0	0	Unknown
	F	F	7	300	0	0	Unknown
312a	A	A	14	40	0	0	Unknown
	B	B	7	7	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	5	300	0	0	Pedestrian
	G	G	7	300	0	0	Unknown
	H	H	7	300	0	0	Unknown
	I	I	7	300	0	0	Unknown
	N	N	1	300	0	0	Unknown
	O	O	5	300	0	0	Pedestrian
	P	P	5	5	0	0	Pedestrian
312b	J	J	7	300	0	0	Unknown
	K	K	7	300	0	0	Unknown
	L	L	5	300	0	0	Unknown
	M	M	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1		368.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1050	100	100
308A	2		120.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1200	100	100
311Ao	1		118.00	CTM	17.00	Normal	✓			Sum of lanes	1500	100	100
311C	1		166.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1650	100	100
311Cx	1		274.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
311LAS	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1400	100	100
311a	1		56.00	CTM	10.00	Normal	✓			Sum of lanes	1500	100	100
311aa O	1		206.00	PDM	36.00	Normal	✓			Sum of lanes	1800	100	100
311aa bus	2		206.00	NetworkDefault	0.00	Normal			✓			100	100
311abus	1		56.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311b	1		275.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
311cn	1		45.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311co	1		45.00	NetworkDefault	0.00	Normal	✓		✓	Sum of lanes	1200	100	100
311csx	1		38.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1600	100	100
311dAS	311dAS		28.00	NetworkDefault	0.00	Normal			✓			100	100
311dn	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1300	100	100
311do	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311out	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1750	100	100
312A	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Ae	1		87.00	CTM	17.00	Normal	✓			Sum of lanes	1800	100	100
312Be	1		87.00	CTM	17.00	Normal	✓	✓		Sum of lanes	1800	100	100
312Bo	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1700	100	100
312Cn	1		70.00	CTM	8.00	Normal	✓	✓		Sum of lanes	1850	100	100
312Co	1		70.00	Flare	8.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312D	1		420.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Dx	1		100.00	NetworkDefault	0.00	Normal						100	100
312Eent	1		203.00	PDM	49.00	Normal	✓			Sum of lanes	1000	100	100
312En	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1600	100	100
312Eo	1		35.00	Flare	6.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312Ex	1		100.00	NetworkDefault	0.00	Normal						100	100
312J	1		43.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	99999
312K	1		185.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1700	100	100
312c BS	1		90.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
312c LS	1		65.00	NetworkDefault	0.00	Normal			✓			100	100
312c ent	1		80.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
312c x	3		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
312x LSx	4		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
4	2		275.00	NetworkDefault	0.00	Normal			✓			100	100
AS	1		35.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS1	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS2	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
ASin	1		185.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
CS 2	1		38.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1600	100	100
QML	1	✓	250.00	NetworkDefault	0.00	Normal			✓			100	100
QMLx	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Pedestrian Crossings: Pedestrian summary

Time Segment	Pedestrian crossing	Side	Calculated Flow Entering (Ped/hr)	Degree of saturation (%)	Actual green (s per cycle)	Effective green (s per cycle)	Mean Delay Per Ped (s)	Mean max queue (Ped)
17:00-18:00	312F	1	22	0	78	78	9.33	0.29
		2	22	0	78	78	9.33	0.29
	312G	1	22	1	24	25	40.88	0.62
		2	22	1	24	25	40.88	0.62
	312H	1	22	1	17	18	46.71	0.66
		2	22	1	17	18	46.71	0.66
	312I	1	22	0	66	67	14.05	0.36
		2	22	0	66	67	14.05	0.36
	312K	1	22	1	18	19	45.86	0.65
		2	22	1	18	19	45.86	0.65
	312L	1	0	0	48	49	0.00	0.00
		2	0	0	48	49	0.00	0.00
	312o	1	0	0	59	59	0.00	0.00
		2	0	0	59	59	0.00	0.00
	312p	1	0	0	5	5	0.00	0.00
		2	0	0	5	5	0.00	0.00
	7	1	0	0	5	6	0.00	0.00
		2	0	0	5	6	0.00	0.00
	8	1	0	0	46	47	0.00	0.00
		2	0	0	46	47	0.00	0.00

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	1	85	6	895	1050	126	10.42	18.75	29.30	36.80	6.32	43.12
	308A	2	76	18	917	1200	126	4.79	1.22	5.85	17.34	0.00	17.34
	311Ao	1	49	84	733	1500	126	3.66	15.49	91.10	10.58	0.85	11.42
	311C	1	48	88	421	1650	66	12.80	5.18	17.96	21.25	2.77	24.02
	311Cx	1	49	85	829	1700	126	1.01	0.23	0.49	3.29	0.00	3.29
	311LAS	1	13	602	151	1400	105	1.95	1.40	9.32	1.16	0.28	1.44
	311a	1	53	69	797	1500	126	1.36	0.30	3.00	4.27	0.00	4.27
	311aa O	1	49	83	797	1800	126	2.13	5.11	14.19	6.68	1.62	8.30
	311aa bus	2	17	427	50	325	126	1.46	0.14	0.40	0.29	0.04	0.33
	311abus	1	5	1700	50	1000	126	0.09	0.00	0.01	0.02	0.00	0.02
	311tb	1	65	38	980	1500	126	2.25	0.61	1.28	8.70	0.00	8.70
	311cn	1	27	231	272	1000	126	0.67	0.05	0.65	0.72	0.00	0.72
	311co	1	51	75	708	1379	126	1.37	0.27	3.45	3.84	0.00	3.84
	311csx	1	9	854	151	1600	126	0.12	0.00	0.07	0.07	0.00	0.07
	311dAS	311dAS	15	494	54	356	126	0.90	0.01	0.28	0.19	0.00	0.19
	311dn	1	70	28	915	1300	126	3.26	0.83	4.15	11.78	0.00	11.78
	311do	1	51	78	708	1400	126	1.31	0.26	1.29	3.67	0.00	3.67
	311out	1	73	24	696	1750	68	25.34	14.83	98.90	69.57	5.31	74.89
	312A	1	81	11	350	1750	30	49.61	7.14	119.00	68.49	1.43	69.93
	312Ae	1	34	161	375	1800	126	13.14	5.93	34.88	19.43	2.44	21.87
	312Be	1	43	108	408	1800	65	19.93	8.06	47.42	32.07	3.32	35.39
	312Bo	1	23	289	25	1700	7	48.85	1.46	24.39	4.82	0.31	5.12
	312Cn	1	74	22	609	1850	55	16.68	7.04	75.43	40.06	1.68	41.75
	312Co	1	22	308	124	1266	55	12.83	1.16	12.44	6.28	0.35	6.62
	312D	1	86	4	371	1750	30	68.92	14.78	20.24	100.85	5.20	106.05
	312Dx	1	0	Unrestricted	410	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	57	57	472	1000	126	6.07	5.76	11.75	11.30	3.24	14.55
	312En	1	50	80	350	1600	54	25.31	5.96	99.41	34.94	3.84	38.78
	312Eo	1	22	307	122	1263	54	21.87	2.02	33.72	10.52	1.30	11.83
	312Ex	1	0	Unrestricted	668	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	62	45	452	1800	50	14.03	5.57	74.53	25.02	1188.25	1213.27
	312K	1	86	5	743	1700	63	39.27	25.22	78.37	115.09	11.53	126.63
	312c BS	1	85	5	1195	1400	126	9.85	26.96	172.27	46.41	10.08	56.49
	312c LS	1	59	52	204	345	126	7.48	0.42	3.75	6.02	0.00	6.02
	312c ent	1	37	143	629	1700	126	0.62	0.11	0.78	1.54	0.00	1.54
	312c x	3	58	56	1037	1800	126	1.36	0.39	3.21	5.55	0.00	5.55
	312x LSx	4	12	679	208	1800	126	0.13	0.01	0.04	0.11	0.00	0.11
	4	2	87	3	592	678	126	16.87	3.60	7.52	39.40	0.98	40.38
	AS	1	45	100	675	1500	126	0.98	0.18	3.02	2.61	0.00	2.61
	AS1	1	1	16100	10	1800	126	0.01	0.00	0.00	0.00	0.00	0.00
	AS2	1	39	130	587	1500	126	0.77	0.13	0.21	1.78	0.00	1.78
	ASin	1	24	275	408	1700	126	0.33	0.04	0.12	0.54	0.00	0.54
	CS 2	1	73	23	445	1600	47	41.27	14.32	216.64	72.44	5.02	77.46
	QML	1	18	412	79	450	126	0.85	0.02	0.04	0.27	0.00	0.27
	QMLx	1	7	1217	123	1800	126	0.07	0.00	0.01	0.04	0.00	0.04

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (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 (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
17:00-18:00	1	1	895	895	0		1050	1050	85		6	0.21	126	126
	308A	2	917	917	0		1200	1200	76		18	0.17	126	126
	311Ao	1	733	733	0		1500	1500	49		84	0.83	126	126
	311C	1	421	421	0		1650	877	48		88	0.72	66	67
	311Cx	1	829	829	0		1700	1700	49		85	0.38	126	126
	311LAS	1	151	151	0		1400	1178	13		602	0.16	105	106
	311a	1	797	797	0		1500	1500	53		69	0.00	126	126
	311aa O	1	797	797	0		1800	1618	49		83	0.00	126	126
	311aa bus	2	50	50	0		325	293	17		427	0.00	126	126
	311abus	1	50	50	0		1000	1000	5		1700	0.00	126	126
	311b	1	980	980	0		1500	1500	65		38	0.00	126	126
	311cn	1	272	272	0		1000	1000	27		231	0.00	126	126
	311co	1	708	708	0		1379	1379	51		75	0.00	126	126
	311csx	1	151	151	0		1600	1600	9		854	0.35	126	126
	311dAS	311dAS	54	54	0		356	356	15		494	0.00	126	126
	311dn	1	915	915	0		1300	1300	70		28	0.00	126	126
	311do	1	708	708	0		1400	1400	51		78	0.00	126	126
	311out	1	696	696	0		1750	958	73		24	0.15	68	69
	312A	1	350	350	0		1750	431	81		11	0.77	30	31
	312Ae	1	375	375	0		1800	1089	34		161	0.00	126	126
	312Be	1	408	408	0		1800	943	43		108	0.00	65	66
	312Bo	1	25	25	0		1700	108	23		289	0.77	7	8
	312Cn	1	609	609	0		1850	822	74		22	0.85	55	56
	312Co	1	124	124	0		1266	563	22		308	0.69	55	56
	312D	1	371	371	0		1750	431	86		4	0.00	30	31
	312Dx	1	410	410	0		Unrestricted	Unrestricted	0		Unrestricted	0.81	126	126
	312Eent	1	472	472	0		1000	825	57		57	0.00	126	126
	312En	1	350	350	0		1600	698	50		80	0.31	54	55
	312Eo	1	122	122	0		1263	551	22		307	0.31	54	55
	312Ex	1	668	668	0		Unrestricted	Unrestricted	0		Unrestricted	0.78	126	126
	312J	1	452	452	0		1800	729	62		45	0.95	50	51
	312K	1	743	743	0		1700	863	86		5	0.00	63	64
	312c BS	1	1195	1195	0		1400	1400	85		5	0.37	126	126
	312c LS	1	204	204	0		345	345	59		52	0.00	126	126
	312c ent	1	629	629	0		1700	1700	37		143	0.00	126	126
	312c x	3	1037	1037	0		1800	1800	58		56	0.20	126	126
	312x LSx	4	208	208	0		1800	1800	12		679	0.41	126	126
	4	2	592	592	0		678	678	87		3	0.00	126	126
	AS	1	675	675	0		1500	1500	45		100	0.01	126	126
	AS1	1	10	10	0		1800	1800	1		16100	0.00	126	126
	AS2	1	587	587	0		1500	1500	39		130	0.00	126	126
	ASin	1	408	408	0		1700	1700	24		275	0.86	126	126
	CS 2	1	445	445	0		1600	610	73		23	0.00	47	48
	QML	1	79	79	0		450	450	18		412	0.00	126	126
	QMLx	1	123	123	0		1800	1800	7		1217	0.06	126	126

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	1	1	35.79	10.42	0.23	2.36	36.80	36.80	36.98	264.74	66.26	6.32	6.32
	308A	2	11.67	4.79	0.00	1.22	17.34	17.34	0.00	0.00	0.00	0.00	0.00
	311Ao	1	15.46	3.66	0.51	0.23	10.58	10.58	10.94	73.58	6.64	0.85	0.85
	311C	1	16.14	12.80	1.28	0.22	21.25	21.25	34.41	138.60	6.28	2.77	2.77
	311Cx	1	29.72	1.01	0.00	0.23	3.29	3.29	0.00	0.00	0.00	0.00	0.00
	311LAS	1	10.80	1.95	0.07	0.01	1.16	1.16	14.92	22.26	0.27	0.28	0.28
	311a	1	6.72	1.36	0.00	0.30	4.27	4.27	0.00	0.00	0.00	0.00	0.00
	311aa O	1	24.72	2.13	0.23	0.24	6.68	6.68	16.21	122.41	6.81	1.62	1.62
	311aa bus	2	24.72	1.46	0.00	0.02	0.29	0.29	6.10	2.55	0.50	0.04	0.04
	311abus	1	6.72	0.09	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
	311b	1	36.19	2.25	0.00	0.61	8.70	8.70	0.00	0.00	0.00	0.00	0.00
	311cn	1	5.88	0.67	0.00	0.05	0.72	0.72	0.00	0.00	0.00	0.00	0.00
	311co	1	5.92	1.37	0.00	0.27	3.84	3.84	0.00	0.00	0.00	0.00	0.00
	311csx	1	4.56	0.12	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.00
	311dAS	311dAS	3.36	0.90	0.00	0.01	0.19	0.19	0.00	0.00	0.00	0.00	0.00
	311dn	1	11.69	3.26	0.00	0.83	11.78	11.78	0.00	0.00	0.00	0.00	0.00
	311do	1	15.13	1.31	0.00	0.26	3.67	3.67	0.00	0.00	0.00	0.00	0.00
	311out	1	10.80	25.34	3.95	0.95	69.57	69.57	60.86	396.67	26.92	5.31	5.31
	312A	1	5.59	49.61	3.16	1.66	68.49	68.49	57.83	156.46	45.96	1.43	1.43
	312Ae	1	9.73	13.14	1.28	0.09	19.43	19.43	45.04	166.33	2.58	2.44	2.44
	312Be	1	9.73	19.93	2.09	0.16	32.07	32.07	56.40	225.40	4.69	3.32	3.32
	312Bo	1	4.20	48.85	0.30	0.03	4.82	4.82	97.58	23.41	0.98	0.31	0.31
	312Cn	1	9.21	16.68	1.78	1.04	40.06	40.06	26.53	132.20	29.37	1.68	1.68
	312Co	1	9.21	12.83	0.41	0.03	6.28	6.28	26.75	32.29	0.89	0.35	0.35
	312D	1	50.40	68.92	4.68	2.42	100.85	100.85	111.82	348.89	65.97	5.20	5.20
	312Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	18.16	6.07	0.42	0.38	11.30	11.30	30.48	133.08	10.79	3.24	3.24
	312En	1	3.13	25.31	2.21	0.25	34.94	34.94	48.68	163.26	7.12	3.84	3.84
	312Eo	1	3.13	21.87	0.71	0.03	10.52	10.52	47.38	56.91	0.90	1.30	1.30
	312Ex	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	5.48	14.03	1.26	0.50	25.02	25.02	34.86	143.31	14.25	1.19	1188.25
	312K	1	19.36	39.27	5.59	2.51	115.09	115.09	94.17	629.57	70.08	11.53	11.53
	312c BS	1	10.52	9.85	0.86	2.41	46.41	46.41	65.81	588.40	197.98	10.08	10.08
	312c LS	1	7.27	7.48	0.00	0.42	6.02	6.02	0.00	0.00	0.00	0.00	0.00
	312c ent	1	7.78	0.62	0.00	0.11	1.54	1.54	0.00	0.00	0.00	0.00	0.00
	312c x	3	11.18	1.36	0.00	0.39	5.55	5.55	0.00	0.00	0.00	0.00	0.00
	312x LSx	4	12.00	0.13	0.00	0.01	0.11	0.11	0.00	0.00	0.00	0.00	0.00
	4	2	33.00	16.87	0.00	2.77	39.40	39.40	13.20	1.51	76.66	0.98	0.98
	AS	1	3.57	0.98	0.00	0.18	2.61	2.61	0.00	0.00	0.00	0.00	0.00
	AS1	1	41.40	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AS2	1	35.08	0.77	0.00	0.13	1.78	1.78	0.00	0.00	0.00	0.00	0.00
	ASin	1	22.20	0.33	0.00	0.04	0.54	0.54	0.00	0.00	0.00	0.00	0.00
	CS 2	1	4.56	41.27	4.13	0.97	72.44	72.44	89.93	372.98	27.22	5.02	5.02
	QML	1	30.00	0.85	0.00	0.02	0.27	0.27	0.00	0.00	0.00	0.00	0.00
	QMLx	1	12.00	0.07	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s per cycle)	Wasted time blocking back (s per cycle)	Wasted time total (s per cycle)	Estimated blocking
17:00-18:00	1	1	0.00	18.75	64.00	29.30	0.00	0.00	0.00			0.00	0.00	0.00	
	308A	2	0.00	1.22	20.87	5.85	0.00	0.00	0.00			0.00	0.00	0.00	
	311Ao	1	0.00	15.49	17.00	91.10	0.00	0.00	0.00			27.00	0.00	27.00	
	311C	1	0.00	5.18	28.87	17.96	0.00	0.00	0.00	0.22	4.43	15.00	0.00	15.00	
	311Cx	1	0.00	0.23	47.65	0.49	0.00	0.00	0.00			0.00	0.00	0.00	
	311LAS	1	0.00	1.40	15.00	9.32	0.00	0.00	0.00	0.01	0.79	7.00	0.00	7.00	
	311a	1	0.00	0.30	10.00	3.00	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa O	1	0.00	5.11	36.00	14.19	0.00	0.00	0.00			0.00	12.76	12.76	
	311aa bus	2	0.00	0.14	35.83	0.40	0.00	0.00	0.00			116.00	8.19	124.19	
	311abus	1	0.00	0.00	9.74	0.01	0.00	0.00	0.00			126.00	0.00	126.00	
	311b	1	0.00	0.61	47.83	1.28	0.00	0.00	0.00			0.00	0.00	0.00	
	311cn	1	0.00	0.05	7.83	0.65	0.00	0.00	0.00			0.00	0.00	0.00	
	311co	1	0.00	0.27	7.83	3.45	0.00	0.00	0.00			0.00	0.00	0.00	
	311csx	1	0.00	0.00	6.61	0.07	0.00	0.00	0.00			22.00	0.00	22.00	
	311dAS	311dAS	0.00	0.01	4.87	0.28	0.00	0.00	0.00			126.00	0.00	126.00	
	311dn	1	0.00	0.83	20.00	4.15	0.00	0.00	0.00			0.00	0.00	0.00	
	311do	1	0.00	0.26	20.00	1.29	0.00	0.00	0.00			0.00	0.00	0.00	
	311out	1	0.00	14.83	15.00	98.90	0.00	0.00	0.00	0.95	13.68	0.00	0.00	0.00	
	312A	1	0.00	7.14	6.00	119.00	0.48	0.48	0.00	1.66	7.14	0.00	0.00	0.00	
	312Ae	1	0.00	5.93	17.00	34.88	0.00	0.00	0.00			0.00	49.76	49.76	
	312Be	1	0.00	8.06	17.00	47.42	0.00	0.00	0.00	0.16	7.40	0.00	0.00	0.00	
	312Bo	1	0.00	1.46	6.00	24.39	0.00	0.00	0.00	0.03	0.85	6.00	0.00	6.00	
	312Cn	1	0.00	7.04	9.33	75.43	0.00	0.00	0.00	1.04	4.88	0.00	0.00	0.00	
	312Co	1	0.00	1.16	9.33	12.44	0.00	0.00	0.00	0.03	1.16	2.00	0.00	2.00	
	312D	1	0.00	14.78	73.04	20.24	0.00	0.00	0.00	2.42	12.21	0.00	0.00	0.00	
	312Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			27.00	0.00	27.00	
	312Eent	1	0.00	5.76	49.00	11.75	0.00	0.00	0.00			0.00	21.99	21.99	
	312En	1	0.00	5.96	6.00	99.41	0.00	0.00	0.00	0.25	5.96	0.00	0.00	0.00	
	312Eo	1	0.00	2.02	6.00	33.72	0.00	0.00	0.00	0.03	2.02	0.00	0.00	0.00	
	312Ex	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			29.00	0.00	29.00	
	312J	1	0.00	5.57	7.48	74.53	0.00	0.00	0.00	0.50	5.12	5.00	10.00	15.00	
	312K	1	0.00	25.22	32.17	78.37	0.00	0.00	0.00	2.51	15.31	0.00	21.00	21.00	
	312c BS	1	0.00	26.96	15.65	172.27	1.91	0.00	0.00			4.00	0.00	4.00	
	312c LS	1	0.00	0.42	11.30	3.75	0.00	0.00	0.00			0.00	0.00	0.00	
	312c ent	1	0.00	0.11	13.91	0.78	0.00	0.00	0.00			0.00	0.00	0.00	
	312c x	3	0.00	0.39	12.17	3.21	0.00	0.00	0.00			0.00	0.00	0.00	
	312x LSx	4	0.00	0.01	17.39	0.04	0.00	0.00	0.00			9.00	0.00	9.00	
	4	2	0.00	3.60	47.83	7.52	0.00	0.00	0.00			0.00	0.00	0.00	
	AS	1	0.00	0.18	6.09	3.02	0.00	0.00	0.00			0.00	0.00	0.00	
	AS1	1	0.00	0.00	60.00	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	AS2	1	0.00	0.13	60.00	0.21	0.00	0.00	0.00			0.00	0.00	0.00	
	ASin	1	0.00	0.04	32.17	0.12	0.00	0.00	0.00			48.00	0.00	48.00	
	CS 2	1	0.00	14.32	6.61	216.64	1.94	0.00	0.00	0.97	10.61	0.00	0.00	0.00	
	QML	1	0.00	0.02	43.48	0.04	0.00	0.00	0.00			0.00	0.00	0.00	
	QMLx	1	0.00	0.00	17.39	0.01	0.00	0.00	0.00			0.00	0.00	0.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean Journey speed (mph)	JourneyTime (s)
17:00-18:00	1	1	329.36	11.49	17.81	46.21
	308A	2	110.04	4.19	16.30	16.46
	311Ao	1	86.49	3.89	13.81	19.12
	311C	1	69.89	3.38	12.83	28.94
	311Cx	1	227.15	7.07	19.95	30.72
	311LAS	1	13.59	0.53	15.79	12.75
	311a	1	44.63	1.79	15.51	8.08
	311aa O	1	164.18	5.94	17.17	26.85
	311aa bus	2	10.30	0.36	17.60	26.18
	311abus	1	2.80	0.09	18.38	6.81
	311b	1	269.50	10.46	16.00	38.44
	311cn	1	12.24	0.50	15.36	6.55
	311co	1	31.86	1.43	13.80	7.29
	311csx	1	5.74	0.20	18.17	4.68
	311dAS	311dAS	1.51	0.06	14.70	4.26
	311dn	1	105.23	3.80	17.20	14.96
	311do	1	81.42	3.23	15.64	16.44
	311out	1	62.64	6.99	5.57	36.14
	312A	1	12.25	5.37	1.42	55.21
	312Ae	1	32.63	2.38	8.51	22.87
	312Be	1	35.50	3.36	6.56	29.66
	312Bo	1	0.87	0.37	1.48	53.05
	312Cn	1	42.63	4.38	6.05	25.89
	312Co	1	8.68	0.76	7.10	22.04
	312D	1	155.82	12.30	7.87	119.32
	312Dx	1	41.00	1.37	18.64	12.00
	312Eent	1	95.82	3.18	18.74	24.23
	312En	1	12.25	2.76	2.75	28.44
	312Eo	1	4.27	0.85	3.13	25.00
	312Ex	1	66.80	2.23	18.64	12.00
	312J	1	19.44	2.45	4.93	19.51
	312K	1	137.46	12.10	7.06	58.63
	312c BS	1	107.55	6.76	9.88	20.37
	312c LS	1	13.26	0.84	9.86	14.75
	312c ent	1	50.32	1.47	21.30	8.40
	312c x	3	72.59	3.61	12.49	12.54
	312x LSx	4	20.80	0.70	18.44	12.13
	4	2	162.80	8.20	12.33	49.87
	AS	1	23.62	0.85	17.21	4.55
	AS1	1	3.45	0.12	18.64	41.41
	AS2	1	202.52	5.85	21.53	35.85
	ASin	1	75.48	2.55	18.36	22.53
	CS 2	1	16.91	5.67	1.85	45.83
	QML	1	19.75	0.68	18.13	30.85
	QMLx	1	12.30	0.41	18.53	12.07

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warned up	Warned up error	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance Index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	1	0.00	0.00	✓	0.00	18.80			1.00	0.00	43.12	43.12
	308A	2	0.00	0.00	✓	0.00	1.23			1.00	0.00	17.34	17.34
	311Ao	1	0.00	0.00	✓	0.00	15.49			1.00	0.00	11.42	11.42
	311C	1	0.00	0.00	✓	0.00	5.18	0.22	4.43	1.00	0.00	24.02	24.02
	311Cx	1	0.00	0.00	✓	0.00	0.23			1.00	0.00	3.29	3.29
	311LAS	1	0.00	0.00	✓	0.00	1.40	0.01	0.79	1.00	0.00	1.44	1.44
	311a	1	0.00	0.00	✓	0.00	0.30			1.00	0.00	4.27	4.27
	311aa O	1	0.00	0.00	✓	0.00	5.11			1.00	0.00	8.30	8.30
	311aa bus	2	0.00	0.00	✓	0.00	0.14			1.00	0.00	0.33	0.33
	311abus	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.02	0.02
	311b	1	0.00	0.00	✓	0.00	0.61			1.00	0.00	8.70	8.70
	311cn	1	0.00	0.00	✓	0.00	0.05			1.00	0.00	0.72	0.72
	311co	1	0.00	0.00	✓	0.00	0.27			1.00	0.00	3.84	3.84
	311csx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.07	0.07
	311dAS	311dAS	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.19	0.19
	311dn	1	0.00	0.00	✓	0.00	0.83			1.00	0.00	11.78	11.78
	311do	1	0.00	0.00	✓	0.00	0.26			1.00	0.00	3.67	3.67
	311out	1	0.00	0.00	✓	0.00	14.84	0.96	13.68	1.00	0.00	74.89	74.89
	312A	1	0.00	0.00	✓	0.00	7.19	1.71	7.19	1.00	0.00	69.93	69.93
	312Ae	1	0.00	0.00	✓	0.00	5.93			1.00	0.00	21.87	21.87
	312Be	1	0.00	0.00	✓	0.00	8.06	0.16	7.40	1.00	0.00	35.39	35.39
	312Bo	1	0.00	0.00	✓	0.00	1.46	0.03	0.85	1.00	0.00	5.12	5.12
	312Cn	1	0.00	0.00	✓	0.00	7.05	1.05	4.89	1.00	0.00	41.75	41.75
	312Co	1	0.00	0.00	✓	0.00	1.16	0.03	1.16	1.00	0.00	6.62	6.62
	312D	1	0.00	0.00	✓	0.00	14.91	2.54	12.33	1.00	0.00	106.05	106.05
	312Dx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312Eent	1	0.00	0.00	✓	0.00	5.76			1.00	0.00	14.55	14.55
	312En	1	0.00	0.00	✓	0.00	5.97	0.25	5.97	1.00	0.00	38.78	38.78
	312Eo	1	0.00	0.00	✓	0.00	2.02	0.03	2.02	1.00	0.00	11.83	11.83
	312Ex	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312J	1	0.00	0.00	✓	0.00	5.58	0.50	5.12	1.00	0.00	26.21	1213.27
	312K	1	0.00	0.00	✓	0.00	25.28	2.58	15.38	1.00	0.00	126.63	126.63
	312c BS	1	0.00	0.00	✓	0.00	27.00			1.00	0.00	56.49	56.49
	312c LS	1	0.00	0.00	✓	0.00	0.43			1.00	0.00	6.02	6.02
	312c ent	1	0.00	0.00	✓	0.00	0.11			1.00	0.00	1.54	1.54
	312c x	3	0.00	0.00	✓	0.00	0.39			1.00	0.00	5.55	5.55
	312x LSx	4	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.11	0.11
	4	2	0.00	0.00	✓	0.00	3.71			1.00	0.00	40.38	40.38
	AS	1	0.00	0.00	✓	0.00	0.18			1.00	0.00	2.61	2.61
	AS1	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	AS2	1	0.00	0.00	✓	0.00	0.13			1.00	0.00	1.78	1.78
	ASin	1	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.54	0.54
	CS 2	1	0.00	0.00	✓	0.00	14.33	0.98	10.62	1.00	0.00	77.46	77.46
	QML	1	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.27	0.27
	QMLx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.04	0.04

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle)	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	312F	1	0	22	11000	78	9.33	0.29	0.81	0.81
		2	0	22	11000	78	9.33	0.29	0.81	0.81
	312G	1	1	22	11000	24	40.88	0.62	3.55	3.55
		2	1	22	11000	24	40.88	0.62	3.55	3.55
	312H	1	1	22	11000	17	46.71	0.66	4.05	4.05
		2	1	22	11000	17	46.71	0.66	4.05	4.05
	312I	1	0	22	11000	66	14.05	0.36	1.22	1.22
		2	0	22	11000	66	14.05	0.36	1.22	1.22
	312K	1	1	22	11000	18	45.86	0.65	3.98	3.98
		2	1	22	11000	18	45.86	0.65	3.98	3.98
	312L	1	0	0	11000	48	0.00	0.00	0.00	0.00
		2	0	0	11000	48	0.00	0.00	0.00	0.00
	312o	1	0	0	11000	59	0.00	0.00	0.00	0.00
		2	0	0	11000	59	0.00	0.00	0.00	0.00
	312p	1	0	0	11000	5	0.00	0.00	0.00	0.00
		2	0	0	11000	5	0.00	0.00	0.00	0.00
	7	1	0	0	11000	5	0.00	0.00	0.00	0.00
		2	0	0	11000	5	0.00	0.00	0.00	0.00
	8	1	0	0	11000	46	0.00	0.00	0.00	0.00
		2	0	0	11000	46	0.00	0.00	0.00	0.00

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
17:00-18:00	312F	1	22	22	0		11000	6810	0		27757	0.00	78	78
		2	22	22	0		11000	6810	0		27757	0.00	78	78
	312G	1	22	22	0		11000	2183	1		8829	0.00	24	25
		2	22	22	0		11000	2183	1		8829	0.00	24	25
	312H	1	22	22	0		11000	1571	1		6329	0.00	17	18
		2	22	22	0		11000	1571	1		6329	0.00	17	18
	312I	1	22	22	0		11000	5849	0		23829	0.00	66	67
		2	22	22	0		11000	5849	0		23829	0.00	66	67
	312K	1	22	22	0		11000	1659	1		6686	0.00	18	19
		2	22	22	0		11000	1659	1		6686	0.00	18	19
	312L	1	0	0	0		11000	4278	0		Unrestricted	0.00	48	49
		2	0	0	0		11000	4278	0		Unrestricted	0.00	48	49
	312o	1	0	0	0		11000	5151	0		Unrestricted	0.00	59	59
		2	0	0	0		11000	5151	0		Unrestricted	0.00	59	59
	312p	1	0	0	0		11000	437	0		Unrestricted	0.00	5	5
		2	0	0	0		11000	437	0		Unrestricted	0.00	5	5
	7	1	0	0	0		11000	524	0		Unrestricted	0.00	5	6
		2	0	0	0		11000	524	0		Unrestricted	0.00	5	6
	8	1	0	0	0		11000	4103	0		Unrestricted	0.00	46	47
		2	0	0	0		11000	4103	0		Unrestricted	0.00	46	47

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)
17:00-18:00	312F	1	4.33	9.33	0.06	0.00	0.81	0.81
		2	4.33	9.33	0.06	0.00	0.81	0.81
	312G	1	3.00	40.88	0.25	0.00	3.55	3.55
		2	3.00	40.88	0.25	0.00	3.55	3.55
	312H	1	3.00	46.71	0.29	0.00	4.05	4.05
		2	3.00	46.71	0.29	0.00	4.05	4.05
	312I	1	5.67	14.05	0.09	0.00	1.22	1.22
		2	5.67	14.05	0.09	0.00	1.22	1.22
	312K	1	3.00	45.86	0.28	0.00	3.98	3.98
		2	3.00	45.86	0.28	0.00	3.98	3.98
	312L	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312o	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312p	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	7	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	8	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
17:00-18:00	312F	1	0.29	10.00	2.93	0.00	0.00	0.00
		2	0.29	10.00	2.93	0.00	0.00	0.00
	312G	1	0.62	10.00	6.17	0.00	0.00	0.00
		2	0.62	10.00	6.17	0.00	0.00	0.00
	312H	1	0.66	10.00	6.60	0.00	0.00	0.00
		2	0.66	10.00	6.60	0.00	0.00	0.00
	312I	1	0.36	10.00	3.61	0.00	0.00	0.00
		2	0.36	10.00	3.61	0.00	0.00	0.00
	312K	1	0.65	10.00	6.54	0.00	0.00	0.00
		2	0.65	10.00	6.54	0.00	0.00	0.00
	312L	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312o	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312p	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	7	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	8	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
17:00-18:00	312F	1	0.13	0.08	0.98	13.67
		2	0.13	0.08	0.98	13.67
	312G	1	0.09	0.27	0.20	43.88
		2	0.09	0.27	0.20	43.88
	312H	1	0.09	0.30	0.18	49.71
		2	0.09	0.30	0.18	49.71
	312I	1	0.18	0.12	0.91	19.71
		2	0.18	0.12	0.91	19.71
	312K	1	0.09	0.30	0.18	48.86
		2	0.09	0.30	0.18	48.86
	312L	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EotS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	312F	1	0.00	0.00	0.29	1.00	0.00	0.81	0.81
		2	0.00	0.00	0.29	1.00	0.00	0.81	0.81
	312G	1	0.00	0.00	0.62	1.00	0.00	3.55	3.55
		2	0.00	0.00	0.62	1.00	0.00	3.55	3.55
	312H	1	0.00	0.00	0.66	1.00	0.00	4.05	4.05
		2	0.00	0.00	0.66	1.00	0.00	4.05	4.05
	312I	1	0.00	0.00	0.36	1.00	0.00	1.22	1.22
		2	0.00	0.00	0.36	1.00	0.00	1.22	1.22
	312K	1	0.00	0.00	0.65	1.00	0.00	3.98	3.98
		2	0.00	0.00	0.65	1.00	0.00	3.98	3.98
	312L	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	15/05/2020 15:40:30	15/05/2020 15:40:32	17:00	126	2129.17	61.48	87.33	4/2	0	0	312D/1	4/2	4/2	✓

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	87	0	21795	4655	9.84	845.79	1256.16	2101.95

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	220	732	31.37	27.22	27.22

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
17:00-18:00	22015	22015	0		87		3	5387	5415

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay (PCU-hr/hr)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	15.97	10.05	37.08	24.40	873.01	873.01	22.09	4194.82	669.10	69.10	1256.16

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
17:00-18:00	216.64	0.00	695.00	123.70	818.70

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)
17:00-18:00	3076.46	159.13	12.01

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	0.00	0.00	✓	0.00	1.00	0.00	0.00	942.11	2129.17

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To																				
		1	2	3	4	5	10	19	20	5a	5b	5c	6	7	8	9	P1	P2	P3	P4	P5	P6
From	1	0.0	64.7	169.6	0.0	0.0	170.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	122.2	121.8	0.0	0.0	0.0	0.0	0.0	0.0
	2	131.3	0.0	250.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	158.2	157.8	0.0	0.0	0.0	0.0	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4	98.5	98.5	196.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.6	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10	0.0	0.0	51.6	0.0	0.0	0.0	0.0	79.6	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19	0.0	0.0	62.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20	127.3	121.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.4	0.0	0.0	0.0	179.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5a	0.0	0.0	62.1	0.0	0.0	53.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	5b	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.3	92.9	0.0	0.0	0.0	0.0	0.0	0.0
	5c	123.0	113.3	143.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	0.0	0.0	0.0	0.0	0.0	31.6	0.0	60.0	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	9	104.8	104.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.9	0.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	P1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	0.0	0.0	0.0	0.0
P2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	0.0	19.7	0.0	0.0	0.0	
P3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.7	0.0	13.7	0.0	0.0	
P4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7	0.0	49.7	0.0	
P5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7	0.0	48.9	
P6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.9	0.0	

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	P5	P4		22		49.71	22	49.71
2	P4	P5		22		49.71	22	49.71
3	P5	P6		22		48.86	22	48.86
4	P6	P5		22		48.86	22	48.86
14	P1	P2		22		43.88	22	43.88
15	P2	P1		22		43.88	22	43.88
23	P4	P3		22		13.67	22	13.67
30	2	1	5		131.32		5	131.32
34	1	2	15		64.67		15	64.67
37	5b	8	601		93.29		601	93.29
38	5b	9	142		92.88		142	92.88
39	5	5b	592		49.87		592	49.87
49	9	8	25		27.29		25	27.29
56	7	10	111		31.57		111	31.57
57	5a	10	1		53.48		1	53.48
58	9	2	99		104.82		99	104.82
59	9	1	30		104.82		30	104.82
60	20	2	108		121.71		108	121.71
61	P3	P4		22		13.67	22	13.67
65	P2	P3		22		19.71	22	19.71
66	20	1	25		125.84		25	125.84
69	4	5c	358		60.60		358	60.60
70	9	5c	50		66.94		50	66.94
80	9	3	0		0.00		0	0.00
81	5c	5a	0		0.00		0	0.00
82	5c	10	0		0.00		0	0.00
83	5c	3	408		142.98		408	142.98
84	19	5a	0		0.00		0	0.00
85	19	10	0		0.00		0	0.00
86	19	3	66		62.54		66	62.54
108	6	20	708		62.18		708	62.18
109	7	20	251		59.99		251	59.99
110	5a	20	0		0.00		0	0.00
111	10	20	21		79.62		21	79.62
191	1	8	101		122.24		101	122.24
192	1	9	21		121.83		21	121.83
193	2	8	285		158.16		285	158.16
194	2	9	20		157.75		20	157.75
206	4	2	172		98.48		172	98.48
207	4	1	49		98.48		49	98.48
208	4	9	25		20.53		25	20.53
230	5a	3	9		62.13		9	62.13
232	10	3	24		51.58		24	51.58
233	7	5a	553		55.35		553	55.35
234	10	5a	34		66.70		34	66.70
257	20	1	538		127.39		538	127.39
258	20	8	0		0.00		0	0.00
259	20	9	0		0.00		0	0.00
262	20	8	25		179.49		25	179.49
263	20	9	0		0.00		0	0.00
264	20	2	0		0.00		0	0.00
265	20	5b	151		52.35		151	52.35
266	P3	P2		22		19.71	22	19.71
267	5c	1	21		123.01		21	123.01
268	5c	8	0		0.00		0	0.00
269	5c	9	0		0.00		0	0.00
270	5c	2	16		113.29		16	113.29
271	1	5a	0		0.00		0	0.00
272	1	10	11		170.39		11	170.39
273	1	3	324		169.60		324	169.60
274	2	5a	0		0.00		0	0.00
275	2	10	0		0.00		0	0.00
276	2	3	61		250.82		61	250.82
277	4	5a	0		0.00		0	0.00
278	4	10	0		0.00		0	0.00
279	4	3	25		196.06		25	196.06
280	9	5a	0		0.00		0	0.00
281	9	10	0		0.00		0	0.00

Traffic Stream Results

Pedestrian Crossing Results																	
				SIGNALS		FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PENALTIES	P.I.	
Pedestrian	Side	Name	Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay weighting (%)	Cost of traffic penalties (£ per hr)	P.I.	
312F	1	(untitled)	312a	312a	F	22	11000	78	0	27757	13.67	9.33	0.29	100	0.00	0.81	
	2	(untitled)	312a	312a	F	22	11000	78	0	27757	13.67	9.33	0.29	100	0.00	0.81	
312G	1	(untitled)		312a	I	22	11000	24	1	8829	43.88	40.88	0.62	100	0.00	3.55	
	2	(untitled)		312a	I	22	11000	24	1	8829	43.88	40.88	0.62	100	0.00	3.55	
312H	1	(untitled)		312a	H	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05	
	2	(untitled)		312a	H	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05	
312I	1	(untitled)	312a	312a	G	22	11000	66	0	23829	19.71	14.05	0.36	100	0.00	1.22	
	2	(untitled)	312a	312a	G	22	11000	66	0	23829	19.71	14.05	0.36	100	0.00	1.22	
312K	1	(untitled)		312a	N	22	11000	18	1	6686	48.86	45.86	0.65	100	0.00	3.98	
	2	(untitled)		312a	N	22	11000	18	1	6686	48.86	45.86	0.65	100	0.00	3.98	
312L	1	(untitled)		312b	L	0	11000	48	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	
	2	(untitled)		312b	L	0	11000	48	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	
312o	1	(untitled)		312a	O	0	11000	59	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	
	2	(untitled)		312a	O	0	11000	59	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	
312p	1	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	
	2	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	
7	1	(untitled)	311out	311out	E	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	
	2	(untitled)	311out	311out	E	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	

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Network Results									
	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	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)
Normal traffic	3075.32	156.99	12.17	35.16	24.40	845.79	1256.16	0.00	2101.95
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians	1.14	2.15	0.33	1.92	0.00	27.22	0.00	0.00	27.22
TOTAL	3076.46	159.13	12.01	37.08	24.40	873.01	1256.16	0.00	2129.17

< = adjusted flow warning (upstream links/traffic streams are over-saturated)
 * = 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/traffic stream excess queue is greater than 0
 P.I. = PERFORMANCE INDEX

- * < = adjusted flow warning (upstream links/traffic streams are over-saturated)
 - * = 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/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX**

TRANSYT 15	
Version: 15.5.0.6767 © Copyright TRL Limited, 2016	
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Filename: rrctmfmb1 2022 126 am zJ3 opt 1 GE 1.6 no g E 1in 2 seq5 .t15

Path: C:\Users\andrewrawlinson\Desktop\rr67 jacobs

Report generation date: 09/07/2020 14:37:38

»Network Diagrams
«A1 - AM : D1 - am* :
»Summary
»Network Options
»Traffic Nodes
»Arms and Traffic Streams
»Pedestrian Crossings
»Local OD Matrix - Local Matrix: 1
»Signal Timings
»TRANSYT 12 Tables
»Results - Link
»Results - Traffic Stream
»Data Entry - Stage Start and End
»Data Entry - Phase
»Data Entry - Traffic Stream
»Data entry - Link
»Results - Pedestrian
»Traffic Stream Results
»Pedestrian Crossing Results
»Network Results
»Point to Point Journey Time
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITDS\AndrewRawlinson
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
			✓		✓	✓	✓	✓	✓	✓	✓		

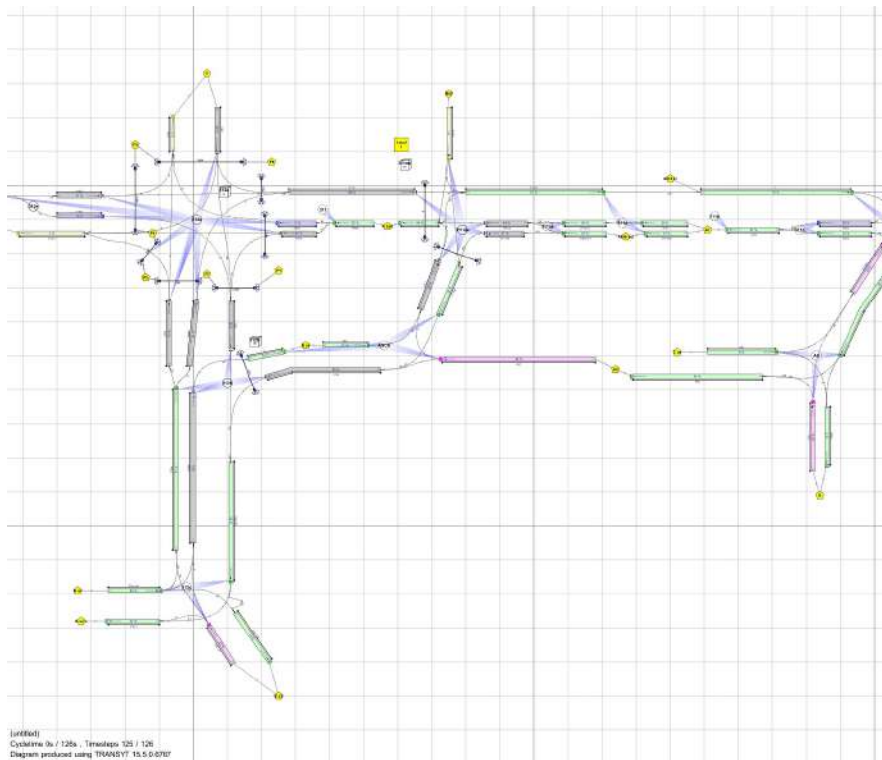
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	mph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



A1 - AM D1 - am*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	09/07/2020 14:37:15	09/07/2020 14:37:17	08:00	126	1634.07	76.45	99.10	308A/2	1	1	312Be/1	308A/2	308A/2	

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM	Jacobs v1.6	D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
am	Jacobs v 1.6			08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
126		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻² [-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.47	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms ⁻² [-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.47	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	312a, 312b, 311ms

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description

(ALL)	(untitled)	
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Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	(untitled)		311d
308A	(untitled)		
311Ao	(untitled)		311
311C	(untitled)		311ms
311Cx	(untitled)		311a
311G	(untitled)		311ms
311LAS	(untitled)		311ms
311a	(untitled)		311a
311aa O	(untitled)		311aa
311aa bus	(untitled)		311aa
311abus	(untitled)		311a
311b	(untitled)		311b
311cn	(untitled)		311c
311co	(untitled)		311c
311csx	(untitled)		ASCS
311dAS	(untitled)		311d
311dn	(untitled)		311d
311do	(untitled)		311d
311out	(untitled)		311ms
312A	(untitled)		312a
312Ae	(untitled)		312b
312Be	(untitled)		312b
312Bo	(untitled)		312a
312Cn	(untitled)		312a
312Co	(untitled)		312a
312D	(untitled)		312a
312Dx	(untitled)		
312Eent	(untitled)		312a
312En	(untitled)		312a
312Eo	(untitled)		312a
312Ex	(untitled)		
312J	(untitled)		312b
312K	(untitled)		312b
312c BS	(untitled)		312c
312c LS	(untitled)		312c
312c ent	(untitled)		312c
312c x	(untitled)		
312x LSx	(untitled)		
5	(untitled)		
6	(untitled)		ASCS
AS	(untitled)		AS
AS1	(untitled)		AS
AS2	(untitled)		
AS3	(untitled)		ASCS
ASin	(untitled)		ASCS
CS 2	(untitled)		311ms
QML	(untitled)		AS
QMLx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	(untitled)			368.00	✓	Sum of lanes	1650					Normal	
308A	2	(untitled)			120.00	✓	Sum of lanes	1225	✓	1800			Normal	
311Ao	1	(untitled)			100.00	✓	Sum of lanes	1500	✓	1800			Normal	
311C	1	Lockwood inbound			166.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
311Cx	1	(untitled)			274.00	✓	Sum of lanes	1700					Normal	
311G	2	(untitled)			20.00								Normal	
311LAS	1	(untitled)			90.00	✓	Sum of lanes	1400	✓	1800	✓		Normal	
311a	1	(untitled)			56.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa O	1	(untitled)			197.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa bus	2	(untitled)			206.00	✓	Sum of lanes	1400					Normal	
311abus	1	(untitled)			56.00	✓	Sum of lanes	1000					Normal	
311b	1	(untitled)			275.00	✓	Sum of lanes	1500					Normal	
311cn	1	(untitled)			45.00	✓	Sum of lanes	1000					Normal	
311co	1	(untitled)			45.00	✓	Sum of lanes	1200				✓	Normal	
311csx	1	(untitled)			38.00	✓	Sum of lanes	1600					Normal	
311dAS	311dAS	(untitled)			28.00							✓	Normal	
311dn	1	(untitled)			115.00	✓	Sum of lanes	1300					Normal	
311do	1	(untitled)			115.00	✓	Sum of lanes	1400					Normal	
311out	1	(untitled)			99.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312A	1	(untitled)			35.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312Ae	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800			Normal	
312Be	1	(untitled)			87.00	✓	Sum of lanes	1833	✓	1800	✓		Normal	
312Bo	1	(untitled)			35.00	✓	Sum of lanes	1700	✓	1800	✓		Normal	
312Cn	1	(untitled)			70.00	✓	Sum of lanes	1850	✓	1800	✓		Normal	
312Co	1	(untitled)			70.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312D	1	Lockwood Road inbound			420.00	✓	Sum of lanes	1855			✓		Normal	
312Dx	1	(untitled)			100.00								Normal	
312Eent	1	(untitled)			203.00	✓	Sum of lanes	1500					Normal	
312En	1	(untitled)			35.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
312Eo	1	(untitled)			35.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312Ex	1	(untitled)			100.00								Normal	
312J	1	(untitled)			43.00	✓	Sum of lanes	1800			✓		Normal	
312K	1	(untitled)			185.00	✓	Sum of lanes	1873			✓		Normal	
312c BS	1	(untitled)			90.00	✓	Sum of lanes	1400					Normal	

312c LS	1	(untitled)			65.00							✓	Normal
312c ent	1	(untitled)			80.00	✓	Sum of lanes	1700					Normal
312c x	3	(untitled)			70.00	✓	Sum of lanes	1800					Normal
312x LSx	4	(untitled)			100.00	✓	Sum of lanes	1800					Normal
5	2	(untitled)			18.00	✓	Sum of lanes	1500	✓	1800			Normal
6	2	(untitled)			85.00	✓	Sum of lanes	1800					Normal
AS	1	(untitled)			35.00	✓	Sum of lanes	1500					Normal
AS1	1	(untitled)			345.00	✓	Sum of lanes	1800					Normal
AS2	1	(untitled)			345.00	✓	Sum of lanes	1500					Normal
AS3	1	(untitled)			275.00							✓	Normal
ASin	1	(untitled)			100.00	✓	Sum of lanes	1700					Normal
CS 2	1	(untitled)			38.00	✓	Sum of lanes	1808			✓		Normal
QML	1	(untitled)		✓	250.00							✓	Normal
QMLx	1	(untitled)			100.00	✓	Sum of lanes	1800					Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1	1	1	(untitled)			1650
308A	2	1	(untitled)			1225
311Ao	1	1	(untitled)			1500
311C	1	1	(untitled)			1800
311Cx	1	1	(untitled)			1700
311G	2	1	(untitled)			
311LAS	1	1	(untitled)			1400
311a	1	1	(untitled)			1500
311aa O	1	1	(untitled)			1500
311aa bus	2	1	(untitled)			1400
311abus	1	1	(untitled)			1000
311b	1	1	(untitled)			1500
311cn	1	1	(untitled)			1000
311co	1	1	(untitled)			1200
311csx	1	1	(untitled)			1600
311dAS	311dAS	1	(untitled)			
311dn	1	1	(untitled)			1300
311do	1	1	(untitled)			1400
311out	1	1	(untitled)			1750
312A	1	1	(untitled)			1750
312Ae	1	1	(untitled)			1800
312Be	1	1	(untitled)			1833
312Bo	1	1	(untitled)			1700
312Cn	1	1	(untitled)			1850
312Co	1	1	(untitled)			1440
312D	1	1	(untitled)			1855
312Dx	1	1	(untitled)			
312Eent	1	1	(untitled)			1500
312En	1	1	(untitled)			1800
312Eo	1	1	(untitled)			1440
312Ex	1	1	(untitled)			
312J	1	1	(untitled)			1800
312K	1	2	(untitled)			1873
312c BS	1	1	(untitled)			1400
312c LS	1	1	(untitled)			
312c ent	1	1	(untitled)			1700
312c x	3	1	(untitled)			1800
312x LSx	4	1	(untitled)			1800
5	2	1	(untitled)			1500
6	2	1	(untitled)			1800
AS	1	1	(untitled)			1500
AS1	1	1	(untitled)			1800
AS2	1	1	(untitled)			1500
AS3	1	1	(untitled)			
ASin	1	1	(untitled)			1700
CS 2	1	1	(untitled)			1808
QML	1	1	(untitled)			
QMLx	1	QMLx	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
1	1	PDM	100	100	100		0.00				
308A	2	CTM	100	100	100		21.00				
311Ao	1	CTM	100	100	100		17.00	✓	17.00	0.00	
311C	1	CTM	100	100	100		29.00				
311Cx	1	NetworkDefault	100	100	100		0.00				
311G	2	NetworkDefault	100	100	100		0.00				
311LAS	1	CTM	100	100	100		15.00	✓	15.00	0.00	
311a	1	CTM	100	100	100		10.00				
311aa O	1	CTM	100	100	100		36.00				
311aa bus	2	NetworkDefault	100	100	100		0.00				
311abus	1	NetworkDefault	100	100	100		0.00				
311b	1	NetworkDefault	100	100	100		0.00				
311cn	1	NetworkDefault	100	100	100		0.00				
311co	1	NetworkDefault	100	100	100		0.00				
311csx	1	NetworkDefault	100	100	100		0.00				
311dAS	311dAS	NetworkDefault	100	100	100		0.00				
311dn	1	NetworkDefault	100	100	100		0.00				
311do	1	NetworkDefault	100	100	100		0.00				
311out	1	CTM	100	100	100		15.00	✓	15.00	0.00	
312A	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Ae	1	CTM	100	100	100		17.00	✓	18.00	0.00	
312Be	1	CTM	100	100	100		17.00	✓	17.00	0.00	
312Bo	1	CTM	100	100	100		6.00				
312Cn	1	CTM	100	100	100		8.00	✓	8.00	0.00	
312Co	1	Flare	100	100	100		8.00	✓	8.00	0.00	
312D	1	NetworkDefault	100	100	100		0.00				
312Dx	1	NetworkDefault	100	100	100		0.00				

312Eent	1	PDM	100	100	100		49.00	✓	49.00	0.00	
312En	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Eo	1	Flare	100	100	100		6.00	✓	6.00	0.00	
312Ex	1	NetworkDefault	100	100	100		0.00				
312J	1	NetworkDefault	99999	100	100		0.00				
312K	1	NetworkDefault	100	100	100		0.00				
312c BS	1	NetworkDefault	100	100	100		0.00				
312c LS	1	NetworkDefault	100	100	100		0.00				
312c ent	1	NetworkDefault	100	100	100		0.00				
312c x	3	NetworkDefault	100	100	100		0.00				
312x LSx	4	NetworkDefault	100	100	100		0.00				
5	2	CTM	100	100	100		17.00	✓	17.00	0.00	
6	2	NetworkDefault	100	100	100		0.00				
AS	1	NetworkDefault	100	100	100		0.00				
AS1	1	NetworkDefault	100	100	100		0.00				
AS2	1	NetworkDefault	100	100	100		0.00				
AS3	1	NetworkDefault	100	100	100		0.00				
ASin	1	NetworkDefault	100	100	100		0.00				
CS 2	1	NetworkDefault	100	100	100		0.00				
QML	1	NetworkDefault	100	100	100		0.00				
QMLx	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	126

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	1236	1236
308A	2	1214	1214
311Ao	1	412	412
311C	1	715	715
311Cx	1	1235	1235
311G	2	0	0
311LAS	1	263	263
311a	1	297	297
311aa O	1	297	297
311aa bus	2	313	313
311abus	1	313	313
311b	1	665	665
311cn	1	328	328
311co	1	337	337
311csx	1	263	263
311dAS	311dAS	36	36
311dn	1	515	515
311do	1	337	337
311out	1	347	347
312A	1	336	336
312Ae	1	361	361
312Be	1	520	520
312Bo	1	25	25
312Cn	1	361	361
312Co	1	51	51
312D	1	389	389
312Dx	1	380	380
312Eent	1	698	698
312En	1	605	605
312Eo	1	93	93
312Ex	1	347	347
312J	1	418	418
312K	1	392	392
312c BS	1	810	810
312c LS	1	205	205
312c ent	1	776	776
312c x	3	666	666
312x LSx	4	244	244
5	2	437	437
6	2	520	520
AS	1	245	245
AS1	1	0	0
AS2	1	363	363
AS3	1	219	219
ASin	1	520	520
CS 2	1	610	610
QML	1	186	186
QMLx	1	32	32

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
311C	1	311ms	A	
311LAS	1	311ms	C	
311out	1	311ms	B	
312A	1	312a	A	
312Be	1	312b	M	
312Bo	1	312a	B	
312Cn	1	312a	C	
312Co	1	312a	C	
312D	1	312a	D	
312En	1	312a	E	
312Eo	1	312a	E	
312J	1	312b	J	
312K	1	312b	K	
CS 2	1	311ms	D	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)
311Ao	1	12.00	18.64
311G	2	2.40	18.64
311a	1	6.72	18.64
311aa bus	2	24.72	18.64
311abus	1	6.72	18.64
311dn	1	11.69	22.00
311do	1	15.13	17.00
312D	1	50.40	18.64
312Eent	1	18.16	25.00
312c LS	1	7.27	20.00
312c ent	1	7.78	23.00
AS1	1	41.40	18.64
AS3	1	33.00	18.64
ASin	1	10.47	21.38
QML	1	30.00	18.64

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)	Auto turning radius	Traffic turn style	Turning radius (m)
1	1	1	311Cx/1	1/1	44.16	18.64	✓	Straight	Straight Movement
308A	2	1	311dAS/311dAS	308A/2	11.67	23.00	✓	Straight	Straight Movement
311C	1	1	312D/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	1	CS 2/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
311LAS	1	1	311aa bus/2	311LAS/1	10.80	18.64	✓	Straight	Straight Movement
311aa O	1	1	311a/1	311aa O/1	23.64	18.64	✓	Straight	Straight Movement
311b	1	1	311cn/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	1	311dn/1	311cn/1	5.92	17.00	✓	Straight	Straight Movement
311co	1	1	311do/1	311co/1	5.92	17.00	✓	Straight	Straight Movement
311csx	1	1	311LAS/1	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	1	QML/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	1	311aa O/1	311out/1	11.88	18.64	✓	Straight	Straight Movement
312A	1	1	312Ae/1	312A/1	5.59	14.00	✓	Straight	Straight Movement
312Ae	1	1	312c ent/1	312Ae/1	9.73	20.00	✓	Nearside	62.50
312Be	1	1	312c ent/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Bo	1	1	312Ae/1	312Bo/1	4.20	18.64	✓	Straight	Straight Movement
312Cn	1	1	311Ao/1	312Cn/1	8.40	18.64	✓	Straight	Straight Movement
312Co	1	1	311Ao/1	312Co/1	8.40	18.64	✓	Straight	Straight Movement
312Dx	1	1	312Co/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312En	1	1	312Eent/1	312En/1	3.13	25.00	✓	Straight	Straight Movement
312Eo	1	1	312Eent/1	312Eo/1	3.13	25.00	✓	Straight	Straight Movement
312Ex	1	1	312D/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	1	312Cn/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
312K	1	1	AS3/1	312K/1	22.20	18.64	✓	Straight	Straight Movement
312c BS	1	1	312J/1	312c BS/1	10.07	20.00	✓	Straight	Straight Movement
312c x	3	1	312c BS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	1	312c BS/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
5	2	1	311out/1	5/2	2.37	17.00	✓	Straight	Straight Movement
6	2	1	312Be/1	6/2	10.20	18.64	✓	Straight	Straight Movement
AS	1	1	311dn/1	AS/1	3.56	22.00	✓	Nearside	73.18
AS2	1	1	AS/1	AS2/1	35.08	22.00	✓	Straight	Straight Movement
CS 2	1	1	AS3/1	CS 2/1	4.56	18.64	✓	Offside	80.41
QMLx	1	1	AS/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
308A	2	2	1/1	308A/2	11.67	23.00	✓	Straight	Straight Movement
311C	1	2	312En/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	2	311G/2	311Cx/1	32.88	18.64	✓	Nearside	62.50
311b	1	2	311co/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	2	311dAS/311dAS	311cn/1	5.40	18.64	✓	Nearside	13.39
311csx	1	2	311G/2	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	2	AS1/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	2	311aa bus/2	311out/1	11.88	18.64	✓	Straight	Straight Movement
312Ae	1	2	312c LS/1	312Ae/1	9.73	20.00	✓	Straight	Straight Movement
312Be	1	2	312c LS/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Dx	1	2	312A/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	2	312Cn/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	2	312D/1	312J/1	4.81	20.00	✓	Straight	Straight Movement
312K	1	2	311csx/1	312K/1	22.20	18.64	✓	Straight	Straight Movement
312c BS	1	2	312K/1	312c BS/1	10.80	18.64	✓	Straight	Straight Movement
312c x	3	2	312c LS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	2	312c ent/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
5	2	2	CS 2/1	5/2	2.16	18.64	✓	Offside	6.00
AS	1	2	1/1	AS/1	4.20	18.64	✓	Straight	Straight Movement
AS2	1	2	QML/1	AS2/1	35.08	22.00	✓	Nearside	100.00
CS 2	1	2	ASin/1	CS 2/1	4.56	18.64	✓	Straight	Straight Movement
QMLx	1	2	AS1/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
311C	1	3	312Bo/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	3	311C/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
312Dx	1	3	312En/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	3	312A/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	3	312Eo/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
5	2	3	311G/2	5/2	2.16	18.64	✓	Offside	37.50

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	(ALL)	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	311cn/1	100	0.22		0	0
311dAS		TrafficStream	311dn/1	100	0.22		0	0
		TrafficStream	311Cx/1	100	0.19		0	0

1		TrafficStream	312En/1	100	0.22	✓	0	0
		TrafficStream	312En/1	100	0.22		0	0
	outbound	TrafficStream	312c BS/1	100	0.22		0	0
		TrafficStream	312c ent/1	90	0.19		0	0
		TrafficStream	311csx/1	30	0.22		0	0
		TrafficStream	ASin/1	5	0.19		0	0
		TrafficStream	AS/1	100	0.22		0	0
		TrafficStream	AS1/1	100	0.19		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (mph)
312F	(untitled)		312a		Farside	5.00	3.33	3.36
312G	(untitled)				Nearside	3.00	2.00	3.36
312H	(untitled)				Farside	3.00	2.00	3.36
312I	(untitled)		312a		Farside	7.00	4.67	3.36
312K	(untitled)				Farside	3.00	2.00	3.36
312L	(untitled)				Farside	3.00	2.00	3.36
312o	(untitled)				Farside	3.00	2.00	3.36
312p	(untitled)				Farside	3.00	2.00	3.36
7	(untitled)		311ms		Nearside	6.00	4.00	3.36
8	(untitled)				Farside	3.00	2.00	3.36

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
312F	312a	F	
312G	312a	I	
312H	312a	H	
312I	312a	G	
312K	312a	N	
312L	312b	L	
312o	312a	O	
312p	312a	P	
7	311ms	E	
8	311ms	F	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To																							
		A bcd	A ex	A near	A off	A1	A2	A616 in	A616 out	B	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6	
From	A bcd	0	0	0	0	0	0	0	0	0	0	0	0	25	336	0	51	0	0	0	0	0	0	0	
	A ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A near	0	0	0	0	313	172	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A off	0	0	0	0	337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A1	297	0	0	0	0	0	0	313	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A2	90	0	0	0	0	0	0	0	0	0	0	0	129	0	0	0	0	0	0	0	0	0		
	A616 in	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A616 out	50	0	0	0	0	0	0	0	0	63	0	0	200	0	0	0	0	0	0	0	0	0		
	B	0	21	0	0	15	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B LS	0	0	0	0	0	0	0	0	0	0	0	0	50	5	0	150	0	0	0	0	0	0		
	B as	0	503	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B wr	0	25	0	0	0	0	0	0	0	50	520	0	0	2	0	179	0	0	0	0	0	0		
	B wr x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	C	0	585	0	0	0	19	0	0	1	81	0	0	12	0	0	0	0	0	0	0	0	0		
	C as	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	D	0	80	0	0	0	5	0	0	0	50	0	0	250	4	0	0	0	0	0	0	0	0		
MSS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (PCU/hr)

		To																						
		A bcd	A ex	A near	A off	A1	A2	A616 in	A616 out	B	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6
	A bcd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A near	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A off	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	A616 in	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Locations

Normal Paths and Flows

file:///C:/Users/andrewrawlinson/Desktop/rr67%20jacobs/rrctmfbl%202022%20126... 09/07/2020

	327		A616 out	B LS	311aa bus/2, 311LAS/1, 311csx/1, 312K/1, 312c BS/1, 312x LSx/4	Normal	63
	330		C	A2	312Eent/1, 312En/1, 311C/1, 311Cx/1, 1/1, AS/1, AS2/1	Normal	19
	331		D	B	312D/1, 311C/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	332		D	A ex	312D/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	80
	333		B wr	A ex	312c ent/1, 312Ae/1, 312Bo/1, 311C/1, 311Cx/1, 1/1, 308A/2	Normal	25
	334		B as	B	ASin/1, CS 2/1, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	335		B as	A ex	ASin/1, CS 2/1, 311Cx/1, 1/1, 308A/2	Normal	503
	336		MSS	A2	311G/2, 311Cx/1, 1/1, AS/1, AS2/1	Normal	0
	337		MSS	B	311G/2, 311Cx/1, 1/1, AS/1, QMLx/1	Normal	0
	338		MSS	A ex	311G/2, 311Cx/1, 1/1, 308A/2	Normal	0

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	1		P5	P4	312H-1E, 312H-2X	Normal	22
	2		P4	P5	312H-2E, 312H-1X	Normal	22
	3		P5	P6	312K-1E, 312K-2X	Normal	22
	4		P6	P5	312K-2E, 312K-1X	Normal	22
	14		P1	P2	312G-1E, 312G-2X	Normal	22
	15		P2	P1	312G-2E, 312G-1X	Normal	22
	23		P4	P3	312F-2E, 312F-1X	Normal	22
	61		P3	P4	312F-1E, 312F-2X	Normal	22
	65		P2	P3	312L-1E, 312L-2X	Normal	22
	266		P3	P2	312L-2E, 312L-1X	Normal	22

Signal Timings

Network Default: 126s cycle time; 126 steps

Controller Stream 311ms

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
311ms	(untitled)		1	NetworkDefault	126

Controller Stream 311ms - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
311ms	Unspecified						Absolute

Controller Stream 311ms - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
311ms	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311ms	A	(untitled)	7	300	0	0	Unknown
	B	(untitled)	7	300	0	0	Unknown
	C	(untitled)	7	300	0	0	Unknown
	D	(untitled)	7	300	0	0	Unknown
	E	(untitled)	3	3	0	0	Unknown
	F	(untitled)	5	300	0	0	Unknown
	G	(untitled)	1	1	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
311ms	1	A, B, C	1
	3	F, E	1
	4	D, F, C	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
311ms	1	Gaining	A	4	1	0	1
	2	Gaining	C	4	1	7	7
	3	Gaining	B	4	1	2	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
311ms	1	(untitled)	Single	1, 3, 4	5, 13, 68

Intergreen Matrix for Controller Stream 311ms

		To						
From	A	B	C	D	E	F	G	
	A			5	3	1		
	B			6	3	1		
	C				5	1		
	D	5	5		5	1		
	E			7	8	1		
	F	7	5			1		
	G	1	5	6	6	3	3	

Banned Stage transitions for Controller Stream 311ms

		To			
From	1	3	4		
	3				
	4				

Interstage Matrix for Controller Stream 311ms

		To			
From	1	3	4		
	3	0	5	6	
	4	7	0	8	
		7	5	0	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
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311ms	1	✓	1	A,B,C	75	5	56	1	7
	2	✓	3	F,E	10	13	3	1	3
	3	✓	4	D,F,C	21	68	47	1	7

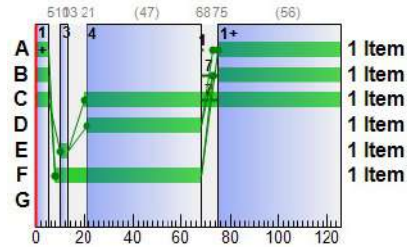
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
311ms	A	1	✓	75	5	56
	B	1	✓	75	5	56
	C	1	✓	20	5	111
	D	1	✓	21	68	47
	E	1	✓	10	13	3
	F	1	✓	8	68	60

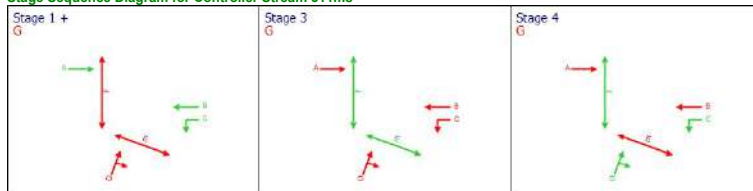
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
311C	1	311ms	311ms	A	75	5	56
311LAS	1	311ms	311ms	C	20	5	111
311out	1	311ms	311ms	B	75	5	56
CS 2	1	311ms	311ms	D	21	68	47

Phase Timings Diagram for Controller Stream 311ms



Stage Sequence Diagram for Controller Stream 311ms



Controller Stream 312a

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312a	(untitled)		1	NetworkDefault	126

Controller Stream 312a - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312a	Unspecified						Absolute

Controller Stream 312a - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312a	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
312a	A	(untitled)	14	300	0	0	Unknown	
	B	(untitled)	2	7	0	0	Unknown	
	C	(untitled)	7	300	0	0	Unknown	
	D	(untitled)	7	300	0	0	Unknown	
	E	(untitled)	7	300	0	0	Unknown	
	F	(untitled)	5	300	0	0	Pedestrian	0
	G	(untitled)	7	300	0	0	Unknown	
	H	(untitled)	7	300	0	0	Unknown	
	I	(untitled)	7	300	0	0	Unknown	
	N	(untitled)	1	300	0	0	Unknown	
	O	(untitled)	5	300	0	0	Pedestrian	0
	P	(untitled)	1	5	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312a	1	I, H, N, O, P, F, G	1
	2	F, E, C, G	1
	3	D, O, A	1
	4	B, N, H, I, F, O	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
312a	1	Gaining	E	1	2	0	8
	2	Losing	B	1	2	6	
	3	Losing	A	1	2	6	
	4	Losing	C	2	3	4	
	5	Losing	E	2	3	4	
	6	Losing	I	1	2	7	
	7	Gaining	A	4	1	1	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312a	1	(untitled)	Single	1, 2, 3, 4	59, 117, 35, 46

Intergreen Matrix for Controller Stream 312a

		To											
		A	B	C	D	E	F	G	H	I	N	O	P
From	A			5		6	6	5			8		
	B				5			5					8
	C	8			8				9		9	5	
	D		6	6		5			9	9	5		8
	E	8			8				5		9		9
	F	5											
	G	8	8										
	H				5	0	8						
	I					5							
	N	5			5	7	5						
	O				7								
	P		5			5	5						

Banned Stage transitions for Controller Stream 312a

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 312a

		To			
		1	2	3	4
From	1	0	8	8	8
	2	9	0	12	9
	3	9	7	0	9
	4	8	8	7	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312a	1	✓	1	I,H,N,O,P,F,G	54	59	5	1	1
	2	✓	2	F,E,C,G	67	117	50	1	3
	3	✓	3	D,O,A	3	35	32	1	14
	4	✓	4	B,N,H,I,F,O	44	46	2	1	1

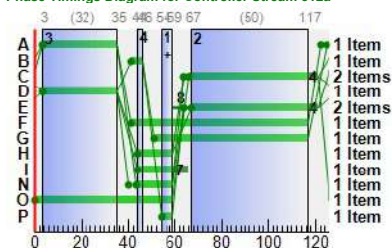
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312a	A	1	✓	3	35	32
	B	1	✓	41	46	5
	C	1	✓	66	121	55
	D	1	✓	3	35	32
	E	1	✓	67	121	54
	F	1	✓	41	117	76
	G	1	✓	51	117	66
	H	1	✓	44	59	15
	I	1	✓	44	66	22
	N	1	✓	43	59	16
	O	1	✓	0	59	59
	P	1	✓	54	59	5

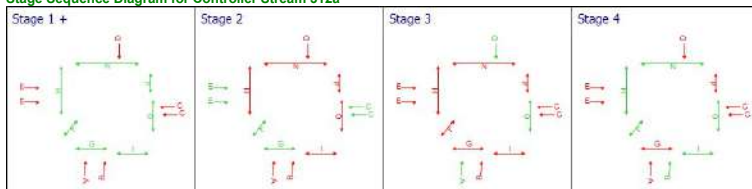
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312A	1	312a	312a	A	3	35	32
312Bo	1	312a	312a	B	41	46	5
312Cn	1	312a	312a	C	66	121	55
312Co	1	312a	312a	C	66	121	55
312D	1	312a	312a	D	3	35	32
312En	1	312a	312a	E	67	121	54
312Eo	1	312a	312a	E	67	121	54

Phase Timings Diagram for Controller Stream 312a



Stage Sequence Diagram for Controller Stream 312a



Controller Stream 312b

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312b	(untitled)		1	NetworkDefault	126

Controller Stream 312b - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312b	Unspecified						Absolute

Controller Stream 312b - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312b	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
312b	J	(untitled)	7	300	0	0	Unknown
	K	(untitled)	7	300	0	0	Unknown
	L	(untitled)	5	300	0	0	Unknown
	M	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312b	1	J, L	7
	2	K, M	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312b	1	(untitled)	Single	1, 2	40, 85

Intergreen Matrix for Controller Stream 312b

		To				
From		J	K	L	M	
	J		5		6	
	K	5		5		
	L		8		0	
	M	5		7		

Banned Stage transitions for Controller Stream 312b

		To	
From	1	2	
	1		
	2		

Interstage Matrix for Controller Stream 312b

		To	
From	1	2	
	1	0	8
	2	7	0

Resultant Stages

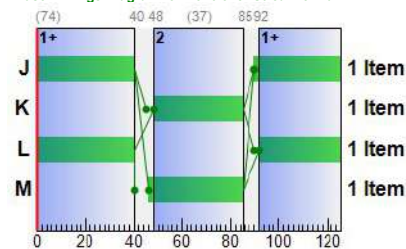
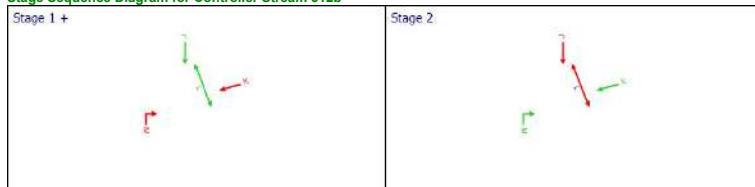
Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312b	1	✓	1	J,L	92	40	74	7	7
	2	✓	2	K,M	48	85	37	7	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312b	J	1	✓	90	40	76
	K	1	✓	48	85	37
	L	1	✓	92	40	74
	M	1	✓	46	85	39

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312Be	1	312b	312b	M	46	85	39
312J	1	312b	312b	J	90	40	76
312K	1	312b	312b	K	48	85	37

Phase Timings Diagram for Controller Stream 312b**Stage Sequence Diagram for Controller Stream 312b****Resultant penalties**

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	(ALL)	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
311ms	1	✓	1	A,B,C	68	7	14
	2	✓	3	F,E	5	5	8
	3	✓	4	D,F,C	13	8	15
312a	1	✓	1	I,H,N,O,P,F,G	46	8	9
	2	✓	2	F,E,C,G	59	8	11
	3	✓	3	D,O,A	117	12	26
	4	✓	4	B,N,H,I,F,O	35	9	10
312b	1	✓	1	J,L	85	7	14
	2	✓	2	K,M	40	8	15

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
311ms	A	1	1	2	7	0
	B	1	1	2	7	0
	C	1	3	2	7	0
	D	1	3	1	8	0
	E	1	2	3	5	0
	F	1	2	1	3	0
312a	A	1	3	4	12	0
	B	1	4	1	6	0
	C	1	2	3	7	4
	D	1	3	4	12	0
	E	1	2	3	8	4
	F	1	4	3	6	0
	G	1	1	3	5	0
	H	1	4	2	9	0
	I	1	4	2	9	7
	N	1	4	2	8	0
	O	1	3	2	9	0
	P	1	1	2	8	0
312b	J	1	1	2	5	0
	K	1	2	1	8	0
	L	1	1	2	7	0
	M	1	2	1	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 126s cycle time; 126 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4
311ms	3	68	5	13	
312a	4	46	59	117	35
312b	2	85	40		

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	(untitled)		1236	1650	126	1650	75	20	3.23	1.11	1.73	47.39
	308A	2	(untitled)		1214	1225	126	1225	99	-9	45.46	22.02	104.84	57.14
	311Ao	1	(untitled)		412	1500	126	1419	29	210	0.73	1.48	8.68	12.73
	311C	1	Lockwood inbound	A	715	1800	56	814	88	2	25.42	20.89	72.04	41.57
	311Cx	1	(untitled)		1235	1700	126	1700	73	24	2.80	6.16	12.93	35.68
	311G	2	(untitled)		0	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	311LAS	1	(untitled)	C	263	1400	111	1244	21	326	1.35	1.42	9.45	12.15
	311a	1	(untitled)		297	1500	126	1500	20	355	0.30	0.02	0.24	7.02
	311aa O	1	(untitled)		297	1500	126	1500	20	355	0.30	0.02	0.07	23.94
	311aa bus	2	(untitled)		313	1400	126	1400	22	303	0.37	0.03	0.09	25.09
	311abus	1	(untitled)		313	1000	126	1000	31	188	0.82	0.07	0.73	7.54
	311b	1	(untitled)		665	1500	126	1500	44	103	0.95	0.18	0.37	37.14
	311cn	1	(untitled)		328	1000	126	1000	33	174	0.88	0.08	1.02	6.77
	311co	1	(untitled)		337	1367	126	1367	25	265	0.43	0.04	0.52	6.35
	311csx	1	(untitled)		263	1600	126	1600	16	448	0.22	0.02	0.24	4.78
	311dAS	311dAS	(untitled)		36	367	126	367	10	818	0.53	0.01	0.11	3.89
	311dn	1	(untitled)		515	1300	126	1300	40	127	0.91	0.13	0.65	12.60
	311do	1	(untitled)		337	1400	126	1400	24	274	0.41	0.04	0.19	15.54
	311out	1	(untitled)	B	347	1750	56	792	44	105	25.34	8.04	53.58	37.22
	312A	1	(untitled)	A	336	1750	32	458	73	23	42.78	6.46	107.59	48.37
	312Ae	1	(untitled)		361	1800	126	1147	31	186	10.83	5.31	31.24	20.56
	312Be	1	(untitled)	M	520	1833	39	582	89	1	63.88	18.73	110.16	73.61
	312Bo	1	(untitled)	B	25	1700	5	81	31	191	57.58	1.50	24.94	61.78
	312Cn	1	(untitled)	C	361	1850	55	822	44	105	25.84	8.17	97.28	34.24
	312Co	1	(untitled)	C	51	1140	55	506	10	794	20.68	1.03	12.21	29.08
	312D	1	Lockwood Road inbound	D	389	1855	32	486	80	12	57.63	14.18	19.41	108.03
	312Dx	1	(untitled)		380	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312Eent	1	(untitled)		698	1500	126	934	75	20	21.65	18.15	37.04	39.82
	312En	1	(untitled)	E	605	1800	54	786	77	17	23.74	6.97	116.25	26.87
	312Eo	1	(untitled)	E	93	1134	54	495	19	379	15.80	1.93	32.11	18.93
	312Ex	1	(untitled)		347	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312J	1	(untitled)	J	418	1800	76	1100	38	137	2.83	2.28	30.43	8.22
	312K	1	(untitled)	K	392	1873	37	565	69	30	45.35	12.85	39.93	67.55
	312c BS	1	(untitled)		810	1400	126	1400	58	56	2.89	12.29	78.51	13.31

312c LS	1	(untitled)		205	404	126	404	51	77	4.56	0.43	3.80	11.83
312c ent	1	(untitled)		776	1700	126	1610	48	87	1.20	2.81	20.20	8.98
312c x	3	(untitled)		666	1800	126	1800	37	143	0.59	0.11	0.89	11.77
312x LSx	4	(untitled)		244	1800	126	1800	14	564	0.16	0.01	0.06	12.16
5	2	(untitled)		437	1500	126	1500	29	209	1.30	7.62	44.81	3.62
6	2	(untitled)		520	1800	126	1800	29	212	0.41	0.06	0.40	10.61
AS	1	(untitled)		245	1500	126	1500	16	451	0.23	0.02	0.26	3.91
AS1	1	(untitled)		0	1800	126	1800	0	Unrestricted	0.00	0.00	0.00	0.00
AS2	1	(untitled)		363	1500	126	1500	24	272	0.38	0.04	0.06	35.46
AS3	1	(untitled)		219	693	126	693	32	185	1.20	0.07	0.15	34.20
ASin	1	(untitled)		520	1700	126	1700	31	194	0.47	0.07	0.39	10.93
CS 2	1	(untitled)	D	610	1808	47	689	89	2	54.81	22.94	347.10	59.37
QML	1	(untitled)		186	546	126	546	34	164	1.70	0.09	0.20	31.70
QMLx	1	(untitled)		32	1800	126	1800	2	4963	0.02	0.00	0.00	12.02

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311ms	1	✓	1	A,B,C	75	5	56	1	7
	2	✓	3	F,E	10	13	3	1	3
	3	✓	4	D,F,C	21	68	47	1	7
312a	1	✓	1	I,H,N,O,P,F,G	54	59	5	1	1
	2	✓	2	F,E,C,G	67	117	50	1	3
	3	✓	3	D,O,A	3	35	32	1	14
	4	✓	4	B,N,H,I,F,O	44	46	2	1	1
312b	1	✓	1	J,L	92	40	74	7	7
	2	✓	2	K,M	48	85	37	7	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311ms	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	3	3	0	0	Unknown
	F	F	5	300	0	0	Unknown
	G	G	1	1	0	0	Unknown
312a	A	A	14	300	0	0	Unknown
	B	B	2	7	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	5	300	0	0	Pedestrian
	G	G	7	300	0	0	Unknown
	H	H	7	300	0	0	Unknown
	I	I	7	300	0	0	Unknown
	N	N	1	300	0	0	Unknown
312b	O	O	5	300	0	0	Pedestrian
	P	P	1	5	0	0	Pedestrian
	J	J	7	300	0	0	Unknown
	K	K	7	300	0	0	Unknown
	L	L	5	300	0	0	Unknown
	M	M	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1		368.00	PDM	0.00	Normal	✓			Sum of lanes	1650	100	100
308A	2		120.00	CTM	21.00	Normal	✓			Sum of lanes	1225	100	100
311Ao	1		100.00	CTM	17.00	Normal	✓			Sum of lanes	1500	100	100
311C	1		166.00	CTM	29.00	Normal	✓	✓		Sum of lanes	1800	100	100
311Cx	1		274.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
311G	2		20.00	NetworkDefault	0.00	Normal	✓					100	100
311LAS	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1400	100	100
311a	1		56.00	CTM	10.00	Normal	✓			Sum of lanes	1500	100	100
311aa O	1		197.00	CTM	36.00	Normal	✓			Sum of lanes	1500	100	100
311aa bus	2		206.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311abus	1		56.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311b	1		275.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
311cn	1		45.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311co	1		45.00	NetworkDefault	0.00	Normal	✓		✓	Sum of lanes	1200	100	100
311csx	1		38.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1600	100	100
311dAS	311dAS		28.00	NetworkDefault	0.00	Normal			✓			100	100
311dn	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1300	100	100
311do	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311out	1		99.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1750	100	100
312A	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Ae	1		87.00	CTM	17.00	Normal	✓			Sum of lanes	1800	100	100
312Be	1		87.00	CTM	17.00	Normal	✓	✓		Sum of lanes	1833	100	100
312Bo	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1700	100	100
312Cn	1		70.00	CTM	8.00	Normal	✓	✓		Sum of lanes	1850	100	100
312Co	1		70.00	Flare	8.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312D	1		420.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1855	100	100
312Dx	1		100.00	NetworkDefault	0.00	Normal						100	100

312Eent	1		203.00	PDM	49.00	Normal	✓			Sum of lanes	1500	100	100
312En	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1800	100	100
312Eo	1		35.00	Flare	6.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312Ex	1		100.00	NetworkDefault	0.00	Normal						100	100
312J	1		43.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	99999
312K	1		185.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1873	100	100
312c BS	1		90.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
312c LS	1		65.00	NetworkDefault	0.00	Normal			✓			100	100
312c ent	1		80.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
312c x	3		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
312x LSx	4		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
5	2		18.00	CTM	17.00	Normal	✓			Sum of lanes	1500	100	100
6	2		85.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS	1		35.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS1	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS2	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS3	1		275.00	NetworkDefault	0.00	Normal			✓			100	100
ASin	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
CS 2	1		38.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1808	100	100
QML	1	✓	250.00	NetworkDefault	0.00	Normal			✓			100	100
QMLx	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Pedestrian Crossings: Pedestrian summary

Time Segment	Pedestrian crossing	Side	Calculated Flow Entering (Ped/hr)	Degree of saturation (%)	Actual green (s (per cycle))	Effective green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)
08:00-09:00	312F	1	22	0	76	76	10.12	0.31
		2	22	0	76	76	10.12	0.31
	312G	1	22	1	22	23	42.51	0.63
		2	22	1	22	23	42.51	0.63
	312H	1	22	2	15	16	48.45	0.67
		2	22	2	15	16	48.45	0.67
	312I	1	22	0	66	67	14.05	0.36
		2	22	0	66	67	14.05	0.36
	312K	1	22	1	16	17	47.58	0.67
		2	22	1	16	17	47.58	0.67
	312L	1	0	0	74	75	0.00	0.00
		2	0	0	74	75	0.00	0.00
	312o	1	0	0	59	59	0.00	0.00
		2	0	0	59	59	0.00	0.00
	312p	1	0	0	5	5	0.00	0.00
		2	0	0	5	5	0.00	0.00
	7	1	0	0	3	4	0.00	0.00
		2	0	0	3	4	0.00	0.00
	8	1	0	0	60	61	0.00	0.00
		2	0	0	60	61	0.00	0.00

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	75	20	1236	1650	126	3.23	1.11	1.73	15.74	0.00	15.74
	308A	2	99	-9	1214	1225	126	45.46	22.02	104.84	217.71	9.00	226.71
	311Ao	1	29	210	412	1500	126	0.73	1.48	8.68	1.19	0.28	1.47
	311C	1	88	2	715	1800	56	25.42	20.89	72.04	71.69	5.42	77.12
	311Cx	1	73	24	1235	1700	126	2.80	6.16	12.93	13.64	0.42	14.06
	311G	2	0	Unrestricted	0	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	311LAS	1	21	326	263	1400	111	1.35	1.42	9.45	1.40	0.38	1.78
	311a	1	20	355	297	1500	126	0.30	0.02	0.24	0.35	0.00	0.35
	311aa O	1	20	355	297	1500	126	0.30	0.02	0.07	0.35	0.00	0.35
	311aa bus	2	22	303	313	1400	126	0.37	0.03	0.09	0.46	0.00	0.46
	311abus	1	31	188	313	1000	126	0.82	0.07	0.73	1.01	0.00	1.01
	311b	1	44	103	665	1500	126	0.95	0.18	0.37	2.50	0.00	2.50
	311cn	1	33	174	328	1000	126	0.88	0.08	1.02	1.14	0.00	1.14
	311co	1	25	265	337	1367	126	0.43	0.04	0.52	0.57	0.00	0.57
	311csx	1	16	448	263	1600	126	0.22	0.02	0.24	0.23	0.00	0.23
	311dAS	311dAS	10	818	36	367	126	0.53	0.01	0.11	0.08	0.00	0.08
	311dn	1	40	127	515	1300	126	0.91	0.13	0.65	1.84	0.00	1.84
	311do	1	24	274	337	1400	126	0.41	0.04	0.19	0.54	0.00	0.54
	311out	1	44	105	347	1750	56	25.34	8.04	53.58	34.68	2.87	37.55
	312A	1	73	23	336	1750	32	42.78	6.46	107.59	56.69	1.30	58.00
	312Ae	1	31	186	361	1800	126	10.83	5.31	31.24	15.42	2.07	17.48
	312Be	1	89	1	520	1833	39	63.88	18.73	110.16	131.02	7.66	138.68
	312Bo	1	31	191	25	1700	5	57.58	1.50	24.94	5.68	0.32	6.00
	312Cn	1	44	105	361	1850	55	25.84	8.17	97.28	36.79	2.93	39.72
	312Co	1	10	794	51	1140	55	20.68	1.03	12.21	4.16	0.36	4.52
	312D	1	80	12	389	1855	32	57.63	14.18	19.41	88.43	5.01	93.44
	312Dx	1	0	Unrestricted	380	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	75	20	698	1500	126	21.65	18.15	37.04	59.61	11.14	70.76
	312En	1	77	17	605	1800	54	23.74	6.97	116.25	56.66	4.48	61.14
	312Eo	1	19	379	93	1134	54	15.80	1.93	32.11	5.80	0.58	6.38
	312Ex	1	0	Unrestricted	347	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	38	137	418	1800	76	2.83	2.28	30.43	4.66	477.01	481.67
	312K	1	69	30	392	1873	37	45.35	12.85	39.93	70.11	4.53	74.64
	312c BS	1	58	56	810	1400	126	2.89	12.29	78.51	9.22	3.23	12.45
	312c LS	1	51	77	205	404	126	4.56	0.43	3.80	3.69	0.12	3.80
	312c ent	1	48	87	776	1700	126	1.20	2.81	20.20	3.66	0.88	4.54
	312c x	3	37	143	666	1800	126	0.59	0.11	0.89	1.54	0.00	1.54

	312x LSx	4	14	564	244	1800	126	0.16	0.01	0.06	0.15	0.00	0.15
	5	2	29	209	437	1500	126	1.30	7.62	44.81	2.24	0.39	2.63
	6	2	29	212	520	1800	126	0.41	0.06	0.40	0.83	0.00	0.83
	AS	1	16	451	245	1500	126	0.23	0.02	0.26	0.23	0.00	0.23
	AS1	1	0	Unrestricted	0	1800	126	0.00	0.00	0.00	0.00	0.00	0.00
	AS2	1	24	272	363	1500	126	0.38	0.04	0.06	0.55	0.00	0.55
	AS3	1	32	185	219	693	126	1.20	0.07	0.15	1.04	0.00	1.04
	ASin	1	31	194	520	1700	126	0.47	0.07	0.39	0.96	0.00	0.96
	CS 2	1	89	2	610	1808	47	54.81	22.94	347.10	131.89	8.07	139.96
	QML	1	34	164	186	546	126	1.70	0.09	0.20	1.25	0.00	1.25
	QMLx	1	2	4963	32	1800	126	0.02	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (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 (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	1	1	1236	1236	0		1650	1650	75		20	0.17	126	126
	308A	2	1214	1214	0		1225	1225	99	✓	-9	0.16	126	126
	311Ao	1	412	412	0		1500	1419	29		210	0.00	126	126
	311C	1	715	715	0		1800	814	88		2	0.87	56	57
	311Cx	1	1235	1235	0		1700	1700	73		24	0.26	126	126
	311G	2	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	126	126
	311LAS	1	263	263	0		1400	1244	21		326	0.00	111	112
	311a	1	297	297	0		1500	1500	20		355	0.00	126	126
	311aa O	1	297	297	0		1500	1500	20		355	0.00	126	126
	311aa bus	2	313	313	0		1400	1400	22		303	0.00	126	126
	311abus	1	313	313	0		1000	1000	31		188	0.00	126	126
	311b	1	665	665	0		1500	1500	44		103	0.00	126	126
	311cn	1	328	328	0		1000	1000	33		174	0.00	126	126
	311co	1	337	337	0		1367	1367	25		265	0.00	126	126
	311csx	1	263	263	0		1600	1600	16		448	0.20	126	126
	311dAS	311dAS	36	36	0		367	367	10		810	0.00	126	126
	311dn	1	515	515	0		1300	1300	40		127	0.00	126	126
	311do	1	337	337	0		1400	1400	24		274	0.00	126	126
	311out	1	347	347	0		1750	792	44		105	0.00	56	57
	312A	1	336	336	0		1750	458	73		23	0.73	32	33
	312Ae	1	361	361	0		1800	1147	31		186	0.03	126	126
	312Be	1	520	520	0		1833	582	89		1	0.04	39	40
	312Bo	1	25	25	0		1700	81	31		191	0.75	5	6
	312Cn	1	361	361	0		1850	822	44		105	0.10	55	56
	312Co	1	51	51	0		1140	506	10		794	0.10	55	56
	312D	1	389	389	0		1855	486	80		12	0.00	32	33
	312Dx	1	380	380	0		Unrestricted	Unrestricted	0		Unrestricted	1.17	126	126
	312Eent	1	698	698	0		1500	934	75		20	0.00	126	126
	312En	1	605	605	0		1800	786	77		17	0.71	54	55
	312Eo	1	93	93	0		1134	495	19		379	0.71	54	55
	312Ex	1	347	347	0		Unrestricted	Unrestricted	0		Unrestricted	1.00	126	126
	312J	1	418	418	0		1800	1100	38		137	0.94	76	77
	312K	1	392	392	0		1873	565	69		30	0.09	37	38
	312c BS	1	810	810	0		1400	1400	58		56	0.67	126	126
	312c LS	1	205	205	0		404	404	51		77	0.00	126	126
	312c ent	1	776	776	0		1700	1610	48		87	0.00	126	126
	312c x	3	666	666	0		1800	1800	37		143	0.62	126	126
	312x LSx	4	244	244	0		1800	1800	14		564	0.26	126	126
	5	2	437	437	0		1500	1500	29		209	0.81	126	126
	6	2	520	520	0		1800	1800	29		212	1.30	126	126
	AS	1	245	245	0		1500	1500	16		451	0.03	126	126
	AS1	1	0	0	0		1800	1800	0		Unrestricted	0.00	126	126
	AS2	1	363	363	0		1500	1500	24		272	0.01	126	126
	AS3	1	219	219	0		693	693	32		185	0.00	126	126
	ASin	1	520	520	0		1700	1700	31		194	0.00	126	126
	CS 2	1	610	610	0		1808	689	89		2	0.00	47	48
	QML	1	186	186	0		546	546	34		164	0.00	126	126
	QMLx	1	32	32	0		1800	1800	2		4963	0.02	126	126

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	44.16	3.23	0.00	1.11	15.74	15.74	0.00	0.00	0.00	0.00	0.00
	308A	2	11.67	45.46	0.93	14.40	217.71	217.71	38.85	93.16	378.54	9.00	9.00
	311Ao	1	12.00	0.73	0.02	0.06	1.19	1.19	5.35	20.34	1.69	0.28	0.28
	311C	1	16.14	25.42	2.11	2.94	71.69	71.69	39.75	202.73	81.48	5.42	5.42
	311Cx	1	32.88	2.80	0.00	0.96	13.64	13.64	2.70	6.11	27.21	0.42	0.42
	311G	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	311LAS	1	10.80	1.35	0.07	0.03	1.40	1.40	11.42	29.22	0.81	0.38	0.38
	311a	1	6.72	0.30	0.00	0.02	0.35	0.35	0.00	0.00	0.00	0.00	0.00
	311aa O	1	23.64	0.30	0.00	0.02	0.35	0.35	0.00	0.00	0.00	0.00	0.00
	311aa bus	2	24.72	0.37	0.00	0.03	0.46	0.46	0.00	0.00	0.00	0.00	0.00
	311abus	1	6.72	0.82	0.00	0.07	1.01	1.01	0.00	0.00	0.00	0.00	0.00
	311b	1	36.19	0.95	0.00	0.18	2.50	2.50	0.00	0.00	0.00	0.00	0.00
	311cn	1	5.90	0.88	0.00	0.08	1.14	1.14	0.00	0.00	0.00	0.00	0.00
	311co	1	5.92	0.43	0.00	0.04	0.57	0.57	0.00	0.00	0.00	0.00	0.00
	311csx	1	4.56	0.22	0.00	0.02	0.23	0.23	0.00	0.00	0.00	0.00	0.00
	311dAS	311dAS	3.36	0.53	0.00	0.01	0.08	0.08	0.00	0.00	0.00	0.00	0.00
	311dn	1	11.69	0.91	0.00	0.13	1.84	1.84	0.00	0.00	0.00	0.00	0.00
	311do	1	15.13	0.41	0.00	0.04	0.54	0.54	0.00	0.00	0.00	0.00	0.00
	311out	1	11.88	25.34	2.27	0.17	34.68	34.68	66.01	224.18	4.86	2.87	2.87
	312A	1	5.59	42.78	3.01	0.98	56.69	56.69	54.72	156.46	27.41	1.30	1.30
	312Ae	1	9.73	10.83	1.01	0.07	15.42	15.42	39.66	141.12	2.06	2.07	2.07
	312Be	1	9.73	63.88	5.92	3.31	131.02	131.02	102.04	440.34	90.28	7.66	7.66
	312Bo	1	4.20	57.58	0.33	0.07	5.68	5.68	102.87	23.81	1.91	0.32	0.32
	312Cn	1	8.40	25.84	2.42	0.17	36.79	36.79	64.67	228.57	4.88	2.93	2.93
	312Co	1	8.40	20.68	0.29	0.01	4.16	4.16	56.99	28.90	0.16	0.36	0.36
	312D	1	50.40	57.63	4.69	1.53	88.43	88.43	102.67	356.74	42.63	5.01	5.01
	312Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	18.16	21.65	3.11	1.09	59.61	59.61	70.79	463.34	30.79	11.14	11.14

312En	1	3.13	23.74	2.73	1.26	56.66	56.66	32.85	163.27	35.49	4.48	4.48
312Eo	1	3.13	15.80	0.39	0.02	5.80	5.80	27.65	25.10	0.62	0.58	0.58
312Ex	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
312J	1	5.39	2.83	0.21	0.12	4.66	4.66	15.07	59.67	3.32	0.48	477.01
312K	1	22.20	45.35	4.16	0.77	70.11	70.11	92.14	339.39	21.80	4.53	4.53
312c BS	1	10.42	2.89	0.25	0.40	9.22	9.22	31.46	232.36	22.46	3.23	3.23
312c LS	1	7.27	4.56	0.00	0.26	3.69	3.69	3.96	0.78	7.34	0.12	0.12
312c ent	1	7.78	1.20	0.03	0.22	3.66	3.66	5.92	39.56	6.38	0.88	0.88
312c x	3	11.18	0.59	0.00	0.11	1.54	1.54	0.00	0.00	0.00	0.00	0.00
312x LSx	4	12.00	0.16	0.00	0.01	0.15	0.15	0.00	0.00	0.00	0.00	0.00
5	2	2.33	1.30	0.10	0.06	2.24	2.24	8.22	34.23	1.71	0.39	0.39
6	2	10.20	0.41	0.00	0.06	0.83	0.83	0.00	0.00	0.00	0.00	0.00
AS	1	3.67	0.23	0.00	0.02	0.23	0.23	0.00	0.00	0.00	0.00	0.00
AS1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AS2	1	35.08	0.38	0.00	0.04	0.55	0.55	0.00	0.00	0.00	0.00	0.00
AS3	1	33.00	1.20	0.00	0.07	1.04	1.04	0.00	0.00	0.00	0.00	0.00
ASin	1	10.47	0.47	0.00	0.07	0.96	0.96	0.00	0.00	0.00	0.00	0.00
CS 2	1	4.56	54.81	6.17	3.11	131.89	131.89	105.49	557.68	85.80	8.07	8.07
QML	1	30.00	1.70	0.00	0.09	1.25	1.25	0.00	0.00	0.00	0.00	0.00
QMLx	1	12.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s per cycle)	Wasted time blocking back (s per cycle)	Wasted time total (s per cycle)	Estimated blocking
06:00-09:00	1	1	0.00	1.11	64.00	1.73	0.00	0.00	0.00			0.00	0.00	0.00	
	308A	2	0.00	22.02	21.00	104.84	0.14	0.00	0.00			0.00	0.00	0.00	
	311Ao	1	0.00	1.48	17.00	8.68	0.00	0.00	0.00			0.00	6.79	6.79	
	311C	1	0.00	20.89	29.00	72.04	0.00	0.00	0.00	2.94	7.98	0.00	0.00	0.00	
	311Cx	1	0.00	6.16	47.65	12.93	0.00	0.00	0.00			0.00	0.00	0.00	
	311G	2	0.00	0.00	3.48	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	311LAS	1	0.00	1.42	15.00	9.45	0.00	0.00	0.00	0.03	1.05	0.00	0.00	0.00	
	311a	1	0.00	0.02	10.00	0.24	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa O	1	0.00	0.02	36.00	0.07	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa bus	2	0.00	0.03	35.83	0.09	0.00	0.00	0.00			0.00	0.00	0.00	
	311abus	1	0.00	0.07	9.74	0.73	0.00	0.00	0.00			0.00	0.00	0.00	
	311b	1	0.00	0.18	47.83	0.37	0.00	0.00	0.00			0.00	0.00	0.00	
	311cn	1	0.00	0.08	7.83	1.02	0.00	0.00	0.00			0.00	0.00	0.00	
	311co	1	0.00	0.04	7.83	0.52	0.00	0.00	0.00			0.00	0.00	0.00	
	311csx	1	0.00	0.02	6.61	0.24	0.00	0.00	0.00			12.00	0.00	12.00	
	311dAS	311dAS	0.00	0.01	4.87	0.11	0.00	0.00	0.00			126.00	0.00	126.00	
	311dn	1	0.00	0.13	20.00	0.65	0.00	0.00	0.00			0.00	0.00	0.00	
	311do	1	0.00	0.04	20.00	0.19	0.00	0.00	0.00			0.00	0.00	0.00	
	311out	1	0.00	8.04	15.00	53.58	0.00	0.00	0.00	0.17	7.30	0.00	0.00	0.00	
	312A	1	0.00	6.46	6.00	107.59	0.16	0.16	0.00	0.98	6.46	0.00	0.00	0.00	
	312Ae	1	0.00	5.31	17.00	31.24	0.00	0.00	0.00			0.00	45.69	45.69	
	312Be	1	0.00	18.73	17.00	110.16	0.22	0.22	0.00	3.31	16.74	0.00	0.00	0.00	
	312Bo	1	0.00	1.50	6.00	24.94	0.00	0.00	0.00	0.07	0.90	4.00	0.00	4.00	
	312Cn	1	0.00	8.17	8.40	97.28	0.00	0.00	0.00	0.17	7.89	0.00	0.00	0.00	
	312Co	1	0.00	1.03	8.40	12.21	0.00	0.00	0.00	0.01	1.00	49.00	0.00	49.00	
	312D	1	0.00	14.18	73.04	19.41	0.00	0.00	0.00	1.53	11.58	0.00	0.00	0.00	
	312Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			64.00	0.00	64.00	
	312Eent	1	0.00	18.15	49.00	37.04	0.00	0.00	0.00			0.00	47.56	47.56	
	312En	1	0.00	6.97	6.00	116.25	0.36	0.36	0.00	1.26	6.97	0.00	0.00	0.00	
	312Eo	1	0.00	1.93	6.00	32.11	0.00	0.00	0.00	0.02	0.90	5.00	0.00	5.00	
	312Ex	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			64.00	0.00	64.00	
	312J	1	0.00	2.28	7.48	30.43	0.00	0.00	0.00	0.12	2.00	5.00	0.00	5.00	
	312K	1	0.00	12.85	32.17	39.93	0.00	0.00	0.00	0.77	9.95	0.00	0.00	0.00	
	312c BS	1	0.00	12.29	15.65	78.51	0.00	0.00	0.00			3.00	0.00	3.00	
	312c LS	1	0.00	0.43	11.30	3.80	0.00	0.00	0.00			0.00	0.00	0.00	
	312c ent	1	0.00	2.81	13.91	20.20	0.00	0.00	0.00			0.00	6.68	6.68	
	312c x	3	0.00	0.11	12.17	0.89	0.00	0.00	0.00			0.00	0.00	0.00	
	312x LSx	4	0.00	0.01	17.39	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
	5	2	0.00	7.62	17.00	44.81	0.00	0.00	0.00			21.00	0.00	21.00	
	6	2	0.00	0.06	14.78	0.40	0.00	0.00	0.00			78.00	0.00	78.00	
	AS	1	0.00	0.02	6.09	0.26	0.00	0.00	0.00			0.00	0.00	0.00	
	AS1	1	0.00	0.00	60.00	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	AS2	1	0.00	0.04	60.00	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
	AS3	1	0.00	0.07	47.83	0.15	0.00	0.00	0.00			0.00	97.00	97.00	
	ASin	1	0.00	0.07	17.39	0.39	0.00	0.00	0.00			0.00	97.00	97.00	
	CS 2	1	0.00	22.94	6.61	347.10	6.31	0.00	0.00	3.11	16.33	0.00	0.00	0.00	
	QML	1	0.00	0.09	43.48	0.20	0.00	0.00	0.00			0.00	0.00	0.00	
	QMLx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			126.00	0.00	126.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
	1	1	454.85	16.27	17.37	47.39
	308A	2	145.68	19.27	4.70	57.14
	311Ao	1	41.20	1.46	17.57	12.73
	311C	1	118.69	8.26	8.93	41.57
	311Cx	1	338.39	12.24	17.18	35.68
	311G	2	0.00	0.00	0.00	0.00
	311LAS	1	23.67	0.89	16.57	12.15
	311a	1	16.63	0.58	17.85	7.02
	311aa O	1	58.51	1.97	18.41	23.94
	311aa bus	2	64.48	2.18	18.37	25.09
	311abus	1	17.53	0.66	16.62	7.54
	311b	1	182.88	6.86	16.56	37.14
	311cn	1	14.76	0.62	14.86	6.77
	311co	1	15.17	0.59	15.85	6.35
	311csx	1	9.99	0.35	17.78	4.78
	311dAS	311dAS	1.01	0.04	16.09	3.89
	311dn	1	59.23	1.80	20.42	12.60
	311do	1	38.76	1.45	16.55	15.54
	311out	1	34.35	3.59	5.95	37.22
	312A	1	11.76	4.51	1.62	48.37
	312Ae	1	31.41	2.06	9.47	20.56

08:00-09:00	312Be	1	45.24	10.63	2.64	73.61
	312Bo	1	0.87	0.43	1.27	61.78
	312Cn	1	25.27	3.43	4.57	34.24
	312Co	1	3.57	0.41	5.39	29.08
	312D	1	163.38	11.67	8.70	108.03
	312Dx	1	38.00	1.27	18.64	12.00
	312Eent	1	141.69	7.72	11.40	39.82
	312En	1	21.18	4.52	2.91	26.87
	312Eo	1	3.26	0.49	4.14	18.93
	312Ex	1	34.70	1.16	18.64	12.00
	312J	1	17.97	0.95	11.70	8.22
	312K	1	72.52	7.35	6.13	67.55
	312c BS	1	72.90	2.99	15.13	13.31
	312c LS	1	13.33	0.67	12.29	11.83
	312c ent	1	62.08	1.94	19.94	8.98
	312c x	3	46.62	2.18	13.30	11.77
	312x LSx	4	24.40	0.82	18.40	12.16
	5	2	7.87	0.44	11.11	3.62
	6	2	44.20	1.53	17.93	10.61
	AS	1	8.57	0.27	20.05	3.91
	AS1	1	0.00	0.00	0.00	0.00
	AS2	1	125.23	3.58	21.76	35.46
	AS3	1	60.22	2.08	17.99	34.20
	ASin	1	52.00	1.58	20.46	10.93
	CS 2	1	23.18	10.06	1.43	59.37
	QML	1	46.50	1.64	17.64	31.70
	QMLx	1	3.20	0.11	18.61	12.02

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.00	1.11			1.00	0.00	15.74	15.74
	308A	2	0.00	0.00	✓	0.00	26.87			1.00	0.00	226.71	226.71
	311Ao	1	0.00	0.00	✓	0.00	1.48			1.00	0.00	1.47	1.47
	311C	1	0.00	0.00	✓	0.00	21.00	3.04	8.09	1.00	0.00	77.12	77.12
	311Cx	1	0.00	0.00	✓	0.00	6.17			1.00	0.00	14.06	14.06
	311G	2	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	311LAS	1	0.00	0.00	✓	0.00	1.42	0.03	1.05	1.00	0.00	1.78	1.78
	311a	1	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.35	0.35
	311aa O	1	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.35	0.35
	311aa bus	2	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.46	0.46
	311abus	1	0.00	0.00	✓	0.00	0.07			1.00	0.00	1.01	1.01
	311b	1	0.00	0.00	✓	0.00	0.18			1.00	0.00	2.50	2.50
	311cn	1	0.00	0.00	✓	0.00	0.08			1.00	0.00	1.14	1.14
	311co	1	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.57	0.57
	311csx	1	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.23	0.23
	311dAS	311dAS	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.08	0.08
	311dn	1	0.00	0.00	✓	0.00	0.13			1.00	0.00	1.84	1.84
	311do	1	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.54	0.54
	311out	1	0.00	0.00	✓	0.00	8.04	0.17	7.30	1.00	0.00	37.55	37.55
	312A	1	0.00	0.00	✓	0.00	6.47	0.99	6.47	1.00	0.00	58.00	58.00
	312Ae	1	0.00	0.00	✓	0.00	5.31			1.00	0.00	17.48	17.48
	312Be	1	0.00	0.00	✓	0.00	18.93	3.50	16.94	1.00	0.00	138.68	138.68
	312Bo	1	0.00	0.00	✓	0.00	1.50	0.07	0.90	1.00	0.00	6.00	6.00
	312Cn	1	0.00	0.00	✓	0.00	8.17	0.17	7.89	1.00	0.00	39.72	39.72
	312Co	1	0.00	0.00	✓	0.00	1.03	0.01	1.00	1.00	0.00	4.52	4.52
	312D	1	0.00	0.00	✓	0.00	14.21	1.57	11.62	1.00	0.00	93.44	93.44
	312Dx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312Eent	1	0.00	0.00	✓	0.00	18.16			1.00	0.00	70.76	70.76
	312En	1	0.00	0.00	✓	0.00	6.99	1.27	6.99	1.00	0.00	61.14	61.14
	312Eo	1	0.00	0.00	✓	0.00	1.93	0.02	0.90	1.00	0.00	6.38	6.38
	312Ex	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312J	1	0.00	0.00	✓	0.00	2.28	0.12	2.00	1.00	0.00	5.14	481.67
	312K	1	0.00	0.00	✓	0.00	12.85	0.78	9.96	1.00	0.00	74.64	74.64
	312c BS	1	0.00	0.00	✓	0.00	12.29			1.00	0.00	12.45	12.45
	312c LS	1	0.00	0.00	✓	0.00	0.43			1.00	0.00	3.80	3.80
	312c ent	1	0.00	0.00	✓	0.00	2.81			1.00	0.00	4.54	4.54
	312c x	3	0.00	0.00	✓	0.00	0.11			1.00	0.00	1.54	1.54
	312x LSx	4	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.15	0.15
	5	2	0.00	0.00	✓	0.00	7.62			1.00	0.00	2.63	2.63
	6	2	0.00	0.00	✓	0.00	0.06			1.00	0.00	0.83	0.83
	AS	1	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.23	0.23
	AS1	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	AS2	1	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.55	0.55
	AS3	1	0.00	0.00	✓	0.00	0.07			1.00	0.00	1.04	1.04
	ASin	1	0.00	0.00	✓	0.00	0.07			1.00	0.00	0.96	0.96
	CS 2	1	0.00	0.00	✓	0.00	23.08	3.26	16.47	1.00	0.00	139.96	139.96
	QML	1	0.00	0.00	✓	0.00	0.09			1.00	0.00	1.25	1.25
	QMLx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle)	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
	312F	1	0	22	11000	76	10.12	0.31	0.88	0.88
		2	0	22	11000	76	10.12	0.31	0.88	0.88
	312G	1	1	22	11000	22	42.51	0.63	3.69	3.69
		2	1	22	11000	22	42.51	0.63	3.69	3.69
	312H	1	2	22	11000	15	48.45	0.67	4.20	4.20

08:00-09:00		2	2	22	11000	15	48.45	0.67	4.20	4.20
	312I	1	0	22	11000	66	14.05	0.36	1.22	1.22
		2	0	22	11000	66	14.05	0.36	1.22	1.22
	312K	1	1	22	11000	16	47.58	0.67	4.13	4.13
		2	1	22	11000	16	47.58	0.67	4.13	4.13
	312L	1	0	0	11000	74	0.00	0.00	0.00	0.00
		2	0	0	11000	74	0.00	0.00	0.00	0.00
	312o	1	0	0	11000	59	0.00	0.00	0.00	0.00
		2	0	0	11000	59	0.00	0.00	0.00	0.00
	312p	1	0	0	11000	5	0.00	0.00	0.00	0.00
		2	0	0	11000	5	0.00	0.00	0.00	0.00
	7	1	0	0	11000	3	0.00	0.00	0.00	0.00
		2	0	0	11000	3	0.00	0.00	0.00	0.00
	8	1	0	0	11000	60	0.00	0.00	0.00	0.00
		2	0	0	11000	60	0.00	0.00	0.00	0.00

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	312F	1	22	22	0		11000	6635	0		27043	0.00	76	76
		2	22	22	0		11000	6635	0		27043	0.00	76	76
	312G	1	22	22	0		11000	2008	1		8114	0.00	22	23
		2	22	22	0		11000	2008	1		8114	0.00	22	23
	312H	1	22	22	0		11000	1397	2		5614	0.00	15	16
		2	22	22	0		11000	1397	2		5614	0.00	15	16
	312I	1	22	22	0		11000	5849	0		23829	0.00	66	67
		2	22	22	0		11000	5849	0		23829	0.00	66	67
	312K	1	22	22	0		11000	1484	1		5971	0.00	16	17
		2	22	22	0		11000	1484	1		5971	0.00	16	17
	312L	1	0	0	0		11000	6548	0		Unrestricted	0.00	74	75
		2	0	0	0		11000	6548	0		Unrestricted	0.00	74	75
	312o	1	0	0	0		11000	5151	0		Unrestricted	0.00	59	59
		2	0	0	0		11000	5151	0		Unrestricted	0.00	59	59
	312p	1	0	0	0		11000	437	0		Unrestricted	0.00	5	5
		2	0	0	0		11000	437	0		Unrestricted	0.00	5	5
	7	1	0	0	0		11000	349	0		Unrestricted	0.00	3	4
		2	0	0	0		11000	349	0		Unrestricted	0.00	3	4
	8	1	0	0	0		11000	5325	0		Unrestricted	0.00	60	61
		2	0	0	0		11000	5325	0		Unrestricted	0.00	60	61

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)
08:00-09:00	312F	1	4.33	10.12	0.06	0.00	0.88	0.88
		2	4.33	10.12	0.06	0.00	0.88	0.88
	312G	1	3.00	42.51	0.26	0.00	3.69	3.69
		2	3.00	42.51	0.26	0.00	3.69	3.69
	312H	1	3.00	48.45	0.30	0.00	4.20	4.20
		2	3.00	48.45	0.30	0.00	4.20	4.20
	312I	1	5.67	14.05	0.09	0.00	1.22	1.22
		2	5.67	14.05	0.09	0.00	1.22	1.22
	312K	1	3.00	47.58	0.29	0.00	4.13	4.13
		2	3.00	47.58	0.29	0.00	4.13	4.13
	312L	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312o	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312p	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	7	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	8	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
08:00-09:00	312F	1	0.31	10.00	3.06	0.00	0.00	0.00
		2	0.31	10.00	3.06	0.00	0.00	0.00
	312G	1	0.63	10.00	6.29	0.00	0.00	0.00
		2	0.63	10.00	6.29	0.00	0.00	0.00
	312H	1	0.67	10.00	6.72	0.00	0.00	0.00
		2	0.67	10.00	6.72	0.00	0.00	0.00
	312I	1	0.36	10.00	3.61	0.00	0.00	0.00
		2	0.36	10.00	3.61	0.00	0.00	0.00
	312K	1	0.67	10.00	6.66	0.00	0.00	0.00
		2	0.67	10.00	6.66	0.00	0.00	0.00
	312L	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312o	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312p	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	7	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	8	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
	312F	1	0.13	0.09	0.93	14.45
		2	0.13	0.09	0.93	14.45
	312G	1	0.09	0.28	0.20	45.51
		2	0.09	0.28	0.20	45.51
	312H	1	0.09	0.31	0.17	51.45
		2	0.09	0.31	0.17	51.45
	312I	1	0.18	0.12	0.91	19.71
		2	0.18	0.12	0.91	19.71
	312K	1	0.09	0.31	0.18	50.58
		2	0.09	0.31	0.18	50.58

08:00-09:00	312L	2	0.09	0.31	0.18	50.58
		1	0.00	0.00	0.00	0.00
	312o	2	0.00	0.00	0.00	0.00
		1	0.00	0.00	0.00	0.00
	312p	2	0.00	0.00	0.00	0.00
		1	0.00	0.00	0.00	0.00
	7	2	0.00	0.00	0.00	0.00
		1	0.00	0.00	0.00	0.00
	8	2	0.00	0.00	0.00	0.00
		1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
		1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
		1	0.00	0.00	0.00	0.00

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EoTS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	312F	1	0.00	0.00	0.31	1.00	0.00	0.88	0.88
		2	0.00	0.00	0.31	1.00	0.00	0.88	0.88
	312G	1	0.00	0.00	0.63	1.00	0.00	3.69	3.69
		2	0.00	0.00	0.63	1.00	0.00	3.69	3.69
	312H	1	0.00	0.00	0.67	1.00	0.00	4.20	4.20
		2	0.00	0.00	0.67	1.00	0.00	4.20	4.20
	312I	1	0.00	0.00	0.36	1.00	0.00	1.22	1.22
		2	0.00	0.00	0.36	1.00	0.00	1.22	1.22
	312K	1	0.00	0.00	0.67	1.00	0.00	4.13	4.13
		2	0.00	0.00	0.67	1.00	0.00	4.13	4.13
	312L	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	09/07/2020 14:37:15	09/07/2020 14:37:17	08:00	126	1634.07	76.45	99.10	308A/2	1	1	312Be/1	308A/2	308A/2	

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	99	-9	19932	4993	13.45	1057.39	548.44	1605.83

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	2	220	792	32.54	28.24	28.24

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	20152	20152	0		99	✓	-9	5785	5813

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	16.32	13.66	42.24	34.21	1085.63	1085.63	23.55	3867.07	879.61	71.91	548.44

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	347.10	0.00	809.00	300.73	1109.73

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)
08:00-09:00	2838.03	167.79	10.51

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	0.00	1.00	0.00	0.00	1157.54	1634.07

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

From	To																		
	A bcd	A ex	A near	A off	B	A1	A2	A616 in	A616 out	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2
From	A bcd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	59.0	0.0	53.8	0.0	0.0	0.0
	A ex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A near	0.0	0.0	0.0	0.0	28.4	56.5	51.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A off	0.0	0.0	0.0	0.0	0.0	59.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	0.0	92.7	0.0	0.0	0.0	79.0	67.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A1	72.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A2	96.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	128.8	0.0	0.0	0.0	0.0	0.0	0.0
	A616 in	0.0	0.0	0.0	0.0	63.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A616 out	66.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	136.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	92.8	0.0	92.8	0.0	0.0	0.0
	B as	0.0	208.7	0.0	0.0	0.0	0.0	193.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

B wr	0.0	288.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	93.2	0.0	0.0	89.8	0.0	89.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B wr x	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C	0.0	244.3	0.0	0.0	201.9	0.0	225.3	0.0	0.0	95.8	0.0	0.0	95.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C as	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D	0.0	326.0	0.0	0.0	0.0	0.0	309.9	0.0	0.0	138.2	0.0	0.0	137.8	120.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
P1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.5	0.0	0.0	0.0	0.0
P2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.5	0.0	19.7	0.0	0.0	0.0
P3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.7	0.0	14.5	0.0	0.0	0.0
P4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5	0.0	51.5	0.0	0.0
P5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.5	0.0	50.6	0.0
P6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.6	0.0	0.0	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	P5	P4		22		51.45	22	51.45
2	P4	P5		22		51.45	22	51.45
3	P5	P6		22		50.58	22	50.58
4	P6	P5		22		50.58	22	50.58
14	P1	P2		22		45.51	22	45.51
15	P2	P1		22		45.51	22	45.51
23	P4	P3		22		14.45	22	14.45
30	D	C	4		120.03		4	120.03
34	C	D	0		0.00		0	0.00
49	B LS	B wr x	50		23.60		50	23.60
56	A near	B	30		28.41		30	28.41
57	C as	B	0		0.00		0	0.00
58	B LS	D	150		92.82		150	92.82
59	B LS	C	5		92.82		5	92.82
61	P3	P4		22		14.45	22	14.45
62	C	B	1		201.90		1	201.90
63	C	A ex	585		244.29		585	244.29
64	D	A2	5		309.85		5	309.85
65	P2	P3		22		19.71	22	19.71
66	A bod	C	336		58.97		336	58.97
67	B wr	A2	0		0.00		0	0.00
68	B wr	B	0		0.00		0	0.00
69	B LS	B as	0		0.00		0	0.00
70	A2	A2	0		0.00		0	0.00
71	A2	B	0		0.00		0	0.00
72	A2	A ex	0		0.00		0	0.00
73	B LS	A2	0		0.00		0	0.00
74	B LS	B	0		0.00		0	0.00
75	B LS	A ex	0		0.00		0	0.00
76	B as	A2	17		193.26		17	193.26
84	A616 in	A2	0		0.00		0	0.00
85	A616 in	B	1		63.84		1	63.84
86	A616 in	A ex	0		0.00		0	0.00
108	A off	A1	337		59.03		337	59.03
109	A near	A1	313		56.54		313	56.54
110	C as	A1	0		0.00		0	0.00
111	B	A1	15		79.01		15	79.01
191	C	B wr x	12		95.42		12	95.42
192	C	B LS	81		95.81		81	95.81
193	D	B wr x	250		137.77		250	137.77
194	D	B LS	50		138.16		50	138.16
206	B wr	D	179		89.85		179	89.85
207	B wr	C	2		89.85		2	89.85
208	B wr	B LS	50		21.13		50	21.13
230	C as	A ex	0		0.00		0	0.00
232	B	A ex	21		92.70		21	92.70
233	A near	A2	172		51.86		172	51.86
234	B	A2	150		67.16		150	67.16
266	P3	P2		22		19.71	22	19.71
284	A bod	D	51		53.81		51	53.81
285	A bod	B wr x	25		85.96		25	85.96
286	A bod	B LS	0		0.00		0	0.00
294	MSS	B wr x	0		0.00		0	0.00
295	MSS	B LS	0		0.00		0	0.00
296	B wr	B as	520		93.19		520	93.19
300	A1	A bod	297		72.04		297	72.04
302	B as	A bod	0		0.00		0	0.00
303	MSS	A bod	0		0.00		0	0.00
307	A2	B wr x	129		128.85		129	128.85
308	A2	B LS	0		0.00		0	0.00
312	A2	A bod	90		96.23		90	96.23
313	A1	A616 out	313		7.54		313	7.54
314	A616 out	A bod	50		66.18		50	66.18
326	A616 out	B wr x	200		135.97		200	135.97
327	A616 out	B LS	63		136.36		63	136.36
330	C	A2	19		225.35		19	225.35
331	D	B	0		0.00		0	0.00
332	D	A ex	80		326.02		80	326.02
333	B wr	A ex	25		288.02		25	288.02
334	B as	B	0		0.00		0	0.00
335	B as	A ex	503		208.72		503	208.72
336	MSS	A2	0		0.00		0	0.00
337	MSS	B	0		0.00		0	0.00
338	MSS	A ex	0		0.00		0	0.00

Final Prediction Table

Traffic Stream Results

Traffic Stream Results																				
				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.

1	1	(untitled)	311d			1236	1650	126	0.00	75	20	47.39	3.23	0.00	1.11		100	100	0.00	15.74
308A	2	(untitled)				1214 <	1225	126	0.00	99	-9	57.14	45.46	38.85	22.02 +		100	100	0.00	226.71
311Ao	1	(untitled)	311			412	1500	126	6.79	29	210	12.73	0.73	5.35	1.48		100	100	0.00	1.47
311C	1	Lockwood Inbound	311ms	311ms	A	715	1800	56	0.00	88	2	41.57	25.42	39.75	20.89	7.98	100	100	0.00	77.12
311Cx	1	(untitled)	311a			1235	1700	126	0.00	73	24	35.68	2.80	2.70	6.16		100	100	0.00	14.06
311G	2	(untitled)	311ms			0	Unrestricted	126	126.00	0	Unrestricted	0.00	0.00	0.00	0.00		100	100	0.00	0.00
311LAS	1	(untitled)	311ms	311ms	C	263	1400	111	0.00	21	326	12.15	1.35	11.42	1.42	1.05	100	100	0.00	1.78
311a	1	(untitled)	311a			297	1500	126	0.00	20	355	7.02	0.30	0.00	0.02		100	100	0.00	0.35
311aa O	1	(untitled)	311aa			297	1500	126	0.00	20	355	23.94	0.30	0.00	0.02		100	100	0.00	0.35
311aa bus	2	(untitled)	311aa			313	1400	126	0.00	22	303	25.09	0.37	0.00	0.03		100	100	0.00	0.46
311abus	1	(untitled)	311a			313	1000	126	0.00	31	188	7.54	0.82	0.00	0.07		100	100	0.00	1.01
311b	1	(untitled)	311b			665	1500	126	0.00	44	103	37.14	0.95	0.00	0.18		100	100	0.00	2.50
311cn	1	(untitled)	311c			328	1000	126	0.00	33	174	6.77	0.88	0.00	0.08		100	100	0.00	1.14
311co	1	(untitled)	311c			337	1367	126	0.00	25	265	6.35	0.43	0.00	0.04		100	100	0.00	0.57
311csx	1	(untitled)	ASCS			263	1600	126	12.00	16	448	4.78	0.22	0.00	0.02		100	100	0.00	0.23
311dAS	311dAS	(untitled)	311d			36	367	126	126.00	10	818	3.89	0.53	0.00	0.01		100	100	0.00	0.08
311dn	1	(untitled)	311d			515	1300	126	0.00	40	127	12.60	0.91	0.00	0.13		100	100	0.00	1.84
311do	1	(untitled)	311d			337	1400	126	0.00	24	274	15.54	0.41	0.00	0.04		100	100	0.00	0.54
311out	1	(untitled)	311ms	311ms	B	347	1750	56	0.00	44	105	37.22	25.34	66.01	8.04	7.30	100	100	0.00	37.55
312A	1	(untitled)	312a	312a	A	336 <	1750	32	0.00	73	23	48.37	42.78	54.72	6.46 +	6.46	100	100	0.00	58.00
312Ae	1	(untitled)	312b			361	1800	126	45.69	31	186	20.56	10.83	39.66	5.31		100	100	0.00	17.48
312Be	1	(untitled)	312b	312b	M	520 <	1833	39	0.00	89	1	73.61	63.88	102.04	18.73 +	16.74	100	100	0.00	138.68
312Bo	1	(untitled)	312a	312a	B	25	1700	5	4.00	31	191	61.78	57.58	102.87	1.50	0.90	100	100	0.00	6.00
312Cn	1	(untitled)	312a	312a	C	361 <	1850	55	0.00	44	105	34.24	25.84	64.67	8.17 +	7.89	100	100	0.00	39.72
312Co	1	(untitled)	312a	312a	C	51	1140	55	49.00	10	794	29.08	20.68	56.99	1.03	1.00	100	100	0.00	4.52
312D	1	Lockwood Road Inbound	312a	312a	D	389	1855	32	0.00	80	12	108.03	57.63	102.67	14.18	11.58	100	100	0.00	93.44
312Dx	1	(untitled)				380	Unrestricted	126	64.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312Ent	1	(untitled)	312a			698	1500	126	47.56	75	20	39.82	21.65	70.79	18.15		100	100	0.00	70.76
312En	1	(untitled)	312a	312a	E	605 <	1800	54	0.00	77	17	26.87	23.74	32.85	6.97 +	6.97	100	100	0.00	61.14
312Eo	1	(untitled)	312a	312a	E	93	1134	54	5.00	19	379	18.93	15.80	27.65	1.93	0.90	100	100	0.00	6.38
312Ex	1	(untitled)				347	Unrestricted	126	64.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312J	1	(untitled)	312b	312b	J	418	1800	76	5.00	38	137	8.22	2.83	15.07	2.28	2.00	100	99999	0.00	481.67
312K	1	(untitled)	312b	312b	K	392	1873	37	0.00	69	30	67.55	45.35	92.14	12.85	9.95	100	100	0.00	74.64
312c BS	1	(untitled)	312c			810	1400	126	3.00	58	56	13.31	2.89	31.46	12.29		100	100	0.00	12.45
312c LS	1	(untitled)	312c			205	404	126	0.00	51	77	11.83	4.56	3.96	0.43		100	100	0.00	3.80
312c ent	1	(untitled)	312c			776	1700	126	6.68	48	87	8.98	1.20	5.92	2.81		100	100	0.00	4.54
312c x	3	(untitled)				666	1800	126	0.00	37	143	11.77	0.59	0.00	0.11		100	100	0.00	1.54
312x LSx	4	(untitled)				244	1800	126	0.00	14	564	12.16	0.16	0.00	0.01		100	100	0.00	0.15
5	2	(untitled)				437	1500	126	21.00	29	209	3.62	1.30	8.22	7.62		100	100	0.00	2.63
6	2	(untitled)	ASCS			520	1800	126	78.00	29	212	10.61	0.41	0.00	0.06		100	100	0.00	0.83
AS	1	(untitled)	AS			245	1500	126	0.00	16	451	3.91	0.23	0.00	0.02		100	100	0.00	0.23
AS1	1	(untitled)	AS			0	1800	126	126.00	0	Unrestricted	0.00	0.00	0.00	0.00		100	100	0.00	0.00
AS2	1	(untitled)				363	1500	126	0.00	24	272	35.46	0.38	0.00	0.04		100	100	0.00	0.55
AS3	1	(untitled)	ASCS			219	693	126	97.00	32	185	34.20	1.20	0.00	0.07		100	100	0.00	1.04
ASin	1	(untitled)	ASCS			520	1700	126	97.00	31	194	10.93	0.47	0.00	0.07		100	100	0.00	0.96
CS 2	1	(untitled)	311ms	311ms	D	610 <	1808	47	0.00	89	2	59.37	54.81	105.49	22.94 +	16.33	100	100	0.00	139.96
QML	1	(untitled)	AS			186	546	126	0.00	34	164	31.70	1.70	0.00	0.09		100	100	0.00	1.25
QMLx	1	(untitled)				32	1800	126	126.00	2	4963	12.02	0.02	0.00	0.00		100	100	0.00	0.00

Pedestrian Crossing Results

Pedestrian	Side	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PENALTIES		P.I.
				Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)			Delay weighting (%)	Cost of traffic penalties (£ per hr)	
312F	1	(untitled)	312a	312a	F	22	11000	76	0	27043	14.45	10.12	0.31	100	0.00	0.88	0.88
	2	(untitled)	312a	312a	F	22	11000	76	0	27043	14.45	10.12	0.31	100	0.00	0.88	0.88
312G	1	(untitled)		312a	I	22	11000	22	1	8114	45.51	42.51	0.63	100	0.00	3.69	3.69
	2	(untitled)		312a	I	22	11000	22	1	8114	45.51	42.51	0.63	100	0.00	3.69	3.69
312H	1	(untitled)		312a	H	22	11000	15	2	5614	51.45	48.45	0.67	100	0.00	4.20	4.20
	2	(untitled)		312a	H	22	11000	15	2	5614	51.45	48.45	0.67	100	0.00	4.20	4.20
312I	1	(untitled)	312a	312a	G	22	11000	66	0	23829	19.71	14.05	0.36	100	0.00	1.22	1.22
	2	(untitled)	312a	312a	G	22	11000	66	0	23829	19.71	14.05	0.36	100	0.00	1.22	1.22
312K	1	(untitled)		312a	N	22	11000	16	1	5971	50.58	47.58	0.67	100	0.00	4.13	4.13
	2	(untitled)		312a	N	22	11000	16	1	5971	50.58	47.58	0.67	100	0.00	4.13	4.13
312L	1	(untitled)		312b	L	0	11000	74	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00
	2	(untitled)		312b	L	0	11000	74	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00
312o	1	(untitled)		312a	O	0	11000	59	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00
	2	(untitled)		312a	O	0	11000	59	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00
312p	1	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00
	2	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00
7	1	(untitled)	311ms	311ms	E	0	11000	3	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00
	2	(untitled)	311ms	311ms	E	0	11000	3	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00
8	1	(untitled)		311ms	F	0	11000	60	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00
	2	(untitled)		311ms	F	0	11000	60	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	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)
Normal traffic	2836.89	165.57	10.65	40.25	34.21	1057.39	548.44	0.00	1605.83
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians	1.14	2.22	0.32	1.99	0.00	28.24	0.00	0.00	28.24
TOTAL	2838.03	167.79	10.51	42.24	34.21	1085.63	548.44	0.00	1634.07

TRANSYT 15	
Version: 15.5.0.6767 © Copyright TRL Limited, 2016	
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Filename: rrfnbl 2022 PM zJ3 opt 1 Gx5 1.6 E 1in 2 seq5 .t15

Path: C:\Users\andrewrawlinson\Desktop\rr67 jacobs

Report generation date: 09/07/2020 14:41:50

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«A1 - pm : D1 - pm* :
»Summary
»Network Options
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»Arms and Traffic Streams
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»Local OD Matrix - Local Matrix: 1
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»Results - Pedestrian
»Traffic Stream Results
»Pedestrian Crossing Results
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»Point to Point Journey Time
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITDS\AndrewRawlinson
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
			✓		✓	✓	✓	✓	✓	✓	✓		

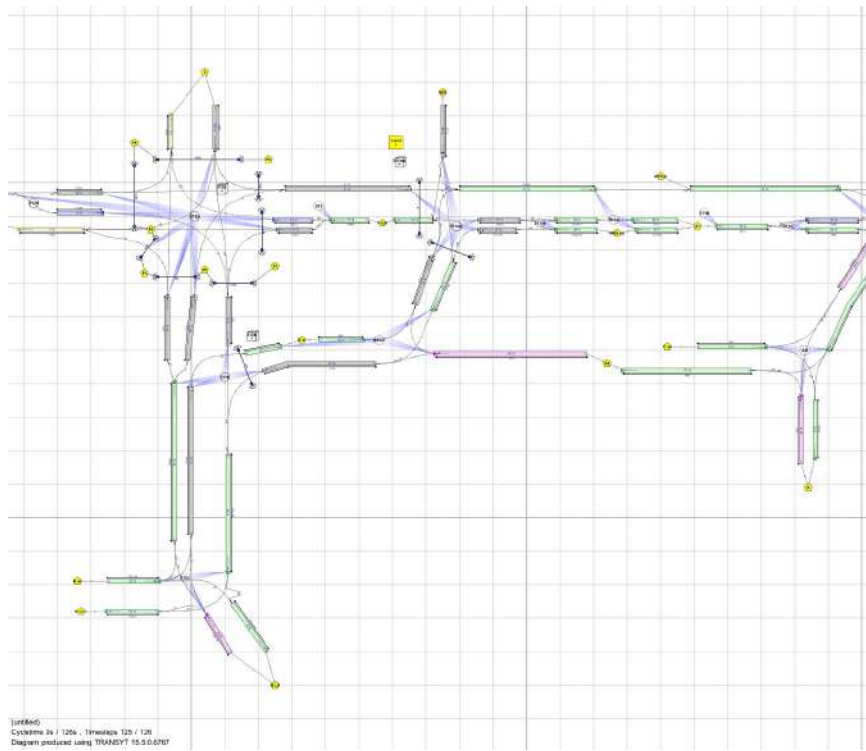
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	mph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



A1 - pm
D1 - pm*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	09/07/2020 14:40:00	09/07/2020 14:40:38	17:00	126	2002.52	83.68	100.14	312D/1	2	3	312D/1	312c BS/1	312D/1	

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
pm		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
pm				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
126		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms*[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.47	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms*[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.47	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	312a, 312b, 311ms

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	(untitled)		311d
308A	(untitled)		
311Ao	(untitled)		311
311C	(untitled)		311ms
311Cx	(untitled)		311a
311G	(untitled)		311ms
311LAS	(untitled)		311ms
311a	(untitled)		311a
311aa O	(untitled)		311aa
311aa bus	(untitled)		311aa
311abus	(untitled)		311a
311b	(untitled)		311b
311cn	(untitled)		311c
311co	(untitled)		311c
311csx	(untitled)		ASCS
311dAS	(untitled)		311d
311dn	(untitled)		311d
311do	(untitled)		311d
311out	(untitled)		311ms
312A	(untitled)		312a
312Ae	(untitled)		312b
312Be	(untitled)		312b
312Bo	(untitled)		312a
312Cn	(untitled)		312a
312Co	(untitled)		312a
312D	(untitled)		312a
312Dx	(untitled)		
312Eent	(untitled)		312a
312En	(untitled)		312a
312Eo	(untitled)		312a
312Ex	(untitled)		
312J	(untitled)		312b
312K	(untitled)		312b
312c BS	(untitled)		312c
312c LS	(untitled)		312c
312c ent	(untitled)		312c
312c x	(untitled)		
312x LSx	(untitled)		
5	(untitled)		
6	(untitled)		ASCS
AS	(untitled)		AS
AS1	(untitled)		AS
AS2	(untitled)		
AS3	(untitled)		ASCS
ASin	(untitled)		ASCS
CS 2	(untitled)		311ms
QML	(untitled)		AS
QMLx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	(untitled)			368.00	✓	Sum of lanes	1050					Normal	
308A	2	(untitled)			120.00	✓	Sum of lanes	1200					Normal	
311Ao	1	(untitled)			100.00	✓	Sum of lanes	1500	✓	1800			Normal	
311C	1	Lockwood inbound			166.00	✓	Sum of lanes	1650			✓		Normal	
311Cx	1	(untitled)			274.00	✓	Sum of lanes	1700					Normal	
311G	2	(untitled)			20.00	✓	Sum of lanes	2300			✓		Normal	
311LAS	1	(untitled)			90.00	✓	Sum of lanes	1400	✓	1800	✓		Normal	
311a	1	(untitled)			56.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa O	1	(untitled)			197.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa bus	2	(untitled)			206.00	✓	Sum of lanes	1400					Normal	
311abus	1	(untitled)			56.00	✓	Sum of lanes	1000					Normal	
311b	1	(untitled)			275.00	✓	Sum of lanes	1500					Normal	
311cn	1	(untitled)			45.00	✓	Sum of lanes	1000					Normal	
311co	1	(untitled)			45.00	✓	Sum of lanes	1200				✓	Normal	
311csx	1	(untitled)			38.00	✓	Sum of lanes	1600					Normal	
311dAS	311dAS	(untitled)			28.00							✓	Normal	
311dn	1	(untitled)			115.00	✓	Sum of lanes	1300					Normal	
311do	1	(untitled)			115.00	✓	Sum of lanes	1400					Normal	
311out	1	(untitled)			99.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312A	1	(untitled)			35.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312Ae	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800			Normal	
312Be	1	(untitled)			87.00	✓	Sum of lanes	1833	✓	1800	✓		Normal	
312Bo	1	(untitled)			35.00	✓	Sum of lanes	1700	✓	1800	✓		Normal	
312Cn	1	(untitled)			70.00	✓	Sum of lanes	1895	✓	1800	✓		Normal	
312Co	1	(untitled)			70.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312D	1	Lockwood Road inbound			420.00	✓	Sum of lanes	1855			✓		Normal	
312Dx	1	(untitled)			100.00								Normal	
312Eent	1	(untitled)			203.00	✓	Sum of lanes	1500					Normal	
312En	1	(untitled)			35.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
312Eo	1	(untitled)			35.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312Ex	1	(untitled)			100.00								Normal	
312J	1	(untitled)			43.00	✓	Sum of lanes	1800			✓		Normal	
312K	1	(untitled)			185.00	✓	Sum of lanes	1873			✓		Normal	
312c BS	1	(untitled)			90.00	✓	Sum of lanes	1400					Normal	
312c LS	1	(untitled)			65.00							✓	Normal	
312c ent	1	(untitled)			80.00	✓	Sum of lanes	1700					Normal	

312c x	3	(untitled)			70.00	✓	Sum of lanes	1800					Normal
312x LSx	4	(untitled)			100.00	✓	Sum of lanes	1800					Normal
5	2	(untitled)			18.00	✓	Sum of lanes	1500	✓	1800			Normal
6	2	(untitled)			85.00	✓	Sum of lanes	1800					Normal
AS	1	(untitled)			35.00	✓	Sum of lanes	1500					Normal
AS1	1	(untitled)			345.00	✓	Sum of lanes	1800					Normal
AS2	1	(untitled)			345.00	✓	Sum of lanes	1500					Normal
AS3	1	(untitled)			275.00							✓	Normal
ASin	1	(untitled)			100.00	✓	Sum of lanes	1700					Normal
CS 2	1	(untitled)			38.00	✓	Sum of lanes	1808			✓		Normal
QML	1	(untitled)		✓	250.00							✓	Normal
QMLx	1	(untitled)			100.00	✓	Sum of lanes	1800					Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1	1	1	(untitled)			1050
308A	2	1	(untitled)			1200
311Ao	1	1	(untitled)			1500
311C	1	1	(untitled)			1650
311Cx	1	1	(untitled)			1700
311G	2	1	(untitled)			2300
311LAS	1	1	(untitled)			1400
311a	1	1	(untitled)			1500
311aa O	1	1	(untitled)			1500
311aa bus	2	1	(untitled)			1400
311abus	1	1	(untitled)			1000
311b	1	1	(untitled)			1500
311cn	1	1	(untitled)			1000
311co	1	1	(untitled)			1200
311csx	1	1	(untitled)			1600
311dAS	311dAS	1	(untitled)			
311dn	1	1	(untitled)			1300
311do	1	1	(untitled)			1400
311out	1	1	(untitled)			1750
312A	1	1	(untitled)			1750
312Ae	1	1	(untitled)			1800
312Be	1	1	(untitled)			1833
312Bo	1	1	(untitled)			1700
312Cn	1	1	(untitled)			1895
312Co	1	1	(untitled)			1440
312D	1	1	(untitled)			1855
312Dx	1	1	(untitled)			
312Eent	1	1	(untitled)			1500
312En	1	1	(untitled)			1800
312Eo	1	1	(untitled)			1440
312Ex	1	1	(untitled)			
312J	1	1	(untitled)			1800
312K	1	2	(untitled)			1873
312c BS	1	1	(untitled)			1400
312c LS	1	1	(untitled)			
312c ent	1	1	(untitled)			1700
312c x	3	1	(untitled)			1800
312x LSx	4	1	(untitled)			1800
5	2	1	(untitled)			1500
6	2	1	(untitled)			1800
AS	1	1	(untitled)			1500
AS1	1	1	(untitled)			1800
AS2	1	1	(untitled)			1500
AS3	1	1	(untitled)			
ASin	1	1	(untitled)			1700
CS 2	1	1	(untitled)			1808
QML	1	1	(untitled)			
QMLx	1	QMLx	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00				
308A	2	NetworkDefault	100	100	100		0.00				
311Ao	1	CTM	100	100	100		17.00	✓	17.00	0.00	
311C	1	NetworkDefault	100	100	100		0.00				
311Cx	1	NetworkDefault	100	100	100		0.00				
311G	2	NetworkDefault	100	100	100		0.00				
311LAS	1	CTM	100	100	100		15.00	✓	15.00	0.00	
311a	1	CTM	100	100	100		10.00				
311aa O	1	CTM	100	100	100		36.00				
311aa bus	2	NetworkDefault	100	100	100		0.00				
311abus	1	NetworkDefault	100	100	100		0.00				
311b	1	NetworkDefault	100	100	100		0.00				
311cn	1	NetworkDefault	100	100	100		0.00				
311co	1	NetworkDefault	100	100	100		0.00				
311csx	1	NetworkDefault	100	100	100		0.00				
311dAS	311dAS	NetworkDefault	100	100	100		0.00				
311dn	1	NetworkDefault	100	100	100		0.00				
311do	1	NetworkDefault	100	100	100		0.00				
311out	1	CTM	100	100	100		15.00	✓	15.00	0.00	
312A	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Ae	1	CTM	100	100	100		17.00	✓	18.00	0.00	
312Be	1	CTM	100	100	100		17.00	✓	17.00	0.00	
312Bo	1	CTM	100	100	100		6.00				
312Cn	1	CTM	100	100	100		8.00	✓	8.00	0.00	
312Co	1	Flare	100	100	100		8.00	✓	8.00	0.00	
312D	1	NetworkDefault	100	100	100		0.00				
312Dx	1	NetworkDefault	100	100	100		0.00				
312Eent	1	PDM	100	100	100		49.00	✓	49.00	0.00	
312En	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Eo	1	Flare	100	100	100		6.00	✓	6.00	0.00	

312Ex	1	NetworkDefault	100	100	100		0.00				
312J	1	NetworkDefault	99999	100	100		0.00				
312K	1	NetworkDefault	100	100	100		0.00				
312c BS	1	NetworkDefault	100	100	100		0.00				
312c LS	1	NetworkDefault	100	100	100		0.00				
312c ent	1	NetworkDefault	100	100	100		0.00				
312c x	3	NetworkDefault	100	100	100		0.00				
312x LSx	4	NetworkDefault	100	100	100		0.00				
5	2	CTM	100	100	100		17.00	✓	17.00	0.00	
6	2	NetworkDefault	100	100	100		0.00				
AS	1	NetworkDefault	100	100	100		0.00				
AS1	1	NetworkDefault	100	100	100		0.00				
AS2	1	NetworkDefault	100	100	100		0.00				
AS3	1	NetworkDefault	100	100	100		0.00				
ASin	1	NetworkDefault	100	100	100		0.00				
CS 2	1	NetworkDefault	100	100	100		0.00				
QML	1	NetworkDefault	100	100	100		0.00				
QMLx	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	126

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	860	860
308A	2	890	890
311Ao	1	784	784
311C	1	391	391
311Cx	1	794	794
311G	2	32	32
311LAS	1	438	438
311a	1	592	592
311aa O	1	592	592
311aa bus	2	488	488
311abus	1	488	488
311b	1	1191	1191
311cn	1	499	499
311co	1	692	692
311csx	1	446	446
311dAS	311dAS	62	62
311dn	1	912	912
311do	1	692	692
311out	1	642	642
312A	1	367	367
312Ae	1	392	392
312Be	1	388	388
312Bo	1	25	25
312Cn	1	654	654
312Co	1	130	130
312D	1	516	516
312Dx	1	455	455
312Eent	1	342	342
312En	1	265	265
312Eo	1	77	77
312Ex	1	687	687
312J	1	501	501
312K	1	689	689
312c BS	1	1190	1190
312c LS	1	230	230
312c ent	1	600	600
312c x	3	1069	1069
312x LSx	4	171	171
5	2	797	797
6	2	388	388
AS	1	445	445
AS1	1	58	58
AS2	1	398	398
AS3	1	382	382
ASin	1	395	395
CS 2	1	534	534
QML	1	164	164
QMLx	1	207	207

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
311C	1	311ms	A	
311G	2	311ms	G	
311LAS	1	311ms	C	
311out	1	311ms	B	
312A	1	312a	A	
312Be	1	312b	M	
312Bo	1	312a	B	
312Cn	1	312a	C	
312Co	1	312a	C	
312D	1	312a	D	
312En	1	312a	E	
312Eo	1	312a	E	
312J	1	312b	J	
312K	1	312b	K	
CS 2	1	311ms	D	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)
311Ao	1	12.00	18.64

311G	2	2.40	18.64
311a	1	6.72	18.64
311aa bus	2	24.72	18.64
311abus	1	6.72	18.64
311dn	1	11.69	22.00
311do	1	15.13	17.00
312D	1	50.40	18.64
312Eent	1	18.16	25.00
312c LS	1	7.27	20.00
312c ent	1	7.78	23.00
AS1	1	41.40	18.64
AS3	1	33.00	18.64
ASin	1	10.47	21.38
QML	1	30.00	18.64

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)	Auto turning radius	Traffic turn style	Turning radius (m)
1	1	1	311Cx/1	1/1	35.79	23.00	✓	Straight	Straight Movement
308A	2	1	311dAS/311dAS	308A/2	11.67	23.00	✓	Straight	Straight Movement
311C	1	1	312D/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	1	CS 2/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
311LAS	1	1	311aa bus/2	311LAS/1	10.80	18.64	✓	Straight	Straight Movement
311aa O	1	1	311a/1	311aa O/1	23.64	18.64	✓	Straight	Straight Movement
311b	1	1	311cn/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	1	311dn/1	311cn/1	5.92	17.00	✓	Straight	Straight Movement
311co	1	1	311do/1	311co/1	5.92	17.00	✓	Straight	Straight Movement
311csx	1	1	311LAS/1	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	1	QML/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	1	311aa O/1	311out/1	11.88	18.64	✓	Straight	Straight Movement
312A	1	1	312Ae/1	312A/1	5.59	14.00	✓	Straight	Straight Movement
312Ae	1	1	312c ent/1	312Ae/1	9.73	20.00	✓	Nearside	62.50
312Be	1	1	312c ent/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Bo	1	1	312Ae/1	312Bo/1	4.20	18.64	✓	Straight	Straight Movement
312Cn	1	1	311Ao/1	312Cn/1	8.40	18.64	✓	Straight	Straight Movement
312Co	1	1	311Ao/1	312Co/1	8.40	18.64	✓	Straight	Straight Movement
312Dx	1	1	312Co/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312En	1	1	312Eent/1	312En/1	3.13	25.00	✓	Straight	Straight Movement
312Eo	1	1	312Eent/1	312Eo/1	3.13	25.00	✓	Straight	Straight Movement
312Ex	1	1	312D/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	1	312Cn/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
312K	1	1	AS3/1	312K/1	22.20	18.64	✓	Straight	Straight Movement
312c BS	1	1	312J/1	312c BS/1	10.07	20.00	✓	Straight	Straight Movement
312c x	3	1	312c BS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	1	312c BS/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
5	2	1	311out/1	5/2	2.37	17.00	✓	Straight	Straight Movement
6	2	1	312Be/1	6/2	10.20	18.64	✓	Straight	Straight Movement
AS	1	1	311dn/1	AS/1	3.56	22.00	✓	Nearside	73.18
AS2	1	1	AS/1	AS2/1	35.08	22.00	✓	Straight	Straight Movement
CS 2	1	1	AS3/1	CS 2/1	4.56	18.64	✓	Offside	80.41
QMLx	1	1	AS/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
308A	2	2	1/1	308A/2	11.67	23.00	✓	Straight	Straight Movement
311C	1	2	312En/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	2	311G/2	311Cx/1	32.88	18.64	✓	Nearside	62.50
311b	1	2	311co/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	2	311dAS/311dAS	311cn/1	5.40	18.64	✓	Nearside	13.39
311csx	1	2	311G/2	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	2	AS1/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	2	311aa bus/2	311out/1	11.88	18.64	✓	Straight	Straight Movement
312Ae	1	2	312c LS/1	312Ae/1	9.73	20.00	✓	Straight	Straight Movement
312Be	1	2	312c LS/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Dx	1	2	312A/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	2	312Cn/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	2	312D/1	312J/1	4.81	20.00	✓	Straight	Straight Movement
312K	1	2	311csx/1	312K/1	22.20	18.64	✓	Straight	Straight Movement
312c BS	1	2	312K/1	312c BS/1	10.80	18.64	✓	Straight	Straight Movement
312c x	3	2	312c LS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	2	312c ent/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
5	2	2	CS 2/1	5/2	2.16	18.64	✓	Offside	6.00
AS	1	2	1/1	AS/1	4.20	18.64	✓	Straight	Straight Movement
AS2	1	2	QML/1	AS2/1	35.08	22.00	✓	Nearside	100.00
CS 2	1	2	ASin/1	CS 2/1	4.56	18.64	✓	Straight	Straight Movement
QMLx	1	2	AS1/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
311C	1	3	312Bo/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	3	311C/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
312Dx	1	3	312En/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	3	312A/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	3	312Eo/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
5	2	3	311G/2	5/2	2.16	18.64	✓	Offside	37.50

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	(ALL)	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	311cn/1	100	0.22		0	0
311dAS		TrafficStream	311dn/1	100	0.22		0	0
		TrafficStream	311Cx/1	100	0.19		0	0
1		TrafficStream	312En/1	100	0.22	✓	0	0
		TrafficStream	312En/1	100	0.22		0	0
	outbound	TrafficStream	312c BS/1	100	0.22		0	0
		TrafficStream	312c ent/1	90	0.19		0	0

		TrafficStream	311csx/1	30	0.22		0	0
		TrafficStream	ASin/1	5	0.19		0	0
		TrafficStream	AS/1	100	0.22		0	0
		TrafficStream	AS1/1	100	0.19		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (mph)
312F	(untitled)		312a		Farside	5.00	3.33	3.36
312G	(untitled)				Nearside	3.00	2.00	3.36
312H	(untitled)				Farside	3.00	2.00	3.36
312I	(untitled)		312a		Farside	7.00	4.67	3.36
312K	(untitled)				Farside	3.00	2.00	3.36
312L	(untitled)				Farside	3.00	2.00	3.36
312o	(untitled)				Farside	3.00	2.00	3.36
312p	(untitled)				Farside	3.00	2.00	3.36
7	(untitled)		311ms		Nearside	6.00	4.00	3.36
8	(untitled)				Farside	3.00	2.00	3.36

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
312F	312a	F	
312G	312a	I	
312H	312a	H	
312I	312a	G	
312K	312a	N	
312L	312b	L	
312o	312a	O	
312p	312a	P	
7	311ms	E	
8	311ms	F	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To																							
		A bcd	A ex	A near	A off	A1	A2	A616 in	A616 out	B	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6	
From	A bcd	0	0	0	0	0	0	0	0	0	5	0	0	20	629	0	130	0	0	0	0	0	0	0	
	A ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A near	0	0	0	0	488	239	0	0	185	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A off	0	0	0	0	692	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A1	592	0	0	0	0	0	0	488	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A2	139	0	0	0	0	0	0	0	0	50	0	0	193	0	0	0	0	0	0	0	0	0		
	A616 in	0	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A616 out	50	0	0	0	0	0	0	0	0	50	0	0	388	0	0	0	0	0	0	0	0	0		
	B	0	17	0	0	9	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B LS	0	0	0	0	0	0	0	0	0	0	50	0	25	30	0	125	0	0	0	0	0	0		
	B as	0	388	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B wr	0	25	0	0	0	0	0	0	0	25	338	0	0	12	0	200	0	0	0	0	0	0		
	B wr x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	C	0	260	0	0	0	5	0	0	0	21	0	0	56	0	0	0	0	0	0	0	0	0		
	C as	0	34	0	0	2	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0		
	D	0	92	0	0	0	9	0	0	0	0	20	0	379	16	0	0	0	0	0	0	0	0		
MSS	16	8	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0			
P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (PCU/hr)

		To																							
		A bcd	A ex	A near	A off	A1	A2	A616 in	A616 out	B	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6	
From	A bcd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A near	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A off	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A616 in	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A616 out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B LS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B as	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B wr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B wr x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Locations

Normal Paths and Flows

le:///C:/Users/andrewrawlinson/Desktop/rr67%20jacobs/rrfnbl%202022%20PM%20... 09/07/2020

	326		A616 out	B wr x	311aa bus/2, 311LAS/1, 311csx/1, 312K/1, 312c BS/1, 312c x/3	Normal	388
	327		A616 out	B LS	311aa bus/2, 311LAS/1, 311csx/1, 312K/1, 312c BS/1, 312x LSx/4	Normal	50

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	1		P5	P4	312H:1E, 312H:2X	Normal	22
	2		P4	P5	312H:2E, 312H:1X	Normal	22
	3		P5	P6	312K:1E, 312K:2X	Normal	22
	4		P6	P5	312K:2E, 312K:1X	Normal	22
	14		P1	P2	312G:1E, 312G:2X	Normal	22
	15		P2	P1	312G:2E, 312G:1X	Normal	22
	23		P4	P3	312F:2E, 312F:1X	Normal	22
	61		P3	P4	312F:1E, 312F:2X	Normal	22
	65		P2	P3	312I:1E, 312I:2X	Normal	22
	266		P3	P2	312I:2E, 312I:1X	Normal	22

Signal Timings

Network Default: 126s cycle time; 126 steps

Controller Stream 311ms

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
311ms	(untitled)		1	NetworkDefault	126

Controller Stream 311ms - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
311ms	Unspecified						Absolute

Controller Stream 311ms - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
311ms	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311ms	A	(untitled)	7	300	0	0	Unknown
	B	(untitled)	7	300	0	0	Unknown
	C	(untitled)	7	300	0	0	Unknown
	D	(untitled)	7	300	0	0	Unknown
	E	(untitled)	3	3	0	0	Unknown
	F	(untitled)	5	300	0	0	Unknown
	G	(untitled)	1	1	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
311ms	1	A, B, C	1
	2	G	1
	3	F, E	1
	4	F, D, C	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
311ms	1	(untitled)	Single	1, 2, 3, 4	92, 94, 100, 27

Intergreen Matrix for Controller Stream 311ms

		To						
From		A	B	C	D	E	F	G
	A				5		3	1
	B				6		3	1
	C					5		1
	D	5	5			5		1
	E			7	8			1
	F	7	5					1
	G	5	5	6	6	3	3	

Banned Stage transitions for Controller Stream 311ms

		To			
From		1	2	3	4
	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 311ms

		To			
From		1	2	3	4
	1	0	1	5	6
	2	6	0	3	6
	3	7	1	0	8
	4	7	1	5	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311ms	1	✓	1	A,B,C	34	92	58	1	7
	2	✓	2	G	93	94	1	1	1
	3	✓	3	F,E	97	100	3	1	3
	4	✓	4	F,D,C	108	27	45	1	7

Resultant Phase Green Periods

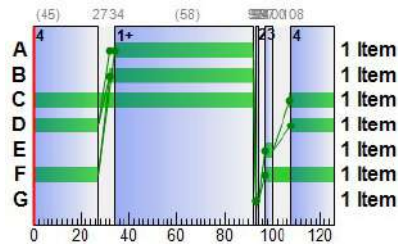
Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
311ms	A	1	✓	34	92	58
	B	1	✓	32	92	60
	C	1	✓	107	92	111
	D	1	✓	108	27	45
	E	1		97	100	3

			✓			
	F	1	✓	97	27	56
	G	1	✓	93	94	1

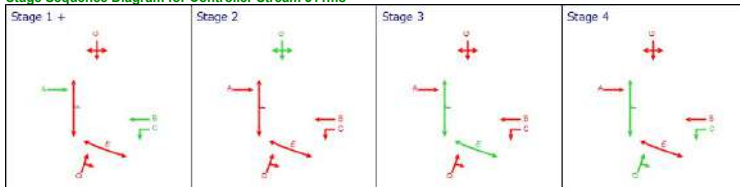
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
311C	1	311ms	311ms	A	34	92	58
311G	2	311ms	311ms	G	93	94	1
311LAS	1	311ms	311ms	C	107	92	111
311out	1	311ms	311ms	B	32	92	60
CS 2	1	311ms	311ms	D	108	27	45

Phase Timings Diagram for Controller Stream 311ms



Stage Sequence Diagram for Controller Stream 311ms



Controller Stream 312a

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312a	(untitled)		1	NetworkDefault	126

Controller Stream 312a - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312a	Unspecified						Absolute

Controller Stream 312a - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312a	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
312a	A	(untitled)	14	300	0	0	Unknown	
	B	(untitled)	2	7	0	0	Unknown	
	C	(untitled)	7	300	0	0	Unknown	
	D	(untitled)	7	300	0	0	Unknown	
	E	(untitled)	7	300	0	0	Unknown	
	F	(untitled)	5	300	0	0	Pedestrian	0
	G	(untitled)	7	300	0	0	Unknown	
	H	(untitled)	7	300	0	0	Unknown	
	I	(untitled)	7	300	0	0	Unknown	
	N	(untitled)	1	300	0	0	Unknown	
	O	(untitled)	5	300	0	0	Pedestrian	0
	P	(untitled)	1	5	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312a	1	I, H, N, O, P, F, G	1
	2	F, E, C, G	1
	3	D, O, A	1
	4	B, N, H, I, F, O	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
312a	1	Gaining	E	1	2	0	8
	2	Losing	B	1	2	6	
	3	Losing	A	1	2	6	
	4	Losing	C	2	3	4	
	5	Losing	E	2	3	4	
	6	Losing	I	1	2	7	
	7	Gaining	A	4	1	1	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312a	1	(untitled)	Single	1, 2, 3, 4	34, 95, 15, 25

Intergreen Matrix for Controller Stream 312a

		To									
		A	B	C	D	E	F	G	H	I	O
From	A			5	6	6	5			8	
	B				5			5			8
	C	8			8				9	9	5
	D		6	6		5			9	9	5
	E	8			8			5		9	9
	F	5									

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
312b	J	(untitled)	7	300	0	0	Unknown
	K	(untitled)	7	300	0	0	Unknown
	L	(untitled)	5	300	0	0	Unknown
	M	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312b	1	J, L	7
	2	K, M	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312b	1	(untitled)	Single	1, 2	24, 81

Intergreen Matrix for Controller Stream 312b

		To				
From		J	K	L	M	
	J	5			6	
	K	5		5		
	L		8		0	
	M	5		7		

Banned Stage transitions for Controller Stream 312b

		To	
From		1	2
	1		
	2		

Interstage Matrix for Controller Stream 312b

		To		
From		1	2	
	1	0	8	
	2	7	0	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312b	1	✓	1	J,L	88	24	62	7	7
	2	✓	2	K,M	32	81	49	7	7

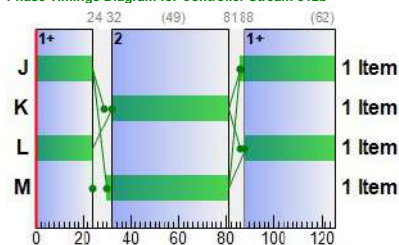
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312b	J	1	✓	86	24	64
	K	1	✓	32	81	49
	L	1	✓	88	24	62
	M	1	✓	30	81	51

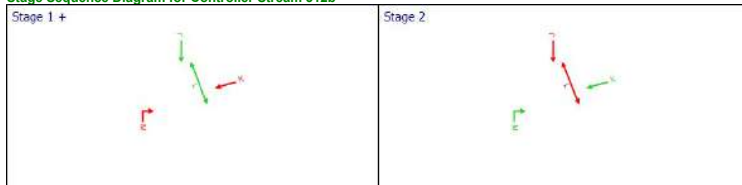
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312Be	1	312b	312b	M	30	81	51
312J	1	312b	312b	J	86	24	64
312K	1	312b	312b	K	32	81	49

Phase Timings Diagram for Controller Stream 312b



Stage Sequence Diagram for Controller Stream 312b



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
17:00-18:00	(ALL)	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
311ms	1	✓	1	A,B,C	27	7	14
	2	✓	2	G	92	1	2
	3	✓	3	F,E	94	3	6
	4	✓	4	F,D,C	100	8	15
	1	✓	1	I,H,N,O,P,F,G	25	8	9
	2	✓	2	F,E,C,G	34	8	11

312a	3	✓	3	D,O,A	95	12	26
	4	✓	4	B,N,H,I,F,O	15	9	10
312b	1	✓	1	J,L	81	7	14
	2	✓	2	K,M	24	8	15

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
311ms	A	1	1	2	7	0
	B	1	1	2	5	0
	C	1	4	2	7	0
	D	1	4	1	8	0
	E	1	3	4	3	0
	F	1	3	1	3	0
	G	1	2	3	1	0
312a	A	1	3	4	12	0
	B	1	4	1	6	0
	C	1	2	3	7	4
	D	1	3	4	12	0
	E	1	2	3	8	4
	F	1	4	3	6	0
	G	1	1	3	5	0
	H	1	4	2	9	0
	I	1	4	2	9	7
	N	1	4	2	8	0
	O	1	3	2	9	0
	P	1	1	2	8	0
312b	J	1	1	2	5	0
	K	1	2	1	8	0
	L	1	1	2	7	0
	M	1	2	1	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 126s cycle time; 126 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4
311ms	4	27	92	94	100
312a	4	25	34	95	15
312b	2	81	24		

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
17:00-18:00	1	1	(untitled)		860	1050	126	1050	82	10	7.89	10.87	16.98	43.68
	308A	2	(untitled)		890	1200	126	1200	74	21	4.25	1.05	5.04	15.93
	311Ao	1	(untitled)		784	1500	126	1036	76	19	17.95	14.59	85.84	29.95
	311C	1	Lockwood inbound	A	391	1650	58	773	51	78	16.97	6.39	22.14	33.12
	311Cx	1	(untitled)		794	1700	126	1700	47	93	0.93	0.20	0.43	33.81
	311G	2	(untitled)	G	32	2300	1	37	88	3	233.05	2.63	75.68	235.45
	311LAS	1	(untitled)	C	438	1400	111	1244	35	156	1.92	2.04	13.62	12.72
	311a	1	(untitled)		592	1500	126	1500	39	128	0.78	0.13	1.29	7.50
	311aa O	1	(untitled)		592	1500	126	1319	45	101	2.49	2.71	7.54	26.13
	311aa bus	2	(untitled)		488	1400	126	1292	38	138	1.36	2.01	5.62	26.08
	311abus	1	(untitled)		488	1000	126	1000	49	84	1.71	0.23	2.38	8.43
	311b	1	(untitled)		1191	1500	126	1500	79	13	4.56	1.51	3.15	40.74
	311cn	1	(untitled)		499	1000	126	1000	50	80	1.79	0.25	3.17	7.70
	311co	1	(untitled)		692	1329	126	1329	52	73	1.47	0.28	3.60	7.39
	311csx	1	(untitled)		446	1600	126	1600	28	223	0.43	0.05	0.81	4.99
	311dAS	311dAS	(untitled)		62	364	126	364	17	428	1.02	0.02	0.36	4.38
	311dn	1	(untitled)		912	1300	126	1300	70	28	3.23	0.82	4.09	14.92
	311do	1	(untitled)		692	1400	126	1400	49	82	1.25	0.24	1.21	16.39
	311out	1	(untitled)	B	642	1750	60	829	77	16	32.69	15.19	101.27	44.57
	312A	1	(untitled)	A	367	1750	34	486	75	19	40.91	6.60	110.06	46.50
	312Ae	1	(untitled)		392	1800	126	1105	35	154	12.63	6.05	35.61	22.36
	312Be	1	(untitled)	M	388	1833	51	756	51	75	30.11	9.58	56.38	39.84
	312Bo	1	(untitled)	B	25	1700	4	67	37	143	62.64	1.54	25.59	66.84
	312Cn	1	(untitled)	C	654	1895	58	887	74	22	24.12	9.02	107.35	32.52
	312Co	1	(untitled)	C	130	1315	58	616	21	326	17.35	1.62	19.27	25.75
	312D	1	Lockwood Road inbound	D	516	1855	34	515	100	-10	122.60	28.95	39.64	173.00
	312Dx	1	(untitled)		455	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312Eent	1	(untitled)		342	1500	126	1500	23	295	0.35	0.03	0.07	18.52
	312En	1	(untitled)	E	265	1800	57	829	32	181	22.54	5.39	89.76	25.67
	312Eo	1	(untitled)	E	77	1312	57	604	13	606	20.26	1.91	31.90	23.39
	312Ex	1	(untitled)		687	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312J	1	(untitled)	J	500	1800	64	929	54	67	7.29	3.40	45.49	12.52
	312K	1	(untitled)	K	689	1873	49	743	93	-3	63.47	27.96	86.91	85.67
	312c BS	1	(untitled)		1189	1400	126	1400	85	6	11.33	28.86	184.40	21.82
	312c LS	1	(untitled)		230	351	126	351	66	37	9.58	0.61	5.41	16.85
	312c ent	1	(untitled)		600	1700	126	1700	35	155	0.58	0.10	0.69	8.36
	312c x	3	(untitled)		1068	1800	126	1800	59	52	1.46	0.43	3.55	12.64
	312x LSx	4	(untitled)		171	1800	126	1800	9	848	0.10	0.00	0.03	12.10
	5	2	(untitled)		797	1500	126	1500	53	69	3.45	8.46	49.77	5.78
	6	2	(untitled)		388	1800	126	1800	22	318	0.27	0.03	0.20	10.47
	AS	1	(untitled)		445	1500	126	1500	30	203	0.51	0.06	1.03	4.09
	AS1	1	(untitled)		58	1800	126	1800	3	2693	0.03	0.00	0.00	41.43
	AS2	1	(untitled)		398	1500	126	1500	27	239	0.43	0.05	0.08	35.51
	AS3	1	(untitled)		382	682	126	682	56	61	3.34	0.35	0.74	36.34
	ASin	1	(untitled)		395	1700	126	1700	23	287	0.32	0.04	0.20	10.79
	CS 2	1	(untitled)	D	534	1808	45	660	81	11	47.16	18.41	278.59	51.72
	QML	1	(untitled)		164	491	126	491	33	169	1.83	0.08	0.19	31.83

	QMLx	1	(untitled)		207	1800	126	1800	12	683	0.13	0.01	0.04	12.13
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Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311ms	1	✓	1	A,B,C	34	92	58	1	7
	2	✓	2	G	93	94	1	1	1
	3	✓	3	F,E	97	100	3	1	3
	4	✓	4	F,D,C	108	27	45	1	7
312a	1	✓	1	I,H,N,O,P,F,G	33	34	1	1	1
	2	✓	2	F,E,C,G	42	95	53	1	3
	3	✓	3	D,O,A	107	15	34	1	14
	4	✓	4	B,N,H,I,F,O	24	25	1	1	1
312b	1	✓	1	J,L	88	24	62	7	7
	2	✓	2	K,M	32	81	49	7	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311ms	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	3	3	0	0	Unknown
	F	F	5	300	0	0	Unknown
	G	G	1	1	0	0	Unknown
312a	A	A	14	300	0	0	Unknown
	B	B	2	7	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	5	300	0	0	Pedestrian
	G	G	7	300	0	0	Unknown
	H	H	7	300	0	0	Unknown
	I	I	7	300	0	0	Unknown
	N	N	1	300	0	0	Unknown
	O	O	5	300	0	0	Pedestrian
312b	P	P	1	5	0	0	Pedestrian
	J	J	7	300	0	0	Unknown
	K	K	7	300	0	0	Unknown
	L	L	5	300	0	0	Unknown
	M	M	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1		368.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1050	100	100
308A	2		120.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1200	100	100
311Ao	1		100.00	CTM	17.00	Normal	✓			Sum of lanes	1500	100	100
311C	1		166.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1650	100	100
311Cx	1		274.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
311G	2		20.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2300	100	100
311LAS	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1400	100	100
311a	1		56.00	CTM	10.00	Normal	✓			Sum of lanes	1500	100	100
311aa O	1		197.00	CTM	36.00	Normal	✓			Sum of lanes	1500	100	100
311aa bus	2		206.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311abus	1		56.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311b	1		275.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
311cn	1		45.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311co	1		45.00	NetworkDefault	0.00	Normal	✓		✓	Sum of lanes	1200	100	100
311csx	1		38.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1600	100	100
311dAS	311dAS		28.00	NetworkDefault	0.00	Normal			✓			100	100
311dn	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1300	100	100
311do	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311out	1		99.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1750	100	100
312A	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Ae	1		87.00	CTM	17.00	Normal	✓			Sum of lanes	1800	100	100
312Be	1		87.00	CTM	17.00	Normal	✓	✓		Sum of lanes	1833	100	100
312Bo	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1700	100	100
312Cn	1		70.00	CTM	8.00	Normal	✓	✓		Sum of lanes	1895	100	100
312Co	1		70.00	Flare	8.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312D	1		420.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1855	100	100
312Dx	1		100.00	NetworkDefault	0.00	Normal						100	100
312Eent	1		203.00	PDM	49.00	Normal	✓			Sum of lanes	1500	100	100
312En	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1800	100	100
312Eo	1		35.00	Flare	6.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312Ex	1		100.00	NetworkDefault	0.00	Normal	✓					100	100
312J	1		43.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	99999
312K	1		185.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1873	100	100
312c BS	1		90.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
312c LS	1		65.00	NetworkDefault	0.00	Normal			✓			100	100
312c ent	1		80.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
312c x	3		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
312x LSx	4		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
5	2		18.00	CTM	17.00	Normal	✓			Sum of lanes	1500	100	100
6	2		85.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

AS	1		35.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS1	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS2	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS3	1		275.00	NetworkDefault	0.00	Normal			✓			100	100
ASin	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
CS 2	1		38.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1808	100	100
QML	1	✓	250.00	NetworkDefault	0.00	Normal			✓			100	100
QMLx	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Pedestrian Crossings: Pedestrian summary

Time Segment	Pedestrian crossing	Side	Calculated Flow Entering (Ped/hr)	Degree of saturation (%)	Actual green (s (per cycle))	Effective green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)
17:00-18:00	312F	1	22	0	74	74	10.94	0.32
		2	22	0	74	74	10.94	0.32
	312G	1	22	1	17	18	46.71	0.66
		2	22	1	17	18	46.71	0.66
	312H	1	22	2	10	11	52.94	0.70
		2	22	2	10	11	52.94	0.70
	312I	1	22	0	65	66	14.52	0.37
		2	22	0	65	66	14.52	0.37
	312K	1	22	2	11	12	52.02	0.70
		2	22	2	11	12	52.02	0.70
	312L	1	0	0	62	63	0.00	0.00
		2	0	0	62	63	0.00	0.00
	312o	1	0	0	56	56	0.00	0.00
		2	0	0	56	56	0.00	0.00
	312p	1	0	0	1	1	0.00	0.00
		2	0	0	1	1	0.00	0.00
	7	1	0	0	3	4	0.00	0.00
		2	0	0	3	4	0.00	0.00
	8	1	0	0	56	57	0.00	0.00
		2	0	0	56	57	0.00	0.00

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	1	82	10	860	1050	126	7.89	10.87	16.98	26.77	4.11	30.88
	308A	2	74	21	890	1200	126	4.25	1.05	5.04	14.93	0.00	14.93
	311Ao	1	76	19	784	1500	126	17.95	14.59	85.84	55.50	5.14	60.64
	311C	1	51	78	391	1650	58	16.97	6.39	22.14	26.17	3.46	29.63
	311Cx	1	47	93	794	1700	126	0.93	0.20	0.43	2.90	0.00	2.90
	311G	2	88	3	32	2300	1	233.05	2.63	75.68	29.42	0.79	30.21
	311LAS	1	35	156	438	1400	111	1.92	2.04	13.62	3.31	0.73	4.04
	311a	1	39	128	592	1500	126	0.78	0.13	1.29	1.82	0.00	1.82
	311aa O	1	45	101	592	1500	126	2.49	2.71	7.54	5.82	0.96	6.78
	311aa bus	2	38	138	488	1400	126	1.36	2.01	5.62	2.62	0.61	3.23
	311abus	1	49	84	488	1000	126	1.71	0.23	2.38	3.29	0.00	3.29
	311b	1	79	13	1191	1500	126	4.56	1.51	3.15	21.41	0.00	21.41
	311cn	1	50	80	499	1000	126	1.79	0.25	3.17	3.52	0.00	3.52
	311co	1	52	73	692	1329	126	1.47	0.28	3.60	4.00	0.00	4.00
	311csx	1	28	223	446	1600	126	0.43	0.05	0.81	0.76	0.00	0.76
	311dAS	311dAS	17	428	62	364	126	1.02	0.02	0.36	0.25	0.00	0.25
	311dn	1	70	28	912	1300	126	3.23	0.82	4.09	11.62	0.00	11.62
	311do	1	49	82	692	1400	126	1.25	0.24	1.21	3.42	0.00	3.42
	311out	1	77	16	642	1750	60	32.69	15.19	101.27	82.78	5.63	88.41
	312A	1	75	19	367	1750	34	40.91	6.60	110.06	59.22	1.33	60.55
	312Ae	1	35	154	392	1800	126	12.63	6.05	35.61	19.53	2.49	22.02
	312Be	1	51	75	388	1833	51	30.11	9.58	56.38	46.09	3.94	50.02
	312Bo	1	37	143	25	1700	4	62.64	1.54	25.59	6.18	0.34	6.51
	312Cn	1	74	22	654	1895	58	24.12	9.02	107.35	62.21	3.23	65.44
	312Co	1	21	326	130	1315	58	17.35	1.62	19.27	8.90	0.62	9.52
	312D	1	100	-10	516	1855	34	122.60	28.95	39.64	249.54	9.76	259.29
	312Dx	1	0	Unrestricted	455	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	23	295	342	1500	126	0.35	0.03	0.07	0.48	0.00	0.48
	312En	1	32	181	265	1800	57	22.54	5.39	89.76	23.56	3.47	27.03
	312Eo	1	13	606	77	1312	57	20.26	1.91	31.90	6.15	0.94	7.10
	312Ex	1	0	Unrestricted	687	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	54	67	500	1800	64	7.29	3.40	45.49	14.38	739.23	753.61
	312K	1	93	-3	689	1873	49	63.47	27.96	86.91	172.48	9.86	182.34
	312c BS	1	85	6	1189	1400	126	11.33	28.86	184.40	53.14	10.45	63.59
	312c LS	1	66	37	230	351	126	9.58	0.61	5.41	8.69	0.00	8.69
	312c ent	1	35	155	600	1700	126	0.58	0.10	0.69	1.37	0.00	1.37
	312c x	3	59	52	1068	1800	126	1.46	0.43	3.55	6.14	0.00	6.14
	312x LSx	4	9	848	171	1800	126	0.10	0.00	0.03	0.07	0.00	0.07
	5	2	53	69	797	1500	126	3.45	8.46	49.77	10.86	0.74	11.60
	6	2	22	318	388	1800	126	0.27	0.03	0.20	0.42	0.00	0.42
	AS	1	30	203	445	1500	126	0.51	0.06	1.03	0.89	0.00	0.89
	AS1	1	3	2693	58	1800	126	0.03	0.00	0.00	0.01	0.00	0.01
	AS2	1	27	239	398	1500	126	0.43	0.05	0.08	0.68	0.00	0.68
	AS3	1	56	61	382	682	126	3.34	0.35	0.74	5.04	0.00	5.04
	ASin	1	23	287	395	1700	126	0.32	0.04	0.20	0.50	0.00	0.50
	CS 2	1	81	11	534	1808	45	47.16	18.41	278.59	99.34	6.49	105.83
	QML	1	33	169	164	491	126	1.83	0.08	0.19	1.19	0.00	1.19
	QMLx	1	12	683	207	1800	126	0.13	0.01	0.04	0.11	0.00	0.11

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (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 (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
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17:00-18:00	1	1	860	860	0		1050	1050	82		10	0.21	126	126
	308A	2	890	890	0		1200	1200	74		21	0.18	126	126
	311Ao	1	784	784	0		1500	1036	76		19	0.00	126	126
	311C	1	391	391	0		1650	773	51		78	0.56	58	59
	311Cx	1	794	794	0		1700	1700	47		93	0.36	126	126
	311G	2	32	32	0		2300	37	88		3	0.00	1	2
	311LAS	1	438	438	0		1400	1244	35		156	0.13	111	112
	311a	1	592	592	0		1500	1500	39		128	0.00	126	126
	311aa O	1	592	592	0		1500	1319	45		101	0.00	126	126
	311aa bus	2	488	488	0		1400	1292	38		138	0.00	126	126
	311abus	1	488	488	0		1000	1000	49		84	0.00	126	126
	311b	1	1191	1191	0		1500	1500	79		13	0.00	126	126
	311cn	1	499	499	0		1000	1000	50		80	0.00	126	126
	311co	1	692	692	0		1329	1329	52		73	0.00	126	126
	311csx	1	446	446	0		1600	1600	28		223	0.31	126	126
	311dAS	311dAS	62	62	0		364	364	17		428	0.00	126	126
	311dn	1	912	912	0		1300	1300	70		28	0.00	126	126
	311do	1	692	692	0		1400	1400	49		82	0.00	126	126
	311out	1	642	642	0		1750	829	77		16	0.19	60	61
	312A	1	367	367	0		1750	486	75		19	0.75	34	35
	312Ae	1	392	392	0		1800	1105	35		154	0.00	126	126
	312Be	1	388	388	0		1833	756	51		75	0.00	51	52
	312Bo	1	25	25	0		1700	67	37		143	0.75	4	5
	312Cn	1	654	654	0		1895	887	74		22	0.62	58	59
	312Co	1	130	130	0		1315	616	21		326	0.62	58	59
	312D	1	516	515	0		1855	515	100	✓	-10	0.00	34	35
	312Dx	1	455	455	0		Unrestricted	Unrestricted	0		Unrestricted	0.87	126	126
	312Eent	1	342	342	0		1500	1500	23		295	0.00	126	126
	312En	1	265	265	0		1800	829	32		181	0.00	57	58
	312Eo	1	77	77	0		1312	604	13		606	0.00	57	58
	312Ex	1	687	687	0		Unrestricted	Unrestricted	0		Unrestricted	0.82	126	126
	312J	1	500	500	1	✓	1800	929	54		67	1.04	64	65
	312K	1	689	689	0		1873	743	93	✓	-3	0.12	49	50
	312c BS	1	1189	1189	1	✓	1400	1400	85		6	0.45	126	126
	312c LS	1	230	230	0		351	351	66		37	0.00	126	126
	312c ent	1	600	600	0		1700	1700	35		155	0.00	126	126
	312c x	3	1068	1068	1	✓	1800	1800	59		52	0.23	126	126
	312x LSx	4	171	171	0		1800	1800	9		848	0.44	126	126
	5	2	797	797	0		1500	1500	53		69	0.72	126	126
	6	2	388	388	0		1800	1800	22		318	1.13	126	126
	AS	1	445	445	0		1500	1500	30		203	0.02	126	126
	AS1	1	58	58	0		1800	1800	3		2693	0.00	126	126
	AS2	1	398	398	0		1500	1500	27		239	0.02	126	126
	AS3	1	382	382	0		682	682	56		61	0.00	126	126
	ASin	1	395	395	0		1700	1700	23		287	0.00	126	126
	CS 2	1	534	534	0		1808	660	81		11	0.00	45	46
	QML	1	164	164	0		491	491	33		169	0.00	126	126
	QMLx	1	207	207	0		1800	1800	12		683	0.00	126	126

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	1	1	35.79	7.89	0.08	1.80	26.77	26.77	25.06	115.51	99.95	4.11	4.11
	308A	2	11.67	4.25	0.00	1.05	14.93	14.93	0.00	0.00	0.00	0.00	0.00
	311Ao	1	12.00	17.95	2.75	1.16	55.50	55.50	52.31	377.31	32.79	5.14	5.14
	311C	1	16.14	16.97	1.59	0.26	26.17	26.17	46.34	173.78	7.34	3.46	3.46
	311Cx	1	32.88	0.93	0.00	0.20	2.90	2.90	0.00	0.00	0.00	0.00	0.00
	311G	2	2.40	233.05	0.55	1.52	29.42	29.42	196.85	31.45	31.55	0.79	0.79
	311LAS	1	10.80	1.92	0.14	0.10	3.31	3.31	13.29	55.47	2.72	0.73	0.73
	311a	1	6.72	0.78	0.00	0.13	1.82	1.82	0.00	0.00	0.00	0.00	0.00
	311aa O	1	23.64	2.49	0.23	0.18	5.82	5.82	12.92	71.29	5.20	0.96	0.96
	311aa bus	2	24.72	1.36	0.07	0.11	2.62	2.62	9.96	45.32	3.26	0.61	0.61
	311abus	1	6.72	1.71	0.00	0.23	3.29	3.29	0.00	0.00	0.00	0.00	0.00
	311b	1	36.19	4.56	0.00	1.51	21.41	21.41	0.00	0.00	0.00	0.00	0.00
	311cn	1	5.91	1.79	0.00	0.25	3.52	3.52	0.00	0.00	0.00	0.00	0.00
	311co	1	5.92	1.47	0.00	0.28	4.00	4.00	0.00	0.00	0.00	0.00	0.00
	311csx	1	4.56	0.43	0.00	0.05	0.76	0.76	0.00	0.00	0.00	0.00	0.00
	311dAS	311dAS	3.36	1.02	0.00	0.02	0.25	0.25	0.00	0.00	0.00	0.00	0.00
	311dn	1	11.69	3.23	0.00	0.82	11.62	11.62	0.00	0.00	0.00	0.00	0.00
	311do	1	15.13	1.25	0.00	0.24	3.42	3.42	0.00	0.00	0.00	0.00	0.00
	311out	1	11.88	32.69	4.53	1.30	82.78	82.78	69.91	412.19	36.65	5.63	5.63
	312A	1	5.59	40.91	3.04	1.13	59.22	59.22	51.22	156.46	31.52	1.33	1.33
	312Ae	1	9.73	12.63	1.28	0.10	19.53	19.53	44.02	169.80	2.78	2.49	2.49
	312Be	1	9.73	30.11	2.98	0.27	46.09	46.09	70.31	265.16	7.64	3.94	3.94
	312Bo	1	4.20	62.64	0.33	0.11	6.18	6.18	107.86	24.01	2.96	0.34	0.34
	312Cn	1	8.40	24.12	3.36	1.02	62.21	62.21	39.35	228.57	28.75	3.23	3.23
	312Co	1	8.40	17.35	0.60	0.03	8.90	8.90	37.99	48.59	0.81	0.62	0.62
	312D	1	50.40	122.60	6.51	11.06	249.54	249.54	151.01	505.93	272.21	9.76	9.76
	312Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	18.16	0.35	0.00	0.03	0.48	0.48	0.00	0.00	0.00	0.00	0.00
	312En	1	3.13	22.54	1.58	0.08	23.56	23.56	58.06	151.72	2.14	3.47	3.47
	312Eo	1	3.13	20.26	0.42	0.01	6.15	6.15	54.31	41.56	0.27	0.94	0.94
	312Ex	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	5.23	7.29	0.70	0.31	14.38	14.38	19.21	87.21	8.92	0.74	739.23
	312K	1	22.20	63.47	7.29	4.85	172.48	172.48	114.10	654.22	131.92	9.86	9.86
	312c BS	1	10.49	11.33	1.41	2.33	53.14	53.14	67.81	677.14	129.45	10.45	10.45
	312c LS	1	7.27	9.58	0.00	0.61	8.69	8.69	0.00	0.00	0.00	0.00	0.00
	312c ent	1	7.78	0.58	0.00	0.10	1.37	1.37	0.00	0.00	0.00	0.00	0.00
	312c x	3	11.18	1.46	0.00	0.43	6.14	6.14	0.00	0.00	0.00	0.00	0.00
	312x LSx	4	12.00	0.10	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.00
	5	2	2.33	3.45	0.46	0.30	10.86	10.86	8.54	59.53	8.56	0.74	0.74
	6	2	10.20	0.27	0.00	0.03	0.42	0.42	0.00	0.00	0.00	0.00	0.00
	AS	1	3.59	0.51	0.00	0.06	0.89	0.89	0.00	0.00	0.00	0.00	0.00
	AS1	1	41.40	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
	AS2	1	35.08	0.43	0.00	0.05	0.68	0.68	0.00	0.00	0.00	0.00	0.00
	AS3	1	33.00	3.34	0.00	0.35	5.04	5.04	0.00	0.00	0.00	0.00	0.00
	ASin	1	10.47	0.32	0.00	0.04	0.50	0.50	0.00	0.00	0.00	0.00	0.00

	CS 2	1	4.56	47.16	5.35	1.65	99.34	99.34	96.91	471.38	46.10	6.49	6.49
	QML	1	30.00	1.83	0.00	0.08	1.19	1.19	0.00	0.00	0.00	0.00	0.00
	QMLx	1	12.00	0.13	0.00	0.01	0.11	0.11	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s per cycle)	Wasted time blocking back (s per cycle)	Wasted time total (s per cycle)	Estimated blocking
17:00-18:00	1	1	0.00	10.87	64.00	16.98	0.00	0.00	0.00			0.00	0.00	0.00	
	308A	2	0.00	1.05	20.87	5.04	0.00	0.00	0.00			0.00	0.00	0.00	
	311Ao	1	0.00	14.59	17.00	85.84	0.00	0.00	0.00			0.00	38.98	38.98	
	311C	1	0.00	6.39	28.87	22.14	0.00	0.00	0.00	0.26	5.43	7.00	0.00	7.00	
	311Cx	1	0.00	0.20	47.65	0.43	0.00	0.00	0.00			0.00	0.00	0.00	
	311G	2	0.00	2.63	3.48	75.68	0.00	0.00	0.00	1.52	2.62	0.00	0.00	0.00	
	311LAS	1	0.00	2.04	15.00	13.62	0.00	0.00	0.00	0.10	1.92	6.00	0.00	6.00	
	311a	1	0.00	0.13	10.00	1.29	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa O	1	0.00	2.71	36.00	7.54	0.00	0.00	0.00			0.00	15.17	15.17	
	311aa bus	2	0.00	2.01	35.83	5.62	0.00	0.00	0.00			0.00	9.68	9.68	
	311abus	1	0.00	0.23	9.74	2.38	0.00	0.00	0.00			0.00	0.00	0.00	
	311b	1	0.00	1.51	47.83	3.15	0.00	0.00	0.00			0.00	0.00	0.00	
	311cn	1	0.00	0.25	7.83	3.17	0.00	0.00	0.00			0.00	0.00	0.00	
	311co	1	0.00	0.28	7.83	3.60	0.00	0.00	0.00			0.00	0.00	0.00	
	311csx	1	0.00	0.05	6.61	0.81	0.00	0.00	0.00			14.00	0.00	14.00	
	311dAS	311dAS	0.00	0.02	4.87	0.36	0.00	0.00	0.00			0.00	0.00	0.00	
	311dn	1	0.00	0.82	20.00	4.09	0.00	0.00	0.00			0.00	0.00	0.00	
	311do	1	0.00	0.24	20.00	1.21	0.00	0.00	0.00			0.00	0.00	0.00	
	311out	1	0.00	15.19	15.00	101.27	0.01	0.01	0.00	1.30	14.68	0.00	1.32	1.32	
	312A	1	0.00	6.60	6.00	110.06	0.23	0.23	0.00	1.13	6.60	0.00	0.00	0.00	
	312Ae	1	0.00	6.05	17.00	35.61	0.00	0.00	0.00			0.00	48.68	48.68	
	312Be	1	0.00	9.58	17.00	56.38	0.00	0.00	0.00	0.27	8.68	0.00	0.00	0.00	
	312Bo	1	0.00	1.54	6.00	25.59	0.00	0.00	0.00	0.11	0.95	3.00	0.00	3.00	
	312Cn	1	0.00	9.02	8.40	107.35	0.05	0.05	0.00	1.02	9.02	0.00	0.00	0.00	
	312Co	1	0.00	1.62	8.40	19.27	0.00	0.00	0.00	0.03	1.62	10.00	0.00	10.00	
	312D	1	0.00	28.95	73.04	39.64	0.00	0.00	0.00	11.06	24.09	0.00	0.00	0.00	
	312Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			21.00	0.00	21.00	
	312Eent	1	0.00	0.03	49.00	0.07	0.00	0.00	0.00			0.00	0.00	0.00	
	312En	1	0.00	5.39	6.00	89.76	0.00	0.00	0.00	0.08	5.23	0.00	0.00	0.00	
	312Eo	1	0.00	1.91	6.00	31.90	0.00	0.00	0.00	0.01	1.46	0.00	0.00	0.00	
	312Ex	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			23.00	0.00	23.00	
	312J	1	0.00	3.40	7.48	45.49	0.00	0.00	0.00	0.31	3.19	5.00	22.00	27.00	
	312K	1	0.00	27.96	32.17	86.91	0.00	0.00	0.00	4.85	19.98	0.00	11.00	11.00	
	312c BS	1	0.00	28.86	15.65	184.40	2.84	0.00	0.00			3.00	0.00	3.00	
	312c LS	1	0.00	0.61	11.30	5.41	0.00	0.00	0.00			0.00	0.00	0.00	
	312c ent	1	0.00	0.10	13.91	0.69	0.00	0.00	0.00			0.00	0.00	0.00	
	312c x	3	0.00	0.43	12.17	3.55	0.00	0.00	0.00			0.00	0.00	0.00	
	312x LSx	4	0.00	0.00	17.39	0.03	0.00	0.00	0.00			7.00	0.00	7.00	
	5	2	0.00	8.46	17.00	49.77	0.00	0.00	0.00			17.00	0.00	17.00	
	6	2	0.00	0.03	14.78	0.20	0.00	0.00	0.00			68.00	0.00	68.00	
	AS	1	0.00	0.06	6.09	1.03	0.00	0.00	0.00			0.00	0.00	0.00	
	AS1	1	0.00	0.00	60.00	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	AS2	1	0.00	0.05	60.00	0.08	0.00	0.00	0.00			0.00	0.00	0.00	
	AS3	1	0.00	0.35	47.83	0.74	0.00	0.00	0.00			0.00	80.00	80.00	
	ASin	1	0.00	0.04	17.39	0.20	0.00	0.00	0.00			0.00	80.00	80.00	
	CS 2	1	0.00	18.41	6.61	278.59	3.77	0.00	0.00	1.65	13.52	0.00	0.00	0.00	
	QML	1	0.00	0.08	43.48	0.19	0.00	0.00	0.00			0.00	0.00	0.00	
	QMLx	1	0.00	0.01	17.39	0.04	0.00	0.00	0.00			0.00	0.00	0.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
17:00-18:00	1	1	316.43	10.43	18.84	43.68
	308A	2	106.78	3.94	16.86	15.93
	311Ao	1	78.40	6.52	7.47	29.95
	311C	1	64.88	3.60	11.21	33.12
	311Cx	1	217.52	7.45	18.13	33.81
	311G	2	0.64	2.09	0.19	235.45
	311LAS	1	39.42	1.55	15.83	12.72
	311a	1	33.15	1.23	16.70	7.50
	311aa O	1	116.62	4.30	16.86	26.13
	311aa bus	2	100.53	3.54	17.67	26.08
	311abus	1	27.33	1.14	14.86	8.43
	311b	1	327.53	13.48	15.10	40.74
	311cn	1	22.46	1.07	13.08	7.70
	311co	1	31.14	1.42	13.62	7.39
	311csx	1	16.95	0.62	17.02	4.99
	311dAS	311dAS	1.74	0.08	14.31	4.38
	311dn	1	104.88	3.78	17.24	14.92
	311do	1	79.58	3.15	15.70	16.39
	311out	1	63.56	7.95	4.97	44.57
	312A	1	12.85	4.74	1.68	46.50
	312Ae	1	34.10	2.43	8.70	22.36
	312Be	1	33.76	4.29	4.88	39.84
	312Bo	1	0.87	0.46	1.17	66.84
	312Cn	1	45.78	5.91	4.82	32.52
	312Co	1	9.10	0.93	6.08	25.75
	312D	1	216.72	24.80	5.43	173.00
	312Dx	1	45.50	1.52	18.64	12.00
	312Eent	1	69.43	1.76	24.52	18.52
	312En	1	9.28	1.89	3.05	25.67
	312Eo	1	2.70	0.50	3.35	23.39
	312Ex	1	68.70	2.29	18.64	12.00
	312J	1	21.52	1.74	7.68	12.52
	312K	1	127.47	16.40	4.83	85.67
	312c BS	1	107.05	7.21	9.23	21.82
	312c LS	1	14.95	1.08	8.63	16.85
	312c ent	1	48.00	1.39	21.41	8.36
	312c x	3	74.79	3.75	12.39	12.64
	312x LSx	4	17.10	0.57	18.48	12.10
	5	2	14.35	1.28	6.96	5.78
	6	2	32.98	1.13	18.15	10.47

AS	1	15.57	0.51	19.12	4.09
AS1	1	20.01	0.67	18.63	41.43
AS2	1	137.31	3.93	21.73	35.51
AS3	1	105.05	3.86	16.93	36.34
ASin	1	39.50	1.18	20.74	10.79
CS 2	1	20.29	7.67	1.64	51.72
QML	1	41.00	1.45	17.57	31.83
QMLx	1	20.70	0.70	18.44	12.13

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	1	0.00	0.00	✓	0.00	10.89			1.00	0.00	30.88	30.88
	308A	2	0.00	0.00	✓	0.00	1.06			1.00	0.00	14.93	14.93
	311Ao	1	0.00	0.00	✓	0.00	14.60			1.00	0.00	60.64	60.64
	311C	1	0.00	0.00	✓	0.00	6.39	0.26	5.43	1.00	0.00	29.63	29.63
	311Cx	1	0.00	0.00	✓	0.00	0.20			1.00	0.00	2.90	2.90
	311G	2	0.00	0.00	✓	0.00	3.04	1.93	3.03	1.00	0.00	30.21	30.21
	311LAS	1	0.00	0.00	✓	0.00	2.04	0.10	1.92	1.00	0.00	4.04	4.04
	311a	1	0.00	0.00	✓	0.00	0.13			1.00	0.00	1.82	1.82
	311aa O	1	0.00	0.00	✓	0.00	2.71			1.00	0.00	6.78	6.78
	311aa bus	2	0.00	0.00	✓	0.00	2.01			1.00	0.00	3.23	3.23
	311abus	1	0.00	0.00	✓	0.00	0.23			1.00	0.00	3.29	3.29
	311b	1	0.00	0.00	✓	0.00	1.52			1.00	0.00	21.41	21.41
	311cn	1	0.00	0.00	✓	0.00	0.25			1.00	0.00	3.52	3.52
	311co	1	0.00	0.00	✓	0.00	0.28			1.00	0.00	4.00	4.00
	311csx	1	0.00	0.00	✓	0.00	0.05			1.00	0.00	0.76	0.76
	311dAS	311dAS	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.25	0.25
	311dn	1	0.00	0.00	✓	0.00	0.82			1.00	0.00	11.62	11.62
	311do	1	0.00	0.00	✓	0.00	0.24			1.00	0.00	3.42	3.42
	311out	1	0.00	0.00	✓	0.00	15.20	1.32	14.69	1.00	0.00	88.41	88.41
	312A	1	0.00	0.00	✓	0.00	6.62	1.14	6.62	1.00	0.00	60.55	60.55
	312Ae	1	0.00	0.00	✓	0.00	6.05			1.00	0.00	22.02	22.02
	312Be	1	0.00	0.00	✓	0.00	9.59	0.27	8.68	1.00	0.00	50.02	50.02
	312Bo	1	0.00	0.00	✓	0.00	1.54	0.11	0.95	1.00	0.00	6.51	6.51
	312Cn	1	0.00	0.00	✓	0.00	9.03	1.03	9.03	1.00	0.00	65.44	65.44
	312Co	1	0.00	0.00	✓	0.00	1.62	0.03	1.62	1.00	0.00	9.52	9.52
	312D	1	0.00	0.00	✓	0.00	33.83	15.94	28.97	1.00	0.00	259.29	259.29
	312Dx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312Eent	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.48	0.48
	312En	1	0.00	0.00	✓	0.00	5.39	0.08	5.23	1.00	0.00	27.03	27.03
	312Eo	1	0.00	0.00	✓	0.00	1.91	0.01	1.46	1.00	0.00	7.10	7.10
	312Ex	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312J	1	0.00	0.00	✓	0.00	3.40	0.31	3.19	1.00	0.00	15.12	753.61
	312K	1	0.00	0.00	✓	0.00	28.39	5.28	20.41	1.00	0.00	182.34	182.34
	312c BS	1	0.00	0.00	✓	0.00	28.90			1.00	0.00	63.59	63.59
	312c LS	1	0.00	0.00	✓	0.00	0.62			1.00	0.00	8.69	8.69
	312c ent	1	0.00	0.00	✓	0.00	0.10			1.00	0.00	1.37	1.37
	312c x	3	0.00	0.00	✓	0.00	0.43			1.00	0.00	6.14	6.14
	312x LSx	4	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.07	0.07
	5	2	0.00	0.00	✓	0.00	8.46			1.00	0.00	11.60	11.60
	6	2	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.42	0.42
	AS	1	0.00	0.00	✓	0.00	0.06			1.00	0.00	0.89	0.89
	AS1	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.01	0.01
	AS2	1	0.00	0.00	✓	0.00	0.05			1.00	0.00	0.68	0.68
	AS3	1	0.00	0.00	✓	0.00	0.36			1.00	0.00	5.04	5.04
	ASin	1	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.50	0.50
	CS 2	1	0.00	0.00	✓	0.00	18.44	1.68	13.55	1.00	0.00	105.83	105.83
	QML	1	0.00	0.00	✓	0.00	0.08			1.00	0.00	1.19	1.19
	QMLx	1	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.11	0.11

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	312F	1	0	22	11000	74	10.94	0.32	0.95	0.95
		2	0	22	11000	74	10.94	0.32	0.95	0.95
	312G	1	1	22	11000	17	46.71	0.66	4.05	4.05
		2	1	22	11000	17	46.71	0.66	4.05	4.05
	312H	1	2	22	11000	10	52.94	0.70	4.59	4.59
		2	2	22	11000	10	52.94	0.70	4.59	4.59
	312I	1	0	22	11000	65	14.52	0.37	1.26	1.26
		2	0	22	11000	65	14.52	0.37	1.26	1.26
	312K	1	2	22	11000	11	52.02	0.70	4.51	4.51
		2	2	22	11000	11	52.02	0.70	4.51	4.51
	312L	1	0	0	11000	62	0.00	0.00	0.00	0.00
		2	0	0	11000	62	0.00	0.00	0.00	0.00
	312o	1	0	0	11000	56	0.00	0.00	0.00	0.00
		2	0	0	11000	56	0.00	0.00	0.00	0.00
	312p	1	0	0	11000	1	0.00	0.00	0.00	0.00
		2	0	0	11000	1	0.00	0.00	0.00	0.00
	7	1	0	0	11000	3	0.00	0.00	0.00	0.00
		2	0	0	11000	3	0.00	0.00	0.00	0.00
	8	1	0	0	11000	56	0.00	0.00	0.00	0.00
		2	0	0	11000	56	0.00	0.00	0.00	0.00

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
	312F	1	22	22	0		11000	6460	0		26329	0.00	74	74

17:00-18:00		2	22	22	0		11000	6460	0		26329	0.00	74	74
	312G	1	22	22	0		11000	1571	1		6329	0.00	17	18
		2	22	22	0		11000	1571	1		6329	0.00	17	18
	312H	1	22	22	0		11000	960	2		3829	0.00	10	11
		2	22	22	0		11000	960	2		3829	0.00	10	11
	312I	1	22	22	0		11000	5762	0		23471	0.00	65	66
		2	22	22	0		11000	5762	0		23471	0.00	65	66
	312K	1	22	22	0		11000	1048	2		4186	0.00	11	12
		2	22	22	0		11000	1048	2		4186	0.00	11	12
	312L	1	0	0	0		11000	5500	0		Unrestricted	0.00	62	63
		2	0	0	0		11000	5500	0		Unrestricted	0.00	62	63
	312o	1	0	0	0		11000	4889	0		Unrestricted	0.00	56	56
		2	0	0	0		11000	4889	0		Unrestricted	0.00	56	56
	312p	1	0	0	0		11000	87	0		Unrestricted	0.00	1	1
		2	0	0	0		11000	87	0		Unrestricted	0.00	1	1
	7	1	0	0	0		11000	349	0		Unrestricted	0.00	3	4
		2	0	0	0		11000	349	0		Unrestricted	0.00	3	4
	8	1	0	0	0		11000	4976	0		Unrestricted	0.00	56	57
		2	0	0	0		11000	4976	0		Unrestricted	0.00	56	57

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)
17:00-18:00	312F	1	4.33	10.94	0.07	0.00	0.95	0.95
		2	4.33	10.94	0.07	0.00	0.95	0.95
	312G	1	3.00	46.71	0.29	0.00	4.05	4.05
		2	3.00	46.71	0.29	0.00	4.05	4.05
	312H	1	3.00	52.94	0.32	0.00	4.59	4.59
		2	3.00	52.94	0.32	0.00	4.59	4.59
	312I	1	5.67	14.52	0.09	0.00	1.26	1.26
		2	5.67	14.52	0.09	0.00	1.26	1.26
	312K	1	3.00	52.02	0.32	0.00	4.51	4.51
		2	3.00	52.02	0.32	0.00	4.51	4.51
	312L	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312o	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312p	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	7	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	8	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
17:00-18:00	312F	1	0.32	10.00	3.18	0.00	0.00	0.00
		2	0.32	10.00	3.18	0.00	0.00	0.00
	312G	1	0.66	10.00	6.60	0.00	0.00	0.00
		2	0.66	10.00	6.60	0.00	0.00	0.00
	312H	1	0.70	10.00	7.03	0.00	0.00	0.00
		2	0.70	10.00	7.03	0.00	0.00	0.00
	312I	1	0.37	10.00	3.67	0.00	0.00	0.00
		2	0.37	10.00	3.67	0.00	0.00	0.00
	312K	1	0.70	10.00	6.97	0.00	0.00	0.00
		2	0.70	10.00	6.97	0.00	0.00	0.00
	312L	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312o	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312p	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	7	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	8	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
17:00-18:00	312F	1	0.13	0.09	0.88	15.27
		2	0.13	0.09	0.88	15.27
	312G	1	0.09	0.30	0.18	49.71
		2	0.09	0.30	0.18	49.71
	312H	1	0.09	0.34	0.16	55.94
		2	0.09	0.34	0.16	55.94
	312I	1	0.18	0.12	0.89	20.19
		2	0.18	0.12	0.89	20.19
	312K	1	0.09	0.34	0.16	55.02
		2	0.09	0.34	0.16	55.02
	312L	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EoTS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
	312F	1	0.00	0.00	0.32	1.00	0.00	0.95	0.95
		2	0.00	0.00	0.32	1.00	0.00	0.95	0.95
	312G	1	0.00	0.00	0.66	1.00	0.00	4.05	4.05
		2	0.00	0.00	0.66	1.00	0.00	4.05	4.05
	312H	1	0.00	0.00	0.70	1.00	0.00	4.59	4.59
		2	0.00	0.00	0.70	1.00	0.00	4.59	4.59
	312I	1	0.00	0.00	0.37	1.00	0.00	1.26	1.26
		2	0.00	0.00	0.37	1.00	0.00	1.26	1.26

17:00-18:00	312K	1	0.00	0.00	0.70	1.00	0.00	4.51	4.51
		2	0.00	0.00	0.70	1.00	0.00	4.51	4.51
	312L	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	09/07/2020 14:40:00	09/07/2020 14:40:38	17:00	126	2002.52	83.68	100.14	312D/1	2	3	312D/1	312c BS/1	312D/1	

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	100	-10	23999	4899	12.23	1157.48	814.30	1971.78

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	2	220	710	35.43	30.74	30.74

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
17:00-18:00	24219	24218	2	✓	100	✓	-10	5609	5638

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	15.17	12.44	47.42	36.26	1188.22	1188.22	23.61	4823.61	893.48	75.81	814.30

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
17:00-18:00	278.59	0.00	310.00	306.84	616.84

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)
17:00-18:00	3157.08	185.76	10.56

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	0.00	0.00	✓	0.00	1.00	0.00	0.00	1264.03	2002.52

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To																						
		A bcd	A ex	A near	A off	B	A1	A2	A616 in	A616 out	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6
From	A bcd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	125.1	0.0	0.0	125.6	74.5	0.0	67.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A ex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A near	0.0	0.0	0.0	0.0	31.1	63.4	54.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A off	0.0	0.0	0.0	0.0	0.0	64.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	0.0	52.1	0.0	0.0	0.0	84.1	67.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A1	84.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A2	91.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	157.1	0.0	0.0	157.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A616 in	0.0	59.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A616 out	77.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	166.0	0.0	0.0	166.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.2	0.0	29.5	97.7	0.0	97.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B as	0.0	156.3	0.0	0.0	0.0	0.0	180.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B wr	0.0	216.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5	58.7	0.0	0.0	89.2	0.0	89.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B wr x	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	C	0.0	166.8	0.0	0.0	0.0	0.0	191.1	0.0	0.0	114.4	0.0	0.0	114.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	C as	0.0	61.7	0.0	0.0	53.6	93.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	D	0.0	310.4	0.0	0.0	0.0	0.0	334.7	0.0	0.0	209.6	0.0	0.0	210.1	185.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MSS	239.0	328.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	372.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
P1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7	0.0	0.0	0.0	0.0	
P2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7	0.0	20.2	0.0	0.0	
P3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	0.0	15.3	0.0	0.0	
P4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0	55.9	0.0	
P5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.9	0.0	55.0	
P6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	0.0	

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	P5	P4		22		55.94	22	55.94
2	P4	P5		22		55.94	22	55.94
3	P5	P6		22		55.02	22	55.02
4	P6	P5		22		55.02	22	55.02
14	P1	P2		22		49.71	22	49.71
15	P2	P1		22		49.71	22	49.71
23	P4	P3		22		15.27	22	15.27
30	D	C	16		185.00		16	185.00
34	C	D	0		0.00		0	0.00

49	B LS	B wr x	25		29.49		25	29.49
56	A near	B	185		31.12		185	31.12
57	C as	B	22		53.56		22	53.56
58	B LS	D	125		97.71		125	97.71
59	B LS	C	30		97.71		30	97.71
61	P3	P4		22		15.27	22	15.27
62	C	B	0		0.00		0	0.00
63	C	A ex	260		166.80		260	166.80
64	D	A2	9		334.72		9	334.72
65	P2	P3		22		20.19	22	20.19
66	A bod	C	629		74.46		629	74.46
67	B wr	A2	0		0.00		0	0.00
68	B wr	B	0		0.00		0	0.00
69	B LS	B as	50		67.17		50	67.17
70	A2	A2	0		0.00		0	0.00
71	A2	B	0		0.00		0	0.00
72	A2	A ex	0		0.00		0	0.00
73	B LS	A2	0		0.00		0	0.00
74	B LS	B	0		0.00		0	0.00
75	B LS	A ex	0		0.00		0	0.00
76	B as	A2	7		180.57		7	180.57
84	A616 in	A2	0		0.00		0	0.00
85	A616 in	B	0		0.00		0	0.00
86	A616 in	A ex	66		59.55		66	59.55
108	A off	A1	692		64.52		692	64.52
109	A near	A1	488		63.37		488	63.37
110	C as	A1	2		93.74		2	93.74
111	B	A1	9		84.14		9	84.14
191	C	B wr x	56		114.95		56	114.95
192	C	B LS	21		114.41		21	114.41
193	D	B wr x	379		210.12		379	210.12
194	D	B LS	20		209.59		20	209.59
206	B wr	D	200		89.22		200	89.22
207	B wr	C	12		89.22		12	89.22
208	B wr	B LS	25		20.46		25	20.46
230	C as	A ex	34		61.74		34	61.74
232	B	A ex	17		52.14		17	52.14
233	A near	A2	239		54.50		239	54.50
234	B	A2	138		67.35		138	67.35
266	P3	P2		22		20.19	22	20.19
284	A bod	D	130		67.70		130	67.70
285	A bod	B wr x	20		125.64		20	125.64
286	A bod	B LS	5		125.10		5	125.10
294	MSS	B wr x	8		372.44		8	372.44
295	MSS	B LS	0		0.00		0	0.00
296	B wr	B as	338		58.68		338	58.68
300	A1	A bod	592		84.51		592	84.51
302	B as	A bod	0		0.00		0	0.00
303	MSS	A bod	16		238.97		16	238.97
307	A2	B wr x	193		157.68		193	157.68
308	A2	B LS	50		157.14		50	157.14
312	A2	A bod	139		91.58		139	91.58
313	A1	A616 out	488		8.43		488	8.43
314	A616 out	A bod	50		77.28		50	77.28
317	C	A2	5		191.10		5	191.10
318	D	B	0		0.00		0	0.00
319	D	A ex	92		310.43		92	310.43
320	B wr	A ex	25		216.45		25	216.45
321	B as	B	0		0.00		0	0.00
322	B as	A ex	388		156.27		388	156.27
323	MSS	A2	0		0.00		0	0.00
324	MSS	B	0		0.00		0	0.00
325	MSS	A ex	8		328.60		8	328.60
326	A616 out	B wr x	388		166.49		388	166.49
327	A616 out	B LS	50		165.95		50	165.95

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max end of red queue (PCU)	Delay weighting multiplier	Stop weighting multiplier	Cost of traffic penalties (£ per hr)	P.I.
1	1	(untitled)	311d			860	1050	126	0.00	82	10	43.68	7.89	25.06	10.87		100	100	0.00	30.88
308A	2	(untitled)				890	1200	126	0.00	74	21	15.93	4.25	0.00	1.05		100	100	0.00	14.93
311Ao	1	(untitled)	311			784	1500	126	38.98	76	19	29.95	17.95	52.31	14.59		100	100	0.00	60.64
311C	1	Lockwood inbound	311ms	311ms	A	391	1650	58	7.00	51	78	33.12	16.97	46.34	6.39	5.43	100	100	0.00	29.63
311Cx	1	(untitled)	311a			794	1700	126	0.00	47	93	33.81	0.93	0.00	0.20		100	100	0.00	2.90
311G	2	(untitled)	311ms	311ms	G	32	2300	1	0.00	88	3	235.45	233.05	196.85	2.63	2.62	100	100	0.00	30.21
311LAS	1	(untitled)	311ms	311ms	C	438	1400	111	6.00	35	156	12.72	1.92	13.29	2.04	1.92	100	100	0.00	4.04
311a	1	(untitled)	311a			592	1500	126	0.00	39	128	7.50	0.78	0.00	0.13		100	100	0.00	1.82
311aa O	1	(untitled)	311aa			592	1500	126	15.17	45	101	26.13	2.49	12.92	2.71		100	100	0.00	6.78
311aa bus	2	(untitled)	311aa			488	1400	126	9.88	38	138	26.08	1.36	9.96	2.01		100	100	0.00	3.23
311abus	1	(untitled)	311a			488	1000	126	0.00	49	84	8.43	1.71	0.00	0.23		100	100	0.00	3.29
311b	1	(untitled)	311b			1191	1500	126	0.00	79	13	40.74	4.56	0.00	1.51		100	100	0.00	21.41
311cn	1	(untitled)	311c			499	1000	126	0.00	50	80	7.70	1.79	0.00	0.25		100	100	0.00	3.52
311co	1	(untitled)	311c			692	1329	126	0.00	52	73	7.39	1.47	0.00	0.28		100	100	0.00	4.00
311csx	1	(untitled)	ASCS			446	1600	126	14.00	28	223	4.99	0.43	0.00	0.05		100	100	0.00	0.76
311dAS	311dAS	(untitled)	311d			62	364	126	0.00	17	428	4.38	1.02	0.00	0.02		100	100	0.00	0.25
311dn	1	(untitled)	311d			912	1300	126	0.00	70	28	14.92	3.23	0.00	0.82		100	100	0.00	11.62
311do	1	(untitled)	311d			692	1400	126	0.00	49	82	16.39	1.25	0.00	0.24		100	100	0.00	3.42
311out	1	(untitled)	311ms	311ms	B	642 <	1750	60	1.32	77	16	44.57	32.69	69.91	15.19 +	14.68	100	100	0.00	88.41
312A	1	(untitled)	312a	312a	A	367 <	1750	34	0.00	75	19	46.50	40.91	51.22	6.60 +	6.60	100	100	0.00	60.55
312Ae	1	(untitled)	312b			392	1800	126	48.68	35	154	22.36	12.63	44.02	6.05		100	100	0.00	22.02
312Be	1	(untitled)	312b	312b	M	388	1833	51	0.00	51	75	39.84	30.11	70.31	9.58	8.68	100	100	0.00	50.02
312Bo	1	(untitled)	312a	312a	B	25	1700	4	3.00	37	143	66.84	62.64	107.86	1.54	0.95	100	100	0.00	6.51
312Cn	1	(untitled)	312a	312a	C	654 <	1895	58	0.00	74	22	32.52	24.12	39.35	9.02 +	9.02	100	100	0.00	65.44

312Co	1	(untitled)	312a	312a	C	130	1315	58	10.00	21	326	25.75	17.35	37.99	1.62	1.62	100	100	0.00	9.52
312D	1	Lockwood Road inbound	312a	312a	D	516	1855	34	0.00	100	-10	173.00	122.60	151.01	28.95	24.09	100	100	0.00	259.29
312Dx	1	(untitled)				455	Unrestricted	126	21.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312Eent	1	(untitled)	312a			342	1500	126	0.00	23	295	18.52	0.35	0.00	0.03		100	100	0.00	0.48
312En	1	(untitled)	312a	312a	E	265	1800	57	0.00	32	181	25.67	22.54	58.06	5.39	5.23	100	100	0.00	27.03
312Eo	1	(untitled)	312a	312a	E	77	1312	57	0.00	13	606	23.39	20.26	54.31	1.91	1.46	100	100	0.00	7.10
312Ex	1	(untitled)				687	Unrestricted	126	23.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312J	1	(untitled)	312b	312b	J	500	1800	64	27.00	54	67	12.52	7.29	19.21	3.40	3.19	100	99999	0.00	753.61
312K	1	(untitled)	312b	312b	K	689	1873	49	11.00	93	-3	85.67	63.47	114.10	27.96	19.98	100	100	0.00	182.34
312c BS	1	(untitled)	312c			1189 <	1400	126	3.00	85	6	21.82	11.33	67.81	28.86 +		100	100	0.00	63.59
312c LS	1	(untitled)	312c			230	351	126	0.00	66	37	16.85	9.58	0.00	0.61		100	100	0.00	8.69
312c ent	1	(untitled)	312c			600	1700	126	0.00	35	155	8.36	0.58	0.00	0.10		100	100	0.00	1.37
312c x	3	(untitled)				1068	1800	126	0.00	59	52	12.64	1.46	0.00	0.43		100	100	0.00	6.14
312x LSx	4	(untitled)				171	1800	126	7.00	9	848	12.10	0.10	0.00	0.00		100	100	0.00	0.07
5	2	(untitled)				797	1500	126	17.00	53	69	5.78	3.45	8.54	8.46		100	100	0.00	11.60
6	2	(untitled)	ASCS			388	1800	126	68.00	22	318	10.47	0.27	0.00	0.03		100	100	0.00	0.42
AS	1	(untitled)	AS			445	1500	126	0.00	30	203	4.09	0.51	0.00	0.06		100	100	0.00	0.89
AS1	1	(untitled)	AS			58	1800	126	126.00	3	2693	41.43	0.03	0.00	0.00		100	100	0.00	0.01
AS2	1	(untitled)				398	1500	126	0.00	27	239	35.51	0.43	0.00	0.05		100	100	0.00	0.68
AS3	1	(untitled)	ASCS			382	682	126	80.00	56	61	36.34	0.00	0.00	0.35		100	100	0.00	5.04
ASin	1	(untitled)	ASCS			395	1700	126	80.00	23	287	10.79	0.32	0.00	0.04		100	100	0.00	0.50
CS 2	1	(untitled)	311ms	311ms	D	534 <	1808	45	0.00	81	11	51.72	47.16	96.91	18.41 +	13.52	100	100	0.00	105.83
QML	1	(untitled)	AS			164	491	126	0.00	33	169	31.83	1.83	0.00	0.08		100	100	0.00	1.19
QMLx	1	(untitled)				207	1800	126	0.00	12	683	12.13	0.13	0.00	0.01		100	100	0.00	0.11

Pedestrian Crossing Results

Pedestrian	Side	Name	SIGNALS			FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PENALTIES	P.I.
			Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay weighting (%)	Cost of traffic penalties (£ per hr)	P.I.
312F	1	(untitled)	312a	312a	F	22	11000	74	0	26329	15.27	10.94	0.32	100	0.00	0.95
	2	(untitled)	312a	312a	F	22	11000	74	0	26329	15.27	10.94	0.32	100	0.00	0.95
312G	1	(untitled)		312a	I	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05
	2	(untitled)		312a	I	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05
312H	1	(untitled)		312a	H	22	11000	10	2	3829	55.94	52.94	0.70	100	0.00	4.59
	2	(untitled)		312a	H	22	11000	10	2	3829	55.94	52.94	0.70	100	0.00	4.59
312I	1	(untitled)	312a	312a	G	22	11000	65	0	23471	20.19	14.52	0.37	100	0.00	1.26
	2	(untitled)	312a	312a	G	22	11000	65	0	23471	20.19	14.52	0.37	100	0.00	1.26
312K	1	(untitled)		312a	N	22	11000	11	2	4186	55.02	52.02	0.70	100	0.00	4.51
	2	(untitled)		312a	N	22	11000	11	2	4186	55.02	52.02	0.70	100	0.00	4.51
312L	1	(untitled)		312b	L	0	11000	62	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312b	L	0	11000	62	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312o	1	(untitled)		312a	O	0	11000	56	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	O	0	11000	56	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312p	1	(untitled)		312a	P	0	11000	1	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	P	0	11000	1	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
7	1	(untitled)	311ms	311ms	E	0	11000	3	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)	311ms	311ms	E	0	11000	3	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
8	1	(untitled)		311ms	F	0	11000	56	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		311ms	F	0	11000	56	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	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)
Normal traffic	3155.93	183.36	10.69	45.26	36.26	1157.48	814.30	0.00	1971.78
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians	1.14	2.40	0.30	2.16	0.00	30.74	0.00	0.00	30.74
TOTAL	3157.08	185.76	10.56	47.42	36.26	1188.22	814.30	0.00	2002.52

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = 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/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 15	
Version: 15.5.0.6767 © Copyright TRL Limited, 2016	
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk	
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Filename: rrfnbl 2037 am zJ3 opt 1 Gx5 1.6 E 1in 2 seq5 .t15
 Path: C:\Users\andrewrawlinson\Desktop\2037 inc RR67 Jacobs
 Report generation date: 09/07/2020 15:19:06

- »Network Diagrams
 «A1 - AM : D1 - AM* :
 »Summary
 »Network Options
 »Traffic Nodes
 »Arms and Traffic Streams
 »Pedestrian Crossings
 »Local OD Matrix - Local Matrix: 1
 »Signal Timings
 »TRANSYT 12 Tables
 »Results - Link
 »Results - Traffic Stream
 »Data Entry - Stage Start and End
 »Data Entry - Phase
 »Data Entry - Traffic Stream
 »Data entry - Link
 »Results - Pedestrian
 »Traffic Stream Results
 »Pedestrian Crossing Results
 »Network Results
 »Point to Point Journey Time
 »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITDS\AndrewRawlinson
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
			✓		✓	✓	✓	✓	✓	✓	✓		

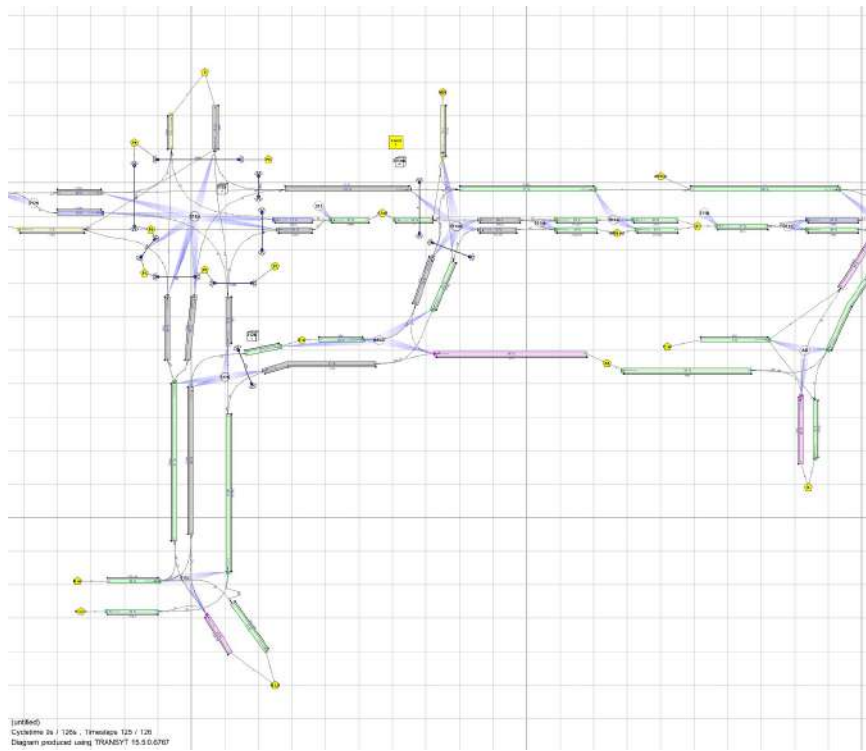
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	mph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



A1 - AM

D1 - AM*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	09/07/2020 15:03:56	09/07/2020 15:05:34	08:00	126	3548.68	214.74	113.40	312Eent/1	6	9	311C/1	312Eent/1	312Eent/1	

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
AM	with selective RR67	D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
126		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms*[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.47	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms*[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.47	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	312a, 312b, 311ms

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	(untitled)		311d
308A	(untitled)		
311Ao	(untitled)		311
311C	(untitled)		311ms
311Cx	(untitled)		311a
311G	(untitled)		311ms
311LAS	(untitled)		311ms
311a	(untitled)		311a
311aa O	(untitled)		311aa
311aa bus	(untitled)		311aa
311abus	(untitled)		311a
311b	(untitled)		311b
311cn	(untitled)		311c
311co	(untitled)		311c
311csx	(untitled)		ASCS
311dAS	(untitled)		311d
311dn	(untitled)		311d
311do	(untitled)		311d
311out	(untitled)		311ms
312A	(untitled)		312a
312Ae	(untitled)		312b
312Be	(untitled)		312b
312Bo	(untitled)		312a
312Cn	(untitled)		312a
312Co	(untitled)		312a
312D	(untitled)		312a
312Dx	(untitled)		
312Eent	(untitled)		312e
312En	(untitled)		312a
312Eo	(untitled)		312a
312Ex	(untitled)		
312J	(untitled)		312b
312K	(untitled)		312b
312c BS	(untitled)		312c
312c LS	(untitled)		312c
312c ent	(untitled)		312c
312c x	(untitled)		
312x LSx	(untitled)		
5	(untitled)		
6	(untitled)		ASCS
AS	(untitled)		AS
AS1	(untitled)		AS
AS2	(untitled)		
AS3	(untitled)		ASCS
ASin	(untitled)		ASCS
CS 2	(untitled)		311ms
QML	(untitled)		AS
QMLx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	(untitled)			368.00	✓	Sum of lanes	1650					Normal	
308A	2	(untitled)			120.00	✓	Sum of lanes	1200	✓	1800			Normal	
311Ao	1	(untitled)			75.00	✓	Sum of lanes	1625					Normal	
311C	1	Lockwood inbound			166.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
311Cx	1	(untitled)			274.00	✓	Sum of lanes	1700					Normal	
311G	2	(untitled)			20.00								Normal	
311LAS	1	(untitled)			90.00	✓	Sum of lanes	1400	✓	1800	✓		Normal	
311a	1	(untitled)			56.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa O	1	(untitled)			197.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa bus	2	(untitled)			206.00	✓	Sum of lanes	1400					Normal	
311abus	1	(untitled)			56.00	✓	Sum of lanes	1000					Normal	
311b	1	(untitled)			275.00	✓	Sum of lanes	1500					Normal	
311cn	1	(untitled)			45.00	✓	Sum of lanes	1000					Normal	
311co	1	(untitled)			45.00	✓	Sum of lanes	1200				✓	Normal	
311csx	1	(untitled)			38.00	✓	Sum of lanes	1600					Normal	
311dAS	311dAS	(untitled)			28.00							✓	Normal	
311dn	1	(untitled)			115.00	✓	Sum of lanes	1300					Normal	
311do	1	(untitled)			115.00	✓	Sum of lanes	1400					Normal	
311out	1	(untitled)			99.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312A	1	(untitled)			35.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312Ae	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800			Normal	
312Be	1	(untitled)			87.00	✓	Sum of lanes	1833	✓	1800	✓		Normal	
312Bo	1	(untitled)			35.00	✓	Sum of lanes	1700	✓	1800	✓		Normal	
312Cn	1	(untitled)			75.00	✓	Sum of lanes	1895	✓	1800	✓		Normal	
312Co	1	(untitled)			70.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312D	1	Lockwood Road inbound			420.00	✓	Sum of lanes	1855			✓		Normal	
312Dx	1	(untitled)			100.00								Normal	
312Eent	1	(untitled)			203.00	✓	Sum of lanes	1800					Normal	
312En	1	(untitled)			35.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
312Eo	1	(untitled)			35.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312Ex	1	(untitled)			100.00								Normal	
312J	1	(untitled)			43.00	✓	Sum of lanes	1800			✓		Normal	
312K	1	(untitled)			185.00	✓	Sum of lanes	1873			✓		Normal	
312c BS	1	(untitled)			90.00	✓	Sum of lanes	1400					Normal	
312c LS	1	(untitled)			65.00							✓	Normal	
312c ent	1	(untitled)			80.00	✓	Sum of lanes	1700					Normal	

312c x	3	(untitled)			70.00	✓	Sum of lanes	1800						Normal
312x LSx	4	(untitled)			100.00	✓	Sum of lanes	1800						Normal
5	2	(untitled)			25.00	✓	Sum of lanes	1500	✓	1800				Normal
6	2	(untitled)			85.00	✓	Sum of lanes	1800						Normal
AS	1	(untitled)			35.00	✓	Sum of lanes	1500						Normal
AS1	1	(untitled)			345.00	✓	Sum of lanes	1800						Normal
AS2	1	(untitled)			345.00	✓	Sum of lanes	1500						Normal
AS3	1	(untitled)			275.00							✓		Normal
ASin	1	(untitled)			100.00	✓	Sum of lanes	1700						Normal
CS 2	1	(untitled)			38.00	✓	Sum of lanes	1808			✓			Normal
QML	1	(untitled)		✓	250.00								✓	Normal
QMLx	1	(untitled)			100.00	✓	Sum of lanes	1800						Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)											1650
308A	2	1	(untitled)											1200
311Ao	1	1	(untitled)											1625
311C	1	1	(untitled)											1800
311Cx	1	1	(untitled)											1700
311G	2	1	(untitled)											
311LAS	1	1	(untitled)											1400
311a	1	1	(untitled)											1500
311aa O	1	1	(untitled)											1500
311aa bus	2	1	(untitled)											1400
311abus	1	1	(untitled)											1000
311b	1	1	(untitled)											1500
311cn	1	1	(untitled)											1000
311co	1	1	(untitled)											1200
311csx	1	1	(untitled)											1600
311dAS	311dAS	1	(untitled)											
311dn	1	1	(untitled)											1300
311do	1	1	(untitled)											1400
311out	1	1	(untitled)											1750
312A	1	1	(untitled)											1750
312Ae	1	1	(untitled)											1800
312Be	1	1	(untitled)											1833
312Bo	1	1	(untitled)											1700
312Cn	1	1	(untitled)											1895
312Co	1	1	(untitled)											1440
312D	1	1	(untitled)											1855
312Dx	1	1	(untitled)											
312Eent	1	1	(untitled)											1800
312En	1	1	(untitled)											1800
312Eo	1	1	(untitled)											1440
312Ex	1	1	(untitled)											
312J	1	1	(untitled)											1800
312K	1	2	(untitled)											1873
312c BS	1	1	(untitled)											1400
312c LS	1	1	(untitled)											
312c ent	1	1	(untitled)											1700
312c x	3	1	(untitled)											1800
312x LSx	4	1	(untitled)											1800
5	2	1	(untitled)											1500
6	2	1	(untitled)											1800
AS	1	1	(untitled)											1500
AS1	1	1	(untitled)											1800
AS2	1	1	(untitled)											1500
AS3	1	1	(untitled)											
ASin	1	1	(untitled)											1700
CS 2	1	1	(untitled)	right	✓	N/A	N/A	1	3.25		80	24.00	✓	1808
QML	1	1	(untitled)											
QMLx	1	QMLx	(untitled)											1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00				
308A	2	CTM	100	100	100		20.00				
311Ao	1	NetworkDefault	100	100	100		13.00	✓	17.00	0.00	
311C	1	CTM	100	100	100		28.00				
311Cx	1	NetworkDefault	100	100	100		0.00				
311G	2	NetworkDefault	100	100	100		0.00				
311LAS	1	CTM	100	100	100		15.00	✓	15.00	0.00	
311a	1	CTM	100	100	100		10.00				
311aa O	1	CTM	100	100	100		36.00				
311aa bus	2	NetworkDefault	100	100	100		0.00				
311abus	1	NetworkDefault	100	100	100		0.00				
311b	1	NetworkDefault	100	100	100		0.00				
311cn	1	NetworkDefault	100	100	100		0.00				
311co	1	NetworkDefault	100	100	100		0.00				
311csx	1	NetworkDefault	100	100	100		0.00				
311dAS	311dAS	NetworkDefault	100	100	100		0.00				
311dn	1	NetworkDefault	100	100	100		0.00				
311do	1	NetworkDefault	100	100	100		0.00				
311out	1	CTM	100	100	100		15.00	✓	15.00	0.00	
312A	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Ae	1	CTM	100	100	100		17.00	✓	18.00	0.00	
312Be	1	CTM	100	100	100		17.00	✓	17.00	0.00	
312Bo	1	CTM	100	100	100		6.00				
312Cn	1	CTM	100	100	100		12.00	✓	8.00	0.00	
312Co	1	Flare	100	100	100		8.00	✓	8.00	0.00	
312D	1	NetworkDefault	100	100	100		0.00				
312Dx	1	NetworkDefault	100	100	100		0.00				
312Eent	1	PDM	100	100	100		49.00	✓	49.00	0.00	
312En	1	CTM	100	100	100		6.00	✓	6.00	0.00	

312Eo	1	Flare	100	100	100		6.00	✓	6.00	0.00	
312Ex	1	NetworkDefault	100	100	100		0.00				
312J	1	NetworkDefault	99999	100	100		0.00				
312K	1	NetworkDefault	100	100	100		0.00				
312c BS	1	NetworkDefault	100	100	100		0.00				
312c LS	1	NetworkDefault	100	100	100		0.00				
312c ent	1	NetworkDefault	100	100	100		0.00				
312c x	3	NetworkDefault	100	100	100		0.00				
312x LSx	4	NetworkDefault	100	100	100		0.00				
5	2	CTM	100	100	100		3.00	✓	17.00	0.00	
6	2	NetworkDefault	100	100	100		0.00				
AS	1	NetworkDefault	100	100	100		0.00				
AS1	1	NetworkDefault	100	100	100		0.00				
AS2	1	NetworkDefault	100	100	100		0.00				
AS3	1	NetworkDefault	100	100	100		0.00				
ASin	1	NetworkDefault	100	100	100		0.00				
CS 2	1	NetworkDefault	100	100	100		0.00				
QML	1	NetworkDefault	100	100	100		0.00				
QMLx	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	126

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	1397	1397
308A	2	1365	1365
311Ao	1	518	518
311C	1	776	776
311Cx	1	1393	1393
311G	2	0	0
311LAS	1	157	157
311a	1	347	347
311aa O	1	347	347
311aa bus	2	207	207
311abus	1	207	207
311b	1	612	612
311cn	1	302	302
311co	1	310	310
311csx	1	157	157
311dAS	311dAS	130	130
311dn	1	527	527
311do	1	310	310
311out	1	397	397
312A	1	349	349
312Ae	1	374	374
312Be	1	555	555
312Bo	1	25	25
312Cn	1	457	457
312Co	1	61	61
312D	1	426	426
312Dx	1	403	403
312Eent	1	693	693
312En	1	643	643
312Eo	1	50	50
312Ex	1	439	439
312J	1	393	393
312K	1	396	396
312c BS	1	789	789
312c LS	1	247	247
312c ent	1	782	782
312c x	3	579	579
312x LSx	4	310	310
5	2	518	518
6	2	555	555
AS	1	387	387
AS1	1	0	0
AS2	1	488	488
AS3	1	422	422
ASin	1	555	555
CS 2	1	738	738
QML	1	312	312
QMLx	1	81	81

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
311C	1	311ms	A	
311LAS	1	311ms	C	
311out	1	311ms	B	
312A	1	312a	A	
312Be	1	312b	M	
312Bo	1	312a	B	
312Cn	1	312a	C	
312Co	1	312a	C	
312D	1	312a	D	
312En	1	312a	E	
312Eo	1	312a	E	
312J	1	312b	J	
312K	1	312b	K	
CS 2	1	311ms	D	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)
311Ao	1	9.00	18.64

311G	2	2.40	18.64
311a	1	6.72	18.64
311aa bus	2	24.72	18.64
311abus	1	6.72	18.64
311dn	1	11.69	22.00
311do	1	15.13	17.00
312D	1	50.40	18.64
312Eent	1	18.16	25.00
312c LS	1	7.27	20.00
312c ent	1	7.78	23.00
AS1	1	41.40	18.64
AS3	1	33.00	18.64
ASin	1	10.47	21.38
QML	1	30.00	18.64

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)	Auto turning radius	Traffic turn style	Turning radius (m)
1	1	1	311Cx/1	1/1	35.79	23.00	✓	Straight	Straight Movement
308A	2	1	311dAS/311dAS	308A/2	11.67	23.00	✓	Straight	Straight Movement
311C	1	1	312D/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	1	CS 2/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
311LAS	1	1	311aa bus/2	311LAS/1	10.80	18.64	✓	Straight	Straight Movement
311aa O	1	1	311a/1	311aa O/1	23.64	18.64	✓	Straight	Straight Movement
311b	1	1	311cn/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	1	311dn/1	311cn/1	5.92	17.00	✓	Straight	Straight Movement
311co	1	1	311do/1	311co/1	5.92	17.00	✓	Straight	Straight Movement
311csx	1	1	311LAS/1	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	1	QML/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	1	311aa O/1	311out/1	11.88	18.64	✓	Straight	Straight Movement
312A	1	1	312Ae/1	312A/1	5.59	14.00	✓	Straight	Straight Movement
312Ae	1	1	312c ent/1	312Ae/1	9.73	20.00	✓	Nearside	62.50
312Be	1	1	312c ent/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Bo	1	1	312Ae/1	312Bo/1	4.20	18.64	✓	Straight	Straight Movement
312Cn	1	1	311Ao/1	312Cn/1	9.00	18.64	✓	Straight	Straight Movement
312Co	1	1	311Ao/1	312Co/1	8.40	18.64	✓	Straight	Straight Movement
312Dx	1	1	312Co/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312En	1	1	312Eent/1	312En/1	3.13	25.00	✓	Straight	Straight Movement
312Eo	1	1	312Eent/1	312Eo/1	3.13	25.00	✓	Straight	Straight Movement
312Ex	1	1	312D/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	1	312Cn/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
312K	1	1	AS3/1	312K/1	22.20	18.64	✓	Straight	Straight Movement
312c BS	1	1	312J/1	312c BS/1	10.07	20.00	✓	Straight	Straight Movement
312c x	3	1	312c BS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	1	312c BS/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
5	2	1	311out/1	5/2	3.29	17.00	✓	Straight	Straight Movement
6	2	1	312Be/1	6/2	10.20	18.64	✓	Straight	Straight Movement
AS	1	1	311dn/1	AS/1	3.56	22.00	✓	Nearside	73.18
AS2	1	1	AS/1	AS2/1	35.08	22.00	✓	Straight	Straight Movement
CS 2	1	1	AS3/1	CS 2/1	4.56	18.64	✓	Offside	80.41
QMLx	1	1	AS/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
308A	2	2	1/1	308A/2	11.67	23.00	✓	Straight	Straight Movement
311C	1	2	312En/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	2	311G/2	311Cx/1	32.88	18.64	✓	Nearside	62.50
311b	1	2	311co/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	2	311dAS/311dAS	311cn/1	5.40	18.64	✓	Nearside	13.39
311csx	1	2	311G/2	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	2	AS1/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	2	311aa bus/2	311out/1	11.88	18.64	✓	Straight	Straight Movement
312Ae	1	2	312c LS/1	312Ae/1	9.73	20.00	✓	Straight	Straight Movement
312Be	1	2	312c LS/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Dx	1	2	312A/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	2	312Cn/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	2	312D/1	312J/1	4.81	20.00	✓	Straight	Straight Movement
312K	1	2	311csx/1	312K/1	22.20	18.64	✓	Straight	Straight Movement
312c BS	1	2	312K/1	312c BS/1	10.80	18.64	✓	Straight	Straight Movement
312c x	3	2	312c LS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	2	312c ent/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
5	2	2	CS 2/1	5/2	3.00	18.64	✓	Offside	6.00
AS	1	2	1/1	AS/1	4.20	18.64	✓	Straight	Straight Movement
AS2	1	2	QML/1	AS2/1	35.08	22.00	✓	Nearside	100.00
CS 2	1	2	ASin/1	CS 2/1	4.56	18.64	✓	Straight	Straight Movement
QMLx	1	2	AS1/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
311C	1	3	312Bo/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	3	311C/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
312Dx	1	3	312En/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	3	312A/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	3	312Eo/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
5	2	3	311G/2	5/2	3.00	18.64	✓	Offside	37.50

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	(ALL)	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	311cn/1	100	0.22		0	0
311dAS		TrafficStream	311dn/1	100	0.22		0	0
		TrafficStream	311Cx/1	100	0.19		0	0
1		TrafficStream	312En/1	100	0.22	✓	0	0
		TrafficStream	312En/1	100	0.22		0	0
	outbound	TrafficStream	312c BS/1	100	0.22		0	0
		TrafficStream	312c ent/1	90	0.19		0	0

		TrafficStream	311csx/1	30	0.22		0	0
		TrafficStream	ASin/1	5	0.19		0	0
		TrafficStream	AS/1	100	0.22		0	0
		TrafficStream	AS1/1	100	0.19		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (mph)
312F	(untitled)		312a		Farside	5.00	3.33	3.36
312G	(untitled)				Nearside	3.00	2.00	3.36
312H	(untitled)				Farside	3.00	2.00	3.36
312I	(untitled)		312a		Farside	7.00	4.67	3.36
312K	(untitled)				Farside	3.00	2.00	3.36
312L	(untitled)				Farside	3.00	2.00	3.36
312o	(untitled)				Farside	3.00	2.00	3.36
312p	(untitled)				Farside	3.00	2.00	3.36
7	(untitled)		311ms		Nearside	6.00	4.00	3.36
8	(untitled)				Farside	3.00	2.00	3.36

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
312F	312a	F	
312G	312a	I	
312H	312a	H	
312I	312a	G	
312K	312a	N	
312L	312b	L	
312o	312a	O	
312p	312a	P	
7	311ms	E	
8	311ms	F	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To																							
		A bcd	A ex	A near	A off	A1	A2	A616 in	A616 out	B	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6	
From	A bcd	0	0	0	0	0	0	0	0	0	0	0	0	25	432	0	61	0	0	0	0	0	0	0	
	A ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A near	0	0	0	0	207	278	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A off	0	0	0	0	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A1	347	0	0	0	0	0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A2	121	27	0	0	0	0	0	0	35	28	0	0	211	0	0	0	0	0	0	0	0	0		
	A616 in	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A616 out	50	0	0	0	0	0	0	0	0	57	0	0	100	0	0	0	0	0	0	0	0	0		
	B	0	35	0	0	95	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B LS	0	0	0	0	0	0	0	0	0	0	155	0	50	0	0	42	0	0	0	0	0	0		
	B as	0	555	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B wr	0	25	0	0	0	0	0	0	0	50	400	0	0	7	0	300	0	0	0	0	0	0		
	B wr x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	C	0	622	0	0	0	21	0	0	0	25	0	0	25	0	0	0	0	0	0	0	0	0		
	C as	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	D	0	101	0	0	0	7	0	0	0	150	0	0	168	0	0	0	0	0	0	0	0	0		
MSS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Bus Input Flows not shown as they are blank.

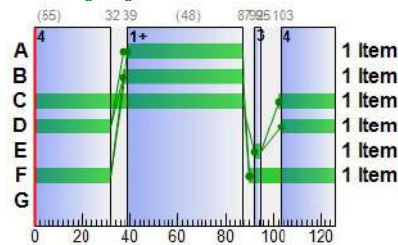
Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (PCU/hr)

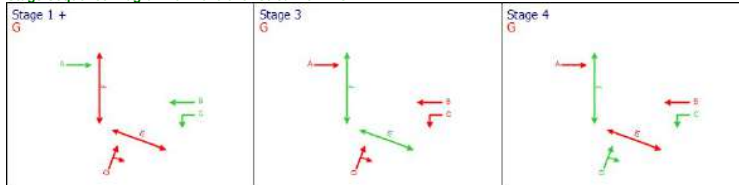
		To																							
		A bcd	A ex	A near	A off	A1	A2	A616 in	A616 out	B	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6	
From	A bcd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A near	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A off	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A616 in	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A616 out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B LS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B as	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B wr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B wr x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
311C	1	311ms	311ms	A	39	87	48
311LAS	1	311ms	311ms	C	102	87	111
311out	1	311ms	311ms	B	37	87	50
CS 2	1	311ms	311ms	D	103	32	55

Phase Timings Diagram for Controller Stream 311ms



Stage Sequence Diagram for Controller Stream 311ms



Controller Stream 312a

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312a	(untitled)		1	NetworkDefault	126

Controller Stream 312a - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312a	Unspecified						Absolute

Controller Stream 312a - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312a	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
312a	A	(untitled)	14	300	0	0	Unknown	
	B	(untitled)	2	7	0	0	Unknown	
	C	(untitled)	7	300	0	0	Unknown	
	D	(untitled)	7	300	0	0	Unknown	
	E	(untitled)	7	300	0	0	Unknown	
	F	(untitled)	5	300	0	0	Pedestrian	0
	G	(untitled)	7	300	0	0	Unknown	
	H	(untitled)	7	300	0	0	Unknown	
	I	(untitled)	7	300	0	0	Unknown	
	N	(untitled)	1	300	0	0	Unknown	
	O	(untitled)	5	300	0	0	Pedestrian	0
	P	(untitled)	1	5	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312a	1	I, H, N, O, P, F, G	1
	2	F, E, C, G	1
	3	D, O, A	1
	4	B, N, H, I, F, O	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
312a	1	Gaining	E	1	2	0	8
	2	Losing	B	1	2	6	
	3	Losing	A	1	2	6	
	4	Losing	C	2	3	4	
	5	Losing	E	2	3	4	
	6	Losing	I	1	2	7	
	7	Gaining	A	4	1	1	1
	8	Gaining	D	2	3	0	11

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312a	1	(untitled)	Single	1, 2, 3, 4	12, 65, 114, 125

Intergreen Matrix for Controller Stream 312a

		To											
		A	B	C	D	E	F	G	H	I	N	O	P
From	A			5		6	6	5			8		
	B				5			5					8
	C	8			8				9	9	5		
	D		6	6		5			9	9	5		8
	E	8			8				5		9		9
	F	5											
	G	8	8										
	H				5	0	8						
	I					5							
	N	5			5	7	5						
	O				7								
	P		5		5	5							

Banned Stage transitions for Controller Stream 312a

	To				
From		1	2	3	4
	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 312a

		To				
From		1	2	3	4	
	1	0	8	8	8	
	2	9	0	12	9	
	3	9	7	0	9	
	4	8	8	7	0	

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312a	1	✓	1	I,H,N,O,P,F,G	7	12	5	1	1
	2	✓	2	F,E,C,G	20	65	45	1	3
	3	✓	3	D,O,A	77	114	37	1	14
	4	✓	4	B,N,H,I,F,O	123	125	2	1	1

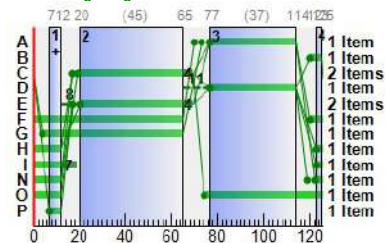
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312a	A	1	✓	77	114	37
	B	1	✓	120	125	5
	C	1	✓	19	69	50
	D	1	✓	77	114	37
	E	1	✓	20	69	49
	F	1	✓	120	65	71
	G	1	✓	4	65	61
	H	1	✓	123	12	15
	I	1	✓	123	19	22
	N	1	✓	122	12	16
	O	1	✓	74	12	64
P	1	✓	7	12	5	

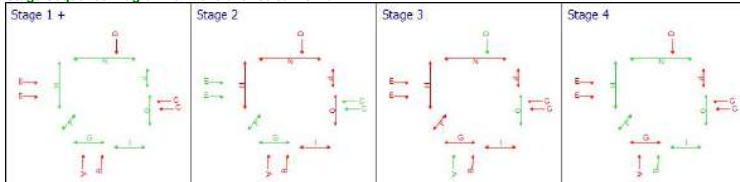
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312A	1	312a	312a	A	77	114	37
312Bo	1	312a	312a	B	120	125	5
312Cn	1	312a	312a	C	19	69	50
312Co	1	312a	312a	C	19	69	50
312D	1	312a	312a	D	77	114	37
312En	1	312a	312a	E	20	69	49
312Eo	1	312a	312a	E	20	69	49

Phase Timings Diagram for Controller Stream 312a



Stage Sequence Diagram for Controller Stream 312a



Controller Stream 312b

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312b	(untitled)		1	NetworkDefault	126

Controller Stream 312b - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312b	Unspecified						Absolute

Controller Stream 312b - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constrain
312b	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
312b	J	(untitled)	7	300	0	0	Unknown
	K	(untitled)	7	300	0	0	Unknown
	L	(untitled)	5	300	0	0	Unknown
	M	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312b	1	J, L	7
	2	K, M	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312b	1	(untitled)	Single	1, 2	120, 45

Intergreen Matrix for Controller Stream 312b

		To				
From	J	K	L	M		
	J	5	5	6		
	K	5	5	0		
	L	8	7	0		
	M	5	7	0		

Banned Stage transitions for Controller Stream 312b

		To	
From	1	2	
	1	2	

Interstage Matrix for Controller Stream 312b

		To	
From	1	2	
	1	0	8

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312b	1	✓	1	J,L	52	120	68	7	7
	2	✓	2	K,M	2	45	43	7	7

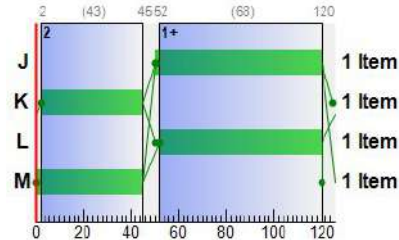
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312b	J	1	✓	50	120	70
	K	1	✓	2	45	43
	L	1	✓	52	120	68
	M	1	✓	0	45	45

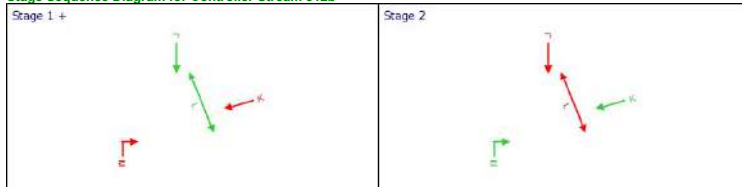
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312Be	1	312b	312b	M	0	45	45
312J	1	312b	312b	J	50	120	70
312K	1	312b	312b	K	2	45	43

Phase Timings Diagram for Controller Stream 312b



Stage Sequence Diagram for Controller Stream 312b



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
08:00-09:00	(ALL)	0.00	0.00	0.00	0.00

TRANSYT 12 Tables

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
311ms	1	✓	1	A,B,C	32	7	14
	2	✓	3	F,E	87	5	8
	3	✓	4	F,D,C	95	8	15
312a	1	✓	1	I,H,N,O,P,F,G	125	8	9
	2	✓	2	F,E,C,G	12	8	11
	3	✓	3	D,O,A	65	12	26
	4	✓	4	B,N,H,I,F,O	114	9	10
312b	1	✓	1	J,L	45	7	14
	2	✓	2	K,M	120	8	15

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
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311ms	A	1	1	2	7	0
	B	1	1	2	5	0
	C	1	3	2	7	0
	D	1	3	1	8	0
	E	1	2	3	5	0
	F	1	2	1	3	0
312a	A	1	3	4	12	0
	B	1	4	1	6	0
	C	1	2	3	7	4
	D	1	3	4	12	0
	E	1	2	3	8	4
	F	1	4	3	6	0
	G	1	1	3	5	0
	H	1	4	2	9	0
	I	1	4	2	9	7
	N	1	4	2	8	0
	O	1	3	2	9	0
	P	1	1	2	8	0
312b	J	1	1	2	5	0
	K	1	2	1	8	0
	L	1	1	2	7	0
	M	1	2	1	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 126s cycle time; 126 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4
311ms	3	32	87	95	
312a	4	125	12	65	114
312b	2	45	120		

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
08:00-09:00	1	1	(untitled)		1321	1650	126	1225	108	-17	159.53	95.24	148.81	195.32
	308A	2	(untitled)		1200	1200	126	1200	100	-10	69.52	34.59	172.96	81.19
	311Ao	1	(untitled)		518	1625	126	1580	33	174	0.58	0.80	6.15	9.58
	311C	1	Lockwood inbound	A	700	1800	48	700	100	-10	102.55	40.18	143.49	118.70
	311Cx	1	(untitled)		1317	1700	126	1700	77	16	3.73	15.12	31.72	36.61
	311G	2	(untitled)		0	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	0.00
	311LAS	1	(untitled)	C	157	1400	111	1244	13	613	1.09	1.40	9.32	11.89
	311a	1	(untitled)		347	1500	126	1500	23	289	0.36	0.03	0.35	7.08
	311aa O	1	(untitled)		347	1500	126	1500	23	289	0.36	0.03	0.10	24.00
	311aa bus	2	(untitled)		207	1400	126	1400	15	509	0.22	0.01	0.04	24.94
	311abus	1	(untitled)		207	1000	126	1000	21	335	0.47	0.03	0.28	7.19
	311b	1	(untitled)		612	1500	126	1500	41	121	0.83	0.14	0.29	37.01
	311cn	1	(untitled)		302	1000	126	1000	30	198	0.78	0.07	0.83	6.54
	311co	1	(untitled)		310	1373	126	1373	23	298	0.38	0.03	0.42	6.30
	311csx	1	(untitled)		157	1600	126	1600	10	817	0.12	0.01	0.08	4.68
	311dAS	311dAS	(untitled)		130	349	126	349	37	141	3.05	0.11	2.26	6.41
	311dn	1	(untitled)		527	1300	126	1300	41	122	0.94	0.14	0.69	12.64
	311do	1	(untitled)		310	1400	126	1400	22	306	0.37	0.03	0.16	15.50
	311out	1	(untitled)	B	397	1750	50	673	59	53	33.36	10.61	70.71	45.24
	312A	1	(untitled)	A	349	1750	37	528	66	36	35.59	6.11	101.87	41.18
	312Ae	1	(untitled)		374	1800	126	1191	31	187	9.62	4.87	28.62	19.35
	312Be	1	(untitled)	M	555	1833	45	669	83	9	49.41	17.42	102.44	59.14
	312Bo	1	(untitled)	B	25	1700	5	81	31	191	58.63	1.50	24.94	62.83
	312Cn	1	(untitled)	C	457	1895	50	767	60	51	33.21	12.23	101.92	42.21
	312Co	1	(untitled)	C	61	1131	50	458	13	575	24.12	1.31	15.65	32.52
	312D	1	Lockwood Road inbound	D	426	1855	37	559	76	18	49.87	14.67	20.09	100.27
	312Dx	1	(untitled)		403	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312Eent	1	(untitled)		693	1800	126	611	113	-21	261.41	65.37	133.42	279.57
	312En	1	(untitled)	E	567	1800	49	576	98	-9	84.66	15.17	252.79	87.80
	312Eo	1	(untitled)	E	44	1125	49	446	10	811	6.90	0.14	2.41	10.03
	312Ex	1	(untitled)		439	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312J	1	(untitled)	J	387	1800	70	1014	38	136	2.45	1.51	20.25	7.63
	312K	1	(untitled)	K	396	1873	43	654	61	49	37.68	11.78	36.61	59.88
	312c BS	1	(untitled)		783	1400	126	1400	56	61	2.62	11.48	73.36	13.06
	312c LS	1	(untitled)		247	409	126	395	63	44	8.18	2.91	25.78	15.45
	312c ent	1	(untitled)		782	1700	126	1589	49	83	1.49	3.50	25.13	9.27
	312c x	3	(untitled)		576	1800	126	1800	32	181	0.47	0.08	0.62	11.66
	312x LSx	4	(untitled)		307	1800	126	1800	17	428	0.21	0.02	0.10	12.21
	5	2	(untitled)		518	1500	126	1500	35	161	1.25	2.26	69.49	4.47
	6	2	(untitled)		555	1800	126	1800	31	192	0.45	0.07	0.46	10.65
	AS	1	(untitled)		380	1500	126	1500	25	255	0.41	0.04	0.70	4.07
	AS1	1	(untitled)		0	1800	126	1800	0	Unrestricted	0.00	0.00	0.00	0.00
	AS2	1	(untitled)		484	1500	126	1500	32	179	0.57	0.08	0.13	35.65
	AS3	1	(untitled)		422	699	126	699	60	49	3.89	0.46	0.95	36.89
	ASin	1	(untitled)		555	1700	126	1700	33	176	0.51	0.08	0.45	10.98
	CS 2	1	(untitled)	D	738	1808	55	804	92	-2	54.53	28.63	433.27	59.09
	QML	1	(untitled)		312	516	126	516	60	49	5.26	0.46	1.05	35.26
	QMLx	1	(untitled)		78	1800	126	1800	4	1973	0.05	0.00	0.01	12.05

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
	1	✓	1	A,B,C	39	87	48	1	7

311ms	2	✓	3	F,E	92	95	3	1	3
	3	✓	4	F,D,C	103	32	55	1	7
312a	1	✓	1	I,H,N,O,P,F,G	7	12	5	1	1
	2	✓	2	F,E,C,G	20	65	45	1	3
	3	✓	3	D,O,A	77	114	37	1	14
	4	✓	4	B,N,H,I,F,O	123	125	2	1	1
312b	1	✓	1	J,L	52	120	68	7	7
	2	✓	2	K,M	2	45	43	7	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311ms	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	3	3	0	0	Unknown
	F	F	5	300	0	0	Unknown
	G	G	1	1	0	0	Unknown
312a	A	A	14	300	0	0	Unknown
	B	B	2	7	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	5	300	0	0	Pedestrian
	G	G	7	300	0	0	Unknown
	H	H	7	300	0	0	Unknown
	I	I	7	300	0	0	Unknown
	N	N	1	300	0	0	Unknown
	O	O	5	300	0	0	Pedestrian
	P	P	1	5	0	0	Pedestrian
312b	J	J	7	300	0	0	Unknown
	K	K	7	300	0	0	Unknown
	L	L	5	300	0	0	Unknown
	M	M	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1		368.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1650	100	100
308A	2		120.00	CTM	20.00	Normal	✓			Sum of lanes	1200	100	100
311Ao	1		75.00	NetworkDefault	13.00	Normal	✓			Sum of lanes	1625	100	100
311C	1		166.00	CTM	28.00	Normal	✓	✓		Sum of lanes	1800	100	100
311Cx	1		274.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
311G	2		20.00	NetworkDefault	0.00	Normal						100	100
311LAS	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1400	100	100
311a	1		56.00	CTM	10.00	Normal	✓			Sum of lanes	1500	100	100
311aa O	1		197.00	CTM	36.00	Normal	✓			Sum of lanes	1500	100	100
311aa bus	2		206.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311abus	1		56.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311b	1		275.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
311cn	1		45.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311co	1		45.00	NetworkDefault	0.00	Normal	✓		✓	Sum of lanes	1200	100	100
311csx	1		38.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1600	100	100
311dAS	311dAS		28.00	NetworkDefault	0.00	Normal			✓			100	100
311dn	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1300	100	100
311do	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311out	1		99.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1750	100	100
312A	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Ae	1		87.00	CTM	17.00	Normal	✓			Sum of lanes	1800	100	100
312Be	1		87.00	CTM	17.00	Normal	✓	✓		Sum of lanes	1833	100	100
312Bo	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1700	100	100
312Cn	1		75.00	CTM	12.00	Normal	✓	✓		Sum of lanes	1895	100	100
312Co	1		70.00	Flare	8.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312D	1		420.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1855	100	100
312Dx	1		100.00	NetworkDefault	0.00	Normal						100	100
312Eent	1		203.00	PDM	49.00	Normal	✓			Sum of lanes	1800	100	100
312En	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1800	100	100
312Eo	1		35.00	Flare	6.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312Ex	1		100.00	NetworkDefault	0.00	Normal						100	100
312J	1		43.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	99999
312K	1		185.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1873	100	100
312c BS	1		90.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
312c LS	1		65.00	NetworkDefault	0.00	Normal			✓			100	100
312c ent	1		80.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
312c x	3		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
312x LSx	4		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
5	2		25.00	CTM	3.00	Normal	✓			Sum of lanes	1500	100	100
6	2		85.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS	1		35.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS1	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS2	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS3	1		275.00	NetworkDefault	0.00	Normal			✓			100	100
ASin	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
CS 2	1		38.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1808	100	999
QML	1	✓	250.00	NetworkDefault	0.00	Normal			✓			100	100
QMLx	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Pedestrian Crossings: Pedestrian summary

Time Segment	Pedestrian crossing	Side	Calculated Flow Entering (Ped/hr)	Degree of saturation (%)	Actual green (s (per cycle))	Effective green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)
08:00-09:00	312F	1	22	0	71	71	12.22	0.34
		2	22	0	71	71	12.22	0.34
	312G	1	22	1	22	23	42.51	0.63
		2	22	1	22	23	42.51	0.63
	312H	1	22	2	15	16	48.45	0.67
		2	22	2	15	16	48.45	0.67
	312I	1	22	0	61	62	16.51	0.39
		2	22	0	61	62	16.51	0.39
	312K	1	22	1	16	17	47.58	0.67
		2	22	1	16	17	47.58	0.67
	312L	1	0	0	68	69	0.00	0.00
		2	0	0	68	69	0.00	0.00
	312o	1	0	0	64	64	0.00	0.00
		2	0	0	64	64	0.00	0.00
	312p	1	0	0	5	5	0.00	0.00
		2	0	0	5	5	0.00	0.00
	7	1	0	0	3	4	0.00	0.00
		2	0	0	3	4	0.00	0.00
	8	1	0	0	68	69	0.00	0.00
		2	0	0	68	69	0.00	0.00

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	108	-17	1321	1650	126	159.53	95.24	148.81	831.24	58.00	889.23
	308A	2	100	-10	1200	1200	126	69.52	34.59	172.96	329.05	8.32	337.37
	311Ao	1	33	174	518	1625	126	0.58	0.80	6.15	1.18	0.10	1.28
	311C	1	100	-10	700	1800	48	102.55	40.18	143.49	283.16	20.33	303.50
	311Cx	1	77	16	1317	1700	126	3.73	15.12	31.72	19.35	1.59	20.94
	311G	2	0	Unrestricted	0	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	311LAS	1	13	613	157	1400	111	1.09	1.40	9.32	0.68	0.22	0.90
	311a	1	23	289	347	1500	126	0.36	0.03	0.35	0.49	0.00	0.49
	311aa O	1	23	289	347	1500	126	0.36	0.03	0.10	0.49	0.00	0.49
	311aa bus	2	15	509	207	1400	126	0.22	0.01	0.04	0.18	0.00	0.18
	311abus	1	21	335	207	1000	126	0.47	0.03	0.28	0.38	0.00	0.38
	311b	1	41	121	612	1500	126	0.83	0.14	0.29	1.99	0.00	1.99
	311cn	1	30	198	302	1000	126	0.78	0.07	0.83	0.93	0.00	0.93
	311co	1	23	298	310	1373	126	0.38	0.03	0.42	0.47	0.00	0.47
	311csx	1	10	817	157	1600	126	0.12	0.01	0.08	0.08	0.00	0.08
	311dAS	311dAS	37	141	130	349	126	3.05	0.11	2.26	1.56	0.00	1.56
	311dn	1	41	122	527	1300	126	0.94	0.14	0.69	1.96	0.00	1.96
	311do	1	22	306	310	1400	126	0.37	0.03	0.16	0.45	0.00	0.45
	311out	1	59	53	397	1750	50	33.36	10.61	70.71	52.25	4.01	56.26
	312A	1	66	36	349	1750	37	35.59	6.11	101.87	48.99	1.23	50.23
	312Ae	1	31	187	374	1800	126	9.62	4.87	28.62	14.19	2.01	16.19
	312Be	1	83	9	555	1833	45	49.41	17.42	102.44	108.18	7.16	115.34
	312Bo	1	31	191	25	1700	5	58.63	1.50	24.94	5.78	0.32	6.10
	312Cn	1	60	51	457	1895	50	33.21	12.23	101.92	59.86	4.38	64.24
	312Co	1	13	575	61	1131	50	24.12	1.31	15.65	5.80	0.48	6.29
	312D	1	76	18	426	1855	37	49.87	14.67	20.09	83.81	5.17	88.97
	312Dx	1	0	Unrestricted	403	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	113	-21	693	1800	126	261.41	65.37	133.42	714.56	32.21	746.77
	312En	1	98	-9	567	1800	49	84.66	15.17	252.79	189.35	9.10	198.45
	312Eo	1	10	811	44	1125	49	6.90	0.14	2.41	1.20	0.09	1.29
	312Ex	1	0	Unrestricted	439	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	38	136	387	1800	70	2.45	1.51	20.25	3.74	325.31	329.05
	312K	1	61	49	396	1873	43	37.68	11.78	36.61	58.86	4.16	63.03
	312c BS	1	56	61	783	1400	126	2.62	11.48	73.36	8.09	2.72	10.81
	312c LS	1	63	44	247	409	126	8.18	2.91	25.78	7.97	0.91	8.88
	312c ent	1	49	83	782	1700	126	1.49	3.50	25.13	4.59	1.39	5.98
	312c x	3	32	181	576	1800	126	0.47	0.08	0.62	1.07	0.00	1.07
	312x LSx	4	17	428	307	1800	126	0.21	0.02	0.10	0.25	0.00	0.25
	5	2	35	161	518	1500	126	1.25	2.26	69.49	2.56	0.18	2.74
	6	2	31	192	555	1800	126	0.45	0.07	0.46	0.98	0.00	0.98
	AS	1	25	255	380	1500	126	0.41	0.04	0.70	0.61	0.00	0.61
	AS1	1	0	Unrestricted	0	1800	126	0.00	0.00	0.00	0.00	0.00	0.00
	AS2	1	32	179	484	1500	126	0.57	0.08	0.13	1.09	0.00	1.09
	AS3	1	60	49	422	699	126	3.89	0.46	0.95	6.47	0.00	6.47
	ASin	1	33	176	555	1700	126	0.51	0.08	0.45	1.12	0.00	1.12
	CS 2	1	92	-2	738	1808	55	54.53	28.63	433.27	158.74	10.00	168.75
	QML	1	60	49	312	516	126	5.28	0.46	1.05	6.48	0.00	6.48
	QMLx	1	4	1973	78	1800	126	0.05	0.00	0.01	0.01	0.00	0.01

Traffic Stream Results: Flows and signals

Time Segment	Arm	Traffic Stream	Calculated flow entering (PCU/hr)	Calculated flow out (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 (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	1	1	1321	1225	76	✓	1650	1225	108	✓	-17	0.16	126	126
	308A	2	1200	1200	165	✓	1200	1200	100	✓	-10	0.00	126	126
	311Ao	1	518	518	0		1625	1580	33		174	0.00	126	126
	311C	1	700	700	76	✓	1800	700	100	✓	-10	0.92	48	49
	311Cx	1	1317	1317	76	✓	1700	1700	77		16	0.24	126	126
	311G	2	0	0	0		Unrestricted	Unrestricted	0		Unrestricted	0.00	126	126
	311LAS	1	157	157	0		1400	1244	13		613	0.00	111	112
	311a	1	347	347	0		1500	1500	23		289	0.00	126	126
	311aa O	1	347	347	0		1500	1500	23		289	0.00	126	126

08:00-09:00	311aa bus	2	207	207	0		1400	1400	15		509	0.00	126	126
	311abus	1	207	207	0		1000	1000	21		335	0.00	126	126
	311b	1	612	612	0		1500	1500	41		121	0.00	126	126
	311cn	1	302	302	0		1000	1000	30		198	0.00	126	126
	311co	1	310	310	0		1373	1373	23		298	0.00	126	126
	311csx	1	157	157	0		1600	1600	10		817	0.20	126	126
	311dAS	311dAS	130	130	0		349	349	37		141	0.00	126	126
	311dn	1	527	527	0		1300	1300	41		122	0.00	126	126
	311do	1	310	310	0		1400	1400	22		306	0.00	126	126
	311out	1	397	397	0		1750	673	59		53	0.00	50	51
	312A	1	349	349	0		1750	528	66		36	0.74	37	38
	312Ae	1	374	374	0		1800	1191	31		187	0.08	126	126
	312Be	1	555	555	0		1833	669	83		9	0.07	45	46
	312Bo	1	25	25	0		1700	81	31		191	0.74	5	6
	312Cn	1	457	457	0		1895	767	60		51	0.01	50	51
	312Co	1	61	61	0		1131	458	13		575	0.01	50	51
	312D	1	426	426	0		1855	559	76		18	0.00	37	38
	312Dx	1	403	403	0		Unrestricted	Unrestricted	0		Unrestricted	1.09	126	126
	312Eent	1	693	611	0		1800	611	113	✓	-21	0.00	126	126
	312En	1	567	567	76	✓	1800	576	98	✓	-9	1.17	49	50
	312Eo	1	44	44	6	✓	1125	446	10		811	1.17	49	50
	312Ex	1	439	439	0		Unrestricted	Unrestricted	0		Unrestricted	1.11	126	126
	312J	1	387	387	6	✓	1800	1014	38		136	1.04	70	71
	312K	1	396	396	0		1873	654	61		49	0.05	43	44
	312c BS	1	783	783	6	✓	1400	1400	56		61	0.67	126	126
	312c LS	1	247	247	0		409	395	63		44	0.00	126	126
	312c ent	1	782	782	0		1700	1589	49		83	0.00	126	126
	312c x	3	576	576	3	✓	1800	1800	32		181	0.52	126	126
	312x LSx	4	307	307	3	✓	1800	1800	17		428	0.49	126	126
	5	2	518	518	0		1500	1500	35		161	0.82	126	126
	6	2	555	555	0		1800	1800	31		192	1.22	126	126
	AS	1	380	380	7	✓	1500	1500	25		255	0.03	126	126
	AS1	1	0	0	0		1800	1800	0		Unrestricted	0.00	126	126
	AS2	1	484	484	4	✓	1500	1500	32		179	0.03	126	126
	AS3	1	422	422	0		699	699	60		49	0.00	126	126
	ASin	1	555	555	0		1700	1700	33		176	0.00	126	126
	CS 2	1	738	738	0		1808	804	92	✓	-2	0.00	55	56
	QML	1	312	312	0		516	516	60		49	0.00	126	126
	QMLx	1	78	78	3	✓	1800	1800	4		1973	0.34	126	126

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	1	1	35.79	159.53	4.85	53.69	831.24	831.24	248.06	1223.54	1814.78	58.00	58.00
	308A	2	11.67	69.52	6.34	16.83	329.05	329.05	36.32	0.01	435.85	8.32	8.32
	311Ao	1	9.00	0.58	0.00	0.08	1.18	1.18	1.56	5.82	2.28	0.10	0.10
	311C	1	16.14	102.55	7.19	12.75	283.16	283.16	152.19	744.63	320.68	20.33	20.33
	311Cx	1	32.88	3.73	0.05	1.32	19.35	19.35	9.62	89.37	37.38	1.59	1.59
	311G	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	311LAS	1	10.80	1.09	0.04	0.01	0.68	0.68	11.28	17.44	0.26	0.22	0.22
	311a	1	6.72	0.36	0.00	0.03	0.49	0.49	0.00	0.00	0.00	0.00	0.00
	311aa O	1	23.64	0.36	0.00	0.03	0.49	0.49	0.00	0.00	0.00	0.00	0.00
	311aa bus	2	24.72	0.22	0.00	0.01	0.18	0.18	0.00	0.00	0.00	0.00	0.00
	311abus	1	6.72	0.47	0.00	0.03	0.38	0.38	0.00	0.00	0.00	0.00	0.00
	311b	1	36.19	0.83	0.00	0.14	1.99	1.99	0.00	0.00	0.00	0.00	0.00
	311cn	1	5.76	0.78	0.00	0.07	0.93	0.93	0.00	0.00	0.00	0.00	0.00
	311co	1	5.92	0.38	0.00	0.03	0.47	0.47	0.00	0.00	0.00	0.00	0.00
	311csx	1	4.56	0.12	0.00	0.01	0.08	0.08	0.00	0.00	0.00	0.00	0.00
	311dAS	311dAS	3.36	3.05	0.00	0.11	1.56	1.56	0.00	0.00	0.00	0.00	0.00
	311dn	1	11.69	0.94	0.00	0.14	1.96	1.96	0.00	0.00	0.00	0.00	0.00
	311do	1	15.13	0.37	0.00	0.03	0.45	0.45	0.00	0.00	0.00	0.00	0.00
	311out	1	11.88	33.36	3.26	0.42	52.25	52.25	80.64	308.20	11.94	4.01	4.01
	312A	1	5.59	35.59	2.81	0.64	48.99	48.99	49.97	156.46	17.94	1.23	1.23
	312Ae	1	9.73	9.62	0.93	0.07	14.19	14.19	37.17	136.95	2.05	2.01	2.01
	312Be	1	9.73	49.41	5.70	1.92	108.18	108.18	89.38	442.45	53.60	7.16	7.16
	312Bo	1	4.20	58.63	0.34	0.07	5.78	5.78	102.87	23.81	1.91	0.32	0.32
	312Cn	1	9.00	33.21	3.78	0.44	59.86	59.86	76.44	336.94	12.38	4.38	4.38
	312Co	1	8.40	24.12	0.40	0.01	5.80	5.80	63.09	38.19	0.29	0.48	0.48
	312D	1	50.40	49.87	4.72	1.18	83.81	83.81	96.75	379.08	33.09	5.17	5.17
	312Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	18.16	261.41	6.00	44.33	714.56	714.56	233.72	598.06	830.19	32.21	32.21
	312En	1	3.13	84.66	3.88	9.45	189.35	189.35	71.18	163.27	240.33	9.10	9.10
	312Eo	1	3.13	6.90	0.08	0.01	1.20	1.20	9.38	3.98	0.15	0.09	0.09
	312Ex	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	5.18	2.45	0.15	0.12	3.74	3.74	10.84	38.61	3.35	0.33	325.31
	312K	1	22.20	37.68	3.68	0.46	58.86	58.86	83.85	319.00	13.05	4.16	4.16
	312c BS	1	10.44	2.62	0.22	0.35	8.09	8.09	27.63	206.27	10.08	2.72	2.72
	312c LS	1	7.27	8.18	0.05	0.51	7.97	7.97	25.56	48.68	14.45	0.91	0.91
	312c ent	1	7.78	1.49	0.09	0.24	4.59	4.59	9.32	66.10	6.79	1.39	1.39
	312c x	3	11.18	0.47	0.00	0.08	1.07	1.07	0.00	0.00	0.00	0.00	0.00
	312x LSx	4	12.00	0.21	0.00	0.02	0.25	0.25	0.00	0.00	0.00	0.00	0.00
	5	2	3.22	1.25	0.09	0.09	2.56	2.56	3.26	14.29	2.60	0.18	0.18
	6	2	10.20	0.45	0.00	0.07	0.98	0.98	0.00	0.00	0.00	0.00	0.00
	AS	1	3.66	0.41	0.00	0.04	0.61	0.61	0.00	0.00	0.00	0.00	0.00
	AS1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AS2	1	35.08	0.57	0.00	0.08	1.09	1.09	0.00	0.00	0.00	0.00	0.00
	AS3	1	33.00	3.89	0.00	0.46	6.47	6.47	0.00	0.00	0.00	0.00	0.00
	ASin	1	10.47	0.51	0.00	0.08	1.12	1.12	0.00	0.00	0.00	0.00	0.00
	CS 2	1	4.56	54.53	6.74	4.44	158.74	158.74	108.10	676.11	121.65	10.00	10.00
	QML	1	30.00	5.26	0.00	0.46	6.48	6.48	0.00	0.00	0.00	0.00	0.00
	QMLx	1	12.00	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))	Estimated blocking

08:00-09:00	1	1	0.00	95.24	64.00	148.81	12.41	0.00	0.00			0.00	32.47	32.47	
	308A	2	0.00	34.59	20.00	172.96	14.59	0.00	0.00			0.00	0.00	0.00	
	311Ao	1	0.00	0.80	13.00	6.15	0.00	0.00	0.00			0.00	3.52	3.52	
	311C	1	0.00	40.18	28.00	143.49	3.79	0.00	0.00	12.75	25.78	0.00	0.00	0.00	
	311Cx	1	0.00	15.12	47.65	31.72	0.00	0.00	0.00			0.00	97.00	97.00	
	311G	2	0.00	0.00	3.48	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	311LAS	1	0.00	1.40	15.00	9.32	0.00	0.00	0.00	0.01	0.62	0.00	0.00	0.00	
	311a	1	0.00	0.03	10.00	0.35	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa O	1	0.00	0.03	36.00	0.10	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa bus	2	0.00	0.01	35.83	0.04	0.00	0.00	0.00			0.00	0.00	0.00	
	311abus	1	0.00	0.03	9.74	0.28	0.00	0.00	0.00			0.00	0.00	0.00	
	311b	1	0.00	0.14	47.83	0.29	0.00	0.00	0.00			0.00	0.00	0.00	
	311cn	1	0.00	0.07	7.83	0.83	0.00	0.00	0.00			0.00	0.00	0.00	
	311co	1	0.00	0.03	7.83	0.42	0.00	0.00	0.00			0.00	0.00	0.00	
	311csx	1	0.00	0.01	6.61	0.08	0.00	0.00	0.00			13.00	0.00	13.00	
	311dAS	311dAS	0.00	0.11	4.87	2.26	0.00	0.00	0.00			0.00	0.00	0.00	
	311dn	1	0.00	0.14	20.00	0.69	0.00	0.00	0.00			0.00	0.00	0.00	
	311do	1	0.00	0.03	20.00	0.16	0.00	0.00	0.00			0.00	0.00	0.00	
	311out	1	0.00	10.61	15.00	70.71	0.00	0.00	0.00	0.42	9.45	0.00	2.54	2.54	
	312A	1	0.00	6.11	6.00	101.87	0.03	0.03	0.00	0.64	6.11	0.00	0.00	0.00	
	312Ae	1	0.00	4.87	17.00	28.62	0.00	0.00	0.00			0.00	42.64	42.64	
	312Be	1	0.00	17.42	17.00	102.44	0.02	0.02	0.00	1.92	15.47	0.00	0.00	0.00	
	312Bo	1	0.00	1.50	6.00	24.94	0.00	0.00	0.00	0.07	0.90	4.00	0.00	4.00	
	312Cn	1	0.00	12.23	12.00	101.92	0.01	0.77	0.00	0.44	10.85	0.00	0.00	0.00	
	312Co	1	0.00	1.31	8.40	15.65	0.00	0.00	0.00	0.01	1.30	3.00	0.00	3.00	
	312D	1	0.00	14.67	73.04	20.09	0.00	0.00	0.00	1.18	11.59	0.00	0.00	0.00	
	312Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			31.00	0.00	31.00	
	312Eent	1	0.00	65.37	49.00	133.42	6.33	6.33	0.00			0.00	83.22	83.22	
	312En	1	0.00	15.17	6.00	252.79	8.16	8.16	0.00	13.63	15.17	0.00	9.70	9.70	
	312Eo	1	0.00	0.14	6.00	2.41	0.00	0.00	0.00	0.01	0.14	9.00	0.00	9.00	
	312Ex	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			67.00	0.00	67.00	
	312J	1	0.00	1.51	7.48	20.25	0.00	0.00	0.00	0.12	1.41	5.00	0.00	5.00	
	312K	1	0.00	11.78	32.17	36.61	0.00	0.00	0.00	0.46	9.21	0.00	0.00	0.00	
	312c BS	1	0.00	11.48	15.65	73.36	0.00	0.00	0.00			6.00	0.00	6.00	
	312c LS	1	0.00	2.91	11.30	25.78	0.00	0.00	0.00			0.00	3.86	3.86	
	312c ent	1	0.00	3.50	13.91	25.13	0.00	0.00	0.00			0.00	8.24	8.24	
	312c x	3	0.00	0.08	12.17	0.62	0.00	0.00	0.00			0.00	0.00	0.00	
	312x LSx	4	0.00	0.02	17.39	0.10	0.00	0.00	0.00			0.00	0.00	0.00	
	5	2	0.00	2.26	3.25	69.49	0.00	0.00	0.00			19.00	0.00	19.00	
	6	2	0.00	0.07	14.78	0.46	0.00	0.00	0.00			73.00	0.00	73.00	
	AS	1	0.00	0.04	6.09	0.70	0.00	0.00	0.00			0.00	0.00	0.00	
	AS1	1	0.00	0.00	60.00	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	AS2	1	0.00	0.08	60.00	0.13	0.00	0.00	0.00			0.00	0.00	0.00	
	AS3	1	0.00	0.46	47.83	0.95	0.00	0.00	0.00			0.00	108.00	108.00	
	ASin	1	0.00	0.08	17.39	0.45	0.00	0.00	0.00			0.00	108.00	108.00	
	CS 2	1	0.00	28.63	6.61	433.27	9.48	0.00	0.00	4.44	18.79	0.00	0.00	0.00	
	QML	1	0.00	0.46	43.48	1.05	0.00	0.00	0.00			0.00	0.00	0.00	
	QMLx	1	0.00	0.00	17.39	0.01	0.00	0.00	0.00			53.00	0.00	53.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
08:00-09:00	1	1	486.13	71.67	4.21	195.32
	308A	2	144.00	27.06	3.31	81.19
	311Ao	1	38.85	1.38	17.52	9.58
	311C	1	116.20	23.08	3.13	118.70
	311Cx	1	360.86	13.39	16.74	36.61
	311G	2	0.00	0.00	0.00	0.00
	311LAS	1	14.13	0.52	16.93	11.89
	311a	1	19.43	0.68	17.69	7.08
	311aa O	1	68.36	2.31	18.36	24.00
	311aa bus	2	42.64	1.43	18.47	24.94
	311abus	1	11.59	0.41	17.42	7.19
	311b	1	168.30	6.29	16.62	37.01
	311cn	1	13.59	0.55	15.40	6.54
	311co	1	13.95	0.54	15.97	6.30
	311csx	1	5.97	0.20	18.15	4.68
	311dAS	311dAS	3.64	0.23	9.77	6.41
	311dn	1	60.61	1.85	20.36	12.64
	311do	1	35.65	1.33	16.60	15.50
	311out	1	39.30	4.99	4.89	45.24
	312A	1	12.22	3.99	1.90	41.18
	312Ae	1	32.54	2.01	10.06	19.35
	312Be	1	48.28	9.12	3.29	59.14
	312Bo	1	0.87	0.44	1.25	62.83
	312Cn	1	34.27	5.36	3.97	42.21
	312Co	1	4.27	0.55	4.82	32.52
	312D	1	178.92	11.87	9.37	100.27
	312Dx	1	40.30	1.34	18.64	12.00
	312Eent	1	140.68	53.82	1.62	279.57
	312En	1	19.85	13.83	0.89	87.80
	312Eo	1	1.54	0.12	7.81	10.03
	312Ex	1	43.90	1.46	18.64	12.00
	312J	1	16.64	0.82	12.61	7.63
	312K	1	73.26	6.59	6.91	59.88
	312c BS	1	70.48	2.84	15.42	13.06
	312c LS	1	16.06	1.06	9.41	15.45
	312c ent	1	62.56	2.01	19.31	9.27
	312c x	3	40.32	1.86	13.44	11.66
	312x LSx	4	30.70	1.04	18.33	12.21
	5	2	12.95	0.64	12.50	4.47
	6	2	47.17	1.64	17.86	10.65
	AS	1	13.29	0.43	19.25	4.07
	AS1	1	0.00	0.00	0.00	0.00
	AS2	1	166.86	4.79	21.65	35.65
	AS3	1	116.05	4.32	16.68	36.89
	ASin	1	55.50	1.69	20.38	10.98
	CS 2	1	28.04	12.11	1.44	59.09
	QML	1	78.00	3.06	15.86	35.26
	QMLx	1	7.82	0.26	18.57	12.05

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance Index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	0.00	0.00	✓	0.00	143.67			1.00	0.00	889.23	889.23
	308A	2	0.00	0.00	✓	0.00	41.76			1.00	0.00	337.37	337.37
	311Ao	1	0.00	0.00	✓	0.00	0.80			1.00	0.00	1.28	1.28
	311C	1	0.00	0.00	✓	0.00	45.65	18.22	31.26	1.00	0.00	303.50	303.50
	311Cx	1	0.00	0.00	✓	0.00	15.12			1.00	0.00	20.94	20.94
	311G	2	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	311LAS	1	0.00	0.00	✓	0.00	1.40	0.01	0.62	1.00	0.00	0.90	0.90
	311a	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.49	0.49
	311aa O	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.49	0.49
	311aa bus	2	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.18	0.18
	311abus	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.38	0.38
	311b	1	0.00	0.00	✓	0.00	0.14			1.00	0.00	1.99	1.99
	311cn	1	0.00	0.00	✓	0.00	0.07			1.00	0.00	0.93	0.93
	311co	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.47	0.47
	311csx	1	0.00	0.00	✓	0.00	0.01			1.00	0.00	0.08	0.08
	311dAS	311dAS	0.00	0.00	✓	0.00	0.11			1.00	0.00	1.56	1.56
	311dn	1	0.00	0.00	✓	0.00	0.14			1.00	0.00	1.96	1.96
	311do	1	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.45	0.45
	311out	1	0.00	0.00	✓	0.00	10.61	0.42	9.46	1.00	0.00	56.26	56.26
	312A	1	0.00	0.00	✓	0.00	6.12	0.64	6.12	1.00	0.00	50.23	50.23
	312Ae	1	0.00	0.00	✓	0.00	4.87			1.00	0.00	16.19	16.19
	312Be	1	0.00	0.00	✓	0.00	17.46	1.97	15.51	1.00	0.00	115.34	115.34
	312Bo	1	0.00	0.00	✓	0.00	1.50	0.07	0.90	1.00	0.00	6.10	6.10
	312Cn	1	0.00	0.00	✓	0.00	12.23	0.44	10.85	1.00	0.00	64.24	64.24
	312Co	1	0.00	0.00	✓	0.00	1.31	0.01	1.30	1.00	0.00	6.29	6.29
	312D	1	0.00	0.00	✓	0.00	14.69	1.20	11.61	1.00	0.00	88.97	88.97
	312Dx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312Eent	1	0.00	0.00	✓	0.00	106.49			1.00	0.00	746.77	746.77
	312En	1	0.00	0.00	✓	0.00	18.28	16.74	18.28	1.00	0.00	198.45	198.45
	312Eo	1	0.00	0.00	✓	0.00	0.14	0.01	0.14	1.00	0.00	1.29	1.29
	312Ex	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312J	1	0.00	0.00	✓	0.00	1.51	0.12	1.41	1.00	0.00	4.07	329.05
	312K	1	0.00	0.00	✓	0.00	11.78	0.46	9.21	1.00	0.00	63.03	63.03
	312c BS	1	0.00	0.00	✓	0.00	11.48			1.00	0.00	10.81	10.81
	312c LS	1	0.00	0.00	✓	0.00	2.92			1.00	0.00	8.88	8.88
	312c ent	1	0.00	0.00	✓	0.00	3.50			1.00	0.00	5.98	5.98
	312c x	3	0.00	0.00	✓	0.00	0.08			1.00	0.00	1.07	1.07
	312x LSx	4	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.25	0.25
	5	2	0.00	0.00	✓	0.00	2.26			1.00	0.00	2.74	2.74
	6	2	0.00	0.00	✓	0.00	0.07			1.00	0.00	0.98	0.98
	AS	1	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.61	0.61
	AS1	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	AS2	1	0.00	0.00	✓	0.00	0.08			1.00	0.00	1.09	1.09
	AS3	1	0.00	0.00	✓	0.00	0.46			1.00	0.00	6.47	6.47
	ASin	1	0.00	0.00	✓	0.00	0.08			1.00	0.00	1.12	1.12
	CS 2	1	0.00	0.00	✓	0.00	28.95	4.76	19.11	1.00	0.00	168.75	168.75
	QML	1	0.00	0.00	✓	0.00	0.46			1.00	0.00	6.48	6.48
	QMLx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.01	0.01

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	312F	1	0	22	11000	71	12.22	0.34	1.06	1.06
		2	0	22	11000	71	12.22	0.34	1.06	1.06
	312G	1	1	22	11000	22	42.51	0.63	3.69	3.69
		2	1	22	11000	22	42.51	0.63	3.69	3.69
	312H	1	2	22	11000	15	48.45	0.67	4.20	4.20
		2	2	22	11000	15	48.45	0.67	4.20	4.20
	312I	1	0	22	11000	61	16.51	0.39	1.43	1.43
		2	0	22	11000	61	16.51	0.39	1.43	1.43
	312K	1	1	22	11000	16	47.58	0.67	4.13	4.13
		2	1	22	11000	16	47.58	0.67	4.13	4.13
	312L	1	0	0	11000	68	0.00	0.00	0.00	0.00
		2	0	0	11000	68	0.00	0.00	0.00	0.00
	312o	1	0	0	11000	64	0.00	0.00	0.00	0.00
		2	0	0	11000	64	0.00	0.00	0.00	0.00
	312p	1	0	0	11000	5	0.00	0.00	0.00	0.00
		2	0	0	11000	5	0.00	0.00	0.00	0.00
	7	1	0	0	11000	3	0.00	0.00	0.00	0.00
		2	0	0	11000	3	0.00	0.00	0.00	0.00
	8	1	0	0	11000	68	0.00	0.00	0.00	0.00
		2	0	0	11000	68	0.00	0.00	0.00	0.00

Pedestrian Crossings: Flows and signals

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	312F	1	22	22	0		11000	6198	0		25257	0.00	71	71
		2	22	22	0		11000	6198	0		25257	0.00	71	71
	312G	1	22	22	0		11000	2008	1		8114	0.00	22	23
		2	22	22	0		11000	2008	1		8114	0.00	22	23
	312H	1	22	22	0		11000	1397	2		5614	0.00	15	16
		2	22	22	0		11000	1397	2		5614	0.00	15	16
	312I	1	22	22	0		11000	5413	0		22043	0.00	61	62
		2	22	22	0		11000	5413	0		22043	0.00	61	62
	312K	1	22	22	0		11000	1484	1		5971	0.00	16	17
		2	22	22	0		11000	1484	1		5971	0.00	16	17
		1	0	0	0		11000	6024	0		Unrestricted	0.00	68	69
		2	0	0	0		11000	6024	0		Unrestricted	0.00	68	69

	312L	2	0	0	0	11000	6024	0	Unrestricted	0.00	68	69
	312o	1	0	0	0	11000	5587	0	Unrestricted	0.00	64	64
		2	0	0	0	11000	5587	0	Unrestricted	0.00	64	64
	312p	1	0	0	0	11000	437	0	Unrestricted	0.00	5	5
		2	0	0	0	11000	437	0	Unrestricted	0.00	5	5
	7	1	0	0	0	11000	349	0	Unrestricted	0.00	3	4
		2	0	0	0	11000	349	0	Unrestricted	0.00	3	4
	8	1	0	0	0	11000	6024	0	Unrestricted	0.00	68	69
		2	0	0	0	11000	6024	0	Unrestricted	0.00	68	69

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)
08:00-09:00	312F	1	4.33	12.22	0.07	0.00	1.06	1.06
		2	4.33	12.22	0.07	0.00	1.06	1.06
	312G	1	3.00	42.51	0.26	0.00	3.69	3.69
		2	3.00	42.51	0.26	0.00	3.69	3.69
	312H	1	3.00	48.45	0.30	0.00	4.20	4.20
		2	3.00	48.45	0.30	0.00	4.20	4.20
	312I	1	5.67	16.51	0.10	0.00	1.43	1.43
		2	5.67	16.51	0.10	0.00	1.43	1.43
	312K	1	3.00	47.58	0.29	0.00	4.13	4.13
		2	3.00	47.58	0.29	0.00	4.13	4.13
	312L	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312o	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312p	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	7	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	8	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
08:00-09:00	312F	1	0.34	10.00	3.36	0.00	0.00	0.00
		2	0.34	10.00	3.36	0.00	0.00	0.00
	312G	1	0.63	10.00	6.29	0.00	0.00	0.00
		2	0.63	10.00	6.29	0.00	0.00	0.00
	312H	1	0.67	10.00	6.72	0.00	0.00	0.00
		2	0.67	10.00	6.72	0.00	0.00	0.00
	312I	1	0.39	10.00	3.91	0.00	0.00	0.00
		2	0.39	10.00	3.91	0.00	0.00	0.00
	312K	1	0.67	10.00	6.66	0.00	0.00	0.00
		2	0.67	10.00	6.66	0.00	0.00	0.00
	312L	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312o	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312p	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	7	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	8	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
08:00-09:00	312F	1	0.13	0.10	0.81	16.56
		2	0.13	0.10	0.81	16.56
	312G	1	0.09	0.28	0.20	45.51
		2	0.09	0.28	0.20	45.51
	312H	1	0.09	0.31	0.17	51.45
		2	0.09	0.31	0.17	51.45
	312I	1	0.18	0.14	0.81	22.17
		2	0.18	0.14	0.81	22.17
	312K	1	0.09	0.31	0.18	50.58
		2	0.09	0.31	0.18	50.58
	312L	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EoTS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	312F	1	0.00	0.00	0.34	1.00	0.00	1.06	1.06
		2	0.00	0.00	0.34	1.00	0.00	1.06	1.06
	312G	1	0.00	0.00	0.63	1.00	0.00	3.69	3.69
		2	0.00	0.00	0.63	1.00	0.00	3.69	3.69
	312H	1	0.00	0.00	0.67	1.00	0.00	4.20	4.20
		2	0.00	0.00	0.67	1.00	0.00	4.20	4.20
	312I	1	0.00	0.00	0.39	1.00	0.00	1.43	1.43
		2	0.00	0.00	0.39	1.00	0.00	1.43	1.43
	312K	1	0.00	0.00	0.67	1.00	0.00	4.13	4.13
		2	0.00	0.00	0.67	1.00	0.00	4.13	4.13
	312L	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00

		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	09/07/2020 15:03:56	09/07/2020 15:05:34	08:00	126	3548.68	214.74	113.40	312Ent/1	6	9	311C/1	312Ent/1	312Ent/1	

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s (per cycle))	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	113	-21	20979	4983	36.50	3020.24	499.41	3519.65

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	2	220	786	33.45	29.03	29.03

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s (per cycle))	Effective green (s (per cycle))
08:00-09:00	21199	21021	507	✓	113	✓	-21	5769	5797

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
08:00-09:00	16.06	36.47	63.40	151.33	3049.27	3049.27	49.32	6037.25	3987.09	174.43	499.41

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s (per cycle))	Wasted time blocking back (s (per cycle))	Wasted time total (s (per cycle))
08:00-09:00	433.27	0.00	535.00	499.19	1034.19

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)
08:00-09:00	3037.70	309.30	6.10

Network Results: Advanced

Time Segment	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	0.00	0.00	✓	0.00	1.00	0.00	0.00	3223.70	3548.68

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To																	
		A bcd	A ex	A near	A off	B	A1	A2	A616 in	A616 out	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1
From	A bcd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.4	63.8	0.0	54.1	0.0	0.0
	A ex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A near	0.0	0.0	0.0	0.0	28.6	56.3	52.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A off	0.0	0.0	0.0	0.0	58.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	0.0	122.9	0.0	0.0	84.9	70.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A1	81.1	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A2	99.6	408.2	0.0	0.0	343.7	0.0	0.0	0.0	123.6	0.0	0.0	123.1	0.0	0.0	0.0	0.0	0.0	0.0
	A616 in	0.0	0.0	0.0	0.0	202.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A616 out	74.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.6	0.0	0.0	127.1	0.0	0.0	0.0	0.0	0.0	0.0
	B LS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.6	0.0	27.1	0.0	0.0	87.8	0.0	0.0	0.0
	B as	0.0	382.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B wr	0.0	528.5	0.0	0.0	0.0	0.0	0.0	0.0	21.5	78.5	0.0	0.0	81.8	0.0	81.8	0.0	0.0	0.0
	B wr x	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	C	0.0	794.4	0.0	0.0	0.0	0.0	753.4	0.0	0.0	326.2	0.0	0.0	325.6	0.0	0.0	0.0	0.0	0.0
	C as	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	D	0.0	561.3	0.0	0.0	0.0	0.0	520.4	0.0	0.0	130.3	0.0	0.0	129.7	0.0	0.0	0.0	0.0	0.0
	MSS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	P1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.5	0.0
	P2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.5	0.0
	P3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	0.0
	P4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.6	0.0
	P5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.5	0.0
	P6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.6	0.0

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	P5	P4		22		51.45	22	51.45
2	P4	P5		22		51.45	22	51.45
3	P5	P6		22		50.58	22	50.58
4	P6	P5		22		50.58	22	50.58
14	P1	P2		22		45.51	22	45.51
15	P2	P1		22		45.51	22	45.51
23	P4	P3		22		16.56	22	16.56
30	D	C	0		0.00		0	0.00
34	C	D	0		0.00		0	0.00
49	B LS	B wr x	50		27.11		50	27.11
56	A near	B	42		28.65		42	28.65
57	C as	B	0		0.00		0	0.00
58	B LS	D	42		87.78		42	87.78
59	B LS	C	0		0.00		0	0.00
61	P3	P4		22		16.56	22	16.56
62	C	B	0		0.00		0	0.00
63	C	A ex	622		794.36		622	794.36
64	D	A2	7		520.41		7	520.41

65	P2	P3		22		22.17		22	22.17
66	A bcd	C	432		63.79		432	63.79	
67	B wr	A2	0		0.00		0	0.00	
68	B wr	B	0		0.00		0	0.00	
69	B LS	B as	155		86.56		155	86.56	
70	A2	A2	0		0.00		0	0.00	
71	A2	B	35		343.71		35	343.71	
72	A2	A ex	27		408.24		27	408.24	
73	B LS	A2	0		0.00		0	0.00	
74	B LS	B	0		0.00		0	0.00	
75	B LS	A ex	0		0.00		0	0.00	
76	B as	A2	0		0.00		0	0.00	
84	A616 in	A2	0		0.00		0	0.00	
85	A616 in	B	4		201.96		4	201.96	
86	A616 in	A ex	0		0.00		0	0.00	
108	A off	A1	310		58.81		310	58.81	
109	A near	A1	207		56.35		207	56.35	
110	C as	A1	0		0.00		0	0.00	
111	B	A1	95		84.87		95	84.87	
191	C	B wr x	25		325.63		25	325.63	
192	C	B LS	25		326.18		25	326.18	
193	D	B wr x	168		129.72		168	129.72	
194	D	B LS	150		130.27		150	130.27	
206	B wr	D	300		81.83		300	81.83	
207	B wr	C	7		81.83		7	81.83	
208	B wr	B LS	50		21.47		50	21.47	
230	C as	A ex	0		0.00		0	0.00	
232	B	A ex	35		122.87		35	122.87	
233	A near	A2	278		52.25		278	52.25	
234	B	A2	182		70.91		182	70.91	
266	P3	P2		22		22.17	22	22.17	
284	A bcd	D	61		54.10		61	54.10	
285	A bcd	B wr x	25		93.36		25	93.36	
286	A bcd	B LS	0		0.00		0	0.00	
294	MSS	B wr x	0		0.00		0	0.00	
295	MSS	B LS	0		0.00		0	0.00	
296	B wr	B as	400		78.55		400	78.55	
300	A1	A bcd	347		81.06		347	81.06	
302	B as	A bcd	0		0.00		0	0.00	
303	MSS	A bcd	0		0.00		0	0.00	
307	A2	B wr x	211		123.07		211	123.07	
308	A2	B LS	28		123.62		28	123.62	
312	A2	A bcd	121		99.61		121	99.61	
313	A1	A616 out	207		7.19		207	7.19	
314	A616 out	A bcd	50		74.92		50	74.92	
317	C	A2	21		753.43		21	753.43	
318	D	B	0		0.00		0	0.00	
319	D	A ex	101		561.34		101	561.34	
320	B wr	A ex	25		528.51		25	528.51	
321	B as	B	0		0.00		0	0.00	
322	B as	A ex	555		382.33		555	382.33	
323	MSS	A2	0		0.00		0	0.00	
324	MSS	B	0		0.00		0	0.00	
325	MSS	A ex	0		0.00		0	0.00	
326	A616 out	B wr x	100		127.05		100	127.05	
327	A616 out	B LS	57		127.60		57	127.60	

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1	(untitled)	311d			1321 <	1650	126	32.47	108	-17	195.32	159.53	248.06	95.24 +		100	100	0.00	889.23
308A	2	(untitled)				1200 <	1200	126	0.00	100	-10	81.19	69.52	36.32	34.59 +		100	100	0.00	337.37
311Ao	1	(untitled)	311			518	1625	126	3.52	33	174	9.58	0.58	1.56	0.80		100	100	0.00	1.28
311C	1	Lockwood inbound	311ms	311ms	A	700 <	1800	48	0.00	100	-10	118.70	102.55	152.19	40.18 +	25.78	100	100	0.00	303.50
311Cx	1	(untitled)	311a			1317	1700	126	97.00	77	16	36.61	3.73	9.62	15.12		100	100	0.00	20.94
311G	2	(untitled)	311ms			0	Unrestricted	126	126.00	0	Unrestricted	0.00	0.00	0.00	0.00		100	100	0.00	0.00
311LAS	1	(untitled)	311ms	311ms	C	157	1400	111	0.00	13	613	11.89	1.09	11.28	1.40	0.62	100	100	0.00	0.90
311a	1	(untitled)	311a			347	1500	126	0.00	23	289	7.08	0.36	0.00	0.03		100	100	0.00	0.49
311aa O	1	(untitled)	311aa			347	1500	126	0.00	23	289	24.00	0.36	0.00	0.03		100	100	0.00	0.49
311aa bus	2	(untitled)	311aa			207	1400	126	0.00	15	509	24.94	0.22	0.00	0.01		100	100	0.00	0.18
311abus	1	(untitled)	311a			207	1000	126	0.00	21	335	7.19	0.47	0.00	0.03		100	100	0.00	0.38
311b	1	(untitled)	311b			612	1500	126	0.00	41	121	37.01	0.83	0.00	0.14		100	100	0.00	1.99
311cn	1	(untitled)	311c			302	1000	126	0.00	30	198	6.54	0.78	0.00	0.07		100	100	0.00	0.93
311co	1	(untitled)	311c			310	1373	126	0.00	23	298	6.30	0.38	0.00	0.03		100	100	0.00	0.47
311csx	1	(untitled)	ASCS			157	1600	126	13.00	10	817	4.68	0.12	0.00	0.01		100	100	0.00	0.08
311dAS	311dAS	(untitled)	311d			130	349	126	0.00	37	141	6.41	3.05	0.00	0.11		100	100	0.00	1.56
311dn	1	(untitled)	311d			527	1300	126	0.00	41	122	12.64	0.94	0.00	0.14		100	100	0.00	1.96
311do	1	(untitled)	311d			310	1400	126	0.00	22	306	15.50	0.37	0.00	0.03		100	100	0.00	0.45
311out	1	(untitled)	311ms	311ms	B	397	1750	50	2.54	59	53	45.24	33.36	80.64	10.61	9.45	100	100	0.00	56.26
312A	1	(untitled)	312a	312a	A	349 <	1750	37	0.00	66	36	41.18	35.59	49.97	6.11 +	6.11	100	100	0.00	50.23
312Ae	1	(untitled)	312b			374	1800	126	42.64	31	187	19.35	9.62	37.17	4.87		100	100	0.00	16.19
312Be	1	(untitled)	312b	312b	M	555 <	1833	45	0.00	83	9	59.14	49.41	89.38	17.42 +	15.47	100	100	0.00	115.34
312Bo	1	(untitled)	312a	312a	B	25	1700	5	4.00	31	191	62.83	58.63	102.87	1.50	0.90	100	100	0.00	6.10
312Cn	1	(untitled)	312a	312a	C	457 <	1895	50	0.00	60	51	42.21	33.21	76.44	12.23 +	10.85	100	100	0.00	64.24
312Co	1	(untitled)	312a	312a	C	61	1131	50	3.00	13	575	32.52	24.12	63.09	1.31	1.30	100	100	0.00	6.29
312D	1	Lockwood Road inbound	312a	312a	D	426	1855	37	0.00	76	18	100.27	49.87	96.75	14.67	11.59	100	100	0.00	88.97
312Dx	1	(untitled)				403	Unrestricted	126	31.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312Eent	1	(untitled)	312e			693 <	1800	126	83.22	113	-21	279.57	261.41	233.72	65.37 +		100	100	0.00	746.77
312En	1	(untitled)	312a	312a	E	567 <	1800	49	9.70	98	-9	87.80	84.66	71.18	15.17	15.17	100	100	0.00	198.45

															+					
312Eo	1	(unfilled)	312a	312a	E	44	1125	49	9.00	10	811	10.03	6.90	9.38	0.14	0.14	100	100	0.00	1.29
312Ex	1	(unfilled)				439	Unrestricted	126	67.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312J	1	(unfilled)	312b	312b	J	387	1800	70	5.00	38	136	7.63	2.45	10.84	1.51	1.41	100	99999	0.00	329.05
312K	1	(unfilled)	312b	312b	K	396	1873	43	0.00	61	49	59.88	37.68	83.85	11.78	9.21	100	100	0.00	63.03
312c BS	1	(unfilled)	312c			783	1400	126	6.00	56	61	13.06	2.62	27.63	11.48		100	100	0.00	10.81
312c LS	1	(unfilled)	312c			247	409	126	3.86	63	44	15.45	8.18	25.56	2.91		100	100	0.00	8.88
312c ent	1	(unfilled)	312c			782	1700	126	8.24	49	83	9.27	1.49	9.32	3.50		100	100	0.00	5.98
312c x	3	(unfilled)				576	1800	126	0.00	32	181	11.66	0.47	0.00	0.08		100	100	0.00	1.07
312x LSx	4	(unfilled)				307	1800	126	0.00	17	428	12.21	0.21	0.00	0.02		100	100	0.00	0.25
5	2	(unfilled)				518	1500	126	19.00	35	161	4.47	1.25	3.26	2.26		100	100	0.00	2.74
6	2	(unfilled)	ASCS			555	1800	126	73.00	31	192	10.65	0.45	0.00	0.07		100	100	0.00	0.98
AS	1	(unfilled)	AS			380	1500	126	0.00	25	255	4.07	0.41	0.00	0.04		100	100	0.00	0.61
AS1	1	(unfilled)	AS			0	1800	126	126.00	0	Unrestricted	0.00	0.00	0.00	0.00		100	100	0.00	0.00
AS2	1	(unfilled)				484	1500	126	0.00	32	179	35.65	0.57	0.00	0.08		100	100	0.00	1.09
AS3	1	(unfilled)	ASCS			422	699	126	108.00	60	49	36.89	3.89	0.00	0.46		100	100	0.00	6.47
ASin	1	(unfilled)	ASCS			555	1700	126	108.00	33	176	10.98	0.51	0.00	0.08		100	100	0.00	1.12
CS 2	1	(unfilled)	311ms	311ms	D	738 <	1808	55	0.00	92	-2	59.09	54.53	108.10	28.63 +	18.79	100	100	0.00	168.75
QML	1	(unfilled)	AS			312	516	126	0.00	60	49	35.26	5.26	0.00	0.46		100	100	0.00	6.48
QMLx	1	(unfilled)				78	1800	126	53.00	4	1973	12.05	0.05	0.00	0.00		100	100	0.00	0.01

Pedestrian Crossing Results

				SIGNALS		FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PENALTIES	P.I.
Pedestrian	Side	Name	Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay reweighting (%)	Cost of traffic penalties (£ per hr)	P.I.
312F	1	(untitled)	312a	312a	F	22	11000	71	0	25257	16.56	12.22	0.34	100	0.00	1.06
	2	(untitled)	312a	312a	F	22	11000	71	0	25257	16.56	12.22	0.34	100	0.00	1.06
312G	1	(untitled)		312a	I	22	11000	22	1	8114	45.51	42.51	0.63	100	0.00	3.69
	2	(untitled)		312a	I	22	11000	22	1	8114	45.51	42.51	0.63	100	0.00	3.69
312H	1	(untitled)		312a	H	22	11000	15	2	5614	51.45	48.45	0.67	100	0.00	4.20
	2	(untitled)		312a	H	22	11000	15	2	5614	51.45	48.45	0.67	100	0.00	4.20
312I	1	(untitled)	312a	312a	G	22	11000	61	0	22043	22.17	16.51	0.39	100	0.00	1.43
	2	(untitled)	312a	312a	G	22	11000	61	0	22043	22.17	16.51	0.39	100	0.00	1.43
312K	1	(untitled)		312a	N	22	11000	16	1	5971	50.58	47.58	0.67	100	0.00	4.13
	2	(untitled)		312a	N	22	11000	16	1	5971	50.58	47.58	0.67	100	0.00	4.13
312L	1	(untitled)		312b	L	0	11000	68	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312b	L	0	11000	68	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312o	1	(untitled)		312a	O	0	11000	64	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	O	0	11000	64	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312p	1	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	P	0	11000	5	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
7	1	(untitled)	311ms	311ms	E	0	11000	3	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)	311ms	311ms	E	0	11000	3	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
8	1	(untitled)		311ms	F	0	11000	68	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		311ms	F	0	11000	68	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	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)
Normal traffic	3036.56	307.02	6.15	61.36	151.33	3020.24	499.41	0.00	3519.65
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians	1.14	2.28	0.31	2.04	0.00	29.03	0.00	0.00	29.03
TOTAL	3037.70	309.30	6.10	63.40	151.33	3049.27	499.41	0.00	3548.68

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = 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/traffic stream excess queue is greater than 0
- **P.I. = PERFORMANCE INDEX**

TRANSYT 15	
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Filename: rrfnbl 2037 PM zJ3 opt 1 Gx5 1.6 E 1in 2 seq5 .t15
 Path: C:\Users\andrewrawlinson\Desktop\2037 inc RR67 Jacobs
 Report generation date: 09/07/2020 15:42:08

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File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	06/12/2011
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ITDS\AndrewRawlinson
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber
			✓		✓	✓	✓	✓	✓	✓	✓		

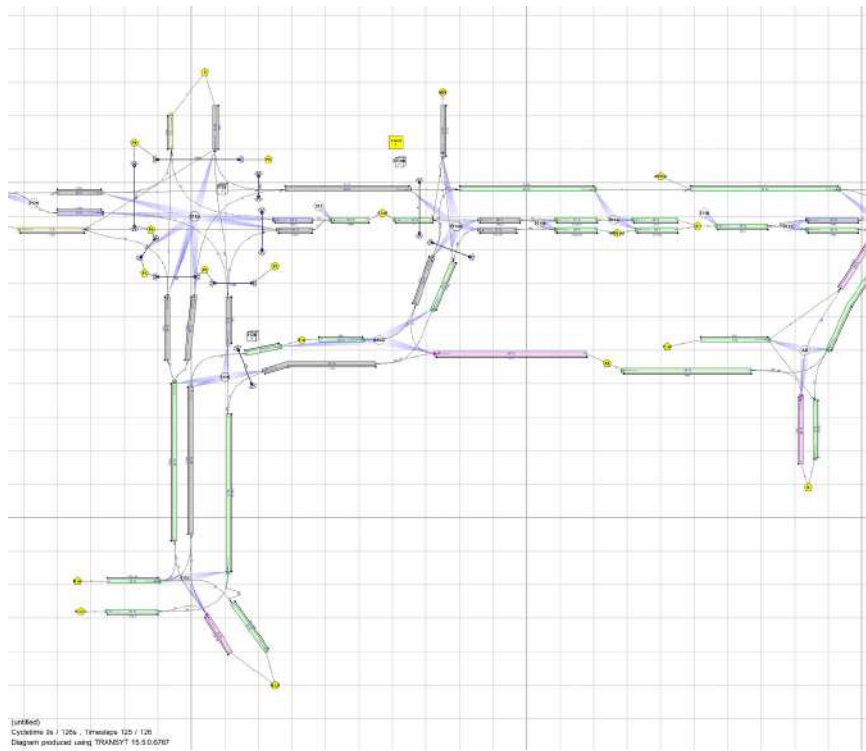
Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	mph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Network Diagrams



A1 - pm
D1 - pm*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	09/07/2020 15:29:16	09/07/2020 15:29:19	17:00	126	3133.76	150.99	102.05	CS 2/1	8	12	CS 2/1	311Ao/1	CS 2/1	

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
pm		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
pm				17:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
126		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient
Default	35

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms*[-2])	Travel time coefficient1	Travel time coefficient2
Bus	1.00	70	15	0.47	30	85

Tram parameters

Name	PCU Factor	Dispersion coefficient1	Dispersion coefficient2	Acceleration (ms*[-2])	Travel time coefficient1	Travel time coefficient2
Tram	1.00	0	0	0.47	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05		✓	312a, 312b, 311ms

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Traffic Nodes

Traffic Nodes

Traffic node	Name	Description
(ALL)	(untitled)	

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
1	(untitled)		311d
308A	(untitled)		
311Ao	(untitled)		311
311C	(untitled)		311ms
311Cx	(untitled)		311a
311G	(untitled)		311ms
311LAS	(untitled)		311ms
311a	(untitled)		311a
311aa O	(untitled)		311aa
311aa bus	(untitled)		311aa
311abus	(untitled)		311a
311b	(untitled)		311b
311cn	(untitled)		311c
311co	(untitled)		311c
311csx	(untitled)		ASCS
311dAS	(untitled)		311d
311dn	(untitled)		311d
311do	(untitled)		311d
311out	(untitled)		311ms
312A	(untitled)		312a
312Ae	(untitled)		312b
312Be	(untitled)		312b
312Bo	(untitled)		312a
312Cn	(untitled)		312a
312Co	(untitled)		312a
312D	(untitled)		312a
312Dx	(untitled)		
312Eent	(untitled)		312e
312En	(untitled)		312a
312Eo	(untitled)		312a
312Ex	(untitled)		
312J	(untitled)		312b
312K	(untitled)		312b
312c BS	(untitled)		312c
312c LS	(untitled)		312c
312c ent	(untitled)		312c
312c x	(untitled)		
312x LSx	(untitled)		
5	(untitled)		
6	(untitled)		ASCS
AS	(untitled)		AS
AS1	(untitled)		AS
AS2	(untitled)		
AS3	(untitled)		ASCS
ASin	(untitled)		ASCS
CS 2	(untitled)		311ms
QML	(untitled)		AS
QMLx	(untitled)		

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1	(untitled)			368.00	✓	Sum of lanes	1050					Normal	
308A	2	(untitled)			120.00	✓	Sum of lanes	1200					Normal	
311Ao	1	(untitled)			75.00	✓	Sum of lanes	1625					Normal	
311C	1	Lockwood inbound			166.00	✓	Sum of lanes	1650			✓		Normal	
311Cx	1	(untitled)			274.00	✓	Sum of lanes	1700					Normal	
311G	2	(untitled)			20.00	✓	Sum of lanes	2300			✓		Normal	
311LAS	1	(untitled)			90.00	✓	Sum of lanes	1400	✓	1800	✓		Normal	
311a	1	(untitled)			56.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa O	1	(untitled)			197.00	✓	Sum of lanes	1500	✓	1800			Normal	
311aa bus	2	(untitled)			206.00	✓	Sum of lanes	1400					Normal	
311abus	1	(untitled)			56.00	✓	Sum of lanes	1000					Normal	
311b	1	(untitled)			275.00	✓	Sum of lanes	1500					Normal	
311cn	1	(untitled)			45.00	✓	Sum of lanes	1000					Normal	
311co	1	(untitled)			45.00	✓	Sum of lanes	1200				✓	Normal	
311csx	1	(untitled)			38.00	✓	Sum of lanes	1600					Normal	
311dAS	311dAS	(untitled)			28.00							✓	Normal	
311dn	1	(untitled)			115.00	✓	Sum of lanes	1300					Normal	
311do	1	(untitled)			115.00	✓	Sum of lanes	1400					Normal	
311out	1	(untitled)			99.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312A	1	(untitled)			35.00	✓	Sum of lanes	1750	✓	1800	✓		Normal	
312Ae	1	(untitled)			87.00	✓	Sum of lanes	1800	✓	1800			Normal	
312Be	1	(untitled)			87.00	✓	Sum of lanes	1833	✓	1800	✓		Normal	
312Bo	1	(untitled)			35.00	✓	Sum of lanes	1700	✓	1800	✓		Normal	
312Cn	1	(untitled)			75.00	✓	Sum of lanes	1895	✓	1800	✓		Normal	
312Co	1	(untitled)			70.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312D	1	Lockwood Road inbound			420.00	✓	Sum of lanes	1860			✓		Normal	
312Dx	1	(untitled)			100.00								Normal	
312Eent	1	(untitled)			203.00	✓	Sum of lanes	1500					Normal	
312En	1	(untitled)			35.00	✓	Sum of lanes	1800	✓	1800	✓		Normal	
312Eo	1	(untitled)			35.00	✓	Sum of lanes	1440	✓	1800	✓	✓	Normal	
312Ex	1	(untitled)			100.00								Normal	
312J	1	(untitled)			43.00	✓	Sum of lanes	1800			✓		Normal	
312K	1	(untitled)			185.00	✓	Sum of lanes	1873			✓		Normal	
312c BS	1	(untitled)			90.00	✓	Sum of lanes	1400					Normal	
312c LS	1	(untitled)			65.00							✓	Normal	
312c ent	1	(untitled)			80.00	✓	Sum of lanes	1700					Normal	

312c x	3	(untitled)			70.00	✓	Sum of lanes	1800					Normal
312x LSx	4	(untitled)			100.00	✓	Sum of lanes	1800					Normal
5	2	(untitled)			25.00	✓	Sum of lanes	1500	✓	1800			Normal
6	2	(untitled)			85.00	✓	Sum of lanes	1800					Normal
AS	1	(untitled)			35.00	✓	Sum of lanes	1500					Normal
AS1	1	(untitled)			345.00	✓	Sum of lanes	1800					Normal
AS2	1	(untitled)			345.00	✓	Sum of lanes	1500					Normal
AS3	1	(untitled)			275.00							✓	Normal
ASin	1	(untitled)			100.00	✓	Sum of lanes	1700					Normal
CS 2	1	(untitled)			38.00	✓	Sum of lanes	1808			✓		Normal
QML	1	(untitled)		✓	250.00							✓	Normal
QMLx	1	(untitled)			100.00	✓	Sum of lanes	1800					Normal

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Saturation flow (PCU/hr)
1	1	1	(untitled)			1050
308A	2	1	(untitled)			1200
311Ao	1	1	(untitled)			1625
311C	1	1	(untitled)			1650
311Cx	1	1	(untitled)			1700
311G	2	1	(untitled)			2300
311LAS	1	1	(untitled)			1400
311a	1	1	(untitled)			1500
311aa O	1	1	(untitled)			1500
311aa bus	2	1	(untitled)			1400
311abus	1	1	(untitled)			1000
311b	1	1	(untitled)			1500
311cn	1	1	(untitled)			1000
311co	1	1	(untitled)			1200
311csx	1	1	(untitled)			1600
311dAS	311dAS	1	(untitled)			
311dn	1	1	(untitled)			1300
311do	1	1	(untitled)			1400
311out	1	1	(untitled)			1750
312A	1	1	(untitled)			1750
312Ae	1	1	(untitled)			1800
312Be	1	1	(untitled)			1833
312Bo	1	1	(untitled)			1700
312Cn	1	1	(untitled)			1895
312Co	1	1	(untitled)			1440
312D	1	1	(untitled)			1860
312Dx	1	1	(untitled)			
312Eent	1	1	(untitled)			1500
312En	1	1	(untitled)			1800
312Eo	1	1	(untitled)			1440
312Ex	1	1	(untitled)			
312J	1	1	(untitled)			1800
312K	1	2	(untitled)			1873
312c BS	1	1	(untitled)			1400
312c LS	1	1	(untitled)			
312c ent	1	1	(untitled)			1700
312c x	3	1	(untitled)			1800
312x LSx	4	1	(untitled)			1800
5	2	1	(untitled)			1500
6	2	1	(untitled)			1800
AS	1	1	(untitled)			1500
AS1	1	1	(untitled)			1800
AS2	1	1	(untitled)			1500
AS3	1	1	(untitled)			
ASin	1	1	(untitled)			1700
CS 2	1	1	(untitled)	right		1808
QML	1	1	(untitled)			
QMLx	1	QMLx	(untitled)			1800

Modelling

Arm	Traffic Stream	Traffic model	Stop weighting multiplier (%)	Delay weighting multiplier (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (PCU)	Has queue limit	Queue limit (PCU)	Excess queue penalty (£)	Has degree of saturation limit
1	1	NetworkDefault	100	100	100		0.00				
308A	2	NetworkDefault	100	100	100		0.00				
311Ao	1	NetworkDefault	100	100	100		13.00	✓	17.00	0.00	
311C	1	NetworkDefault	100	100	100		0.00				
311Cx	1	NetworkDefault	100	100	100		0.00				
311G	2	NetworkDefault	100	100	100		0.00				
311LAS	1	CTM	100	100	100		15.00	✓	15.00	0.00	
311a	1	CTM	100	100	100		10.00				
311aa O	1	CTM	100	100	100		36.00				
311aa bus	2	NetworkDefault	100	100	100		0.00				
311abus	1	NetworkDefault	100	100	100		0.00				
311b	1	NetworkDefault	100	100	100		0.00				
311cn	1	NetworkDefault	100	100	100		0.00				
311co	1	NetworkDefault	100	100	100		0.00				
311csx	1	NetworkDefault	100	100	100		0.00				
311dAS	311dAS	NetworkDefault	100	100	100		0.00				
311dn	1	NetworkDefault	100	100	100		0.00				
311do	1	NetworkDefault	100	100	100		0.00				
311out	1	CTM	100	100	100		15.00	✓	15.00	0.00	
312A	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Ae	1	CTM	100	100	100		17.00	✓	18.00	0.00	
312Be	1	CTM	100	100	100		17.00	✓	17.00	0.00	
312Bo	1	CTM	100	100	100		6.00				
312Cn	1	CTM	100	100	100		12.00	✓	8.00	0.00	
312Co	1	Flare	100	100	100		8.00	✓	8.00	0.00	
312D	1	NetworkDefault	100	100	100		0.00				
312Dx	1	NetworkDefault	100	100	100		0.00				
312Eent	1	PDM	100	100	100		49.00	✓	49.00	0.00	
312En	1	CTM	100	100	100		6.00	✓	6.00	0.00	
312Eo	1	Flare	100	100	100		6.00	✓	6.00	0.00	

312Ex	1	NetworkDefault	100	100	100		0.00				
312J	1	NetworkDefault	99999	100	100		0.00				
312K	1	NetworkDefault	100	100	100		0.00				
312c BS	1	NetworkDefault	100	100	100		0.00				
312c LS	1	NetworkDefault	100	100	100		0.00				
312c ent	1	NetworkDefault	100	100	100		0.00				
312c x	3	NetworkDefault	100	100	100		0.00				
312x LSx	4	NetworkDefault	100	100	100		0.00				
5	2	CTM	100	100	100		3.00	✓	17.00	0.00	
6	2	NetworkDefault	100	100	100		0.00				
AS	1	NetworkDefault	100	100	100		0.00				
AS1	1	NetworkDefault	100	100	100		0.00				
AS2	1	NetworkDefault	100	100	100		0.00				
AS3	1	NetworkDefault	100	100	100		0.00				
ASin	1	NetworkDefault	100	100	100		0.00				
CS 2	1	NetworkDefault	100	100	100		0.00				
QML	1	NetworkDefault	100	100	100		0.00				
QMLx	1	NetworkDefault	100	100	100		0.00				

Modelling - Advanced

Arm	Traffic Stream	Initial queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type of random parameter	Random parameter	Auto cycle time	Cycle time
(ALL)	(ALL)	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	126

Normal - Modelling

Arm	Traffic Stream	Stop weighting (%)	Delay weighting (%)
(ALL)	(ALL)	100	100

Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)
1	1	812	812
308A	2	823	823
311Ao	1	919	919
311C	1	327	327
311Cx	1	789	789
311G	2	8	8
311LAS	1	288	288
311a	1	732	732
311aa O	1	732	732
311aa bus	2	338	338
311abus	1	338	338
311b	1	1163	1163
311cn	1	432	432
311co	1	731	731
311csx	1	290	290
311dAS	311dAS	177	177
311dn	1	1043	1043
311do	1	731	731
311out	1	782	782
312A	1	391	391
312Ae	1	423	423
312Be	1	426	426
312Bo	1	32	32
312Cn	1	707	707
312Co	1	212	212
312D	1	521	521
312Dx	1	556	556
312Eent	1	297	297
312En	1	226	226
312Eo	1	71	71
312Ex	1	729	729
312J	1	548	548
312K	1	777	777
312c BS	1	1325	1325
312c LS	1	297	297
312c ent	1	652	652
312c x	3	1019	1019
312x LSx	4	406	406
5	2	941	941
6	2	426	426
AS	1	777	777
AS1	1	49	49
AS2	1	680	680
AS3	1	669	669
ASin	1	433	433
CS 2	1	615	615
QML	1	363	363
QMLx	1	332	332

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
311C	1	311ms	A	
311G	2	311ms	G	
311LAS	1	311ms	C	
311out	1	311ms	B	
312A	1	312a	A	
312Be	1	312b	M	
312Bo	1	312a	B	
312Cn	1	312a	C	
312Co	1	312a	C	
312D	1	312a	D	
312En	1	312a	E	
312Eo	1	312a	E	
312J	1	312b	J	
312K	1	312b	K	
CS 2	1	311ms	D	

Entry Sources

Arm	Traffic Stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)
311Ao	1	9.00	18.64

311G	2	2.40	18.64
311a	1	6.72	18.64
311aa bus	2	24.72	18.64
311abus	1	6.72	18.64
311dn	1	11.69	22.00
311do	1	15.13	17.00
312D	1	50.40	18.64
312Eent	1	18.16	25.00
312c LS	1	7.27	20.00
312c ent	1	7.78	23.00
AS1	1	41.40	18.64
AS3	1	33.00	18.64
ASin	1	10.47	21.38
QML	1	30.00	18.64

Sources

Arm	Traffic Stream	Source	Source traffic stream	Destination traffic stream	Cruise time for Normal Traffic (s)	Cruise speed for Normal Traffic (mph)	Auto turning radius	Traffic turn style	Turning radius (m)
1	1	1	311Cx/1	1/1	35.79	23.00	✓	Straight	Straight Movement
308A	2	1	311dAS/311dAS	308A/2	11.67	23.00	✓	Straight	Straight Movement
311C	1	1	312D/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	1	CS 2/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
311LAS	1	1	311aa bus/2	311LAS/1	10.80	18.64	✓	Straight	Straight Movement
311aa O	1	1	311a/1	311aa O/1	23.64	18.64	✓	Straight	Straight Movement
311b	1	1	311cn/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	1	311dn/1	311cn/1	5.92	17.00	✓	Straight	Straight Movement
311co	1	1	311do/1	311co/1	5.92	17.00	✓	Straight	Straight Movement
311csx	1	1	311LAS/1	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	1	QML/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	1	311aa O/1	311out/1	11.88	18.64	✓	Straight	Straight Movement
312A	1	1	312Ae/1	312A/1	5.59	14.00	✓	Straight	Straight Movement
312Ae	1	1	312c ent/1	312Ae/1	9.73	20.00	✓	Nearside	62.50
312Be	1	1	312c ent/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Bo	1	1	312Ae/1	312Bo/1	4.20	18.64	✓	Straight	Straight Movement
312Cn	1	1	311Ao/1	312Cn/1	9.00	18.64	✓	Straight	Straight Movement
312Co	1	1	311Ao/1	312Co/1	8.40	18.64	✓	Straight	Straight Movement
312Dx	1	1	312Co/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312En	1	1	312Eent/1	312En/1	3.13	25.00	✓	Straight	Straight Movement
312Eo	1	1	312Eent/1	312Eo/1	3.13	25.00	✓	Straight	Straight Movement
312Ex	1	1	312D/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	1	312Cn/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
312K	1	1	AS3/1	312K/1	22.20	18.64	✓	Straight	Straight Movement
312c BS	1	1	312J/1	312c BS/1	10.07	20.00	✓	Straight	Straight Movement
312c x	3	1	312c BS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	1	312c BS/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
5	2	1	311out/1	5/2	3.29	17.00	✓	Straight	Straight Movement
6	2	1	312Be/1	6/2	10.20	18.64	✓	Straight	Straight Movement
AS	1	1	311dn/1	AS/1	3.56	22.00	✓	Nearside	73.18
AS2	1	1	AS/1	AS2/1	35.08	22.00	✓	Straight	Straight Movement
CS 2	1	1	AS3/1	CS 2/1	4.56	18.64	✓	Offside	80.41
QMLx	1	1	AS/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
308A	2	2	1/1	308A/2	11.67	23.00	✓	Straight	Straight Movement
311C	1	2	312En/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	2	311G/2	311Cx/1	32.88	18.64	✓	Nearside	62.50
311b	1	2	311co/1	311b/1	36.19	17.00	✓	Straight	Straight Movement
311cn	1	2	311dAS/311dAS	311cn/1	5.40	18.64	✓	Nearside	13.39
311csx	1	2	311G/2	311csx/1	4.56	18.64	✓	Straight	Straight Movement
311dAS	311dAS	2	AS1/1	311dAS/311dAS	3.36	18.64	✓	Straight	Straight Movement
311out	1	2	311aa bus/2	311out/1	11.88	18.64	✓	Straight	Straight Movement
312Ae	1	2	312c LS/1	312Ae/1	9.73	20.00	✓	Straight	Straight Movement
312Be	1	2	312c LS/1	312Be/1	9.73	20.00	✓	Straight	Straight Movement
312Dx	1	2	312A/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	2	312Cn/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	2	312D/1	312J/1	4.81	20.00	✓	Straight	Straight Movement
312K	1	2	311csx/1	312K/1	22.20	18.64	✓	Straight	Straight Movement
312c BS	1	2	312K/1	312c BS/1	10.80	18.64	✓	Straight	Straight Movement
312c x	3	2	312c LS/1	312c x/3	11.18	14.00	✓	Straight	Straight Movement
312x LSx	4	2	312c ent/1	312x LSx/4	12.00	18.64	✓	Straight	Straight Movement
5	2	2	CS 2/1	5/2	3.00	18.64	✓	Offside	6.00
AS	1	2	1/1	AS/1	4.20	18.64	✓	Straight	Straight Movement
AS2	1	2	QML/1	AS2/1	35.08	22.00	✓	Nearside	100.00
CS 2	1	2	ASin/1	CS 2/1	4.56	18.64	✓	Straight	Straight Movement
QMLx	1	2	AS1/1	QMLx/1	12.00	18.64	✓	Straight	Straight Movement
311C	1	3	312Bo/1	311C/1	16.14	23.00	✓	Straight	Straight Movement
311Cx	1	3	311C/1	311Cx/1	32.88	18.64	✓	Straight	Straight Movement
312Dx	1	3	312En/1	312Dx/1	12.00	18.64	✓	Straight	Straight Movement
312Ex	1	3	312A/1	312Ex/1	12.00	18.64	✓	Straight	Straight Movement
312J	1	3	312Eo/1	312J/1	6.87	14.00	✓	Straight	Straight Movement
5	2	3	311G/2	5/2	3.00	18.64	✓	Offside	37.50

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Visibility restricted
(ALL)	(ALL)	AllTraffic		

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Percentage opposing (%)	Slope coefficient	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	311cn/1	100	0.22		0	0
311dAS		TrafficStream	311dn/1	100	0.22		0	0
		TrafficStream	311Cx/1	100	0.19		0	0
1		TrafficStream	312En/1	100	0.22	✓	0	0
		TrafficStream	312En/1	100	0.22		0	0
	outbound	TrafficStream	312c BS/1	100	0.22		0	0
		TrafficStream	312c ent/1	90	0.19		0	0

		TrafficStream	311csx/1	30	0.22		0	0
		TrafficStream	ASin/1	5	0.19		0	0
		TrafficStream	AS/1	100	0.22		0	0
		TrafficStream	AS1/1	100	0.19		0	0

Pedestrian Crossings

Pedestrian Crossings

Crossing	Name	Description	Traffic node	Allow walk on red	Crossing type	Length (m)	Cruise time (seconds)	Cruise speed (mph)
312F	(untitled)		312a		Farside	5.00	3.33	3.36
312G	(untitled)				Nearside	3.00	2.00	3.36
312H	(untitled)				Farside	3.00	2.00	3.36
312I	(untitled)		312a		Farside	7.00	4.67	3.36
312K	(untitled)				Farside	3.00	2.00	3.36
312L	(untitled)				Farside	3.00	2.00	3.36
312o	(untitled)				Farside	3.00	2.00	3.36
312p	(untitled)				Farside	3.00	2.00	3.36
7	(untitled)		311ms		Nearside	6.00	4.00	3.36
8	(untitled)				Farside	3.00	2.00	3.36

Pedestrian Crossings - Signals

Crossing	Controller stream	Phase	Second phase enabled
312F	312a	F	
312G	312a	I	
312H	312a	H	
312I	312a	G	
312K	312a	N	
312L	312b	L	
312o	312a	O	
312p	312a	P	
7	311ms	E	
8	311ms	F	

Pedestrian Crossings - Sides

Crossing	Side	Saturation flow (Ped/hr)
(ALL)	(ALL)	11000

Pedestrian Crossings - Modelling

Crossing	Side	Delay weighting (%)	Assignment Cost Weighting (%)	Exclude from results calculation	Max queue storage (Ped)	Has queue limit	Has degree of saturation limit
(ALL)	(ALL)	100	100		0.00		

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit
1	(untitled)	✓	✓	Path Equalisation			✓			✓	1.25		

Normal Input Flows (PCU/hr)

		To																							
		A bcd	A ex	A near	A off	A1	A2	A616 in	A616 out	B	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6	
From	A bcd	0	0	0	0	0	0	0	0	0	0	0	0	25	682	0	212	0	0	0	0	0	0	0	
	A ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A near	0	0	0	0	338	415	0	0	290	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A off	0	0	0	0	731	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A1	732	0	0	0	0	0	0	338	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A2	155	0	0	0	0	0	0	0	27	75	0	0	412	0	0	0	0	0	0	0	0	0		
	A616 in	0	2	0	0	0	6	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0		
	A616 out	50	0	0	0	0	0	0	0	0	50	0	0	238	0	0	0	0	0	0	0	0	0		
	B	0	39	0	0	89	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B LS	0	7	0	0	0	0	0	0	0	0	50	0	50	40	0	150	0	0	0	0	0	0		
	B as	0	426	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	B wr	0	25	0	0	0	0	0	0	0	50	376	0	0	7	0	194	0	0	0	0	0	0		
	B wr x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	C	0	220	0	0	0	6	0	0	0	31	0	0	40	0	0	0	0	0	0	0	0	0		
	C as	0	44	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	D	0	58	0	0	0	11	0	0	0	200	0	0	252	0	0	0	0	0	0	0	0	0		
	MSS	4	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0		
P1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
P6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows (PCU/hr)

		To																							
		A bcd	A ex	A near	A off	A1	A2	A616 in	A616 out	B	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6	
From	A bcd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A near	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A off	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A616 in	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	A616 out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B LS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B as	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B wr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	B wr x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	326		A616 out	B wr x	311aa bus/2, 311LAS/1, 311csx/1, 312K/1, 312c BS/1, 312c x/3	Normal	238
	327		A616 out	B LS	311aa bus/2, 311LAS/1, 311csx/1, 312K/1, 312c BS/1, 312x LSx/4	Normal	50

Pedestrian Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Pedestrian calculated flow (Ped/hr)
1	1		P5	P4	312H:1E, 312H:2X	Normal	22
	2		P4	P5	312H:2E, 312H:1X	Normal	22
	3		P5	P6	312K:1E, 312K:2X	Normal	22
	4		P6	P5	312K:2E, 312K:1X	Normal	22
	14		P1	P2	312G:1E, 312G:2X	Normal	22
	15		P2	P1	312G:2E, 312G:1X	Normal	22
	23		P4	P3	312F:2E, 312F:1X	Normal	22
	61		P3	P4	312F:1E, 312F:2X	Normal	22
	65		P2	P3	312I:1E, 312I:2X	Normal	22
	266		P3	P2	312I:2E, 312I:1X	Normal	22

Signal Timings

Network Default: 126s cycle time; 126 steps

Controller Stream 311ms

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
311ms	(untitled)		1	NetworkDefault	126

Controller Stream 311ms - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
311ms	Unspecified						Absolute

Controller Stream 311ms - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
311ms	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311ms	A	(untitled)	7	300	0	0	Unknown
	B	(untitled)	7	300	0	0	Unknown
	C	(untitled)	7	300	0	0	Unknown
	D	(untitled)	7	300	0	0	Unknown
	E	(untitled)	3	3	0	0	Unknown
	F	(untitled)	5	300	0	0	Unknown
	G	(untitled)	1	1	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
311ms	1	A, B, C	1
	2	G	1
	3	F, E	1
	4	F, D, C	1

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
311ms	1	(untitled)	Single	1, 2, 3, 4	51, 53, 59, 108

Intergreen Matrix for Controller Stream 311ms

		To						
		A	B	C	D	E	F	G
From	A				5	3	1	
	B				6	3	1	
	C				5		1	
	D	5	5			5	1	
	E			7	8			1
	F	7	5					1
	G	5	5	6	6	3	3	

Banned Stage transitions for Controller Stream 311ms

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 311ms

		To			
		1	2	3	4
From	1	0	1	5	6
	2	6	0	3	6
	3	7	1	0	8
	4	7	1	5	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311ms	1	✓	1	A,B,C	115	51	62	1	7
	2	✓	2	G	52	53	1	1	1
	3	✓	3	F,E	56	59	3	1	3
	4	✓	4	F,D,C	67	108	41	1	7

Resultant Phase Green Periods

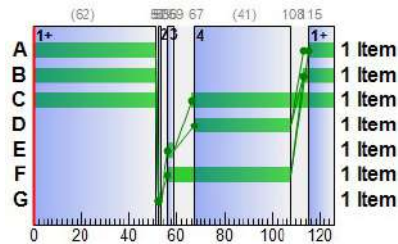
Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
311ms	A	1	✓	115	51	62
	B	1	✓	113	51	64
	C	1	✓	66	51	111
	D	1	✓	67	108	41
	E	1		56	59	3

			✓			
F	1		✓	56	108	52
G	1		✓	52	53	1

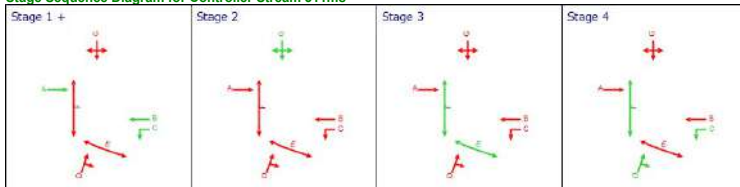
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
311C	1	311ms	311ms	A	115	51	62
311G	2	311ms	311ms	G	52	53	1
311LAS	1	311ms	311ms	C	66	51	111
311out	1	311ms	311ms	B	113	51	64
CS 2	1	311ms	311ms	D	67	108	41

Phase Timings Diagram for Controller Stream 311ms



Stage Sequence Diagram for Controller Stream 311ms



Controller Stream 312a

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312a	(untitled)		1	NetworkDefault	126

Controller Stream 312a - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312a	Unspecified						Absolute

Controller Stream 312a - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312a	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
312a	A	(untitled)	14	300	0	0	Unknown	
	B	(untitled)	2	7	0	0	Unknown	
	C	(untitled)	7	300	0	0	Unknown	
	D	(untitled)	7	300	0	0	Unknown	
	E	(untitled)	7	300	0	0	Unknown	
	F	(untitled)	5	300	0	0	Pedestrian	0
	G	(untitled)	7	300	0	0	Unknown	
	H	(untitled)	7	300	0	0	Unknown	
	I	(untitled)	7	300	0	0	Unknown	
	N	(untitled)	1	300	0	0	Unknown	
	O	(untitled)	5	300	0	0	Pedestrian	0
	P	(untitled)	1	5	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312a	1	I, H, N, O, P, F, G	1
	2	F, E, C, G	1
	3	D, O, A	1
	4	B, N, H, I, F, O	1

Losing / Gaining Phase Delays

Controller Stream	Delay	Type	Phase	From stage	To stage	Relative delay	Absolute delay
312a	1	Gaining	E	1	2	0	8
	2	Losing	B	1	2	6	
	3	Losing	A	1	2	6	
	4	Losing	C	2	3	4	
	5	Losing	E	2	3	4	
	6	Losing	I	1	2	7	
	7	Gaining	A	4	1	1	1
	8	Gaining	D	2	3	0	11

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312a	1	(untitled)	Single	1, 2, 3, 4	14, 74, 121, 5

Intergreen Matrix for Controller Stream 312a

	To										
	A	B	C	D	E	F	G	H	I	O	P
A			5		6	6	5			8	
B				5			5				8
C	8			8				9		9	5
D		6	6		5			9	9	5	8
E	8			8				5		9	9

From	F	5												
	G	8	8											
	H			5	0	8								
	I			5										
	N	5		5	7	5								
	O			7										
	P		5		5	5								

Banned Stage transitions for Controller Stream 312a

From	To			
	1	2	3	4
	1			
	2			
	3			
	4			

Interstage Matrix for Controller Stream 312a

From	To			
	1	2	3	4
	1	0	8	8
	2	9	0	12
	3	9	7	0
	4	8	8	7

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312a	1	✓	1	I,H,N,O,P,F,G	13	14	1	1	1
	2	✓	2	F,E,C,G	22	74	52	1	3
	3	✓	3	D,O,A	86	121	35	1	14
	4	✓	4	B,N,H,I,F,O	4	5	1	1	1

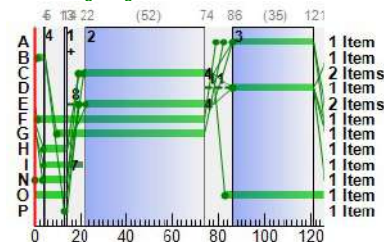
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312a	A	1	✓	86	121	35
	B	1	✓	1	5	4
	C	1	✓	21	78	57
	D	1	✓	86	121	35
	E	1	✓	22	78	56
	F	1	✓	1	74	73
	G	1	✓	10	74	64
	H	1	✓	4	14	10
	I	1	✓	4	21	17
	N	1	✓	3	14	11
	O	1	✓	83	14	57
	P	1	✓	13	14	1

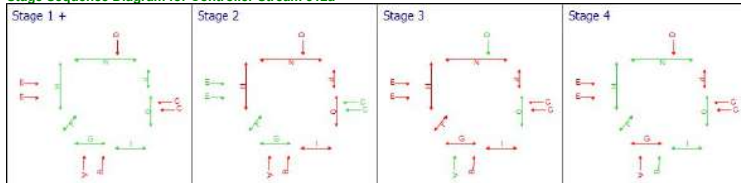
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312A	1	312a	312a	A	86	121	35
312Bo	1	312a	312a	B	1	5	4
312Cn	1	312a	312a	C	21	78	57
312Co	1	312a	312a	C	21	78	57
312D	1	312a	312a	D	86	121	35
312En	1	312a	312a	E	22	78	56
312Eo	1	312a	312a	E	22	78	56

Phase Timings Diagram for Controller Stream 312a



Stage Sequence Diagram for Controller Stream 312a



Controller Stream 312b

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)
312b	(untitled)		1	NetworkDefault	126

Controller Stream 312b - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
312b	Unspecified						Absolute

Controller Stream 312b - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
312b	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
312b	J	(untitled)	7	300	0	0	Unknown
	K	(untitled)	7	300	0	0	Unknown
	L	(untitled)	5	300	0	0	Unknown
	M	(untitled)	7	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)
312b	1	J, L	7
	2	K, M	7

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends
312b	1	(untitled)	Single	1, 2	4, 68

Intergreen Matrix for Controller Stream 312b

		To				
From		J	K	L	M	
	J		5		6	
	K	5		5		
	L		8		0	
	M	5		7		

Banned Stage transitions for Controller Stream 312b

		To	
From		1	2
	1		
	2		

Interstage Matrix for Controller Stream 312b

		To	
From		1	2
	1	0	8
	2	7	0

Resultant Stages

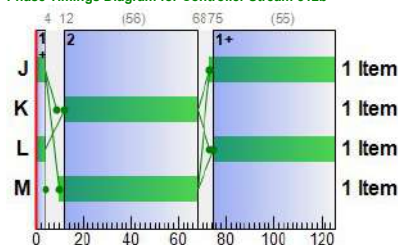
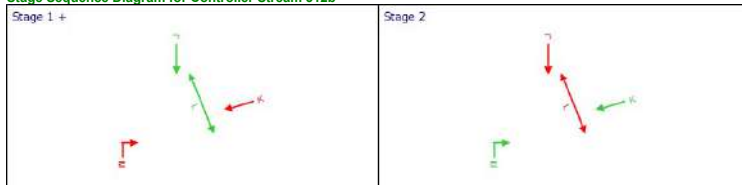
Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
312b	1	✓	1	J,L	75	4	55	7	7
	2	✓	2	K,M	12	68	56	7	7

Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
312b	J	1	✓	73	4	57
	K	1	✓	12	68	56
	L	1	✓	75	4	55
	M	1	✓	10	68	58

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
312Be	1	312b	312b	M	10	68	58
312J	1	312b	312b	J	73	4	57
312K	1	312b	312b	K	12	68	56

Phase Timings Diagram for Controller Stream 312b**Stage Sequence Diagram for Controller Stream 312b****Resultant penalties**

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
17:00-18:00	(ALL)	0.00	0.00	0.00	0.00

TRANSYT 12 Tables**Resultant Stages**

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	TRANSYT Stage start (s)	TRANSYT Preceding interstage (s)	TRANSYT Stage minimum (s)
311ms	1	✓	1	A,B,C	108	7	14
	2	✓	2	G	51	1	2
	3	✓	3	F,E	53	3	6
	4	✓	4	F,D,C	59	8	15
	1	✓	1	I,H,N,O,P,F,G	5	8	9

312a	2	✓	2	F,E,C,G	14	8	11
	3	✓	3	D,O,A	74	12	26
	4	✓	4	B,N,H,I,F,O	121	9	10
312b	1	✓	1	J,L	68	7	14
	2	✓	2	K,M	4	8	15

Resultant Phase Green Periods

Controller Stream	Phase	Green period	TRANSYT Starting stage	TRANSYT Ending stage	TRANSYT Start lag (s)	TRANSYT End lag (s)
311ms	A	1	1	2	7	0
	B	1	1	2	5	0
	C	1	4	2	7	0
	D	1	4	1	8	0
	E	1	3	4	3	0
	F	1	3	1	3	0
	G	1	2	3	1	0
312a	A	1	3	4	12	0
	B	1	4	1	6	0
	C	1	2	3	7	4
	D	1	3	4	12	0
	E	1	2	3	8	4
	F	1	4	3	6	0
	G	1	1	3	5	0
	H	1	4	2	9	0
	I	1	4	2	9	7
	N	1	4	2	8	0
	O	1	3	2	9	0
	P	1	1	2	8	0
312b	J	1	1	2	5	0
	K	1	2	1	8	0
	L	1	1	2	7	0
	M	1	2	1	6	0

Stage Timings (TRANSYT 12 timings)

Network Default: 126s cycle time; 126 steps

Controller Stream	Number of Stages	Stage 1	Stage 2	Stage 3	Stage 4
311ms	4	108	51	53	59
312a	4	5	14	74	121
312b	2	68	4		

Results - Link

Results - Traffic Stream

Results - Traffic Stream: Vehicle summary

Time Segment	Arm	Traffic Stream	Name	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Calculated capacity (PCU/hr)	Degree of saturation (%)	Practical reserve capacity (%)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	JourneyTime (s)
17:00-18:00	1	1	(untitled)		803	1050	126	1050	76	18	7.11	18.45	28.83	42.90
	308A	2	(untitled)		814	1200	126	1200	68	33	3.15	0.71	3.41	14.82
	311Ao	1	(untitled)		919	1625	126	907	101	-11	96.79	49.38	379.88	105.79
	311C	1	Lockwood inbound	A	327	1650	62	825	40	127	15.61	4.80	16.63	31.76
	311Cx	1	(untitled)		780	1700	126	1700	46	96	0.90	0.19	0.41	33.78
	311G	2	(untitled)	G	8	2300	1	37	22	311	75.11	0.31	8.79	77.51
	311LAS	1	(untitled)	C	288	1400	111	1244	23	289	1.42	1.42	9.49	12.22
	311a	1	(untitled)		732	1500	126	1500	49	84	1.14	0.23	2.32	7.86
	311aa O	1	(untitled)		732	1500	126	1193	61	47	7.22	7.45	20.71	30.86
	311aa bus	2	(untitled)		338	1400	126	1177	29	213	2.57	2.50	6.98	27.29
	311abus	1	(untitled)		338	1000	126	1000	34	166	0.92	0.09	0.88	7.64
	311b	1	(untitled)		1163	1500	126	1500	78	16	4.09	1.32	2.76	40.28
	311cn	1	(untitled)		432	1000	126	1000	43	108	1.37	0.16	2.09	7.17
	311co	1	(untitled)		731	1344	126	1344	54	65	1.59	0.32	4.13	7.51
	311csx	1	(untitled)		290	1600	126	1600	18	397	0.25	0.02	0.30	4.81
	311dAS	311dAS	(untitled)		177	337	126	337	52	72	5.83	0.29	5.89	9.19
	311dn	1	(untitled)		1043	1300	126	1300	80	12	5.52	1.60	7.99	17.21
	311do	1	(untitled)		731	1400	126	1400	52	72	1.40	0.28	1.42	16.53
	311out	1	(untitled)	B	782	1750	64	792	99	-9	76.68	25.10	167.33	88.56
	312A	1	(untitled)	A	391	1750	35	500	78	15	40.71	6.83	113.77	46.30
	312Ae	1	(untitled)		423	1800	126	1075	39	129	14.29	7.20	42.34	24.02
	312Be	1	(untitled)	M	426	1833	58	858	50	81	25.31	9.65	56.79	35.04
	312Bo	1	(untitled)	B	32	1700	4	67	47	90	69.26	1.63	27.25	73.46
	312Cn	1	(untitled)	C	698	1895	57	872	80	12	38.85	13.56	113.00	47.85
	312Co	1	(untitled)	C	209	1331	57	613	34	163	28.65	3.58	42.65	37.05
	312D	1	Lockwood Road inbound	D	521	1860	35	531	98	-8	104.25	26.57	36.38	154.65
	312Dx	1	(untitled)		553	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312Eent	1	(untitled)		297	1500	126	1500	20	355	0.30	0.02	0.05	18.46
	312En	1	(untitled)	E	226	1800	56	814	28	224	22.46	4.64	77.27	25.59
	312Eo	1	(untitled)	E	71	1329	56	601	12	662	20.68	1.91	31.88	23.81
	312Ex	1	(untitled)		720	Unrestricted	126	Unrestricted	0	Unrestricted	0.00	0.00	0.00	12.00
	312J	1	(untitled)	J	548	1800	57	829	66	36	9.63	3.79	50.71	14.80
	312K	1	(untitled)	K	777	1873	56	847	92	-2	51.76	29.63	92.09	73.96
	312c BS	1	(untitled)		1325	1400	126	1400	95	-5	24.10	37.31	238.37	34.59
	312c LS	1	(untitled)		297	312	126	312	95	-5	63.01	14.58	129.00	70.28
	312c ent	1	(untitled)		652	1700	126	1700	38	135	0.66	0.12	0.86	8.44
	312c x	3	(untitled)		1019	1800	126	1800	57	59	1.30	0.37	3.02	12.49
	312x LSx	4	(untitled)		406	1800	126	1800	23	299	0.29	0.03	0.19	12.29
	5	2	(untitled)		938	1500	126	1500	63	44	2.93	2.69	82.10	6.17
	6	2	(untitled)		426	1800	126	1800	24	280	0.31	0.04	0.25	10.51
	AS	1	(untitled)		776	1500	126	1500	52	74	1.28	0.28	4.55	4.90
	AS1	1	(untitled)		49	1800	126	1800	3	3206	0.03	0.00	0.00	41.43
	AS2	1	(untitled)		680	1500	126	1500	45	99	0.99	0.19	0.31	36.07
	AS3	1	(untitled)		669	126	126	692	97	-7	42.90	10.38	21.71	75.90
	ASin	1	(untitled)		433	1700	126	1700	25	253	0.36	0.04	0.25	10.83
	CS 2	1	(untitled)	D	615	1808	41	603	102	-12	131.16	36.30	549.30	135.72

	QML	1	(untitled)		363	420	126	420	86	4	24.48	2.47	5.68	54.48
	QMLx	1	(untitled)		331	1800	126	1800	18	389	0.23	0.02	0.12	12.23

Data Entry - Stage Start and End

Resultant Stage

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
311ms	1	✓	1	A,B,C	115	51	62	1	7
	2	✓	2	G	52	53	1	1	1
	3	✓	3	F,E	56	59	3	1	3
	4	✓	4	F,D,C	67	108	41	1	7
312a	1	✓	1	I,H,N,O,P,F,G	13	14	1	1	1
	2	✓	2	F,E,C,G	22	74	52	1	3
	3	✓	3	D,O,A	86	121	35	1	14
	4	✓	4	B,N,H,I,F,O	4	5	1	1	1
312b	1	✓	1	J,L	75	4	55	7	7
	2	✓	2	K,M	12	68	56	7	7

Data Entry - Phase

Phase

Controller Stream	Phase	Phase	Minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
311ms	A	A	7	300	0	0	Unknown
	B	B	7	300	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	3	3	0	0	Unknown
	F	F	5	300	0	0	Unknown
	G	G	1	1	0	0	Unknown
312a	A	A	14	300	0	0	Unknown
	B	B	2	7	0	0	Unknown
	C	C	7	300	0	0	Unknown
	D	D	7	300	0	0	Unknown
	E	E	7	300	0	0	Unknown
	F	F	5	300	0	0	Pedestrian
	G	G	7	300	0	0	Unknown
	H	H	7	300	0	0	Unknown
	I	I	7	300	0	0	Unknown
	N	N	1	300	0	0	Unknown
	O	O	5	300	0	0	Pedestrian
	P	P	1	5	0	0	Pedestrian
312b	J	J	7	300	0	0	Unknown
	K	K	7	300	0	0	Unknown
	L	L	5	300	0	0	Unknown
	M	M	7	300	0	0	Unknown

Data Entry - Traffic Stream

Traffic Stream

Arm	Traffic Stream	Auto length	Length (m)	Traffic model	Max queue storage (PCU)	Traffic type	Has Saturation Flow	Is signal controlled	Is give way	Saturation flow source	Saturation flow (PCU/hr)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1	1		368.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1050	100	100
308A	2		120.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1200	100	100
311Ao	1		75.00	NetworkDefault	13.00	Normal	✓			Sum of lanes	1625	100	100
311C	1		166.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1650	100	100
311Cx	1		274.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
311G	2		20.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	2300	100	100
311LAS	1		90.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1400	100	100
311a	1		56.00	CTM	10.00	Normal	✓			Sum of lanes	1500	100	100
311aa O	1		197.00	CTM	36.00	Normal	✓			Sum of lanes	1500	100	100
311aa bus	2		206.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311abus	1		56.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311b	1		275.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
311cn	1		45.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1000	100	100
311co	1		45.00	NetworkDefault	0.00	Normal	✓		✓	Sum of lanes	1200	100	100
311csx	1		38.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1600	100	100
311dAS	311dAS		28.00	NetworkDefault	0.00	Normal			✓			100	100
311dn	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1300	100	100
311do	1		115.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
311out	1		99.00	CTM	15.00	Normal	✓	✓		Sum of lanes	1750	100	100
312A	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1750	100	100
312Ae	1		87.00	CTM	17.00	Normal	✓			Sum of lanes	1800	100	100
312Be	1		87.00	CTM	17.00	Normal	✓	✓		Sum of lanes	1833	100	100
312Bo	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1700	100	100
312Cn	1		75.00	CTM	12.00	Normal	✓	✓		Sum of lanes	1895	100	100
312Co	1		70.00	Flare	8.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312D	1		420.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1860	100	100
312Dx	1		100.00	NetworkDefault	0.00	Normal						100	100
312Eent	1		203.00	PDM	49.00	Normal	✓			Sum of lanes	1500	100	100
312En	1		35.00	CTM	6.00	Normal	✓	✓		Sum of lanes	1800	100	100
312Eo	1		35.00	Flare	6.00	Normal	✓	✓	✓	Sum of lanes	1440	100	100
312Ex	1		100.00	NetworkDefault	0.00	Normal						100	100
312J	1		43.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1800	100	99999
312K	1		185.00	NetworkDefault	0.00	Normal	✓	✓		Sum of lanes	1873	100	100
312c BS	1		90.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1400	100	100
312c LS	1		65.00	NetworkDefault	0.00	Normal			✓			100	100
312c ent	1		80.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
312c x	3		70.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
312x LSx	4		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
5	2		25.00	CTM	3.00	Normal	✓			Sum of lanes	1500	100	100

6	2		85.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS	1		35.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS1	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100
AS2	1		345.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1500	100	100
AS3	1		275.00	NetworkDefault	0.00	Normal			✓			100	100
ASin	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1700	100	100
CS 2	1		38.00	NetworkDefault	0.00	Normal	✓		✓	Sum of lanes	1808	100	100
QML	1	✓	250.00	NetworkDefault	0.00	Normal			✓			100	100
QMLx	1		100.00	NetworkDefault	0.00	Normal	✓			Sum of lanes	1800	100	100

Data entry - Link

Results - Pedestrian

Pedestrian Crossings: Pedestrian summary

Time Segment	Pedestrian crossing	Side	Calculated Flow Entering (Ped/hr)	Degree of saturation (%)	Actual green (s per cycle)	Effective green (s per cycle)	Mean Delay Per Ped (s)	Mean max queue (Ped)
17:00-18:00	312F	1	22	0	73	73	11.36	0.32
		2	22	0	73	73	11.36	0.32
	312G	1	22	1	17	18	46.71	0.66
		2	22	1	17	18	46.71	0.66
	312H	1	22	2	10	11	52.94	0.70
		2	22	2	10	11	52.94	0.70
	312I	1	22	0	64	65	15.01	0.37
		2	22	0	64	65	15.01	0.37
	312K	1	22	2	11	12	52.02	0.70
		2	22	2	11	12	52.02	0.70
	312L	1	0	0	55	56	0.00	0.00
		2	0	0	55	56	0.00	0.00
	312o	1	0	0	57	57	0.00	0.00
		2	0	0	57	57	0.00	0.00
	312p	1	0	0	1	1	0.00	0.00
		2	0	0	1	1	0.00	0.00
	7	1	0	0	3	4	0.00	0.00
		2	0	0	3	4	0.00	0.00
	8	1	0	0	52	53	0.00	0.00
		2	0	0	52	53	0.00	0.00

Traffic Stream Results

Traffic Stream Results: Vehicle summary

Time Segment	Arm	Traffic Stream	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Mean max queue (PCU)	Utilised storage (%)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	1	76	18	803	1050	126	7.11	18.45	28.83	22.52	6.73	29.24
	308A	2	68	33	814	1200	126	3.15	0.71	3.41	10.11	0.00	10.11
	311Ao	1	101	-11	919	1625	126	96.79	49.38	379.88	350.85	16.72	367.57
	311C	1	40	127	327	1650	62	15.61	4.80	16.63	20.14	2.54	22.68
	311Cx	1	46	96	780	1700	126	0.90	0.19	0.41	2.76	0.00	2.76
	311G	2	22	311	8	2300	1	75.11	0.31	8.79	2.37	0.11	2.48
	311LAS	1	23	289	288	1400	111	1.42	1.42	9.49	1.61	0.41	2.02
	311a	1	49	84	732	1500	126	1.14	0.23	2.32	3.30	0.00	3.30
	311aa O	1	61	47	732	1500	126	7.22	7.45	20.71	20.85	2.64	23.49
	311aa bus	2	29	213	338	1400	126	2.57	2.50	6.98	3.43	0.82	4.25
	311abus	1	34	166	338	1000	126	0.92	0.09	0.88	1.22	0.00	1.22
	311b	1	78	16	1163	1500	126	4.09	1.32	2.76	18.76	0.00	18.76
	311cn	1	43	108	432	1000	126	1.37	0.16	2.09	2.33	0.00	2.33
	311co	1	54	65	731	1344	126	1.59	0.32	4.13	4.59	0.00	4.59
	311csx	1	18	397	290	1600	126	0.25	0.02	0.30	0.28	0.00	0.28
	311dAS	311dAS	52	72	177	337	126	5.83	0.29	5.89	4.07	0.00	4.07
	311dn	1	80	12	1043	1300	126	5.52	1.60	7.99	22.69	0.00	22.69
	311do	1	52	72	731	1400	126	1.40	0.28	1.42	4.04	0.00	4.04
	311out	1	99	-9	782	1750	64	76.68	25.10	167.33	236.52	9.07	245.59
	312A	1	78	15	391	1750	35	40.71	6.83	113.77	62.78	1.37	64.15
	312Ae	1	39	129	423	1800	126	14.29	7.20	42.34	23.85	2.87	26.72
	312Be	1	50	81	426	1833	58	25.31	9.65	56.79	42.52	3.97	46.49
	312Bo	1	47	90	32	1700	4	69.26	1.63	27.25	8.74	0.46	9.20
	312Cn	1	80	12	698	1895	57	38.85	13.56	113.00	106.96	4.85	111.80
	312Co	1	34	163	209	1331	57	28.65	3.58	42.65	23.65	1.40	25.05
	312D	1	98	-8	521	1860	35	104.25	26.57	36.38	214.24	9.11	223.35
	312Dx	1	0	Unrestricted	553	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	20	355	297	1500	126	0.30	0.02	0.05	0.35	0.00	0.35
	312En	1	28	224	226	1800	56	22.46	4.64	77.27	20.02	2.99	23.01
	312Eo	1	12	662	71	1329	56	20.68	1.91	31.88	5.79	0.88	6.67
	312Ex	1	0	Unrestricted	720	Unrestricted	126	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	66	36	548	1800	57	9.63	3.79	50.71	20.81	874.84	895.65
	312K	1	92	-2	777	1873	56	51.76	29.63	92.09	158.63	10.38	169.01
	312c BS	1	95	-5	1325	1400	126	24.10	37.31	238.37	125.91	17.65	143.56
	312c LS	1	95	-5	297	312	126	63.01	14.58	129.00	73.81	2.49	76.30
	312c ent	1	38	135	652	1700	126	0.66	0.12	0.86	1.69	0.00	1.69
	312c x	3	57	59	1019	1800	126	1.30	0.37	3.02	5.23	0.00	5.23
	312x LSx	4	23	299	406	1800	126	0.29	0.03	0.19	0.47	0.00	0.47
	5	2	63	44	938	1500	126	2.93	2.69	82.10	10.84	0.31	11.15
	6	2	24	280	426	1800	126	0.31	0.04	0.25	0.52	0.00	0.52
	AS	1	52	74	776	1500	126	1.28	0.28	4.55	3.93	0.00	3.93
	AS1	1	3	3206	49	1800	126	0.03	0.00	0.00	0.01	0.00	0.01
	AS2	1	45	99	680	1500	126	0.99	0.19	0.31	2.66	0.00	2.66
	AS3	1	97	-7	669	1692	126	42.90	10.38	21.71	113.21	4.92	118.13
	ASin	1	25	253	433	1700	126	0.36	0.04	0.25	0.62	0.00	0.62
	CS 2	1	102	-12	615	1808	41	131.16	36.30	549.30	318.17	12.15	330.31
	QML	1	86	4	363	420	126	24.48	2.47	5.68	35.06	0.00	35.06
	QMLx	1	18	389	331	1800	126	0.23	0.02	0.12	0.30	0.00	0.30

Traffic Stream Results: Flows and signals

Time	Traffic	Calculated flow	Calculated	Flow	Adjusted	Restructured sat	Calculated	Degree of	DOS	Practical	Mean	Actual	Effective
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Segment	Arm	Stream	entering (PCU/hr)	flow out (PCU/hr)	discrepancy (PCU/hr)	flow warning	flow (PCU/hr)	capacity (PCU/hr)	saturation (%)	Threshold exceeded	reserve capacity (%)	modulus of error	green (s (per cycle))	green (s (per cycle))
17:00-18:00	1	1	803	803	9		1050	1050	76		18	0.34	126	126
	308A	2	814	814	9	✓	1200	1200	68		33	0.26	126	126
	311Ao	1	919	907	0		1625	907	101	✓	-11	0.00	126	126
	311C	1	327	327	0		1650	825	40		127	0.62	62	63
	311Cx	1	780	780	9	✓	1700	1700	46		96	0.44	126	126
	311G	2	8	8	0		2300	37	22		311	0.00	1	2
	311LAS	1	288	288	0		1400	1244	23		289	0.29	111	112
	311a	1	732	732	0		1500	1500	49		84	0.00	126	126
	311aa O	1	732	732	0		1500	1193	61		47	0.00	126	126
	311aa bus	2	338	338	0		1400	1177	29		213	0.00	126	126
	311abus	1	338	338	0		1000	1000	34		166	0.00	126	126
	311b	1	1163	1163	0		1500	1500	78		16	0.00	126	126
	311cn	1	432	432	0		1000	1000	43		108	0.00	126	126
	311co	1	731	731	0		1344	1344	54		65	0.00	126	126
	311csx	1	290	290	0		1600	1600	18		397	0.47	126	126
	311dAS	311dAS	177	177	0		337	337	52		72	0.00	126	126
	311dn	1	1043	1043	0		1300	1300	80		12	0.00	126	126
	311do	1	731	731	0		1400	1400	52		72	0.00	126	126
	311out	1	782	782	0		1750	792	99	✓	-9	0.35	64	65
	312A	1	391	391	0		1750	500	78		15	0.79	35	36
	312Ae	1	423	423	0		1800	1075	39		129	0.00	126	126
	312Be	1	426	426	0		1833	858	50		81	0.00	58	59
	312Bo	1	32	32	0		1700	67	47		90	0.79	4	5
	312Cn	1	698	698	9	✓	1895	872	80		12	0.85	57	58
	312Co	1	209	209	3	✓	1331	613	34		163	0.85	57	58
	312D	1	521	521	0		1860	531	98	✓	-8	0.00	35	36
	312Dx	1	553	553	3	✓	Unrestricted	Unrestricted	0		Unrestricted	0.74	126	126
	312Eent	1	297	297	0		1500	1500	20		355	0.00	126	126
	312En	1	226	226	0		1800	814	28		224	0.00	56	57
	312Eo	1	71	71	0		1329	601	12		662	0.00	56	57
	312Ex	1	720	720	9	✓	Unrestricted	Unrestricted	0		Unrestricted	0.87	126	126
	312J	1	548	548	0		1800	829	66		36	1.08	57	58
	312K	1	777	777	0		1873	847	92	✓	-2	0.12	56	57
	312c BS	1	1325	1325	0		1400	1400	95	✓	-5	0.37	126	126
	312c LS	1	297	297	0		312	312	95	✓	-5	0.00	126	126
	312c ent	1	652	652	0		1700	1700	38		135	0.00	126	126
	312c x	3	1019	1019	0		1800	1800	57		59	0.20	126	126
	312x LSx	4	406	406	0		1800	1800	23		299	0.40	126	126
	5	2	938	938	3	✓	1500	1500	63		44	0.64	126	126
	6	2	426	426	0		1800	1800	24		280	1.02	126	126
	AS	1	776	776	1	✓	1500	1500	52		74	0.03	126	126
	AS1	1	49	49	0		1800	1800	3		3206	0.00	126	126
	AS2	1	680	680	0		1500	1500	45		99	0.02	126	126
	AS3	1	669	669	0		692	692	97	✓	-7	0.00	126	126
	ASin	1	433	433	0		1700	1700	25		253	0.00	126	126
	CS 2	1	615	603	0		1808	603	102	✓	-12	0.00	41	42
	QML	1	363	363	0		420	420	86		4	0.00	126	126
	QMLx	1	331	331	1	✓	1800	1800	18		389	0.06	126	126

Traffic Stream Results: Stops and delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	1	1	35.79	7.11	0.36	1.22	22.52	22.52	43.90	317.89	34.53	6.73	6.73
	308A	2	11.67	3.15	0.00	0.71	10.11	10.11	0.00	0.00	0.00	0.00	0.00
	311Ao	1	9.00	96.79	6.83	17.88	350.85	350.85	146.99	887.57	446.03	16.72	16.72
	311C	1	16.14	15.61	1.29	0.13	20.14	20.14	40.76	129.59	3.70	2.54	2.54
	311Cx	1	32.88	0.90	0.00	0.19	2.76	2.76	0.00	0.00	0.00	0.00	0.00
	311G	2	2.40	75.11	0.14	0.03	2.37	2.37	107.98	7.80	0.84	0.11	0.11
	311LAS	1	10.80	1.42	0.08	0.03	1.61	1.61	11.46	32.00	0.99	0.41	0.41
	311a	1	6.72	1.14	0.00	0.23	3.30	3.30	0.00	0.00	0.00	0.00	0.00
	311aa O	1	23.64	7.22	0.98	0.48	20.85	20.85	28.74	196.57	13.77	2.64	2.64
	311aa bus	2	24.72	2.57	0.18	0.06	3.43	3.43	19.23	63.36	1.65	0.82	0.82
	311abus	1	6.72	0.92	0.00	0.09	1.22	1.22	0.00	0.00	0.00	0.00	0.00
	311b	1	36.19	4.09	0.00	1.32	18.76	18.76	0.00	0.00	0.00	0.00	0.00
	311cn	1	5.81	1.37	0.00	0.16	2.33	2.33	0.00	0.00	0.00	0.00	0.00
	311co	1	5.92	1.59	0.00	0.32	4.59	4.59	0.00	0.00	0.00	0.00	0.00
	311csx	1	4.56	0.25	0.00	0.02	0.28	0.28	0.00	0.00	0.00	0.00	0.00
	311dAS	311dAS	3.36	5.83	0.00	0.29	4.07	4.07	0.00	0.00	0.00	0.00	0.00
	311dn	1	11.69	5.52	0.00	1.60	22.69	22.69	0.00	0.00	0.00	0.00	0.00
	311do	1	15.13	1.40	0.00	0.28	4.04	4.04	0.00	0.00	0.00	0.00	0.00
	311out	1	11.88	76.68	5.45	11.21	236.52	236.52	92.47	433.49	289.65	9.07	9.07
	312A	1	5.59	40.71	3.07	1.35	62.78	62.78	49.64	156.46	37.63	1.37	1.37
	312Ae	1	9.73	14.29	1.55	0.13	23.85	23.85	46.96	194.99	3.63	2.87	2.87
	312Be	1	9.73	25.31	2.75	0.24	42.52	42.52	64.51	267.88	6.93	3.97	3.97
	312Bo	1	4.20	69.26	0.41	0.21	8.74	8.74	113.62	30.73	5.63	0.46	0.46
	312Cn	1	9.00	38.85	5.97	1.56	106.96	106.96	55.40	342.86	43.86	4.85	4.85
	312Co	1	8.40	28.65	1.58	0.09	23.65	23.65	53.42	109.29	2.52	1.40	1.40
	312D	1	50.40	104.25	6.46	8.63	214.24	214.24	139.38	506.71	219.47	9.11	9.11
	312Dx	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312Eent	1	18.16	0.30	0.00	0.02	0.35	0.35	0.00	0.00	0.00	0.00	0.00
	312En	1	3.13	22.46	1.36	0.05	20.02	20.02	58.60	130.93	1.52	2.99	2.99
	312Eo	1	3.13	20.68	0.40	0.01	5.79	5.79	55.08	38.88	0.23	0.88	0.88
	312Ex	1	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	312J	1	5.17	9.63	0.83	0.64	20.81	20.81	19.61	89.29	18.09	0.87	874.84
	312K	1	22.20	51.76	6.77	4.40	158.63	158.63	108.56	707.17	120.81	10.38	10.38
	312c BS	1	10.50	24.10	1.98	6.89	125.91	125.91	100.81	969.59	365.78	17.65	17.65
	312c LS	1	7.27	63.01	0.02	5.18	73.81	73.81	58.03	41.43	130.92	2.49	2.49
	312c ent	1	7.78	0.66	0.00	0.12	1.69	1.69	0.00	0.00	0.00	0.00	0.00
	312c x	3	11.18	1.30	0.00	0.37	5.23	5.23	0.00	0.00	0.00	0.00	0.00
	312x LSx	4	12.00	0.29	0.00	0.03	0.47	0.47	0.00	0.00	0.00	0.00	0.00
	5	2	3.24	2.93	0.24	0.52	10.84	10.84	3.10	14.29	14.78	0.31	0.31
	6	2	10.20	0.31	0.00	0.04	0.52	0.52	0.00	0.00	0.00	0.00	0.00
	AS	1	3.62	1.28	0.00	0.28	3.93	3.93	0.00	0.00	0.00	0.00	0.00
	AS1	1	41.40	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00

	AS2	1	35.08	0.99	0.00	0.19	2.66	2.66	0.00	0.00	0.00	0.00	0.00
	AS3	1	33.00	42.90	0.00	7.97	113.21	113.21	58.70	6.71	385.97	4.92	4.92
	ASin	1	10.47	0.36	0.00	0.04	0.62	0.62	0.00	0.00	0.00	0.00	0.00
	CS 2	1	4.56	131.16	7.03	15.38	318.17	318.17	160.72	599.20	369.42	12.15	12.15
	QML	1	30.00	24.48	0.00	2.47	35.06	35.06	0.00	0.00	0.00	0.00	0.00
	QMLx	1	12.00	0.23	0.00	0.02	0.30	0.30	0.00	0.00	0.00	0.00	0.00

Traffic Stream Results: Queues and blocking

Time Segment	Arm	Traffic Stream	Initial queue (PCU)	Mean max queue (PCU)	Max queue storage (PCU)	Utilised storage (%)	Average storage excess queue (PCU)	Average limit excess queue (PCU)	Excess queue penalty (£ per hr)	Max end of green queue (PCU)	Max end of red queue (PCU)	Wasted time starvation (s per cycle))	Wasted time blocking back (s per cycle))	Wasted time total (s per cycle))	Estimated blocking
17:00-18:00	1	1	0.00	18.45	64.00	28.83	0.00	0.00	0.00			0.00	0.00	0.00	
	308A	2	0.00	0.71	20.87	3.41	0.00	0.00	0.00			0.00	0.00	0.00	
	311Ao	1	0.00	49.38	13.00	379.88	20.63	16.63	0.00			0.00	55.65	55.65	
	311C	1	0.00	4.80	28.87	16.63	0.00	0.00	0.00	0.13	4.12	7.00	0.00	7.00	
	311Cx	1	0.00	0.19	47.65	0.41	0.00	0.00	0.00			0.00	0.00	0.00	
	311G	2	0.00	0.31	3.48	8.79	0.00	0.00	0.00	0.03	0.31	1.00	0.00	1.00	
	311LAS	1	0.00	1.42	15.00	9.49	0.00	0.00	0.00	0.03	1.15	18.00	0.00	18.00	
	311a	1	0.00	0.23	10.00	2.32	0.00	0.00	0.00			0.00	0.00	0.00	
	311aa O	1	0.00	7.45	36.00	20.71	0.00	0.00	0.00			0.00	25.76	25.76	
	311aa bus	2	0.00	2.50	35.83	6.98	0.00	0.00	0.00			0.00	20.05	20.05	
	311abus	1	0.00	0.09	9.74	0.88	0.00	0.00	0.00			0.00	0.00	0.00	
	311b	1	0.00	1.32	47.83	2.76	0.00	0.00	0.00			0.00	0.00	0.00	
	311cn	1	0.00	0.16	7.83	2.09	0.00	0.00	0.00			0.00	0.00	0.00	
	311co	1	0.00	0.32	7.83	4.13	0.00	0.00	0.00			0.00	0.00	0.00	
	311csx	1	0.00	0.02	6.61	0.30	0.00	0.00	0.00			27.00	0.00	27.00	
	311dAS	311dAS	0.00	0.29	4.87	5.89	0.00	0.00	0.00			0.00	0.00	0.00	
	311dn	1	0.00	1.60	20.00	7.99	0.00	0.00	0.00			0.00	0.00	0.00	
	311do	1	0.00	0.28	20.00	1.42	0.00	0.00	0.00			0.00	0.00	0.00	
	311out	1	0.00	25.10	15.00	167.33	5.86	5.86	0.00	11.21	25.10	0.00	7.97	7.97	
	312A	1	0.00	6.83	6.00	113.77	0.33	0.33	0.00	1.35	6.83	0.00	0.00	0.00	
	312Ae	1	0.00	7.20	17.00	42.34	0.00	0.00	0.00			0.00	50.75	50.75	
	312Be	1	0.00	9.65	17.00	56.79	0.00	0.00	0.00	0.24	8.64	0.00	0.00	0.00	
	312Bo	1	0.00	1.63	6.00	27.25	0.00	0.00	0.00	0.21	1.28	2.00	0.00	2.00	
	312Cn	1	0.00	13.56	12.00	113.00	0.69	2.94	0.00	1.56	13.56	0.00	0.00	0.00	
	312Co	1	0.00	3.58	8.40	42.65	0.00	0.00	0.00	0.09	3.58	7.00	0.00	7.00	
	312D	1	0.00	26.57	73.04	36.38	0.00	0.00	0.00	8.63	21.65	0.00	0.00	0.00	
	312Dx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			18.00	0.00	18.00	
	312Eent	1	0.00	0.02	49.00	0.05	0.00	0.00	0.00			0.00	0.00	0.00	
	312En	1	0.00	4.64	6.00	77.27	0.00	0.00	0.00	0.05	4.51	0.00	0.00	0.00	
	312Eo	1	0.00	1.91	6.00	31.88	0.00	0.00	0.00	0.01	1.37	0.00	0.00	0.00	
	312Ex	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			26.00	0.00	26.00	
	312J	1	0.00	3.79	7.48	50.71	0.00	0.00	0.00	0.64	3.60	5.00	31.00	36.00	
	312K	1	0.00	29.63	32.17	92.09	0.00	0.00	0.00	4.40	19.34	0.00	30.00	30.00	
	312c BS	1	0.00	37.31	15.65	238.37	6.85	0.00	0.00			2.00	0.00	2.00	
	312c LS	1	0.00	14.58	11.30	129.00	0.53	0.00	0.00			0.00	0.00	0.00	
	312c ent	1	0.00	0.12	13.91	0.86	0.00	0.00	0.00			0.00	0.00	0.00	
	312c x	3	0.00	0.37	12.17	3.02	0.00	0.00	0.00			0.00	0.00	0.00	
	312x LSx	4	0.00	0.03	17.39	0.19	0.00	0.00	0.00			0.00	0.00	0.00	
	5	2	0.00	2.69	3.27	82.10	0.00	0.00	0.00			18.00	0.00	18.00	
	6	2	0.00	0.04	14.78	0.25	0.00	0.00	0.00			61.00	0.00	61.00	
	AS	1	0.00	0.28	6.09	4.55	0.00	0.00	0.00			0.00	0.00	0.00	
	AS1	1	0.00	0.00	60.00	0.00	0.00	0.00	0.00			126.00	0.00	126.00	
	AS2	1	0.00	0.19	60.00	0.31	0.00	0.00	0.00			0.00	0.00	0.00	
	AS3	1	0.00	10.38	47.83	21.71	0.00	0.00	0.00			0.00	126.00	126.00	
	ASin	1	0.00	0.04	17.39	0.25	0.00	0.00	0.00			0.00	126.00	126.00	
	CS 2	1	0.00	36.30	6.61	549.30	19.23	0.00	0.00	15.38	29.44	0.00	0.00	0.00	
	QML	1	0.00	2.47	43.48	5.68	0.00	0.00	0.00			0.00	0.00	0.00	
	QMLx	1	0.00	0.02	17.39	0.12	0.00	0.00	0.00			0.00	0.00	0.00	

Traffic Stream Results: Journey times

Time Segment	Arm	Traffic Stream	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
17:00-18:00	1	1	295.42	9.57	19.19	42.90
	308A	2	97.73	3.35	18.12	14.82
	311Ao	1	68.92	27.01	1.59	105.79
	311C	1	54.28	2.88	11.69	31.76
	311Cx	1	213.66	7.32	18.15	33.78
	311G	2	0.16	0.17	0.58	77.51
	311LAS	1	25.92	0.98	16.48	12.22
	311a	1	40.99	1.60	15.93	7.86
	311aa O	1	144.20	6.28	14.28	30.86
	311aa bus	2	69.63	2.56	16.88	27.29
	311abus	1	18.93	0.72	16.40	7.64
	311b	1	319.83	13.01	15.27	40.28
	311cn	1	19.44	0.86	14.03	7.17
	311co	1	32.90	1.53	13.40	7.51
	311csx	1	11.02	0.39	17.68	4.81
	311dAS	311dAS	4.96	0.45	6.82	9.19
	311dn	1	119.95	4.99	14.95	17.21
	311do	1	84.06	3.36	15.56	16.53
	311out	1	77.42	19.24	2.50	88.56
	312A	1	13.69	5.03	1.69	46.30
	312Ae	1	36.80	2.82	8.10	24.02
	312Be	1	37.06	4.15	5.55	35.04
	312Bo	1	1.12	0.65	1.07	73.46
	312Cn	1	52.35	9.28	3.51	47.85
	312Co	1	14.65	2.15	4.23	37.05
	312D	1	218.82	22.38	6.08	154.65
	312Dx	1	55.33	1.84	18.64	12.00
	312Eent	1	60.29	1.52	24.60	18.46
	312En	1	7.91	1.61	3.06	25.59
	312Eo	1	2.49	0.47	3.29	23.81
	312Ex	1	72.03	2.40	18.64	12.00
	312J	1	23.55	2.25	6.50	14.80
	312K	1	143.75	15.96	5.60	73.96
	312c BS	1	119.22	12.73	5.82	34.59
	312c LS	1	19.31	5.80	2.07	70.28
	312c ent	1	52.16	1.53	21.21	8.44
	312c x	3	71.31	3.53	12.54	12.49

312x LSx	4	40.60	1.39	18.20	12.29
5	2	23.45	1.61	9.06	6.17
6	2	36.21	1.24	18.09	10.51
AS	1	27.17	1.06	15.97	4.90
AS1	1	16.91	0.56	18.63	41.43
AS2	1	234.55	6.81	21.39	36.07
AS3	1	183.98	14.10	8.10	75.90
ASin	1	43.30	1.30	20.66	10.83
CS 2	1	23.37	23.19	0.63	135.72
QML	1	90.75	5.49	10.26	54.48
QMLx	1	33.15	1.13	18.30	12.23

Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	Mean Max Queue EoTS (PCU)	Max End of Green Queue EoTS (PCU)	Max End of Red Queue EoTS (PCU)	PCU Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	1	0.00	0.00	✓	0.00	18.46			1.00	0.00	29.24	29.24
	308A	2	0.00	0.00	✓	0.00	0.71			1.00	0.00	10.11	10.11
	311Ao	1	0.00	0.00	✓	0.00	59.09			1.00	0.00	367.57	367.57
	311C	1	0.00	0.00	✓	0.00	4.80	0.13	4.12	1.00	0.00	22.68	22.68
	311Cx	1	0.00	0.00	✓	0.00	0.19			1.00	0.00	2.76	2.76
	311G	2	0.00	0.00	✓	0.00	0.31	0.03	0.31	1.00	0.00	2.48	2.48
	311LAS	1	0.00	0.00	✓	0.00	1.42	0.03	1.15	1.00	0.00	2.02	2.02
	311a	1	0.00	0.00	✓	0.00	0.23			1.00	0.00	3.30	3.30
	311aa O	1	0.00	0.00	✓	0.00	7.46			1.00	0.00	23.49	23.49
	311aa bus	2	0.00	0.00	✓	0.00	2.50			1.00	0.00	4.25	4.25
	311abus	1	0.00	0.00	✓	0.00	0.09			1.00	0.00	1.22	1.22
	311b	1	0.00	0.00	✓	0.00	1.33			1.00	0.00	18.76	18.76
	311cn	1	0.00	0.00	✓	0.00	0.16			1.00	0.00	2.33	2.33
	311co	1	0.00	0.00	✓	0.00	0.32			1.00	0.00	4.59	4.59
	311csx	1	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.28	0.28
	311dAS	311dAS	0.00	0.00	✓	0.00	0.29			1.00	0.00	4.07	4.07
	311dn	1	0.00	0.00	✓	0.00	1.61			1.00	0.00	22.69	22.69
	311do	1	0.00	0.00	✓	0.00	0.28			1.00	0.00	4.04	4.04
	311out	1	0.00	0.00	✓	0.00	28.78	14.89	28.78	1.00	0.00	245.59	245.59
	312A	1	0.00	0.00	✓	0.00	6.85	1.38	6.85	1.00	0.00	64.15	64.15
	312Ae	1	0.00	0.00	✓	0.00	7.20			1.00	0.00	26.72	26.72
	312Be	1	0.00	0.00	✓	0.00	9.66	0.24	8.64	1.00	0.00	46.49	46.49
	312Bo	1	0.00	0.00	✓	0.00	1.64	0.21	1.29	1.00	0.00	9.20	9.20
	312Cn	1	0.00	0.00	✓	0.00	13.58	1.58	13.58	1.00	0.00	111.80	111.80
	312Co	1	0.00	0.00	✓	0.00	3.58	0.09	3.58	1.00	0.00	25.05	25.05
	312D	1	0.00	0.00	✓	0.00	29.21	11.27	24.29	1.00	0.00	223.35	223.35
	312Dx	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312Eent	1	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.35	0.35
	312En	1	0.00	0.00	✓	0.00	4.64	0.05	4.51	1.00	0.00	23.01	23.01
	312Eo	1	0.00	0.00	✓	0.00	1.91	0.01	1.37	1.00	0.00	6.67	6.67
	312Ex	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.00	0.00
	312J	1	0.00	0.00	✓	0.00	3.79	0.64	3.60	1.00	0.00	21.69	895.65
	312K	1	0.00	0.00	✓	0.00	29.92	4.69	19.63	1.00	0.00	169.01	169.01
	312c BS	1	0.00	0.00	✓	0.00	37.90			1.00	0.00	143.56	143.56
	312c LS	1	0.00	0.00	✓	0.00	15.73			1.00	0.00	76.30	76.30
	312c ent	1	0.00	0.00	✓	0.00	0.12			1.00	0.00	1.69	1.69
	312c x	3	0.00	0.00	✓	0.00	0.37			1.00	0.00	5.23	5.23
	312x LSx	4	0.00	0.00	✓	0.00	0.03			1.00	0.00	0.47	0.47
	5	2	0.00	0.00	✓	0.00	2.69			1.00	0.00	11.15	11.15
	6	2	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.52	0.52
AS	1	0.00	0.00	✓	0.00	0.28			1.00	0.00	3.93	3.93	
AS1	1	0.00	0.00	✓	0.00	0.00			1.00	0.00	0.01	0.01	
AS2	1	0.00	0.00	✓	0.00	0.19			1.00	0.00	2.66	2.66	
AS3	1	0.00	0.00	✓	0.00	12.10			1.00	0.00	118.13	118.13	
ASin	1	0.00	0.00	✓	0.00	0.04			1.00	0.00	0.62	0.62	
CS 2	1	0.00	0.00	✓	0.00	45.19	24.26	38.33	1.00	0.00	330.31	330.31	
QML	1	0.00	0.00	✓	0.00	2.60			1.00	0.00	35.06	35.06	
QMLx	1	0.00	0.00	✓	0.00	0.02			1.00	0.00	0.30	0.30	

Pedestrian Crossing Results

Pedestrian Crossings: Pedestrian summary

Time Segment	Crossing	Side	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s (per cycle))	Mean Delay Per Ped (s)	Mean max queue (Ped)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	312F	1	0	22	11000	73	11.36	0.32	0.99	0.99
		2	0	22	11000	73	11.36	0.32	0.99	0.99
	312G	1	1	22	11000	17	46.71	0.66	4.05	4.05
		2	1	22	11000	17	46.71	0.66	4.05	4.05
	312H	1	2	22	11000	10	52.94	0.70	4.59	4.59
		2	2	22	11000	10	52.94	0.70	4.59	4.59
	312I	1	0	22	11000	64	15.01	0.37	1.30	1.30
		2	0	22	11000	64	15.01	0.37	1.30	1.30
	312K	1	2	22	11000	11	52.02	0.70	4.51	4.51
		2	2	22	11000	11	52.02	0.70	4.51	4.51
	312L	1	0	0	11000	55	0.00	0.00	0.00	0.00
		2	0	0	11000	55	0.00	0.00	0.00	0.00
	312o	1	0	0	11000	57	0.00	0.00	0.00	0.00
		2	0	0	11000	57	0.00	0.00	0.00	0.00
	312p	1	0	0	11000	1	0.00	0.00	0.00	0.00
		2	0	0	11000	1	0.00	0.00	0.00	0.00
	7	1	0	0	11000	3	0.00	0.00	0.00	0.00
		2	0	0	11000	3	0.00	0.00	0.00	0.00
	8	1	0	0	11000	52	0.00	0.00	0.00	0.00
		2	0	0	11000	52	0.00	0.00	0.00	0.00

Pedestrian Crossings: Flows and signals

[illegible]

Time Segment	Crossing	Side	Calculated flow entering (Ped/hr)	Calculated flow out (Ped/hr)	Flow discrepancy (Ped/hr)	Adjusted flow warning	Calculated sat flow (Ped/hr)	Calculated capacity (Ped/hr)	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Mean modulus of error	Actual green (s (per cycle))	Effective green (s (per cycle))
17:00-18:00	312F	1	22	22	0		11000	6373	0		25971	0.00	73	73
		2	22	22	0		11000	6373	0		25971	0.00	73	73
	312G	1	22	22	0		11000	1571	1		6329	0.00	17	18
		2	22	22	0		11000	1571	1		6329	0.00	17	18
	312H	1	22	22	0		11000	960	2		3829	0.00	10	11
		2	22	22	0		11000	960	2		3829	0.00	10	11
	312I	1	22	22	0		11000	5675	0		23114	0.00	64	65
		2	22	22	0		11000	5675	0		23114	0.00	64	65
	312K	1	22	22	0		11000	1048	2		4186	0.00	11	12
		2	22	22	0		11000	1048	2		4186	0.00	11	12
	312L	1	0	0	0		11000	4889	0		Unrestricted	0.00	55	56
		2	0	0	0		11000	4889	0		Unrestricted	0.00	55	56
	312o	1	0	0	0		11000	4976	0		Unrestricted	0.00	57	57
		2	0	0	0		11000	4976	0		Unrestricted	0.00	57	57
	312p	1	0	0	0		11000	87	0		Unrestricted	0.00	1	1
		2	0	0	0		11000	87	0		Unrestricted	0.00	1	1
	7	1	0	0	0		11000	349	0		Unrestricted	0.00	3	4
		2	0	0	0		11000	349	0		Unrestricted	0.00	3	4
	8	1	0	0	0		11000	4627	0		Unrestricted	0.00	52	53
		2	0	0	0		11000	4627	0		Unrestricted	0.00	52	53

Pedestrian Crossings: Stops and delays

Time Segment	Crossing	Side	Mean Cruise Time per Ped (s)	Mean Delay per Ped (s)	Uniform delay (Ped-hr/hr)	Random plus oversat delay (Ped-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)
17:00-18:00	312F	1	4.33	11.36	0.07	0.00	0.99	0.99
		2	4.33	11.36	0.07	0.00	0.99	0.99
	312G	1	3.00	46.71	0.29	0.00	4.05	4.05
		2	3.00	46.71	0.29	0.00	4.05	4.05
	312H	1	3.00	52.94	0.32	0.00	4.59	4.59
		2	3.00	52.94	0.32	0.00	4.59	4.59
	312I	1	5.67	15.01	0.09	0.00	1.30	1.30
		2	5.67	15.01	0.09	0.00	1.30	1.30
	312K	1	3.00	52.02	0.32	0.00	4.51	4.51
		2	3.00	52.02	0.32	0.00	4.51	4.51
	312L	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312o	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	312p	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	7	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00
	8	1	1.00	0.00	0.00	0.00	0.00	0.00
		2	1.00	0.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Queues and blocking

Time Segment	Crossing	Side	Mean max queue (Ped)	Max queue storage (Ped)	Utilised storage (%)	Average storage excess queue (Ped)	Average limit excess queue (Ped)	Excess queue penalty (£ per hr)
17:00-18:00	312F	1	0.32	10.00	3.24	0.00	0.00	0.00
		2	0.32	10.00	3.24	0.00	0.00	0.00
	312G	1	0.66	10.00	6.60	0.00	0.00	0.00
		2	0.66	10.00	6.60	0.00	0.00	0.00
	312H	1	0.70	10.00	7.03	0.00	0.00	0.00
		2	0.70	10.00	7.03	0.00	0.00	0.00
	312I	1	0.37	10.00	3.73	0.00	0.00	0.00
		2	0.37	10.00	3.73	0.00	0.00	0.00
	312K	1	0.70	10.00	6.97	0.00	0.00	0.00
		2	0.70	10.00	6.97	0.00	0.00	0.00
	312L	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312o	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	312p	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	7	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00
	8	1	0.00	10.00	0.00	0.00	0.00	0.00
		2	0.00	10.00	0.00	0.00	0.00	0.00

Pedestrian Crossings: Journey times

Time Segment	Crossing	Side	Distance travelled (Ped-km/hr)	Time spent (Ped-hr/hr)	Mean journey speed (mph)	JourneyTime (s)
17:00-18:00	312F	1	0.13	0.10	0.86	15.69
		2	0.13	0.10	0.86	15.69
	312G	1	0.09	0.30	0.18	49.71
		2	0.09	0.30	0.18	49.71
	312H	1	0.09	0.34	0.16	55.94
		2	0.09	0.34	0.16	55.94
	312I	1	0.18	0.13	0.87	20.67
		2	0.18	0.13	0.87	20.67
	312K	1	0.09	0.34	0.16	55.02
		2	0.09	0.34	0.16	55.02
	312L	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	0.00

Pedestrian Crossings: Advanced

Time Segment	Crossing	Side	Degree of saturation penalty (£ per hr)	Ped gap accepting penalty (£ per hr)	Mean Max Queue EoTS (Ped)	Ped Factor	Cost of traffic penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
	312F	1	0.00	0.00	0.32	1.00	0.00	0.99	0.99
		2	0.00	0.00	0.32	1.00	0.00	0.99	0.99
	312G	1	0.00	0.00	0.66	1.00	0.00	4.05	4.05
		2	0.00	0.00	0.66	1.00	0.00	4.05	4.05

17:00-18:00	312H	1	0.00	0.00	0.70	1.00	0.00	4.59	4.59
		2	0.00	0.00	0.70	1.00	0.00	4.59	4.59
	312I	1	0.00	0.00	0.37	1.00	0.00	1.30	1.30
		2	0.00	0.00	0.37	1.00	0.00	1.30	1.30
	312K	1	0.00	0.00	0.70	1.00	0.00	4.51	4.51
		2	0.00	0.00	0.70	1.00	0.00	4.51	4.51
	312L	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312o	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	312p	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	7	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00
	8	1	0.00	0.00	0.00	1.00	0.00	0.00	0.00
		2	0.00	0.00	0.00	1.00	0.00	0.00	0.00

Network Results

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	09/07/2020 15:29:16	09/07/2020 15:29:19	17:00	126	3133.76	150.99	102.05	CS 2/1	8	12	CS 2/1	311Aa/1	CS 2/1	

Network Results: Vehicle summary

Time Segment	Degree of saturation (%)	Practical reserve capacity (%)	Calculated flow entering (PCU/hr)	Actual green (s per cycle)	Mean Delay per Veh (s)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	102	-12	26299	4908	20.37	2113.20	989.66	3102.86

Network Results: Pedestrian summary

Time Segment	Degree of saturation (%)	Calculated Flow Entering (Ped/hr)	Actual green (s per cycle)	Mean Delay Per Ped (s)	Weighted cost of delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	2	220	686	35.61	30.90	30.90

Network Results: Flows and signals

Time Segment	Calculated flow entering (PCU/hr)	Calculated flow out (PCU/hr)	Flow discrepancy (PCU/hr)	Adjusted flow warning	Degree of saturation (%)	DOS Threshold exceeded	Practical reserve capacity (%)	Actual green (s per cycle)	Effective green (s per cycle)
17:00-18:00	26519	26495	56	✓	102	✓	-12	5594	5623

Network Results: Stops and delays

Time Segment	Mean Cruise Time per Veh (s)	Mean Delay per Veh (s)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Unweighted cost of delay (£ per hr)	Weighted cost of delay (£ per hr)	Mean stops per Veh (%)	Uniform stops (Stops per hr)	Random stops (Stops per hr)	Unweighted cost of stops (£ per hr)	Weighted cost of stops (£ per hr)
17:00-18:00	15.16	20.50	57.91	93.08	2144.10	2144.10	33.30	6274.66	2518.36	115.70	989.66

Network Results: Queues and blocking

Time Segment	Utilised storage (%)	Excess queue penalty (£ per hr)	Wasted time starvation (s per cycle)	Wasted time blocking back (s per cycle)	Wasted time total (s per cycle)
17:00-18:00	549.30	0.00	318.00	473.18	791.18

Network Results: Journey times

Time Segment	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)
17:00-18:00	3455.80	262.65	8.18

Network Results: Advanced

Time Segment	Degree of saturation (%)	Ped gap accepting penalty (£ per hr)	Warmed up	Warmed up error	PCU Factor	Cost of traffic penalties (£ per hr)	Controller stream penalties (£ per hr)	Unweighted performance index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	0.00	0.00	✓	0.00	1.00	0.00	0.00	2259.80	3133.76

Point to Point Journey Time

Average Journey Time (s) for Local Matrix: 1

		To																						
		A bcd	A ex	A near	A off	B	A1	A2	A616 in	A616 out	B LS	B as	B wr	B wr x	C	C as	D	MSS	P1	P2	P3	P4	P5	P6
From	A bcd	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	238.4	165.6	0.0	154.8	0.0	0.0	0.0	0.0	0.0	0.0
	A ex	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A near	0.0	0.0	0.0	0.0	34.3	64.8	58.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A off	0.0	0.0	0.0	0.0	0.0	64.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	0.0	78.5	0.0	0.0	0.0	110.7	90.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A1	133.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A2	216.6	0.0	0.0	0.0	306.2	0.0	0.0	0.0	0.0	199.2	0.0	0.0	0.0	199.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A616 in	0.0	57.3	0.0	0.0	60.2	0.0	84.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	A616 out	122.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	166.3	0.0	0.0	0.0	166.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B LS	0.0	275.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	115.7	0.0	82.8	152.6	0.0	152.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B as	0.0	238.2	0.0	0.0	0.0	0.0	265.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B wr	0.0	213.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	54.0	0.0	0.0	90.7	0.0	90.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B wr x	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	C	0.0	171.5	0.0	0.0	0.0	0.0	198.2	0.0	0.0	136.6	0.0	0.0	0.0	136.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	C as	0.0	65.4	0.0	0.0	0.0	97.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	D	0.0	270.4	0.0	0.0	0.0	0.0	297.1	0.0	0.0	206.5	0.0	0.0	0.0	206.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MSS	82.5	167.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	228.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
P1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7	0.0	0.0	0.0	
P2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.7	0.0	20.7	0.0	0.0	
P3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	0.0	15.7	0.0	0.0	
P4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7	0.0	55.9	0.0	
P5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.9	0.0	55.0	
P6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0	0.0	

Path Journey Time

Path	From Location	To Location	Normal Calculated Flow (PCU/hr)	Pedestrian calculated flow (Ped/hr)	Normal journey time (s)	Pedestrian journey time (s)	Calculated Total Flow (PCU/hr)	Avg journey time (s)
1	P5	P4		22		55.94	22	55.94
2	P4	P5		22		55.94	22	55.94
3	P5	P6		22		55.02	22	55.02
4	P6	P5		22		55.02	22	55.02
14	P1	P2		22		49.71	22	49.71

15	P2	P1			22			49.71		22		49.71
23	P4	P3			22			15.69		22		15.69
30	D	C	0				0.00			0		0.00
34	C	D	0				0.00			0		0.00
49	B LS	B wr x	50				82.76			50		82.76
56	A near	B	290				34.28			290		34.28
57	C as	B	0				0.00			0		0.00
58	B LS	D	150				152.65			150		152.65
59	B LS	C	40				152.65			40		152.65
61	P3	P4			22			15.69		22		15.69
62	C	B	0				0.00			0		0.00
63	C	A ex	220				171.46			220		171.46
64	D	A2	11				297.13			11		297.13
65	P2	P3			22			20.67		22		20.67
66	A bod	C	682				165.64			682		165.64
67	B wr	A2	0				0.00			0		0.00
68	B wr	B	0				0.00			0		0.00
69	B LS	B as	50				115.74			50		115.74
70	A2	A2	0				0.00			0		0.00
71	A2	B	27				306.20			27		306.20
72	A2	A ex	0				0.00			0		0.00
73	B LS	A2	0				0.00			0		0.00
74	B LS	B	0				0.00			0		0.00
75	B LS	A ex	7				275.58			7		275.58
76	B as	A2	7				264.98			7		264.98
84	A616 in	A2	6				84.07			6		84.07
85	A616 in	B	15				60.23			15		60.23
86	A616 in	A ex	2				57.33			2		57.33
108	A off	A1	731				64.32			731		64.32
109	A near	A1	338				64.77			338		64.77
110	C as	A1	5				97.66			5		97.66
111	B	A1	89				110.72			89		110.72
191	C	B wr x	40				136.83			40		136.83
192	C	B LS	31				136.63			31		136.63
193	D	B wr x	252				206.68			252		206.68
194	D	B LS	200				206.49			200		206.49
206	B wr	D	194				90.71			194		90.71
207	B wr	C	7				90.71			7		90.71
208	B wr	B LS	50				20.73			50		20.73
230	C as	A ex	44				65.43			44		65.43
232	B	A ex	39				78.49			39		78.49
233	A near	A2	415				58.13			415		58.13
234	B	A2	235				90.56			235		90.56
266	P3	P2			22			20.67		22		20.67
284	A bod	D	212				154.84			212		154.84
285	A bod	B wr x	25				238.37			25		238.37
286	A bod	B LS	0				0.00			0		0.00
294	MSS	B wr x	2				228.76			2		228.76
295	MSS	B LS	0				0.00			0		0.00
296	B wr	B as	376				54.00			376		54.00
300	A1	A bod	732				133.66			732		133.66
302	B as	A bod	0				0.00			0		0.00
303	MSS	A bod	4				82.53			4		82.53
307	A2	B wr x	412				199.38			412		199.38
308	A2	B LS	75				199.19			75		199.19
312	A2	A bod	155				216.60			155		216.60
313	A1	A616 out	338				7.64			338		7.64
314	A616 out	A bod	50				122.74			50		122.74
317	C	A2	6				198.20			6		198.20
318	D	B	0				0.00			0		0.00
319	D	A ex	58				270.39			58		270.39
320	B wr	A ex	25				213.57			25		213.57
321	B as	B	0				0.00			0		0.00
322	B as	A ex	426				238.24			426		238.24
323	MSS	A2	0				0.00			0		0.00
324	MSS	B	0				0.00			0		0.00
325	MSS	A ex	2				167.50			2		167.50
326	A616 out	B wr x	238				166.50			238		166.50
327	A616 out	B LS	50				166.31			50		166.31

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Max end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	P.I.
1	1	(untitled)	311d			803	1050	126	0.00	76	18	42.90	7.11	43.90	18.45		100	100	0.00	29.24
308A	2	(untitled)				814	1200	126	0.00	68	33	14.82	3.15	0.00	0.71		100	100	0.00	10.11
311Ao	1	(untitled)	311			919 <	1625	126	55.65	101	-11	105.79	96.79	146.99	49.38 +		100	100	0.00	367.57
311C	1	Lockwood inbound	311ms	311ms	A	327	1650	62	7.00	40	127	31.76	15.61	40.76	4.80	4.12	100	100	0.00	22.68
311Cx	1	(untitled)	311a			780	1700	126	0.00	46	96	33.78	0.90	0.00	0.19		100	100	0.00	2.76
311G	2	(untitled)	311ms	311ms	G	8	2300	1	1.00	22	311	77.51	75.11	107.98	0.31	0.31	100	100	0.00	2.48
311LAS	1	(untitled)	311ms	311ms	C	288	1400	111	18.00	23	289	12.22	1.42	11.46	1.42	1.15	100	100	0.00	2.02
311a	1	(untitled)	311a			732	1500	126	0.00	49	84	7.86	1.14	0.00	0.23		100	100	0.00	3.30
311aa O	1	(untitled)	311aa			732	1500	126	25.76	61	47	30.86	7.22	28.74	7.45		100	100	0.00	23.49
311aa bus	2	(untitled)	311aa			338	1400	126	20.05	29	213	27.29	2.57	19.23	2.50		100	100	0.00	4.25
311abus	1	(untitled)	311a			338	1000	126	0.00	34	166	7.64	0.92	0.00	0.09		100	100	0.00	1.22
311b	1	(untitled)	311b			1163	1500	126	0.00	78	16	40.28	4.09	0.00	1.32		100	100	0.00	18.76
311cn	1	(untitled)	311c			432	1000	126	0.00	43	108	7.17	1.37	0.00	0.16		100	100	0.00	2.33
311co	1	(untitled)	311c			731	1344	126	0.00	54	65	7.51	1.59	0.00	0.32		100	100	0.00	4.59
311csx	1	(untitled)	ASCS			290	1600	126	27.00	18	397	4.81	0.25	0.00	0.02		100	100	0.00	0.28
311dAS	311dAS	(untitled)	311d			177	337	126	0.00	52	72	9.19	5.83	0.00	0.29		100	100	0.00	4.07
311dn	1	(untitled)	311d			1043	1300	126	0.00	80	12	17.21	5.52	0.00	1.60		100	100	0.00	22.69
311do	1	(untitled)	311d			731	1400	126	0.00	52	72	16.53	1.40	0.00	0.28		100	100	0.00	4.04
311out	1	(untitled)	311ms	311ms	B	782 <	1750	64	7.97	99	-9	88.56	76.68	92.47	25.10 +	25.10	100	100	0.00	245.59

312A	1	(untitled)	312a	312a	A	391 <	1750	35	0.00	78	15	46.30	40.71	49.64	6.83 +	6.83	100	100	0.00	64.15
312Ae	1	(untitled)	312b			423	1800	126	50.75	39	129	24.02	14.29	46.96	7.20		100	100	0.00	26.72
312Be	1	(untitled)	312b	312b	M	426	1833	58	0.00	50	81	35.04	25.31	64.51	9.65	8.64	100	100	0.00	46.49
312Bo	1	(untitled)	312a	312a	B	32	1700	4	2.00	47	90	73.46	69.26	113.62	1.63	1.28	100	100	0.00	9.20
312Cn	1	(untitled)	312a	312a	C	698 <	1895	57	0.00	80	12	47.85	38.85	55.40	13.56 +	13.56	100	100	0.00	111.80
312Co	1	(untitled)	312a	312a	C	209	1331	57	7.00	34	163	37.05	28.65	53.42	3.58	3.58	100	100	0.00	25.05
312D	1	Lockwood Road inbound	312a	312a	D	521	1860	35	0.00	98	-8	154.65	104.25	139.38	26.57	21.65	100	100	0.00	223.35
312Dx	1	(untitled)				553	Unrestricted	126	18.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312Eent	1	(untitled)	312e			297	1500	126	0.00	20	355	18.46	0.30	0.00	0.02		100	100	0.00	0.35
312En	1	(untitled)	312a	312a	E	226	1800	56	0.00	28	224	25.59	22.46	58.60	4.64	4.51	100	100	0.00	23.01
312Eo	1	(untitled)	312a	312a	E	71	1329	56	0.00	12	662	23.81	20.68	55.08	1.91	1.37	100	100	0.00	6.67
312Ex	1	(untitled)				720	Unrestricted	126	26.00	0	Unrestricted	12.00	0.00	0.00	0.00		100	100	0.00	0.00
312J	1	(untitled)	312b	312b	J	548	1800	57	36.00	66	36	14.80	9.63	19.61	3.79	3.60	100	99999	0.00	895.65
312K	1	(untitled)	312b	312b	K	777	1873	56	30.00	92	-2	73.96	51.76	106.56	29.63	19.34	100	100	0.00	169.01
312c BS	1	(untitled)	312c			1325 <	1400	126	2.00	95	-5	34.59	24.10	100.81	37.31 +		100	100	0.00	143.56
312c LS	1	(untitled)	312c			297 <	312	126	0.00	95	-5	70.28	63.01	58.03	14.58 +		100	100	0.00	76.30
312c ent	1	(untitled)	312c			652	1700	126	0.00	38	135	8.44	0.66	0.00	0.12		100	100	0.00	1.69
312c x	3	(untitled)				1019	1800	126	0.00	57	59	12.49	1.30	0.00	0.37		100	100	0.00	5.23
312x LSx	4	(untitled)				406	1800	126	0.00	23	299	12.29	0.29	0.00	0.03		100	100	0.00	0.47
5	2	(untitled)				938	1500	126	18.00	63	44	6.17	2.93	3.10	2.69		100	100	0.00	11.15
6	2	(untitled)	ASCS			426	1800	126	61.00	24	280	10.51	0.31	0.00	0.04		100	100	0.00	0.52
AS	1	(untitled)	AS			776	1500	126	0.00	52	74	4.90	1.28	0.00	0.28		100	100	0.00	3.93
AS1	1	(untitled)	AS			49	1800	126	126.00	3	3206	41.43	0.03	0.00	0.00		100	100	0.00	0.01
AS2	1	(untitled)				680	1500	126	0.00	45	99	36.07	0.99	0.00	0.19		100	100	0.00	2.66
AS3	1	(untitled)	ASCS			669	692	126	126.00	97	-7	75.90	42.90	58.70	10.38		100	100	0.00	118.13
ASin	1	(untitled)	ASCS			433	1700	126	126.00	25	253	10.83	0.36	0.00	0.04		100	100	0.00	0.62
CS 2	1	(untitled)	311ms	311ms	D	615 <	1808	41	0.00	102	-12	135.72	131.16	160.72	36.30 +	29.44	100	100	0.00	330.31
QML	1	(untitled)	AS			363	420	126	0.00	86	4	54.48	24.48	0.00	2.47		100	100	0.00	35.06
QMLx	1	(untitled)				331	1800	126	0.00	18	389	12.23	0.23	0.00	0.02		100	100	0.00	0.30

Pedestrian Crossing Results

			SIGNALS			FLOWS		PERFORMANCE			PER PED		QUEUES	WEIGHTS	PENALTIES	P.I.
Pedestrian	Side	Name	Traffic node	Controller stream	Phase	Calculated Flow Entering (Ped/hr)	Calculated sat flow (Ped/hr)	Actual green (s per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Ped (s)	Mean max queue (Ped)	Delay weighting (%)	Cost of traffic penalties (£ per hr)	P.I.
312F	1	(untitled)	312a	312a	F	22	11000	73	0	25971	15.69	11.36	0.32	100	0.00	0.99
	2	(untitled)	312a	312a	F	22	11000	73	0	25971	15.69	11.36	0.32	100	0.00	0.99
312G	1	(untitled)		312a	I	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05
	2	(untitled)		312a	I	22	11000	17	1	6329	49.71	46.71	0.66	100	0.00	4.05
312H	1	(untitled)		312a	H	22	11000	10	2	3829	55.94	52.94	0.70	100	0.00	4.59
	2	(untitled)		312a	H	22	11000	10	2	3829	55.94	52.94	0.70	100	0.00	4.59
312I	1	(untitled)	312a	312a	G	22	11000	64	0	23114	20.67	15.01	0.37	100	0.00	1.30
	2	(untitled)	312a	312a	G	22	11000	64	0	23114	20.67	15.01	0.37	100	0.00	1.30
312K	1	(untitled)		312a	N	22	11000	11	2	4186	55.02	52.02	0.70	100	0.00	4.51
	2	(untitled)		312a	N	22	11000	11	2	4186	55.02	52.02	0.70	100	0.00	4.51
312L	1	(untitled)		312b	L	0	11000	55	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312b	L	0	11000	55	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312o	1	(untitled)		312a	O	0	11000	57	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	O	0	11000	57	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
312p	1	(untitled)		312a	P	0	11000	1	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		312a	P	0	11000	1	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
7	1	(untitled)	311ms	311ms	E	0	11000	3	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)	311ms	311ms	E	0	11000	3	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
8	1	(untitled)		311ms	F	0	11000	52	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00
	2	(untitled)		311ms	F	0	11000	52	0	Unrestricted	0.00	0.00	0.00	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (mph)	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)
Normal traffic	3454.66	260.24	8.25	55.73	93.08	2113.20	989.66	0.00	3102.86
Bus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians	1.14	2.41	0.30	2.18	0.00	30.90	0.00	0.00	30.90
TOTAL	3455.80	262.65	8.18	57.91	93.08	2144.10	989.66	0.00	3133.76

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = 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/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

Appendix C
Lockwood Bar
Road Safety Audit and Designers Response

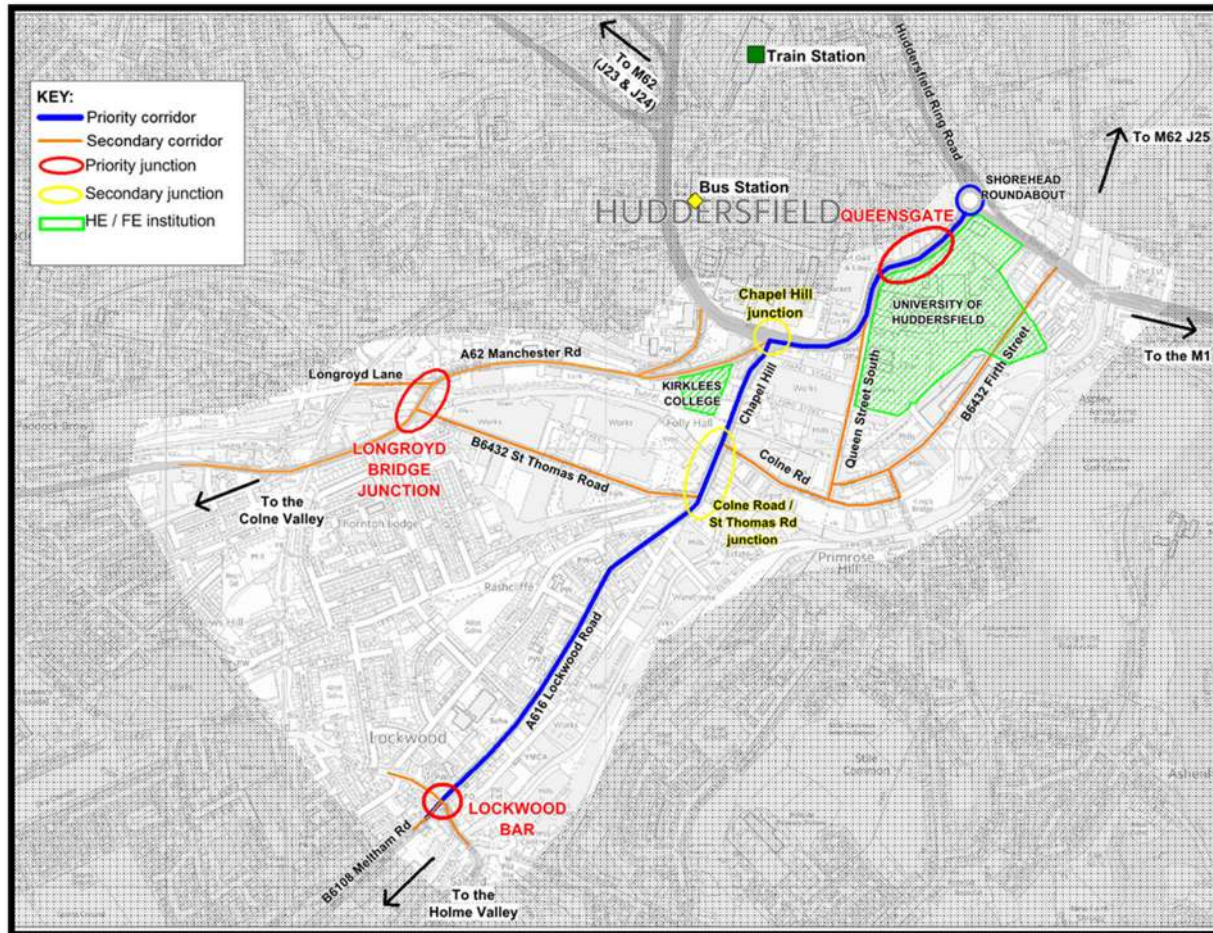
Scheme Name	Lockwood Bar <i>(part of the WY+TF Huddersfield Southern Gateways scheme)</i>	Budget Code	25/64313	Lead Designer	Kurmaravel Kurusamy – Group Engineer Charles Wong – Senior Engineer
Location	A616 Lockwood Road / Bridge and Albert Street, Huddersfield				
Type of Scheme	(eg new road scheme / junctions improvements / traffic calming etc.) New Road, traffic management and junction improvements				

[illegible]

General Comments/ Design Criteria/ Summary / Details of last audit (if required):

This also includes any departures from standards

Lockwood Bar (part of WY+TF Huddersfield Southern Gateways scheme)



As part of the emerging Huddersfield Southern Gateways project (see adjacent map) a transformational highway improvement scheme is proposed for the Lockwood Bar area.

The Lockwood Bar junction is a key intersection on the A616, which operates at a degree of saturation in excess of 100%. The Kirklees Transport model identifies it as already being one of the districts 'top 20' congested junctions, with proposed future development in the Colne and Holme Valleys of up projected to increase demand further.

The primary driver for this element of the scheme is to alleviate the existing congestion bottleneck at the Lockwood Bar junction, whilst also creating additional capacity to facilitate anticipated traffic growth associated with the delivery of the draft Kirklees Local Plan.

Secondary aims are to improve infrastructure, facilities and the environment for pedestrians, cyclists and bus services / bus users and to create an attractive gateway to Huddersfield, in order to encourage modal shift towards more sustainable modes and local investment and regeneration.

Design principles for Huddersfield Southern Gateways:

- Declutter.
- Minimise road signs and lines
- Landscaping and art to reflect local distinctiveness.
- Maximise use of green infrastructure
- Cycle lanes and wider pavements
- Wide, straight-across toucan crossings
- High quality materials.
- Gateways to mark arrival to the town centre.

The scheme can be divided into three sections:

1) Lockwood Bar plus Bridge Street / Albert Street junction

- Reconfiguration of the Lockwood Bar junction
- Large Bridge Street to Lockwood Road flow to be abstracted from Lockwood Bar and sent along the improved Albert Street to reappear at a new junction at the site currently occupied by the 'Shine on Me Car Wash' and 'Lockwood Tyres' (see Section 2).
- All-round pedestrian facilities at the Lockwood Bar junction (inc. relocation of the Lockwood Road pedestrians crossing, closer to the junction)
- New bus gate for inbound traffic from Bridge Street to Lockwood Road
- Lockwood Road outbound bus lane to be shortened, so that it ends before the new junction at Crowther Street
- Relocation of the two inbound 'Lockwood Bar' bus stops

2) Albert Street / Crowther Street / Lockwood Road

- New junction and road at Crowther Street and the site currently occupied by the 'Shine on Me Car Wash' and 'Lockwood Tyres' for traffic from Albert Street to Lockwood Road.
- New pedestrian crossing facilities across the new junction and on Lockwood Road, outside Mount Pleasant School
- Short section of Albert Street to be closed to inbound traffic, which will be forced to join Lockwood Road at the new junction. (Cyclists will be to continue inbound along the full length of Albert Street)

The proposed scheme has resulted from extensive traffic modelling using Transyt software, which shows this to be the optimal design for improving capacity and journey times by all modes, whilst minimising land take.

Traffic Signals and traffic modelling design has been carried out by Andrew Rawlinson - Principal Engineer – UTMC (andrew.rawlinson@kirklees.gov.uk) and Robert Whiteside – Principal Engineer - UTMC (Robert.Whiteside@Kirklees.gov.uk)

The proposed speed limit for the scheme area is 30mph.

Please do not hesitate to get in touch for any enquiries.

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Do you perceive any safety problems? NO

No

List of drawings supplied for Audit purposes (including version number)
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HD-25-64313-GA-01C - General Arrangement Drawing 1 of 2 HD-25-64313-GA-02 - General Arrangement Drawing 2 of 2 HD-25-64313-RS-01 Signs and Markings Drawing 1 of 2 HD-25-64313-RS-02 Signs and Markings Drawing 2 of 2 HD-25-64313-UTC-01 UTC Proposed Albert St HD-25-64313-UTC-01-L UTC Signal Detail HD-25-64313-UTC-02-L UTC Signal Full
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All audit briefs need to be submitted to the Audit team at the following email address RoadSafetyAudits@Kirklees.gov.uk

RSA1 Auditor's Comments

Refer to designer's Response for auditor comments.

Other comments

Refer to designer's Response for auditor comments.

Designer's Response

Lockwood Bar Junction				
ISSUE	DETAILS	AUDITOR'S SUGGESTIONS	DESIGNER'S RESPONSE	DESIGNER ADDRESSED, OR WILL IMPLEMENT, THE AUDITOR'S SUGGESTIONS?
1	A left turn ban from Lockwood Road to Bridge Street will be widely abused, particularly as there is no suitable alternative route for drivers visiting premises on Lockwood Road west of Crowther Street, and proceeding towards Honley. Without a signal drawing it is not possible to comment on any potential conflict this will have on signal operation or pedestrian safety at the Bridge Street crossing point.	Look at concept behind left turn ban and assess impact of TRO abuse	The left ban restriction is proposed to reinforce the use of the realigned Crowther Link as the preferred route from Lockwood Road to Bridge Street. There are a small number (eight no.) of on-street time limited parking spaces with a small potential some of these would seek to exit via Bridge Street. A u-turn and right turn into the realigned Crowther Street link could achieve this. The left turn ban is also to ensure that bus movements, which are permitted to do the movement, are not delayed by general traffic. Any potential for abuse will be observed during the 12 months monitoring and evaluation period.	No
2	The proposed left turn ban from the B6108 to Swan Lane is noted. However, there is no reason given for this and due to the lack of alternative routes, it will lead to two issues Abuse of the left turn ban (possibly conflicting with	Clarify the need for the proposed left turn ban and if required, ascertain how the above issues can be mitigated.	This restriction will be under 12 months reviewing and evaluation period. A plan is in place to lift the proposed restriction should necessary. The left turn ban is there to improve footway width at the corner and to improve the efficiency of the ahead movement. The survey recorded 5 movements in morning peak and 15 movement in evening peak. The are other	No

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	the 'green man' phase on Swan Lane). • Drivers using the residential Bentley Street, or very unsuitable Neale Road as a 'rat run'.		route (Bentley Street/Devonshire Street) prior to the Swan Lane junction to accommodate this movement.	
3	The junction island on Lockwood Road at the Bridge Street junction has a 'reverse' stagger for pedestrians. This may be problematic, particularly as vehicles will be approaching from the rear (i.e. from Bridge Street)	Assess possibility of creating a 'positive' stagger.	Due to geometric constrain and the benefit of signalling the junction (improve inter-visibility for signal), we had implemented the negative stagger. There is number of installations for pedestrian crossing are with negative stagger.	No

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ISSUE	DETAILS	AUDITOR'S SUGGESTIONS	DESIGNER'S RESPONSE	DESIGNER ADDRESSED, OR WILL IMPLEMENT, THE AUDITOR'S SUGGESTIONS?
4	The bus stop outside 256 Lockwood Road is close to the junction island, possibly resulting in difficulties for large vehicles travelling eastbound when there is a stationary bus at the stop.	Check swept paths to ensure all traffic can move freely.	Swept path checked, and there is adequate width for HGV to pass while a bus park at the bus stop.	Yes
5	The forecourt area in front of nos. 256-260 is used by vehicles. This may conflict with pedestrian movements and the adjacent junction island, and require dropped kerbing.	Ensure that the footway/ kerbing is suitable for vehicle use, and consider any conflict with the island(CW: Unless access is ban at that location, otherwise access need to be maintained).	We agreed with the auditor concerns. We have addressed this issue, and this is reflected in the latest design.	Yes
6	A stationary bus stood at the stop by 207a Lockwood Road may force larger vehicles into the path of oncoming traffic.	Ensure the bus stop build out and parking bays are designed to a minimum width.	The Parallel parking bay width is 2m in width.	Yes
7	Despite the large number of retail premises on Lockwood	Assess the possibility of a pedestrian feature	RSA suggestion above has been considered in the detail design stage, but it is not possible to	No

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	Road between Bridge Street and Crowther Street, there is no proposed pedestrian facility other than at the two junctions. Pedestrians crossing between shops will not walk to a junction and back to cross the A616. Currently, this is much less of an issue due to the 2 existing islands, and central hatching.	between the two junctions.	implement this with the current lanes and parking space in place. One additional island will involve lane reduce, and this will reduce the traffic capacity of the scheme. Part of Lockwood Road has been reduced from three to two lane, which provide easier mid-block crossing opportunities.	
8	There is currently no advance direction sign for the Lockwood Bar junction when approaching from the town centre (between the Crowther Street and Bridge Street junctions), to highlight the Swan Lane low bridge. This has historic issues with HGV strikes, or HGVs reaching the bridge and having to turn back.	Assess the possibility of an ADS incorporating low bridge information (Safety able to advise).	Low bridge restriction information is added to ADS. All proposed road signs are shown in drawing HD/25/64313/RS-1.	Yes
9	The ahead / left lanes on the Lockwood Road approach to both junctions have little in the way of advance markings, which will result in driver confusion and unexpected lane changing.	Provide appropriate lane arrows much further back from the stop lines. Remove the proposed bifurcation arrow opposite no. 246.	Lane arrows are added and shown in drawing HD/25/64313/RS-1.	Yes

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10	Despite signing to the contrary, drivers exiting the school car park will turn right or travel ahead if they so wish. As the access is unsignalled, this may cause safety issues due to conflicts with the adjacent green man phases at the junction, and vehicles approaching from the three opposing directions.	Assess methods of enforcing the right turn ban to remove conflicts.	The latest school access layout is now under signal control.	Yes
11	It is noted that the existing refuge is to remain on Lockwood Road, immediately west of the Mount Street junction. However, as both westbound lanes will carry general traffic, this will be hazardous for pedestrians crossing through a line of stationary traffic into a 'live' lane.	Assess possibility of siting island at a point where pedestrians only have to cross a lane at a time.	RSA suggestion has been considered in detail design stage, due to capacity reason we required two lane to reduce congestion at this point. Under the current island arrangement (as existing), it is not possible to accommodate an additional island with the two lanes in place. This is the nearest crossing point for the school and there is no other suitable location for island relocation within the proposed layout. Therefore, we suggest this island to remain as it is.	No
12	As both westbound lanes on Lockwood Road will carry general traffic, it will be hazardous for drivers turning right in or out of adjacent car parks east of property no. 175, when crossing through a line of	This is particularly difficult to mitigate, but the issue can be discussed further.	RSA concern has been considered in detail design stage, but there are many vehicle crossings between Crowther Street and Bath Street. If we provide Keep Clear to all the crossings, then we will lose the network capacity on Lockwood Road. It is also unlikely that the carparks will have large amount of vehicle movement. Please note that the latest	No

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	stationary traffic into a 'live' lane.		plan has the whole of bus lane removed (between Crowther Street and Summer Street).	
13	Pedestrians using the crossing point at the top of Crowther Street, to reach the triangular island, may struggle to see to the right due to property no. 175, creating driver / pedestrian intervisibility issues.	Site the crossing point to ensure adequate driver / pedestrian intervisibility.	The crossing at top of Crowther Street has now repositioned.	Yes
14	The 1004 lane markings at the junction of the new road and the A616 (by the school) may encourage driver to travel the wrong side of the central island outside the school, when turning right onto the A616.	Remove the 1004 markings from within the junction area and possibly look at signing / bollards to ensure drivers take the correct path.	Lines are now removed, and Keep Right bollard to erect in the island	Yes
15	The right turn from the A616 into the school will obstruct westbound traffic behind, causing following drivers to stray into the left turn lane.	Assess the possibility of creating a right turn pocket for stationary vehicles.	The latest layout will have pocket with width between 2.2m to 2.5m to accommodate right turning traffic.	Yes

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Albert Street				
ISSUE	DETAILS	AUDITOR'S SUGGESTIONS	DESIGNER'S RESPONSE	DESIGNER ADDRESSED, OR WILL IMPLEMENT, THE AUDITOR'S SUGGESTIONS?
16	Albert Street is currently a ½ mile stretch of straight road, over which drivers have full priority. The proposed junction with the new road will appear (to those approaching westbound on Albert Street) of having priority over conflicting westbound traffic approaching on the new road. This will lead to junction overshoot issues.	Assess possibility of twin yellow backed Give Way signing, with the offside sign sited on an island (see comment below regarding possible island).	RSA suggestion has been considered in detail design stage. However, a physical island will affect the HGVs turning movement/swept path, so this cannot be incorporated into the design. Twin yellow backed Give Way sign will be erected on both sides of the junction as suggested.	Yes and no
17	Eastbound drivers on Albert Street approaching the proposed left hand bend / junction will have the impression that the road runs straight ahead, rather than bearing left. This will lead to conflict with westbound traffic approaching from the A616.	Look at bend signing measures to ensure that drivers are aware that the priority route runs to the left at the junction.	2x No Entry sign and junction and an Advance Direction sign are added to the junction.	Yes
18	The proposed 'no entry except cycles' sign on Albert does not	Provide a splitter island at the junction to	RSA suggestion has been considered in detail design stage. However, a physical island will	No

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	work in conjunction with a westbound 'one way' system. Eastbound drivers will abuse it, and westbound drivers may queue in 2 lanes at the junction, to turn left / right. (This was an issue on Smithy Lane, Huddersfield).	separate westbound traffic from eastbound cyclists. This will also allow the provision of an offside Give Way sign for westbound traffic, and possibly give some deterrence to eastbound drivers wishing to abuse the no entry signing (although this will still be a considerable issue, as at Burn Road, Lindley, amongst others).	affect the HGVs turning movement/swept path, so this cannot be incorporated into the design. The green colour surface is there to emphasises the contra flow cycle lane is for cycle use only.	
19	Crowther Street is proposed to become a cul-de-sac, but there is no turning facility for drivers accessing the road, then wishing to exit again. It is noted that no. 175 Lockwood Road has delivery doors fronting onto Crowther Street.	Assess the possibility of providing a turning facility, and provide 'cul de sac' signing / street nameplates at the Alert Street junction to reduce problems.	Cul-de-sac sign will erect at the entrance. There is 6m width between the kerb and parallel parking bay, so there is adequate space for a car to turn around.	Yes
20	The gyratory nature of the overall scheme will mislead westbound drivers on Albert Street (between Crowther Street	Provide lane arrows / two way signing along this stretch to	Lane arrows to be added before and after the bend.	Yes

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	and Bridge Street) into believing the road is a 2 lane, one way street.	emphasise the system of traffic management.		
21	The eastbound approach lane to Lockwood Road is shown as a 2.8m width, which is particularly narrow for a 'new build road'	Assess the possibility of widening the lane by (say) reducing footway widths or removing the cycle lane.	Cycle lane removed	Yes

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Bridge Street				
ISSUE	DETAILS	AUDITOR'S SUGGESTIONS	DESIGNER'S RESPONSE	DESIGNER ADDRESSED, OR WILL IMPLEMENT, THE AUDITOR'S SUGGESTIONS?
22	The left turn from Albert Street to Bridge Street will have the appearance that both lanes on Bridge Street cater for southbound traffic, resulting in conflict between opposing vehicles.	Look at markings / arrows to emphasise the situation to left turning drivers.	Lane arrow added in the bend.	Yes
23	Whilst there are no advance direction signs shown on Bridge Street, it must be ensured that there is a replacement for the existing sign which highlights the Swan Lane low bridge.	Provide an ADS incorporating low bridge information.	ADSs added	Yes
24	Northbound drivers may mistakenly travel the wrong side of the splitter island outside no.13, and continue to the Lockwood Bar junction.	Ensure that No Entry signs or bollards are provided to clarify the situation to drivers.	An ADS sign added at southern side of the bridge. A Keep Right bollard added near the pedestrian crossing.	Yes
25	Drivers exiting the lay by outside nos. 11-15 and wishing to proceed eastbound on Lockwood Road will make an	Safety do not have a suggestion to mitigate this, but can discuss.	Auditor suggestion was considered in the detailed design. However, it is concluded drivers outside nos. 11-15 had to use Swan lane to make the possible safe U-turn. It is likely	No

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	illegal right turn at the Lockwood Bar junction.		that a small number of vehicles may take this illegal right turn, but this will not cause a safety concern as the junction/bus lane is under signal control. This will be monitored during the 12 months reviewing and evaluation period.	
26	The amended alignment will allow drivers exiting Albert Street onto Bridge Street to do so at higher speeds, potentially causing safety issues at the Water Street junction.	Ensure junction sight lines at Water Street are sufficient	The current proposal has slight improvement for traffic going around the bend.	Yes
27	There is an accident issue with turning vehicles at the Brewery Drive junction	Increase the existing KEEP CLEAR text to 2.8m, to emphasise the situation to drivers.	The Keep Clear increased to 2.8m as suggested.	Yes

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Additional Issue				
ISSUE	DETAILS	AUDITOR'S SUGGESTIONS	DESIGNER'S RESPONSE	DESIGNER ADDRESSED, OR WILL IMPLEMENT, THE AUDITOR'S SUGGESTIONS?
28	Vehicles travelling eastbound on Albert Street may have visibility issues spotting vehicles approaching from around the bend the new link road (Crowther), or exiting the new Albert Street junction (at speed). If a loading facility is need on that section of Albert Street it needs to be relocated.		This will be under a 12months monitoring and evaluation period. The latest proposal has not worsened the visibility situation. The combination of parking & loading restriction and a reduction of on-street parking availability should improve the current condition. Part of the Albert Street has been widened which has also improve the visibility.	No
29	The bus stop outside 207a. Vehicles will have to cut in across the bus and a parked vehicle. Parked vehicle exiting the space could be struck when pulling out of the space as visibility could be impaired by the bus. Also may have drivers speeding up to pass the bus as it pulls out then hitting the back of a queue of traffic waiting at the signals.		Agree with auditor. The car parking space is now removed.	Yes

Other Comments

ISSUE	DETAILS	DESIGNER'S RESPONSE
-	As there are no details of traffic signal arrangements, it is not possible to pass comment on these in detail.	UTC's plans are included in the submission
30	It is noted there is no pedestrian facility on the island immediately outside the school. Notwithstanding the comments above about the uncontrolled school access, a facility here may be useful.	RSA suggestion has been considered in the detail design stage. However, under the current design with the existing road width, there is not enough width to accommodate an island with crossing facility. The pedestrian should use the new pelican crossing, which is in proximity. Under the proposed signal phases, there will be a left filter and full green for the outbound traffic. Therefore, this island location is no longer suitable for pedestrian crossing.
31	Safety would recommend against a green surface for short cycle lane on Albert St, although if an island is installed here, the junction design would change.	RSA suggestion has been considered in detail design stage. However, a physical island will affect the HGVs turning movement/swept path, so this cannot be incorporated into the design. The green colour surface is there to emphasise the contra flow cycle lane is for cycle use only.
32	If the left turn back onto the A616 is signalled opposite 234a Lockwood Road, Give Way markings are not required.	Give Way removed
33	The tactile paving arrangement opposite 234a Lockwood Road needs to be reversed.	Corrected

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34	Suggest removing the hatchings opposite 234a on the approach to the 8 no. parking spaces, and widening the footway.	The footway is widened with hatching removed.
35	Suggest shortening the bus box marking outside 207 Lockwood Road.	Bus box is 19m. This is the minimum length require.
36	If a form of pedestrian facility or hatching cannot be provided on Lockwood Road between Crowther Street and Lockwood Bar, suggest employing a double white line system between opposing flows, to clarify the lane system to drivers.	The current centre line 1004 is 150mm wide (road wider than 10m), so this should improve clarity for the lane system in place. The current hazard warning line should provide significant diver legibility.
37	Diag. 1010 lining not required on the Albert Street approach to Lockwood Road.	Removed Diag. 1010
38	Ditto left turn to Meltham Road from Bridge Street.	Removed Diag. 1010
39	The exit from the school should have a diag. 609 sign prior to the junction.	The access is now controlled by signal.
40	The B6108 should be bracketed on advance direction signs.	Amended
41	Gaps are required between destinations on advance direction signs.	Drawing updated
42	2.5m lanes are very narrow on the B6108, although it is acknowledged this probably mirrors the existing situation. (as existing)	It is not possible to widen the lane due to the existing road layout.
43	Double yellow lines run through the pedestrian crossing points at various sites.	Drawing updated

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44	Hatched markings run through the crossing point opposite no. 228 Lockwood Road.	Drawing updated
45	Some recorded injury accidents at Bridge St / Water St junction, but unaffected by scheme. Nothing at Lockwood Bar or on A616 to cause concern.	Noted
46	Although Lockwood Road eastbound has a running lane of 4.42m, a cycle lane is also shown. However, there is no westbound cycle lane, even though lane widths are somewhat less. Might a westbound cycle lane be preferable to that proposed?	RSA suggestion has been considered in the detail design stage. However, due to the islands' location and parallel parking facility, there are too many conflicts to provide a westbound cycle lane.