

Notting Hill Gate

Public Realm Improvements TRANSYT modelling

April 2013



Technical Note

Project:	Notting Hill Gate TRANSYT Modelling	Job No:	100001126
Subject:	TRANSYT Modelling - 2013		
Prepared by:	Takeshi Nakamura	Date:	8th April 2013
Approved by:	Ebenezer Harris	Date:	9th April 2013

Project centre has been commissioned by RBKC to undertake a TRANSYT modelling exercise to investigate public realm improvements along Notting Hill Gate. The objective of this technical note is to provide the model results of the proposed options, which would enable a well informed decision to be made as to which proposal to proceed or be considered in the next stage of the scheme.

Previous TRANSYT modelling works were undertaken in 2005 by Project Centre in relation to proposed public realm improvements along Notting Hill Gate. The 2005 TRANSYT model included key junctions on Notting Hill Gate from Campden Hill Road to the west to a pedestrian crossing by Broad Walk (close to Queensway Tube Station) to the east. The TRANSYT node-link diagram for the 2005 model is contained in Appendix A. As this model was developed some years back, with 2005 traffic data, coupled with the fact that there is no evidence that the 2005 models went through the rigorous Transport for London (TfL) modelling audit process (MAP), there was element of risk to use the 2005 TRANSYT model for this study. In addition to that, the 2005 TRANSYT model did not include any of the several priority junctions within the modelled area.

Project Centre again developed existing and proposed TRANSYT models along Notting Hill Gate, in 2011, to investigate the traffic impacts of improving pedestrian crossing facilities at Notting Hill Gate junction with Linden Gardens. The TRANSYT network extended from this junction (to the east) to Notting Hill Gate junction with Pembridge Road to the west, including key priority junctions. The extent of the 2011 TRANSYT model covers the core area for the proposed public realm improvements. Apart from the fact that this model would have current traffic and signal data (as compared to the 2005 TRANSYT), both the base and proposed models were audited by TfL and approved as fit for purpose. In addition, the proposed pedestrian improvements at Notting Hill Gate / Linden Gardens junction obtained approval for design and implementation. It was therefore deemed appropriate to use the 2011 validated and approved TRANSYT models for this study. It was discussed and agreed with the client (RBKC) that the proposed 2011 TRANSYT model which incorporated the pedestrian improvements at Notting Hill Gate junction with Linden Gardens will form the basis of assessment of the new proposed public realm improvement options along Notting Hill Gate. The TRANSYT node-link diagram for 2011 is contained in Appendix B.

The three options considered and assessed in terms of traffic impacts are based on outline public realm sketch produced by Project Centre in March 2013 and contained in Appendix C. The proposed options are as follows:

- Option 1: Widen footway on either side of the carriageway by reducing the existing three lanes in each direction of Notting Hill Gate between Kensington Church Street and Pembridge Road to two lanes (per direction). In addition, providing straight pedestrian signal control crossing facilities across all arms at Notting Hill Gate junctions with Kensington Church Street and Pembridge Road with exclusive pedestrian stage.
- Option 2: Maintaining the existing three lanes in each direction of Notting Hill Gate between Pembridge Road and Kensington Church Street, however, providing straight pedestrian signal control crossing facilities at the junctions with 'minor' public realm improvements.

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- Option 3: As in Option 1 but providing staggered pedestrian crossing facilities at Notting Hill Gate junctions with Kensington Church Street and Pembridge Road. This option is being considered as a fallback to Option 1 should the provision of straight pedestrian signal control crossing facilities have an adverse impact on junction capacity and results in significant traffic queues and delays.

At present the junctions within the study area operate on cycle time of 88 seconds during the peak hours. However, it is also noted that, as the junctions falls within Urban Traffic Control (UTC) group 32 and operate with adaptive signal system (SCOOT) the cycle time would increase during peak periods of high traffic demand to maximise junction capacities and decrease during periods of low traffic demand to minimise delays.

Option 1 was first tested with 88 seconds cycle time and further assessed on the next higher SCOOT compatible cycle time of 96 seconds. A summary of the model results is contained in Table 1.1 below with the full TRANSYT outputs contained in Appendix D. As indicated in Table 1.1, the model results suggest that at 88 seconds cycle time all approaches of the junction of Notting Hill Gate with Kensington Church Street would operate within capacity and below the practical maximum desired operating capacity of 90%. However, some approach arms of Notting Hill Gate junction with Pembridge Road would operate slightly above the practical threshold capacity of 90% during the AM and PM peak hours. For a higher cycle time of 96 seconds, the modelling results reveal that both junctions of Notting Hill Gate with Kensington Church Street and Pembridge Road would operate satisfactorily, with all approach arms predicted to operate with degrees of saturation (operating capacities) less than 90%.

A summary of the model results for Option 2 for both 88 and 96 seconds cycle times is presented in Table 1.2 with full TRANSYT outputs contained in Appendix D. As can be seen in Table 1.2, the modelling results indicate that for Option 2 and in particular at Notting Hill Gate / Pembridge Road junction, the approach arms would operate with very high degrees of saturation and in some cases above the theoretical maximum capacity of 100% with significant traffic queues. This implies that Option 2 would not be feasible for both cycle times of 88 and 96 seconds.

Similarly, Option 3 was first tested with 88 seconds cycle time and a summary of the modelling results for all peak hours are presented in Table 1.3. Full TRANSYT outputs for all peak hours are contained in Appendix D. The models predict that all approach arms of both junctions would operate within capacity and below the practical maximum desired capacity of 90% during all peak hours. The favourable prediction for Option 3 with cycle time of 88 seconds does not warrant further testing of this option with higher cycle time. This is because, if a lower cycle time of 88 seconds is feasible then a higher cycle time of 96 seconds would also be feasible as well. However, a higher cycle time would lead to higher waiting times and delays to pedestrians.

In summary, the modelling exercise has shown that Option 1 would be feasible for cycle time of 96 seconds and all junctions within the study area would operate within capacity. However, for 88 seconds cycle time some approach arms of Notting Hill Gate / Pembridge Road would operate slightly above 90% during the weekday AM and PM peak hours. On the contrary, the modelling exercise suggests that Option 2 would not be feasible and would have adverse impacts on traffic flow through the study area during the peak hours. Alternatively, Option 3, which is similar to Option 1 but incorporating staggered pedestrian crossing facilities instead of straight crossings, would be feasible for 88 seconds cycle time and all approach arms would operate with DoS less than 90% for all peak hours.

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Currently, the study area is within signal control group 32 which runs on UTC cycle time of 88 seconds during peak hours and is SCOOT controlled. Should the scheme requires increasing the cycle time of the junctions within the study area to 96 seconds, it is likely that Transport for London (TfL) will request a wider scope of model to cover the entire signal control group.

As SCOOT will assist in effective operation of the junctions and reduce the degrees of saturation (DoS) it is possible that in reality all arms of the junctions could operate with DoS below the values predicted by the models. Therefore, Option 1 (based on 88 seconds cycle time), which would have minimal delays to pedestrians as compared to Option 3, may be acceptable to TfL, although the model predicts some arms with DoS slightly above 90% during AM and PM. However, proceeding with this option in the next stage would require early involvement with TfL. If this option is objected by TfL then Option 1 could proceed with 96 seconds cycle time or Option 3 with 88 seconds cycle time.

It is noted that this modelling exercise is based on 2011 signal information and traffic data collected on March 2011. Therefore, the modelling results would change if current signal and traffic data (2013) are used.

Table 1.1 - Base Model and Proposed Option 1 Results: Degree of Saturation and Mean Maximum Queue length

Table 1.1a - Based on 88 seconds cycle time

Link Number	Link Description	Number of Lane	AM				IP				PM			
			Base		Option 1 (88s)		Base		Option 1 (88s)		Base		Option 1 (88s)	
			DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
Nottinghill gate / Pembridge Road Node 1260														
6013	Pembridge Road Nearside	1	35	4	46	6	37	5	56	7	37	5	51	7
6011	Pembridge Road Offside	1	65	5	91	8	66	5	84	7	65	5	91	8
6023	Notting Hill Gate WB Nearside	1	26	4	64	7	30	4	76	8	33	2	81	11
6021	Notting Hill Gate WB Offside	1	69	4	93	13	50	8	88	11	61	4	91	13
6042	Notting Hill Gate EB Nearside	1	63	11	89	14	71	11	83	11	63	11	85	14
6041	Notting Hill Gate EB Offside	1	37	5	90	12	42	5	87	10	40	5	88	11
Nottinghill Gate/ Kensington Church Street Node 1268														
5821	Notting Hill Gate WB	2	18	3	37	5	21	5	46	6	20	1	51	6
5833	Palace Gardens Terrace (Left Turn)	1	59	8	82	20	60	9	89	22	63	9	81	19
5831	Palace Gardens Terrace (Right Turn)	1	60	9			59	9			52	7		
5843	Notting Hill Gate EB Nearside	2	36	8	75	10	33	4	81	12	31	7	71	6
5841	Notting Hill Gate EB Offside	1	15	2	74	13	19	1	80	7	20	2	70	6
Nottinghill Gate/ Linden Gardens Node 1259														
5911	Linden Gardens	1	14	1	14	1	15	1	15	1	12	1	12	1
5922	Notting Hill Gate WB Nearside	1	66	10	37	5	59	9	39	6	65	10	45	7
5921	Notting Hill Gate WB Offside	2	30	8	17	4	31	8	20	6	39	11	26	8
5943	Notting Hill Gate EB Nearside	1	62	9	62	20	58	6	58	16	57	8	57	10
5941	Notting Hill Gate EB Offside	1	48	4	67	5	53	9	69	8	53	5	71	8
Pedestrian Crossing by Linden Gardens Node 12183														
18342	Notting Hill Gate EB	2	33	1	33	1	31	1	31	1	31	1	31	1

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Table 1.1b - Based on 96 seconds cycle time

Link Number	Link Description	Number of Lane	AM				IP				PM			
			Base		Option 1 (96s)		Base		Option 1 (96s)		Base		Option 1 (96s)	
			DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
Nottinghill gate / Pembridge Road Node 1260														
6013	Pembridge Road Nearside	1	35	4	43	6	37	5	53	8	37	5	49	7
6011	Pembridge Road Offside	1	65	5	83	7	66	5	84	7	65	5	83	7
6023	Notting Hill Gate WB Nearside	1	26	4	61	7	30	4	71	10	33	2	78	11
6021	Notting Hill Gate WB Offside	1	69	4	88	12	50	8	80	10	61	4	87	12
6042	Notting Hill Gate EB Nearside	1	63	11	86	14	71	11	80	12	63	11	83	14
6041	Notting Hill Gate EB Offside	1	37	5	84	11	42	5	80	10	40	5	82	10
Nottinghill Gate/ Kensington Church Street Node 1268														
5821	Notting Hill Gate WB	2	18	3	34	5	21	5	42	7	20	1	47	8
5833	Palace Gardens Terrace (Left Turn)	1	59	8	83	22	60	9	86	23	63	9	81	20
5831	Palace Gardens Terrace (Right Turn)	1	60	9			59	9			52	7		
5843	Notting Hill Gate EB Nearside	2	36	8	69	10	33	4	75	10	31	7	66	10
5841	Notting Hill Gate EB Offside	1	15	2	68	13	19	1	75	13	20	2	65	10
Nottinghill Gate/ Linden Gardens Node 1269														
5911	Linden Gardens	1	14	1	15	1	15	1	16	1	12	1	13	1
5922	Notting Hill Gate WB Nearside	1	66	10	36	6	59	9	35	5	65	10	42	7
5921	Notting Hill Gate WB Offside	2	30	8	16	5	31	8	18	5	39	11	25	8
5943	Notting Hill Gate EB Nearside	1	62	9	61	21	58	6	58	20	57	8	56	17
5941	Notting Hill Gate EB Offside	1	48	4	65	5	53	9	72	7	53	5	72	8
Pedestrian Crossing by Linden Gardens Node 12183														
18342	Notting Hill Gate EB	2	33	1	33	1	31	1	31	1	31	1	30	1

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Table 1.2 - Base Model and Proposed Option 2 Results: Degree of Saturation and Mean Maximum Queue Length

Table 1.1a - Based on 88 seconds cycle time

Link Number	Link Description	Number of Lane	AM				IP				PM			
			Base		Option2 (88s)		Base		Option2 (88s)		Base		Option2 (88s)	
			DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
Nottinghill gate / Pembridge Road Node 1260														
6013	Pembridge Road Nearside	1	35	4	56	6	37	5	65	8	37	5	58	7
6011	Pembridge Road Offside	1	65	5	114	19	66	5	103	13	65	5	101	12
6023	Notting Hill Gate WB Nearside	1	26	4	36	5	30	4	43	5	33	2	47	5
6021	Notting Hill Gate WB Offside	1	69	4	116	36	50	8	104	20	61	4	106	24
6042	Notting Hill Gate EB Nearside	1	63	11	94	16	71	11	90	13	63	11	97	20
6041	Notting Hill Gate EB Offside	1	37	5	97	16	42	5	99	16	40	5	100	16
Nottinghill Gate/ Kensington Church Street Node 1268														
5821	Notting Hill Gate WB	2	18	3	31	8	21	5	41	10	20	1	42	8
5833	Palace Gardens Terrace (Left Turn)	1	59	8	82	20	60	9	85	21	63	9	81	20
5831	Palace Gardens Terrace (Right Turn)	1	60	9			59	9			52	7		
5843	Notting Hill Gate EB Nearside	2	36	8	77	12	33	4	83	16	31	7	66	12
5841	Notting Hill Gate EB Offside	1	15	2	32	3	19	1	48	3	20	2	41	3
Nottinghill Gate/ Linden Gardens Node 1269														
5911	Linden Gardens	1	14	1	14	1	15	1	15	1	12	1	12	1
5922	Notting Hill Gate WB Nearside	1	66	10	38	6	59	9	39	6	65	10	45	7
5921	Notting Hill Gate WB Offside	2	30	8	17	4	31	8	20	6	39	11	26	8
5943	Notting Hill Gate EB Nearside	1	62	9	62	24	58	6	58	21	57	8	57	20
5941	Notting Hill Gate EB Offside	1	48	4	66	5	53	9	69	8	53	5	71	8
Pedestrian Crossing by Linden Gardens Node 12183														
18342	Notting Hill Gate EB	2	33	1	33	1	31	1	31	1	31	1	31	1

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96 seconds cycle time

Link Number	Link Description	Number of Lane	AM				IP				PM			
			Base		Option2 (96s)		Base		Option2 (96s)		Base		Option2 (96s)	
			DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
Nottinghill gate / Pembridge Road Node 1260														
6013	Pembridge Road Nearside	1	35	4	50	6	37	5	61	9	37	5	55	6
6011	Pembridge Road Offside	1	65	5	100	12	66	5	92	9	65	5	99	7
6023	Notting Hill Gate WB Nearside	1	26	4	34	7	30	4	40	9	33	2	43	8
6021	Notting Hill Gate WB Offside	1	69	4	102	20	50	8	96	15	61	4	94	11
6042	Notting Hill Gate EB Nearside	1	63	11	94	17	71	11	86	13	63	11	94	13
6041	Notting Hill Gate EB Offside	1	37	5	95	15	42	5	90	12	40	5	90	10
Nottinghill Gate/ Kensington Church Street Node 1258														
5821	Notting Hill Gate WB	2	18	3	27	9	21	5	35	10	20	1	37	5
5833	Palace Gardens Terrace (Left Turn)	1	59	8	83	22	60	9	86	23	63	9	81	19
5831	Palace Gardens Terrace (Right Turn)	1	60	9			59	9			52	7		
5843	Notting Hill Gate EB Nearside	2	36	8	68	18	33	4	71	17	31	7	59	6
5841	Notting Hill Gate EB Offside	1	15	2	28	3	19	1	41	5	20	2	37	5
Nottinghill Gate/ Linden Gardens Node 1259														
5911	Linden Gardens	1	14	1	15	1	15	1	16	1	12	1	13	1
5922	Notting Hill Gate WB Nearside	1	66	10	35	5	59	9	36	6	65	10	43	7
5921	Notting Hill Gate WB Offside	2	30	8	16	4	31	8	19	5	39	11	25	7
5943	Notting Hill Gate EB Nearside	1	62	9	61	25	58	6	58	22	57	8	56	15
5941	Notting Hill Gate EB Offside	1	48	4	67	5	53	9	70	9	53	5	70	7
Pedestrian Crossing by Linden Gardens Node 12183														
18342	Notting Hill Gate EB	2	33	1	33	1	31	1	31	1	31	1	30	1



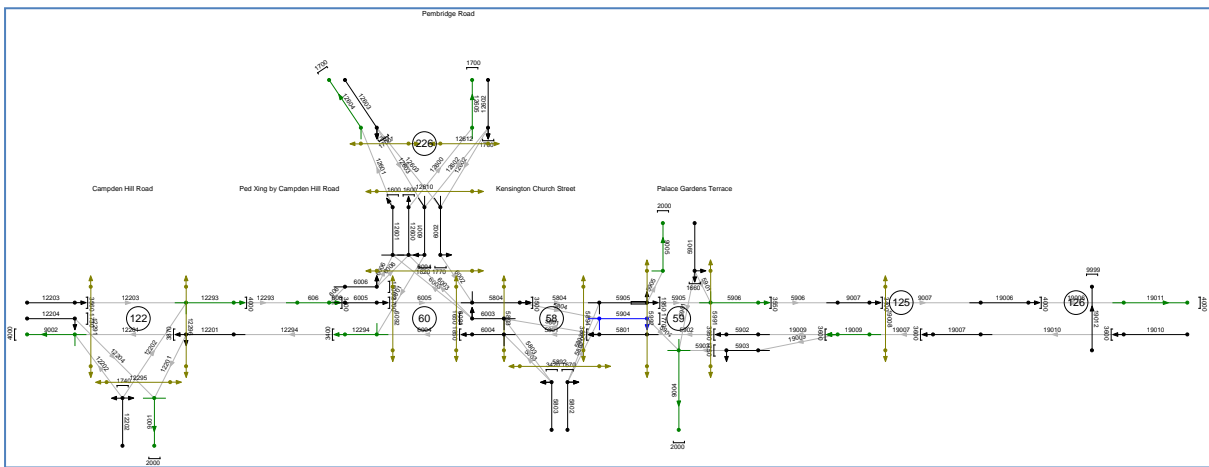
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Table 1.3 - Base Model and Proposed Option 3 Results: Degree of Saturation and Mean Maximum Queue length

Link Number	Link Description	Number of Lane	AM				IP				PM			
			Base		Option 3 (88s)		Base		Option 3 (88s)		Base		Option 3 (88s)	
			DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
Nottinghill gate / Pembridge Road Node 1260														
6013	Pembridge Road Nearside	1	35	4	43	5	37	5	54	7	37	5	49	6
6011	Pembridge Road Offside	1	65	5	83	7	66	5	84	7	65	5	83	7
6023	Notting Hill Gate WB Nearside	1	26	4	61	6	30	4	71	9	33	2	78	8
6021	Notting Hill Gate WB Offside	1	69	4	89	12	50	8	84	10	61	4	87	11
6042	Notting Hill Gate EB Nearside	1	63	11	85	13	71	11	76	10	63	11	82	13
6041	Notting Hill Gate EB Offside	1	37	5	85	11	42	5	78	9	40	5	83	10
Nottinghill Gate/ Kensington Church Street Node 1258														
5821	Notting Hill Gate WB	2	18	3	34	5	21	5	41	6	20	1	45	5
5833	Palace Gardens Terrace (Left Turn)	1	59	8	79	19	60	9	85	21	63	9	81	19
5831	Palace Gardens Terrace (Right Turn)	1	60	9			59	9			52	7		
5843	Notting Hill Gate EB Nearside	2	36	8	69	9	33	4	73	9	31	7	64	6
5841	Notting Hill Gate EB Offside	1	15	2	68	12	19	1	73	12	20	2	63	5
Nottinghill Gate/ Linden Gardens Node 1259														
5911	Linden Gardens	1	14	1	14	1	15	1	15	1	12	1	12	1
5922	Notting Hill Gate WB Nearside	1	66	10	36	5	59	9	37	5	65	10	43	7
5921	Notting Hill Gate WB Offside	2	30	8	16	4	31	8	19	5	39	11	25	7
5943	Notting Hill Gate EB Nearside	1	62	9	62	19	58	6	58	18	57	8	57	15
5941	Notting Hill Gate EB Offside	1	48	4	69	5	53	9	72	6	53	5	74	7
Pedestrian Crossing by Linden Gardens Node 12183														
18342	Notting Hill Gate EB	2	33	1	33	1	31	1	31	1	31	1	31	1

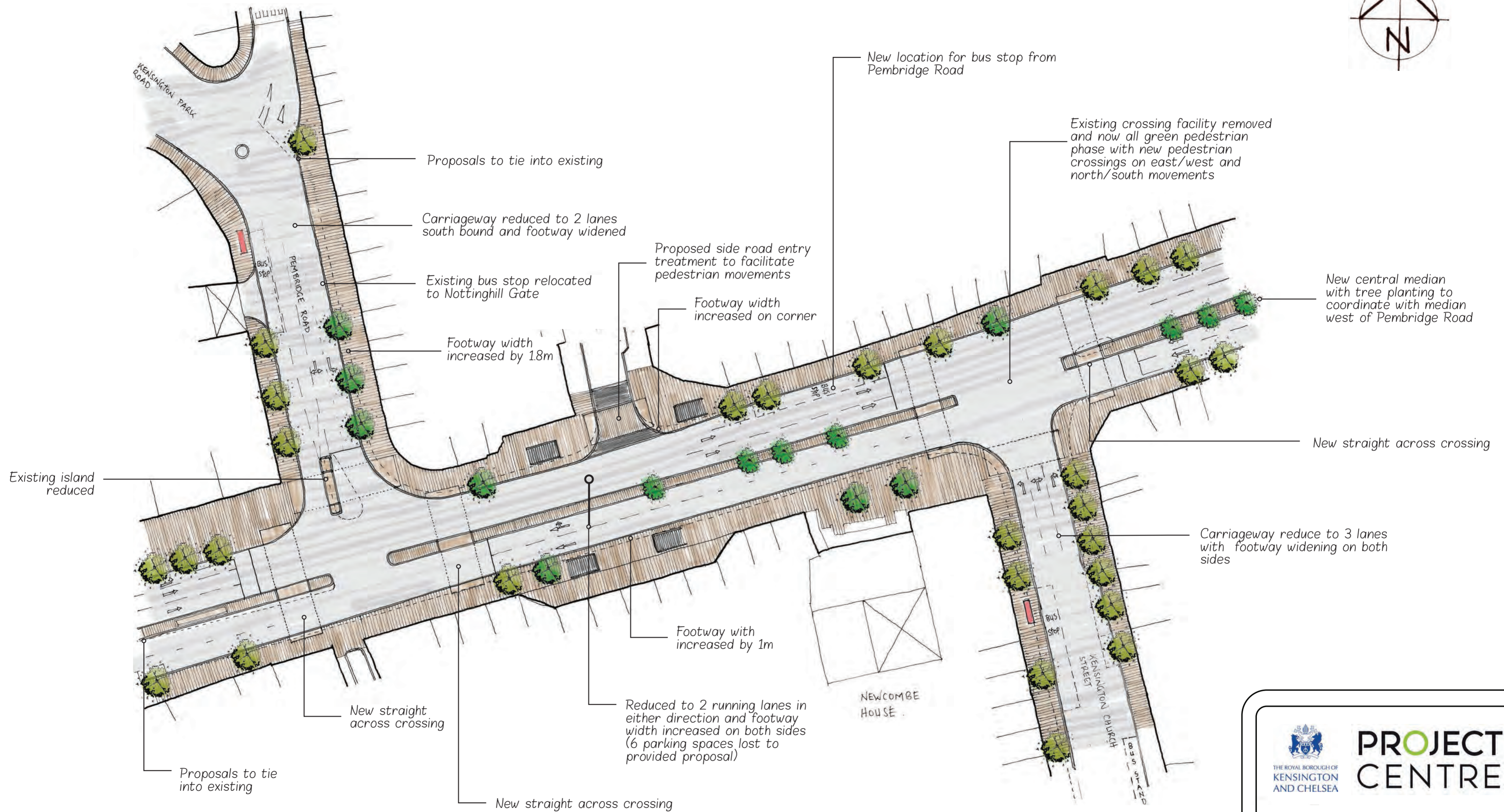
APPENDIX A – 2005 TRANSYT LINK DIAGRAM

TRANSYT Node – Link Diagram for the study area (2005)








APPENDIX B – 2011 TRANSYT LINK DIAGRAM

APPENDIX C – PUBLIC REALM SKETCH



Legend

-  Existing tree
-  Proposed tree
-  Proposed Yorkstone paving in accordance with RBKC Streetscape Manual
-  Steps to entry/exit of underground station
-  Existing kerb line



PROJECT CENTRE

NOTTING HILL GATE

OUTLINE DESIGN STAGE

SKETCH MASTERPLAN PROPOSAL

APPENDIX D – TRANSYT OUTPUTS OPTION 1-3

OPTION 1 88 SECONDS CYCLE TIME

Option 1 AM 88 seconds Cycle time

PRT File
AM : 0830-0930

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED AM OPT1 88S.DAT" at 14:14 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE = 88
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15285 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
      (SEC)  CYCLE  MINS. (SEC) (SEC)  0  1  100  %  %  1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   TYPE  LIST OF NODES TO BE OPTIMISED
NO.   TYPE
3) =  2   1258  1260  1259  12183  12185  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) =  7   4042  4043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5) =  7   4111  4112  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6) =  7   4121  4122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7) =  7   4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8) =  7   4197  4196  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9) =  7   4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10) = 7   5821  5822  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11) = 7   5841  5842  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12) = 7   5843  5844  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13) = 7   5854  5855  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14) = 7   5922  5923  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15) = 7   5941  5942  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
16) = 7   5943  5944  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
17) = 7   5998  5997  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
18) = 7   6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
19) = 7   6013  6014  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
20) = 7   6021  6122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
21) = 7   6023  6024  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
22) = 7   6042  6043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
23) = 7   6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
24) = 7  12591  12593  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
25) = 7  18341  18342  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
26) = 7  18399  18398  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0  7  6
28) = 10  1259  7  0  6
29) = 10  1260  7  6  6
30) = 10  12183  7  6  6
31) = 10  12185  7  6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  18  18  9
33) = 11  1259  11  9  6
34) = 11  1260  17  6  5  10
35) = 11  12183  8  5
36) = 11  12185  8  5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1  19  55  4
38) = 12  1259  1  18  82  6
    
```

39) = 12 1260 1 7 41 65 79
 40) = 12 12183 1 30 19
 41) = 12 12185 1 23 12

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS LINK1	LINKS LINK2	LINK1 GIVEWAY		LINK2 GIVEWAY		LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
						ONLY % FLOW	A1 X100	A2 X100						
42)	30	4011	4042	0	0	0	22	0	0	200	0	715	0	0
43)	30	4111	4131	0	0	0	22	0	0	200	0	715	0	0
44)	30	4112	0	0	0	0	0	0	0	200	0	715	0	0
45)	30	4121	4111	0	0	0	22	0	0	80	0	1500	0	0
46)	30	4122	0	0	0	0	0	0	0	80	0	1500	0	0
47)	30	4131	4121	0	0	0	22	0	0	200	0	715	0	0
48)	30	4132	0	0	0	0	0	0	0	200	0	715	0	0
49)	30	5941	5921	5922	0	0	50	50	0	77	0	1000	0	0
50)	30	5942	0	0	0	0	0	0	0	77	0	1000	0	0

LINK CARDS: FIXED DATA GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
				START STAGE	END LAG	START STAGE	END LAG					
51)	31	4041	0	0	0	0	0	65	0	1881	0	0
52)	31	4042	0	0	0	0	0	65	0	1815	0	0
53)	31	4043	0	0	0	0	0	65	0	0	0	0
54)	31	4196	0	0	0	0	0	200	0	0	0	0
55)	31	4197	0	0	0	0	0	200	0	1800	0	0
56)	31	4198	0	0	0	0	0	200	0	0	0	0
57)	31	4199	0	0	0	0	0	200	0	1800	0	0
58)	31	5821	1258	1	18	2	12	83	0	3670	0	0
59)	31	5822	0	0	0	0	0	83	0	0	0	0
60)	31	5841	1258	1	18	2	13	64	0	1867	0	0
61)	31	5842	0	0	0	0	0	64	0	0	0	0
62)	31	5843	1258	1	18	2	13	64	0	1843	0	0
63)	31	5844	0	0	0	0	0	64	0	0	0	0
64)	31	5851	1258	3	9	1	0	18	0	10000	0	0
65)	31	5852	1258	3	9	2	0	7	0	10000	0	0
66)	31	5853	1258	3	9	1	0	18	0	10000	0	0
67)	31	5854	1258	2	18	3	0	200	0	3412	0	0
68)	31	5855	0	0	0	0	0	200	0	0	0	0
69)	31	5911	1259	3	6	1	5	200	0	1708	0	0
70)	31	5921	1259	1	11	2	0	200	0	4064	0	0
71)	31	5922	1259	1	11	2	0	200	0	1842	0	0
72)	31	5923	0	0	0	0	0	200	0	0	0	0
73)	31	5941	1259	1	10	3	2	77	0	1631	0	0
74)	31	5942	0	0	0	0	0	77	0	0	0	0
75)	31	5943	1259	1	10	3	0	77	0	1931	0	0
76)	31	5944	0	0	0	0	0	77	0	0	0	0
77)	31	5951	1259	2	6	1	0	9	0	10000	0	0
78)	31	5997	0	0	0	0	0	200	0	0	0	0
79)	31	5998	0	0	0	0	0	200	0	1800	0	0
80)	31	5999	0	0	0	0	0	200	0	1800	0	0
81)	31	6011	1260	3	5	4	0	80	0	1800	0	0
82)	31	6012	0	0	0	0	0	80	0	0	0	0
83)	31	6013	1260	2	6	4	1	80	0	1616	0	0
84)	31	6014	0	0	0	0	0	80	0	0	0	0
85)	31	6021	1260	2	5	3	0	137	0	1631	0	0
86)	31	6023	1260	1	17	3	0	137	0	1771	0	0
87)	31	6024	0	0	0	0	0	137	0	0	0	0
88)	31	6041	1260	1	17	2	0	200	0	1881	0	0
89)	31	6042	1260	1	17	2	0	200	0	1881	0	0
90)	31	6043	0	0	0	0	0	200	0	0	0	0
91)	31	6051	1260	4	10	1	0	18	0	10000	0	0
92)	31	6053	1260	4	10	1	0	18	0	10000	0	0
93)	31	6054	1260	4	10	1	0	18	0	10000	0	0
94)	31	6098	0	0	0	0	0	200	0	0	0	0
95)	31	6099	0	0	0	0	0	200	0	3600	0	0
96)	31	6122	0	0	0	0	0	137	0	0	0	0
97)	31	12591	12185	1	8	2	0	25	0	3600	0	0
98)	31	12592	12185	2	5	1	0	8	0	10000	0	0
99)	31	12593	0	0	0	0	0	200	0	0	0	0
100)	31	12597	1259	3	6	1	0	9	0	10000	0	0
101)	31	12598	1259	2	9	1	0	8	0	10000	0	0
102)	31	18341	12183	1	8	2	0	30	0	3746	0	0
103)	31	18342	0	0	0	0	0	30	0	0	0	0
104)	31	18398	0	0	0	0	0	200	0	0	0	0
105)	31	18399	0	0	0	0	0	200	0	3600	0	0
106)	31	18451	12183	2	5	1	0	8	0	10000	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1		ENTRY 2		ENTRY 3		ENTRY 4	
					LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW
107)	32	4011	129	0	0	0	17	0	0	0	0	0
108)	32	4041	377	0	6013	30	5	6041	347	6	0	0
109)	32	4042	325	0	6013	166	5	6042	159	6	0	0
110)	32	4043	168	0	6014	90	3000	6043	78	3000	0	0
111)	32	4111	224	0	0	0	17	0	0	0	0	0
112)	32	4112	74	0	0	0	3000	0	0	0	0	0
113)	32	4121	435	0	6021	250	7	6042	191	7	0	0
114)	32	4122	120	0	6043	24	3046	6122	96	3046	0	0
115)	32	4131	220	0	0	0	17	0	0	0	0	0
116)	32	4132	34	0	0	0	3000	0	0	0	0	0
117)	32	4136	74	0	4122	74	3000	0	0	0	0	0
118)	32	4197	246	0	4121	207	17	4131	39	17	0	0
119)	32	4198	46	0	4122	46	3000	0	0	0	0	0
120)	32	4199	277	0	4111	49	17	4121	228	17	0	0
121)	32	5821	416	0	5921	404	14	0	0	0	0	0
122)	32	5822	66	0	5923	70	3013	0	0	0	0	0
123)	32	5841	441	0	4011	64	6	4041	377	6	0	0
124)	32	5842	64	0	4043	64	3020	0	0	0	0	0
125)	32	5843	400	0	4011	65	6	4042	335	6	0	0
126)	32	5844	104	0	4043	104	3020	0	0	0	0	0
127)	32	5851	10	0	0	0	15	0	0	0	0	0
128)	32	5852	10	0	0	0	6	0	0	0	0	0
129)	32	5853	10	0	0	0	15	0	0	0	0	0
130)	32	5854	646	0	0	0	17	0	0	0	0	0
131)	32	5855	126	0	0	0	3020	0	0	0	0	0
132)	32	5911	32	0	0	0	17	0	0	0	0	0
133)	32	5921	414	0	0	0	17	0	0	0	0	0
134)	32	5922	317	0	0	0	17	0	0	0	0	0
135)	32	5923	100	0	0	0	3000	0	0	0	0	0
136)	32	5941	295	0	5841	111	7	5854	184	7	0	0
137)	32	5942	90	0	5842	64	3000	5855	20	3000	0	0
138)	32	5943	899	0	5841	330	7	5843	400	7	5854	174
139)	32	5944	118	0	5844	104	3000	5855	14	3000	0	0
140)	32	5951	10	0	0	0	9	0	0	0	0	0
141)	32	5997	120	0	12593	120	3000	0	0	0	0	0
142)	32	5998	631	0	12591	631	17	0	0	0	0	0
143)	32	5999	48	0	5921	10	17	5943	38	17	0	0
144)	32	6011	163	0	4111	87	7	4131	76	7	0	0
145)	32	6012	24	0	4112	18	3046	0	0	0	0	0
146)	32	6013	196	0	4111	88	7	4131	105	7	0	0

147)=	32	6014	90	0	4112	56	3046	4132	34	3000	0	0	0	0	0	0
148)=	32	6021	250	0	5821	106	13	5854	144	11	0	0	0	0	0	0
149)=	32	6023	478	0	5821	310	13	5854	144	11	0	0	0	0	0	0
150)=	32	6024	66	0	5822	66	3000	0	0	0	0	0	0	0	0	0
151)=	32	6041	347	0	0	0	17	0	0	0	0	0	0	0	0	0
152)=	32	6042	350	0	0	0	17	0	0	0	0	0	0	0	0	0
153)=	32	6043	102	0	0	0	3000	0	0	0	0	0	0	0	0	0
154)=	32	6051	10	0	0	0	6	0	0	0	0	0	0	0	0	0
155)=	32	6053	10	0	0	0	6	0	0	0	0	0	0	0	0	0
156)=	32	6054	10	0	0	0	9	0	0	0	0	0	0	0	0	0
157)=	32	6098	90	0	6012	24	3000	6024	66	3000	0	0	0	0	0	0
158)=	32	6099	641	0	6011	163	17	6023	478	17	0	0	0	0	0	0
159)=	32	6122	96	0	5855	92	3000	0	0	0	0	0	0	0	0	0
160)=	32	12591	631	0	5911	19	8	5922	317	4	5941	295	4	0	0	0
161)=	32	12592	10	0	0	0	7	0	0	0	0	0	0	0	0	0
162)=	32	12593	120	0	5923	30	3000	5942	90	3000	0	0	0	0	0	0
163)=	32	12597	10	0	0	0	8	0	0	0	0	0	0	0	0	0
164)=	32	12598	10	0	0	0	6	0	0	0	0	0	0	0	0	0
165)=	32	18341	874	0	5911	13	5	5943	861	5	0	0	0	0	0	0
166)=	32	18342	118	0	5944	118	3000	0	0	0	0	0	0	0	0	0
167)=	32	18398	118	0	18342	118	3000	0	0	0	0	0	0	0	0	0
168)=	32	18399	874	0	18341	874	17	0	0	0	0	0	0	0	0	0
169)=	32	18451	10	0	0	0	9	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

CARD TYPE	LINK NO.	SAT. FLOW	LANE 1.		LANE 2.		LANE 3.		CAPAC VEH.	SAT. FLOW	CAPAC VEH.	SAT. FLOW	CAPAC VEH.
			SAT.	FLOW	SAT.	FLOW	SAT.	FLOW					
170)=	33	5854	1800	4	0	0	0	0	0	0	0	0	0
171)=	33	5943	1815	4	0	0	0	0	0	0	0	0	0
172)=	33	6042	1544	3	0	0	0	0	0	0	0	0	0

*****END OF SUBROUTINE TINPUT*****

88 SECOND CYCLE 88 STEPS

INITIAL SETTINGS

-(SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10	LINK NUMBER				PERFORMANCE		EXIT	GREEN TIMES		
												LINK FLOW	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	UNIFORM (U+R+O=MEAN PCU-H/H)	RANDOM+ OVERSAT Q)	COST OF DELAY	MEAN STOP /PCU	COST OF STOP	MEAN MAX.	AVERAGE EXCESS	WEIGHTED SUM OF ($/H)	INDEX.	NODE	1ST END (SECONDS)	2ND END
1258	3	19	55	4																	
1259	3	18	82	6																	
1260	4	7	41	65	79																
12183	2	30	19																		
12185	2	23	12																		

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	UNIFORM (U+R+O=MEAN PCU-H/H)	RANDOM+ OVERSAT Q)	COST OF DELAY	MEAN STOP /PCU	COST OF STOP	MEAN MAX.	AVERAGE EXCESS	WEIGHTED SUM OF (\$/H)	INDEX.	EXIT NODE	GREEN TIMES	
																1ST END (SECONDS)	2ND END
6024BL	66	6023L	64	16.4	21.1	0.3 + 0.1	(5.5)	58	(0.5)	7				6.0	1260	24	65
6041	347	1881	90	17.0	73.8	3.3 + 3.8	(101.0)	135	(11.5)	12			112.5	1260	24	41	
6042	350	2481SF	89	17.0	61.3	3.2 + 2.8	(84.7)	123	(10.6)	14			95.2	1260	24	41	
6043BL	102	6042L	89	24.0	61.3	0.9 + 0.8	(24.7)	123	(1.6)	14			26.2	1260	24	41	
6051	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1260	1	7	
6053	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1260	1	7	
6054	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1260	1	7	
6098BL	90	6099L	20	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0			0.2				
6099	640	3600S	20	17.0	0.6	0.0 + 0.1	(1.6)	1	(0.1)	0			1.7				
6122BL	96	6021L	93	16.4	98.2	1.3 + 1.4	(37.2)	150	(1.8)	13			39.0	1260	46	65	
12591	631	3600S	26	4.1	1.2	0.1 + 0.1	(3.1)	5	(0.1)	1			3.1	12185	31	12	
12592	10	10000	1	7.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	12185	17	23	
12593BL	120	12591L	26	24.0	2.7	0.1 + 0.0	(1.3)	19	(0.3)	1			1.6	12185	31	12	
12597	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1259	12	18	
12598	10	10000	1	6.0	30.9	0.1 + 0.0	(1.2)	83	(0.0)	0			1.2	1259	3	18	

18341	873	3746S	33	5.0	1.1	0.0	0.2	(3.7)	3	(0.2)	1	3.8	12183	38	19
18342BL	118	18341L	33	3.6	1.0	0.0	0.0	(0.5)	2	(0.0)	1	0.5	12183	38	19
18398BL	118	18399L	28	24.0	0.7	0.0	0.0	(0.3)	1	(0.0)	0	0.3			
18399	873	3600S	28	17.0	0.7	0.0	0.2	(2.4)	1	(0.2)	0	2.5			
18451	10	10000	1	9.0	40.0	0.1	0.0	(1.6)	94	(0.0)	0	1.6	12183	24	30

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	115.9	15.5	34.3	28.1	(885.8)	+ (113.0)	+ (0.0)	= 998.8	TOTALS
288.4	26.5	10.9	6.4	4.7	(157.5)	+ (11.6)	+ (0.0)	= 169.1	BUSES
1511.8	89.4	16.9	27.9	23.4	(728.3)	+ (101.4)	+ (0.0)	= 829.7	OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	102.9	+ 71.9	+ 54.9	= 229.7

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 73

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13
- (SECONDS)

1258	3	19	55	4	
1259	3	18	82	6	
1260	4	7	41	65	79
12183	2	30	19		
12185	2	23	12		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	115.9	15.5	34.3	28.1	(885.8)	+ (113.0)	+ (0.0)	= 998.8	TOTALS
288.4	26.5	10.9	6.4	4.7	(157.5)	+ (11.6)	+ (0.0)	= 169.1	BUSES
1511.8	89.4	16.9	27.9	23.4	(728.3)	+ (101.4)	+ (0.0)	= 829.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 378

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35
- (SECONDS)

1258	3	19	55	4	
1259	3	18	82	6	
1260	4	7	41	65	79
12183	2	30	19		
12185	2	23	12		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	115.9	15.5	34.3	28.1	(885.8)	+ (113.0)	+ (0.0)	= 998.8	TOTALS
288.4	26.5	10.9	6.4	4.7	(157.5)	+ (11.6)	+ (0.0)	= 169.1	BUSES
1511.8	89.4	16.9	27.9	23.4	(728.3)	+ (101.4)	+ (0.0)	= 829.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 368

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1
- (SECONDS)

1258	3	19	55	4	
1259	3	18	82	6	
1260	4	7	41	65	79
12183	2	30	19		
12185	2	23	12		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	115.9	15.5	34.3	28.1	(885.8)	+ (113.0)	+ (0.0)	= 998.8	TOTALS
288.4	26.5	10.9	6.4	4.7	(157.5)	+ (11.6)	+ (0.0)	= 169.1	BUSES
1511.8	89.4	16.9	27.9	23.4	(728.3)	+ (101.4)	+ (0.0)	= 829.7	OTHER

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 783

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13
- (SECONDS)

1258	3	19	55	4	
1259	3	18	82	6	
1260	4	7	41	65	79
12183	2	30	19		
12185	2	23	12		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	115.9	15.5	34.3	28.1	(885.8)	+ (113.0)	+ (0.0)	= 998.8	TOTALS
288.4	26.5	10.9	6.4	4.7	(157.5)	+ (11.6)	+ (0.0)	= 169.1	BUSES
1511.8	89.4	16.9	27.9	23.4	(728.3)	+ (101.4)	+ (0.0)	= 829.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35
 - (SECONDS)

1258 3 19 55 4
 1259 3 18 82 6
 1260 4 7 41 65 79
 12183 2 30 19
 12185 2 23 12

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	115.9	15.5	34.3	28.1	(885.8) +	(113.0)	+ (0.0)	= 998.8	TOTALS
288.4	26.5	10.9	6.4	4.7	(157.5) +	(11.6)	+ (0.0)	= 169.1	BUSES
1511.8	89.4	16.9	27.9	23.4	(728.3) +	(101.4)	+ (0.0)	= 829.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 405

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1
 - (SECONDS)

1258 3 19 55 4
 1259 3 18 82 6
 1260 4 7 41 65 79
 12183 2 30 19
 12185 2 23 12

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	115.9	15.5	34.3	28.1	(885.8) +	(113.0)	+ (0.0)	= 998.8	TOTALS
288.4	26.5	10.9	6.4	4.7	(157.5) +	(11.6)	+ (0.0)	= 169.1	BUSES
1511.8	89.4	16.9	27.9	23.4	(728.3) +	(101.4)	+ (0.0)	= 829.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1 -1
 - (SECONDS)

1258 3 19 55 4
 1259 3 18 82 6
 1260 4 7 41 65 79
 12183 2 30 19
 12185 2 23 12

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	115.9	15.5	34.3	28.1	(885.8) +	(113.0)	+ (0.0)	= 998.8	TOTALS
288.4	26.5	10.9	6.4	4.7	(157.5) +	(11.6)	+ (0.0)	= 169.1	BUSES
1511.8	89.4	16.9	27.9	23.4	(728.3) +	(101.4)	+ (0.0)	= 829.7	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 874

88 SECOND CYCLE 88 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 13 35 -1 13 35 1 -1 1
 - (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1258	3	19	55	4							
1259	3	18	82	6							
1260	4	7	41	65	79						
12183	2	30	19								
12185	2	23	12								

LINK NUMBER	FLOW INFO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE DELAY	TIMES PER PCU (SEC)	-----DELAY----- UNIFORM RANDOM+ COST (U+R+O=MEAN Q) (PCU-H/H) (\$/H)	----STOPS---- MEAN COST OF STOPS /PCU (\$/H)	----QUEUE---- MAX. AVERAGE EXCESS (PCU) (PCU)	PERFORMANCE INDEX, WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
4011	129	715	21	17.0	3.8	0.0 + 0.1 (1.9)	0 (0.0)	0	1.9		37	67
4041	377	1881	20	5.9	1.2	0.0 + 0.1 (1.8)	1 (0.2)	0	1.9		37	67
4042	324	1815S	27	5.5	1.4	0.0 + 0.1 (1.7)	2 (0.1)	0	1.9		37	67
4043BL	168	4042L	27	7.8	1.4	0.0 + 0.1 (0.9)	2 (0.0)	0	0.9		37	67
4111	224	715S	45	17.0	5.0	0.0 + 0.3 (4.4)	0 (0.0)	0	4.4		37	67
4112BL	74	4111L	45	24.0	5.0	0.0 + 0.1 (1.5)	0 (0.0)	0	1.5		37	67
4121	434	1500S	39	7.0	2.0	0.0 + 0.2 (3.5)	0 (0.0)	0	3.5		37	67
4122BL	120	4121L	39	64.4	2.0	0.0 + 0.1 (1.0)	0 (0.0)	0	1.0		37	67
4131	220	715S	43	17.0	5.3	0.0 + 0.3 (4.6)	0 (0.0)	0	4.6		37	67
4132BL	34	4131L	43	24.0	5.3	0.0 + 0.1 (0.7)	0 (0.0)	0	0.7		37	67
4196BL	74	4197L	18	24.0	1.2	0.0 + 0.0 (0.4)	1 (0.0)	0	0.4		37	67
4197	246	1800S	18	17.0	1.2	0.0 + 0.1 (1.2)	1 (0.1)	0	1.3		37	67
4198BL	46	4199L	18	24.0	1.2	0.0 + 0.0 (0.2)	1 (0.0)	0	0.2		37	67
4199	276	1800S	18	17.0	1.2	0.0 + 0.1 (1.3)	1 (0.1)	0	1.4		37	67
5821	416	3670S	37	14.0	17.1	1.7 + 0.3 (28.1)	38 (1.0)	5	29.1	1258	37	67
5822BL	66	5821L	37	31.8	24.9	0.4 + 0.0 (6.5)	62 (0.5)	5	7.0	1258	37	67
5841	441	1867S	74	6.0	18.0	1.0 + 1.2 (31.3)	93 (8.2)	13	39.6	1258	37	67
5842BL	64	5841L	74	36.5	36.0	0.5 + 0.2 (9.1)	91 (0.7)	13	9.8	1258	37	67
5843	399	1843S	75	6.0	24.7	1.6 + 1.2 (38.9)	75 (6.1)	10	44.9	1258	37	67
5844BL	104	5843L	75	36.5	38.5	0.8 + 0.3 (15.8)	88 (1.1)	10	16.9	1258	37	67
5851	10	10000	1	15.0	40.0	0.1 + 0.0 (1.6)	94 (0.0)	0	1.6	1258	13	19
5852	10	10000	0	6.0	12.1	0.0 + 0.0 (0.5)	51 (0.0)	0	0.5	1258	13	55
5853	10	10000	1	15.0	40.0	0.1 + 0.0 (1.6)	94 (0.0)	0	1.6	1258	13	19
5854	646	4132Sf	82	17.0	41.7	5.6 + 1.9 (106.2)	102 (16.2)	20	122.4	1258	73	4

5855BL	126	5854L	82	52.8	41.7	1.1 + 0.4	(20.7)	102	(1.6)	20	22.3	1258	73	4	
5911	32	1708	14	17.0	42.5	0.3 + 0.1	(5.4)	95	(0.8)	1	6.1	1259	12	23	
5921	414	4064	17	17.0	8.2	0.8 + 0.1	(13.4)	41	(4.2)	4	17.5	1259	29	82	
5922	317	1842S	37	17.0	11.0	0.7 + 0.2	(13.8)	49	(3.8)	5	17.6	1259	29	82	
5923BL	100	5922L	37	24.0	11.0	0.2 + 0.1	(4.3)	49	(0.6)	5	5.0	1259	29	82	
5941	295	1631S	67	7.0	11.1	0.1 + 0.8	(12.9)	41	(2.5)	5	15.5	1259	28	8	
5942BL	90	5941L	67	9.2	10.8	0.0 + 0.2	(3.8)	45	(0.5)	5	4.4	1259	28	8	
5943	898	21453f	62	7.0	7.2	1.1 + 0.7	(25.7)	67	(12.9)	20	+	38.5	1259	28	6
5944BL	118	5943L	62	9.2	5.8	0.1 + 0.1	(2.7)	56	(0.8)	20	+	3.5	1259	28	6
5951	10	10000	0	9.0	28.3	0.1 + 0.0	(1.1)	79	(0.0)	0	1.1	1259	0	18	
5997BL	120	5998L	42	24.0	1.7	0.0 + 0.1	(0.8)	2	(0.0)	0	0.8				
5998	631	1800S	42	17.0	1.7	0.0 + 0.3	(4.3)	2	(0.3)	0	4.6				
5999	48	1800	3	17.0	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2				
6011	163	1800S	91	7.0	110.6	1.7 + 3.3	(71.1)	163	(6.2)	8	77.3	1260	70	79	
6012BL	24	6011L	91	64.4	110.4	0.3 + 0.5	(10.5)	163	(0.5)	8	10.9	1260	70	79	
6013	196	1616S	46	7.0	25.4	1.1 + 0.3	(19.6)	77	(3.6)	6	23.2	1260	47	80	
6014BL	90	6013L	46	43.7	25.4	0.5 + 0.1	(9.0)	77	(0.9)	6	9.9	1260	47	80	
6021	249	1631S	93	11.8	86.8	2.5 + 3.5	(85.3)	145	(6.9)	13	92.2	1260	46	65	
6023	477	1771S	64	12.4	21.3	2.0 + 0.8	(40.1)	62	(5.6)	7	45.7	1260	24	65	

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER PCU	UNIFORM DELAY	RANDOM+ OVERSAT	COST OF DELAY	STOPS MEAN OF /PCU	COST OF STOPS	QUEUE MAX.	AVERAGE EXCESS	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES	EXIT NODE	GREEN START	TIMES END	START END
(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(U+R+O=MEAN Q)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	(\$/H)		1ST	2ND	(SECONDS)
6024BL	66	6023L	64	16.4	21.1	0.3 + 0.1	(5.5)	58	(0.5)	7	6.0	1260	24	65			
6041	347	1881	90	17.0	73.8	3.3 + 3.8	(101.0)	135	(11.5)	12	112.5	1260	24	41			
6042	350	2481Sf	89	17.0	61.3	3.2 + 2.8	(84.7)	123	(10.6)	14	95.2	1260	24	41			
6043BL	102	6042L	89	24.0	61.3	0.9 + 0.8	(24.7)	123	(1.6)	14	26.2	1260	24	41			
6051	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1260	1	7			
6053	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1260	1	7			
6054	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1260	1	7			
6098BL	90	6099L	20	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2						
6099	640	3600S	20	17.0	0.6	0.0 + 0.1	(1.6)	1	(0.1)	0	1.7						
6122BL	96	6021L	93	16.4	98.2	1.3 + 1.4	(37.2)	150	(1.8)	13	39.0	1260	46	65			
12591	631	3600S	26	4.1	1.2	0.1 + 0.1	(3.1)	5	(0.1)	1	3.1	12185	31	12			
12592	10	10000	1	7.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	12185	17	23			
12593BL	120	12591L	26	24.0	2.7	0.1 + 0.0	(1.3)	19	(0.3)	1	1.6	12185	31	12			
12597	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1259	12	18			
12598	10	10000	1	6.0	30.9	0.1 + 0.0	(1.2)	83	(0.0)	0	1.2	1259	3	18			
18341	873	3746S	33	5.0	1.1	0.0 + 0.2	(3.7)	3	(0.2)	1	3.8	12183	38	19			
18342BL	118	18341L	33	3.6	1.0	0.0 + 0.0	(0.5)	2	(0.0)	1	0.5	12183	38	19			
18398BL	118	18399L	28	24.0	0.7	0.0 + 0.0	(0.3)	1	(0.0)	0	0.3						
18399	873	3600S	28	17.0	0.7	0.0 + 0.2	(2.4)	1	(0.2)	0	2.5						
18451	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	12183	24	30			

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	TOTALS
(PCU-RM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	115.9	15.5	34.3	28.1	(885.8)	+ (113.0)	+ (0.0)	= 998.8	TOTALS
288.4	26.5	10.9	6.4	4.7	(157.5)	+ (11.6)	+ (0.0)	= 169.1	BUSES
1511.8	89.4	16.9	27.9	23.4	(728.3)	+ (101.4)	+ (0.0)	= 829.7	OTHER

ROUTE

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
	102.9	+	71.9	+	54.9	=	229.7

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 405

PROGRAM TRANSYT FINISHED

Option 1 IP 88 seconds cycle time

PRT File
IP : 1200-1300

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED IP OPT1 88S.DAT" at 14:19 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE = 88
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15285 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
          (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
          (SEC)  CYCLE  MINS. (SEC) (SEC)  1=YES  CYCLE  %  %  1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
3) =  2    1258  1260  1259  12183  12185  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
          LIST OF NODES TO BE OPTIMISED
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) =  7  4042  4043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5) =  7  4111  4112  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6) =  7  4121  4122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7) =  7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8) =  7  4197  4196  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9) =  7  4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10) = 7  5821  5822  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11) = 7  5841  5842  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12) = 7  5843  5844  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13) = 7  5854  5855  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14) = 7  5922  5923  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15) = 7  5941  5942  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
16) = 7  5943  5944  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
17) = 7  5998  5997  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
18) = 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
19) = 7  6013  6014  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
20) = 7  6021  6122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
21) = 7  6023  6024  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
22) = 7  6042  6043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
23) = 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
24) = 7  12591 12593 0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
25) = 7  18341 18342 0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
26) = 7  18399 18398 0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0  7  6
28) = 10  1259  7  0  6
29) = 10  1260  7  6  7  6
30) = 10  12183  7  6
31) = 10  12185  7  6
    
```

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NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  18  18  9
33) = 11  1259  11  9  6
34) = 11  1260  17  6  5  10
35) = 11  12183  8  5
36) = 11  12185  9  5
    
```

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NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1  13  46  86
38) = 12  1259  1  16  76  4
    
```


18341	835	3746S	31	5.0	1.0	0.0	0.2	(3.2)	2	(0.1)	0	3.3	12183	37	18
18342BL	100	18341L	31	3.6	0.9	0.0	0.0	(0.4)	2	(0.0)	0	0.4	12183	37	18
18398BL	100	18399L	26	24.0	0.7	0.0	0.0	(0.3)	1	(0.0)	0	0.3			
18399	835	3600S	26	17.0	0.7	0.0	0.2	(2.2)	1	(0.2)	0	2.4			
18451	10	10000	1	9.0	40.0	0.1	0.0	(1.6)	94	(0.0)	0	1.6	12183	23	29

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1781.6	114.6	15.5	37.1	26.6	(903.4) + (105.6)	+ (0.0)	= 1009.1	TOTALS
243.5	21.8	11.2	6.0	4.0	(142.3) + (9.7)	+ (0.0)	= 152.0	BUSES
1538.1	92.8	16.6	31.1	22.5	(761.1) + (96.0)	+ (0.0)	= 857.1	OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	101.9	+ 73.3	+ 50.1	= 225.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 73

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13
- (SECONDS)

1258	3	13	46	86					
1259	3	16	76	4					
1260	4	14	47	71	86				
12183	2	29	18						
12185	2	21	10						

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1781.6	114.6	15.5	37.1	26.6	(903.4) + (105.6)	+ (0.0)	= 1009.1	TOTALS
243.5	21.8	11.2	6.0	4.0	(142.3) + (9.7)	+ (0.0)	= 152.0	BUSES
1538.1	92.8	16.6	31.1	22.5	(761.1) + (96.0)	+ (0.0)	= 857.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 370

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35
- (SECONDS)

1258	3	13	46	86					
1259	3	16	76	4					
1260	4	14	47	71	86				
12183	2	29	18						
12185	2	21	10						

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1781.6	114.6	15.5	37.1	26.6	(903.4) + (105.6)	+ (0.0)	= 1009.1	TOTALS
243.5	21.8	11.2	6.0	4.0	(142.3) + (9.7)	+ (0.0)	= 152.0	BUSES
1538.1	92.8	16.6	31.1	22.5	(761.1) + (96.0)	+ (0.0)	= 857.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 360

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1
- (SECONDS)

1258	3	13	46	86					
1259	3	16	76	4					
1260	4	14	47	71	86				
12183	2	29	18						
12185	2	21	10						

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1781.6	114.6	15.5	37.1	26.6	(903.4) + (105.6)	+ (0.0)	= 1009.1	TOTALS
243.5	21.8	11.2	6.0	4.0	(142.3) + (9.7)	+ (0.0)	= 152.0	BUSES
1538.1	92.8	16.6	31.1	22.5	(761.1) + (96.0)	+ (0.0)	= 857.1	OTHER

NO. OF ENTRIES TO SUBPT = 25
NO. OF LINKS RECALCULATED= 841

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13
- (SECONDS)

1258	3	13	46	86					
1259	3	16	76	4					
1260	4	14	47	71	86				
12183	2	29	18						
12185	2	21	10						

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1781.6	114.6	15.5	37.1	26.6	(903.4) + (105.6)	+ (0.0)	= 1009.1	TOTALS
243.5	21.8	11.2	6.0	4.0	(142.3) + (9.7)	+ (0.0)	= 152.0	BUSES
1538.1	92.8	16.6	31.1	22.5	(761.1) + (96.0)	+ (0.0)	= 857.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 394

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35
 - (SECONDS)

1258 3 13 46 86
 1259 3 16 76 4
 1260 4 14 47 71 86
 12183 2 29 18
 12185 2 21 10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1781.6	114.6	15.5	37.1	26.6	(903.4)	+ (105.6)	+ (0.0)	= 1009.1	TOTALS
243.5	21.8	11.2	6.0	4.0	(142.3)	+ (9.7)	+ (0.0)	= 152.0	BUSES
1538.1	92.8	16.6	31.1	22.5	(761.1)	+ (96.0)	+ (0.0)	= 857.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1
 - (SECONDS)

1258 3 13 46 86
 1259 3 16 76 4
 1260 4 14 47 71 86
 12183 2 29 18
 12185 2 21 10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1781.6	114.6	15.5	37.1	26.6	(903.4)	+ (105.6)	+ (0.0)	= 1009.1	TOTALS
243.5	21.8	11.2	6.0	4.0	(142.3)	+ (9.7)	+ (0.0)	= 152.0	BUSES
1538.1	92.8	16.6	31.1	22.5	(761.1)	+ (96.0)	+ (0.0)	= 857.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 392

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1 -1
 - (SECONDS)

1258 3 13 46 86
 1259 3 16 76 4
 1260 4 14 47 71 86
 12183 2 29 18
 12185 2 21 10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1781.6	114.6	15.5	37.1	26.6	(903.4)	+ (105.6)	+ (0.0)	= 1009.1	TOTALS
243.5	21.8	11.2	6.0	4.0	(142.3)	+ (9.7)	+ (0.0)	= 152.0	BUSES
1538.1	92.8	16.6	31.1	22.5	(761.1)	+ (96.0)	+ (0.0)	= 857.1	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 869

88 SECOND CYCLE 88 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 13 35 -1 13 35 1 -1 1
 - (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1258	3	13	46	86							
1259	3	16	76	4							
1260	4	14	47	71	86						
12183	2	29	18								
12185	2	21	10								

LINK NUMBER	FLOW INFO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE DELAY (SEC)	TIMES PCU (SEC)	-----DELAY----- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT OF DELAY (\$/H)	COST OF DELAY (\$/H)	-----STOPS----- MEAN STOPS /PCU	COST OF STOPS (\$/H)	-----QUEUE----- MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
4011	118	715	20	17.0	3.8	0.0 + 0.1	(1.7)	0	(0.0)	0			1.7			
4041	348	1881	18	5.9	1.2	0.0 + 0.1	(1.6)	1	(0.1)	0			1.7			
4042	380	1815S	30	5.4	1.4	0.0 + 0.1	(2.1)	2	(0.2)	0			2.3			
4043BL	158	4042L	30	7.8	1.4	0.0 + 0.1	(0.9)	2	(0.0)	0			0.9			
4111	287	715S	55	17.0	6.1	0.0 + 0.5	(6.9)	0	(0.0)	1			6.9			
4112BL	78	4111L	55	24.0	6.1	0.0 + 0.1	(1.9)	0	(0.0)	1			1.9			
4121	417	1500S	37	7.0	2.0	0.0 + 0.2	(3.3)	3	(0.2)	1			3.5			
4122BL	102	4121L	37	56.4	2.0	0.0 + 0.1	(0.8)	2	(0.0)	1			0.8			
4131	217	715S	42	17.0	5.2	0.0 + 0.3	(4.4)	0	(0.0)	0			4.4			
4132BL	36	4131L	42	24.0	5.2	0.0 + 0.1	(0.7)	0	(0.0)	0			0.7			
4196BL	66	4197L	16	24.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0			0.3			
4197	228	1800S	16	17.0	1.2	0.0 + 0.1	(1.1)	1	(0.1)	0			1.1			
4198BL	36	4199L	16	24.0	1.2	0.0 + 0.0	(0.2)	1	(0.0)	0			0.2			
4199	257	1800S	16	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0			1.3			
5821	482	3670S	46	14.0	20.1	2.3 + 0.4	(38.2)	42	(0.5)	6			38.7	1258	31	58
5822BL	52	5821L	46	30.2	31.5	0.4 + 0.0	(6.5)	72	(0.0)	6			6.5	1258	31	58
5841	417	1867S	80	6.0	24.8	1.2 + 1.7	(40.7)	52	(4.4)	7			45.1	1258	31	59
5842BL	76	5841L	80	7.7	41.4	0.6 + 0.3	(12.4)	82	(0.8)	7			13.2	1258	31	59
5843	412	1843S	81	6.0	46.1	3.5 + 1.7	(74.9)	93	(7.7)	12			82.6	1258	31	59
5844BL	80	5843L	81	7.7	44.9	0.7 + 0.3	(14.2)	88	(0.9)	12			15.1	1258	31	59
5851	10	10000	1	15.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1258	7	13
5852	10	10000	0	6.0	13.8	0.0 + 0.0	(0.5)	55	(0.0)	0			0.5	1258	7	46
5853	10	10000	1	15.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1258	7	13
5854	673	3412Sf	89	17.0	48.5	5.9 + 3.2	(128.9)	112	(18.5)	22			147.3	1258	64	86

5855BL	122	5854L	89	52.8	48.5	1.1 + 0.6	(23.4)	112	(1.7)	22	25.1	1258	64	86	
5911	34	1708	15	17.0	42.6	0.3 + 0.1	(5.7)	96	(0.8)	1	6.5	1259	10	21	
5921	471	4064	20	17.0	10.3	1.2 + 0.1	(19.1)	47	(5.4)	6	24.5	1259	27	76	
5922	326	1842S	39	17.0	13.4	1.0 + 0.3	(17.2)	55	(4.4)	6	21.6	1259	27	76	
5923BL	84	5922L	39	24.0	13.4	0.2 + 0.1	(4.4)	55	(0.6)	6	5.0	1259	27	76	
5941	316	1631S	69	7.0	10.9	0.1 + 0.8	(13.6)	49	(3.3)	8	16.9	1259	26	6	
5942BL	96	5941L	69	9.2	11.3	0.0 + 0.3	(4.3)	60	(0.7)	8	5.0	1259	26	6	
5943	854	21455f	58	7.0	4.8	0.5 + 0.6	(16.2)	51	(8.2)	18	+	25.4	1259	26	4
5944BL	100	5943L	58	9.2	4.7	0.1 + 0.1	(1.9)	52	(0.7)	18	+	2.5	1259	26	4
5951	10	10000	0	9.0	25.1	0.1 + 0.0	(1.0)	74	(0.0)	0	1.0	1259	82	16	
5997BL	128	5998L	43	24.0	1.8	0.0 + 0.1	(0.9)	2	(0.0)	0	0.9				
5998	654	1800S	43	17.0	1.8	0.0 + 0.3	(4.6)	2	(0.3)	0	4.9				
5999	31	1800	2	17.0	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1				
6011	166	1800S	84	7.0	82.9	1.7 + 2.1	(54.3)	140	(5.5)	7	59.8	1260	76	86	
6012BL	24	6011L	84	56.4	83.1	0.3 + 0.3	(7.9)	141	(0.4)	7	8.3	1260	76	86	
6013	265	1616S	56	7.0	26.8	1.5 + 0.5	(28.1)	81	(5.0)	7	33.1	1260	53	87	
6014BL	94	6013L	56	37.7	26.9	0.5 + 0.2	(10.0)	81	(1.0)	7	10.9	1260	53	87	
6021	241	1631S	88	11.7	78.9	2.9 + 2.3	(75.0)	134	(6.2)	11	81.2	1260	52	71	
6023	569	1771S	76	12.4	20.4	1.8 + 1.4	(45.7)	45	(4.9)	8	50.6	1260	31	71	

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX	EXIT NODE	GREEN TIMES	
						UNIFORM	RANDOM+ COST	MEAN	COST	MAX.	AVERAGE EXCESS			START	END
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O=MEAN Q)	DELAY (\$/H)	STOPS /PCU	STOPS (\$/H)	(PCU)	(PCU)	(\$/H)		1ST	2ND
6024BL	56	6023L	76	16.4	11.8	0.0 + 0.1	(2.6)	25	(0.2)	8		2.8	1260	31	71
6041	315	1881	87	17.0	67.6	3.0 + 2.9	(84.0)	128	(9.9)	10		94.0	1260	31	47
6042	320	2516Sf	83	17.0	53.0	2.9 + 1.8	(66.9)	113	(8.9)	11		75.8	1260	31	47
6043BL	82	6042L	83	24.0	53.0	0.7 + 0.5	(17.2)	113	(1.2)	11		18.3	1260	31	47
6051	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1260	8	14
6053	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1260	8	14
6054	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1260	8	14
6098BL	80	6099L	23	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
6099	735	3600S	23	17.0	0.6	0.0 + 0.1	(1.9)	1	(0.1)	0		2.0			
6122BL	84	6021L	88	16.4	92.8	1.4 + 0.8	(30.8)	136	(1.4)	11		32.2	1260	52	71
12591	654	3600S	28	4.1	1.1	0.0 + 0.2	(2.9)	3	(0.0)	1		2.9	12185	30	10
12592	10	10000	1	7.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	12185	15	21
12593BL	128	12591L	28	3.0	0.9	0.0 + 0.0	(0.5)	2	(0.0)	1		0.5	12185	30	10
12597	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1259	10	16
12598	10	10000	0	6.0	27.5	0.1 + 0.0	(1.1)	78	(0.0)	0		1.1	1259	85	16
18341	835	3746S	31	5.0	1.0	0.0 + 0.2	(3.2)	2	(0.1)	0		3.3	12183	37	18
18342BL	100	18341L	31	3.6	0.9	0.0 + 0.0	(0.4)	2	(0.0)	0		0.4	12183	37	18
18398BL	100	18399L	26	24.0	0.7	0.0 + 0.0	(0.3)	1	(0.0)	0		0.3			
18399	835	3600S	26	17.0	0.7	0.0 + 0.2	(2.2)	1	(0.2)	0		2.4			
18451	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	12183	23	29

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	TOTALS
(PCU-RM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.6	114.6	15.5	37.1	26.6	(903.4)	+ (105.6)	+ (0.0)	= 1009.1	TOTALS
243.5	21.8	11.2	6.0	4.0	(142.3)	+ (9.7)	+ (0.0)	= 152.0	BUSES
1538.1	92.8	16.6	31.1	22.5	(761.1)	+ (96.0)	+ (0.0)	= 857.1	OTHER

ROUTE

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	101.9	+	73.3	+	50.1	=	225.3
NO. OF ENTRIES TO SUBPT =	11						
NO. OF LINKS RECALCULATED=	405						
PROGRAM TRANSYT FINISHED							

Opion 1 PM 88 seconds cycle time

PRT File
PM : 1730-1830

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED PM OPT1 88S.DAT" at 14:22 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 64
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE = 88
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15448 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS  CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
          (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
          (SEC)  CYCLE  MINS. (SEC) (SEC)  1=YES  CYCLE  %  %  1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   TYPE  LIST OF NODES TO BE OPTIMISED
NO.   TYPE
3) =  2  1258  1260  1259  12183  12185  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) =  7  4042  4043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5) =  7  4111  4112  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6) =  7  4121  4122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7) =  7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8) =  7  4197  4196  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9) =  7  4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10) = 7  5821  5822  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11) = 7  5841  5842  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12) = 7  5843  5844  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13) = 7  5854  5855  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14) = 7  5922  5923  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15) = 7  5941  5942  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
16) = 7  5943  5944  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
17) = 7  5998  5997  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
18) = 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
19) = 7  6013  6014  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
20) = 7  6021  6122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
21) = 7  6023  6024  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
22) = 7  6042  6043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
23) = 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
24) = 7  12591 12593  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
25) = 7  18341 18342  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
26) = 7  18399 18398  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0  7  6
28) = 10  1259  7  0  6
29) = 10  1260  7  6  7  6
30) = 10  12183  7  6
31) = 10  12185  7  6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  18  18  9
33) = 11  1259  11  9  6
34) = 11  1260  17  6  5  10
35) = 11  12183  8  5
36) = 11  12185  9  5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1  80  29  65
38) = 12  1259  1  81  53  69
    
```


Table with columns representing lane numbers and values for lanes 1 through 3. Rows are labeled from 147) to 171) with associated lane numbers and values.

LINK CARDS : FLARE SATURATION FLOW DATA

Table with columns: CARD TYPE, LINK NO., SAT. FLOW, CAPAC. VEH., SAT. FLOW, CAPAC. VEH., SAT. FLOW, CAPAC. VEH. Rows 172) to 174).

*****END OF SUBROUTINE TINPUT*****

88 SECOND CYCLE 88 STEPS

INITIAL SETTINGS
- (SECONDS)

Table with columns: NODE NO, NUMBER OF STAGES, STAGE 1, STAGE 2, STAGE 3, STAGE 4, STAGE 5, STAGE 6, STAGE 7, STAGE 8, STAGE 9, STAGE 10. Rows 1258 to 12185.

Table with columns: LINK NUMBER, FLOW INTO LINK, SAT FLOW, DEGREE OF SAT, MEAN PER CRUISE, MEAN TIMES DELAY, DELAY (SEC), UNIFORM OVERSAT (PCU-H/H), RANDOM+Q DELAY, COST OF DELAY (\$/H), STOPS OF DELAY (%), STOPS OF DELAY (\$/H), MEAN MAX. (PCU), QUEUE AVERAGE EXCESS (PCU), PERFORMANCE INDEX. WEIGHTED SUM OF (\$/H), EXIT NODE, GREEN START END (SECONDS), TIMES START 1ST, END 2ND (SECONDS). Rows 4011 to 6021.

88 SECOND CYCLE 88 STEPS

Table with columns: LINK NUMBER, FLOW INTO LINK, SAT FLOW, DEGREE OF SAT, MEAN PER CRUISE, MEAN TIMES DELAY, DELAY (SEC), UNIFORM OVERSAT (PCU-H/H), RANDOM+Q DELAY, COST OF DELAY (\$/H), STOPS OF DELAY (%), STOPS OF DELAY (\$/H), MEAN MAX. (PCU), QUEUE AVERAGE EXCESS (PCU), PERFORMANCE INDEX. WEIGHTED SUM OF (\$/H), EXIT NODE, GREEN START END (SECONDS), TIMES START 1ST, END 2ND (SECONDS). Rows 6023 to 12592.

12593BL	122	12591L	29	3.0	0.9	0.0	+	0.0	(	0.4)	2	(	0.0)	1		0.5	12185	7	75
12597	10	10000	1	8.0	40.0	0.1	+	0.0	(	1.6)	94	(	0.0)	0		1.6	1259	75	81
12598	10	10000	0	6.0	27.5	0.1	+	0.0	(	1.1)	78	(	0.0)	0		1.1	1259	62	81
18341	829	3746S	31	5.0	1.0	0.0	+	0.2	(	3.2)	2	(	0.1)	1		3.3	12183	13	82
18342BL	90	18341L	31	3.6	1.0	0.0	+	0.0	(	0.4)	3	(	0.0)	1		0.4	12183	13	82
18398BL	90	18399L	26	24.0	0.7	0.0	+	0.0	(	0.2)	1	(	0.0)	0		0.2			
18399	829	3600S	26	17.0	0.7	0.0	+	0.2	(	2.2)	1	(	0.2)	0		2.4			
18451	10	10000	1	9.0	40.0	0.1	+	0.0	(	1.6)	94	(	0.0)	0		1.6	12183	87	5

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	116.8	15.8	37.0	26.5	(900.8) +	(106.5) +	(0.0) +	=	1007.2
243.5	22.2	11.0	6.2	3.8	(141.7) +	(9.9) +	(0.0) +	=	151.6
1602.2	94.6	16.9	30.8	22.7	(759.1) +	(96.6) +	(0.0) +	=	855.7

CRUISE		DELAY		STOPS		TOTALS	
FUEL CONSUMPTION	PREDICTIONS	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR
105.8		+	73.1	+	50.5	=	229.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 74

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13
- (SECONDS)

1258	3	80	29	65	
1259	3	81	53	69	
1260	4	82	27	52	66
12183	2	5	82		
12185	2	86	75		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	116.8	15.8	37.0	26.5	(900.8) +	(106.5) +	(0.0) +	=	1007.2
243.5	22.2	11.0	6.2	3.8	(141.7) +	(9.9) +	(0.0) +	=	151.6
1602.2	94.6	16.9	30.8	22.7	(759.1) +	(96.6) +	(0.0) +	=	855.7

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 371

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35
- (SECONDS)

1258	3	80	29	65	
1259	3	81	53	69	
1260	4	82	27	52	66
12183	2	5	82		
12185	2	86	75		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	116.8	15.8	37.0	26.5	(900.8) +	(106.5) +	(0.0) +	=	1007.2
243.5	22.2	11.0	6.2	3.8	(141.7) +	(9.9) +	(0.0) +	=	151.6
1602.2	94.6	16.9	30.8	22.7	(759.1) +	(96.6) +	(0.0) +	=	855.7

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 359

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1
- (SECONDS)

1258	3	80	29	65	
1259	3	81	53	69	
1260	4	82	27	52	66
12183	2	5	82		
12185	2	86	75		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	116.8	15.8	37.0	26.5	(900.8) +	(106.5) +	(0.0) +	=	1007.2
243.5	22.2	11.0	6.2	3.8	(141.7) +	(9.9) +	(0.0) +	=	151.6
1602.2	94.6	16.9	30.8	22.7	(759.1) +	(96.6) +	(0.0) +	=	855.7

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 765

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13
- (SECONDS)

1258	3	80	29	65	
1259	3	81	53	69	
1260	4	82	27	52	66
12183	2	5	82		
12185	2	86	75		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	116.8	15.8	37.0	26.5	(900.8) +	(106.5) +	(0.0) +	=	1007.2

243.5	22.2	11.0	6.2	3.8	(141.7) + (9.9) + (0.0) =	151.6	BUSES
1602.2	94.6	16.9	30.8	22.7	(759.1) + (96.6) + (0.0) =	855.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 398

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35
 - (SECONDS)

1258	3	80	29	65							
1259	3	81	53	69							
1260	4	82	27	52	66						
12183	2	5	82								
12185	2	86	75								

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1845.8	116.8	15.8	37.0	26.5	(900.8) + (106.5)	+ (0.0)	=	1007.2	TOTALS
243.5	22.2	11.0	6.2	3.8	(141.7) + (9.9)	+ (0.0)	=	151.6	BUSES
1602.2	94.6	16.9	30.8	22.7	(759.1) + (96.6)	+ (0.0)	=	855.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1
 - (SECONDS)

1258	3	80	29	65							
1259	3	81	53	69							
1260	4	82	27	52	66						
12183	2	5	82								
12185	2	86	75								

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1845.8	116.8	15.8	37.0	26.5	(900.8) + (106.5)	+ (0.0)	=	1007.2	TOTALS
243.5	22.2	11.0	6.2	3.8	(141.7) + (9.9)	+ (0.0)	=	151.6	BUSES
1602.2	94.6	16.9	30.8	22.7	(759.1) + (96.6)	+ (0.0)	=	855.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 401

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1 -1
 - (SECONDS)

1258	3	80	29	65							
1259	3	81	53	69							
1260	4	82	27	52	66						
12183	2	5	82								
12185	2	86	75								

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1845.8	116.8	15.8	37.0	26.5	(900.8) + (106.5)	+ (0.0)	=	1007.2	TOTALS
243.5	22.2	11.0	6.2	3.8	(141.7) + (9.9)	+ (0.0)	=	151.6	BUSES
1602.2	94.6	16.9	30.8	22.7	(759.1) + (96.6)	+ (0.0)	=	855.7	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 872

88 SECOND CYCLE 88 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 13 35 -1 13 35 1 -1 1
 - (SECONDS)

1258	3	80	29	65							
1259	3	81	53	69							
1260	4	82	27	52	66						
12183	2	5	82								
12185	2	86	75								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE DELAY	MEAN TIMES	-----DELAY-----	UNIFORM OVERSAT	RANDOM+ OF DELAY	COST OF DELAY	----STOPS----	MEAN COST	----QUEUE----	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES START
		(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O=MEAN Q)	OVERSAT DELAY	(\$/H)	(%)	(\$/H)	(PCU)	AVERAGE EXCESS OF () VALUES (\$/H)		1ST END	2ND END
4011	84	715	14	17.0	3.5	0.0 + 0.1	(1.2)	0	(0.0)	0		1.2				
4041	359	1881	19	5.7	1.2	0.0 + 0.1	(1.7)	1	(0.1)	0		1.8				
4042	401	1815S	31	5.7	1.9	0.1 + 0.2	(3.0)	21	(2.4)	6		5.5				
4043BL	154	4042L	31	7.8	1.7	0.0 + 0.1	(1.0)	13	(0.3)	6		1.3				
4098	10	1800	1	17.0	1.0	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0				
4111	256	715S	49	17.0	5.3	0.0 + 0.4	(5.3)	0	(0.0)	0		5.3				
4112BL	68	4111L	49	24.0	5.3	0.0 + 0.1	(1.4)	0	(0.0)	0		1.4				
4121	463	1500S	40	7.0	2.1	0.0 + 0.3	(3.9)	6	(0.6)	1		4.5				
4122BL	108	4121L	40	63.4	2.1	0.0 + 0.1	(0.9)	5	(0.1)	1		1.0				
4131	188	715S	38	17.0	4.9	0.0 + 0.3	(3.6)	0	(0.0)	0		3.6				
4132BL	36	4131L	38	24.0	4.9	0.0 + 0.0	(0.7)	0	(0.0)	0		0.7				
4196BL	68	4197L	18	24.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0		0.3				
4197	256	1800S	18	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0		1.3				
4198BL	40	4199L	17	24.0	1.2	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2				
4199	270	1800S	17	17.0	1.2	0.0 + 0.1	(1.3)	1	(0.1)	0		1.4				
5821	605	3670S	51	14.0	16.5	2.3 + 0.5	(39.4)	34	(0.5)	6		39.9	1258	10	41	
5822BL	74	5821L	51	28.2	24.4	0.4 + 0.1	(7.1)	57	(0.0)	6		7.2	1258	10	41	
5841	401	1867S	70	6.0	24.1	1.7 + 1.0	(38.1)	45	(3.7)	6		41.8	1258	10	42	
5842BL	92	5841L	70	7.7	36.0	0.7 + 0.2	(13.1)	71	(0.8)	6		13.9	1258	10	42	
5843	433	1843S	71	6.0	24.9	1.9 + 1.1	(42.5)	47	(4.1)	6		46.6	1258	10	42	
5844BL	60	5843L	71	7.7	36.4	0.5 + 0.1	(8.6)	72	(0.5)	6		9.2	1258	10	42	

5851	10	10000	1	15.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1258	74	80
5852	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1258	74	80
5853	10	10000	1	15.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1258	74	80
5854	602	4169Sf	81	17.0	41.8	5.3 + 1.7	(99.2)	102	(15.0)	19	114.2	1258	47	65
5855BBL	124	5854L	81	52.8	41.8	1.1 + 0.3	(20.4)	102	(1.6)	19	22.0	1258	47	65
5911	28	1708	12	17.0	42.2	0.3 + 0.1	(4.7)	95	(0.7)	1	5.3	1259	75	86
5921	607	4064	26	17.0	10.7	1.6 + 0.2	(25.6)	49	(7.3)	8	33.0	1259	4	53
5922	374	1842S	45	17.0	14.1	1.1 + 0.3	(20.8)	58	(5.3)	7	26.1	1259	4	53
5923BBL	92	5922L	45	24.0	14.1	0.3 + 0.1	(5.1)	58	(0.7)	7	5.8	1259	4	53
5941	295	1631S	71	7.0	15.0	0.3 + 0.9	(17.5)	64	(4.0)	8	21.5	1259	3	71
5942BBL	92	5941L	71	9.2	17.3	0.2 + 0.3	(6.3)	97	(1.1)	8	7.4	1259	3	71
5943	841	2145Sf	57	7.0	3.5	0.2 + 0.6	(11.7)	32	(5.8)	10	17.5	1259	3	69
5944BBL	90	5943L	57	9.2	3.6	0.0 + 0.1	(1.3)	30	(0.3)	10	1.6	1259	3	69
5951	10	10000	0	9.0	25.1	0.1 + 0.0	(1.0)	74	(0.0)	0	1.0	1259	59	81
5997BBL	122	5998L	45	24.0	1.8	0.0 + 0.1	(0.9)	2	(0.0)	0	0.9			
5998	685	1800S	45	17.0	1.8	0.0 + 0.3	(4.9)	2	(0.3)	0	5.2			
5999	33	1800	2	17.0	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1			
6011	168	1800S	91	7.0	107.8	1.8 + 3.2	(71.5)	161	(6.3)	8	77.8	1260	57	66
6012BBL	18	6011L	91	63.4	107.7	0.2 + 0.3	(7.6)	161	(0.4)	8	8.0	1260	57	66
6013	237	1616S	51	7.0	25.8	1.3 + 0.4	(24.1)	79	(4.4)	7	28.5	1260	33	67
6014BBL	94	6013L	51	40.9	25.8	0.5 + 0.2	(9.6)	79	(0.9)	7	10.5	1260	33	67
6021	263	1631S	91	11.9	81.9	3.0 + 3.0	(84.9)	139	(7.0)	13	91.9	1260	32	52

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN JOURNEY SPEED	PER PCU CRUISE DELAY	UNIFORM RANDOM+ OVERSAT OF (U+R+O=MEAN Q)	COST DELAY (\$/H)	MEAN COST OF STOPS /PCU (\$/H)	STOPS OF STOPS (\$/H)	QUEUE AVERAGE EXCESS (PCU)	PERFORMANCE INDEX WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END	TIMES START END (SECONDS)
6023	618	1771S	81	12.5	21.6	1.8 + 1.9	(52.6)	59	(7.0)	11	59.6	1260	11	52
6024BBL	68	6023L	81	16.4	15.7	0.1 + 0.2	(4.2)	40	(0.3)	11	4.6	1260	11	52
6041	320	1881	88	17.0	70.7	3.1 + 3.2	(89.2)	131	(10.3)	11	99.5	1260	11	27
6042	403	2939Sf	85	17.0	52.9	3.7 + 2.2	(84.0)	112	(11.1)	14	95.1	1260	11	27
6043BBL	78	6042L	85	24.0	52.9	0.7 + 0.4	(16.3)	112	(1.1)	14	17.4	1260	11	27
6051	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1260	76	82
6053	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1260	76	82
6054	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1260	76	82
6098BBL	86	6099L	24	24.0	0.7	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2			
6099	786	3600S	24	17.0	0.7	0.0 + 0.1	(2.0)	1	(0.1)	0	2.2			
6122BBL	90	6021L	91	16.4	99.7	1.5 + 1.0	(35.4)	141	(1.6)	13	37.0	1260	32	52
12591	685	3600S	29	4.1	1.2	0.1 + 0.2	(3.2)	4	(0.0)	1	3.3	12185	7	75
12592	10	10000	1	7.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	12185	80	86
12593BBL	122	12591L	29	3.0	0.9	0.0 + 0.0	(0.4)	2	(0.0)	1	0.5	12185	7	75
12597	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1259	75	81
12598	10	10000	0	6.0	27.5	0.1 + 0.0	(1.1)	78	(0.0)	0	1.1	1259	62	81
18341	829	3746S	31	5.0	1.0	0.0 + 0.2	(3.2)	2	(0.1)	1	3.3	12183	13	82
18342BBL	90	18341L	31	3.6	1.0	0.0 + 0.0	(0.4)	3	(0.0)	1	0.4	12183	13	82
18398BBL	90	18399L	26	24.0	0.7	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2			
18399	829	3600S	26	17.0	0.7	0.0 + 0.2	(2.2)	1	(0.2)	0	2.4			
18451	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	12183	87	5

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)
1845.8	116.8	15.8	37.0	26.5	(900.8)	+ (106.5)	+ (0.0)	= 1007.2
243.5	22.2	11.0	6.2	3.8	(141.7)	+ (9.9)	+ (0.0)	= 151.6
1602.2	94.6	16.9	30.8	22.7	(759.1)	+ (96.6)	+ (0.0)	= 855.7

ROUTE

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	105.8	73.1	50.5	229.3

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 409

PROGRAM TRANSYT FINISHED

OPTION 1 96 SECONDS CYCLE TIME

Option 1 AM 96 Seconds cycle time

PRT File
AM : 0830-0930

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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RG40 3GA, UK		

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED AM OPT1 96S.DAT" at 14:24 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 96
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15869 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
          (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
          (SEC)  PER  MINS. (SEC) (SEC)  0=NO  1=CYCLE  %  %  0=TIMES  1=O/SET  FINAL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
NO.   TYPE  96    96    60    2    3    0    1    100  100    0    2    0    0    1420  260
          LIST OF NODES TO BE OPTIMISED
3) = 2    1258  1260  1259  12183  12185    0    0    0    0    0    0    0    0    0    0
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) = 7  4042  4043    0    0    0    0    0    0    0    0    0    0    0    0    0    0
5) = 7  4111  4112    0    0    0    0    0    0    0    0    0    0    0    0    0    0
6) = 7  4121  4122    0    0    0    0    0    0    0    0    0    0    0    0    0    0
7) = 7  4131  4132    0    0    0    0    0    0    0    0    0    0    0    0    0    0
8) = 7  4197  4196    0    0    0    0    0    0    0    0    0    0    0    0    0    0
9) = 7  4199  4198    0    0    0    0    0    0    0    0    0    0    0    0    0    0
10) = 7  5821  5822    0    0    0    0    0    0    0    0    0    0    0    0    0    0
11) = 7  5841  5842    0    0    0    0    0    0    0    0    0    0    0    0    0    0
12) = 7  5843  5844    0    0    0    0    0    0    0    0    0    0    0    0    0    0
13) = 7  5854  5855    0    0    0    0    0    0    0    0    0    0    0    0    0    0
14) = 7  5922  5923    0    0    0    0    0    0    0    0    0    0    0    0    0    0
15) = 7  5941  5942    0    0    0    0    0    0    0    0    0    0    0    0    0    0
16) = 7  5943  5944    0    0    0    0    0    0    0    0    0    0    0    0    0    0
17) = 7  5998  5997    0    0    0    0    0    0    0    0    0    0    0    0    0    0
18) = 7  6011  6012    0    0    0    0    0    0    0    0    0    0    0    0    0    0
19) = 7  6013  6014    0    0    0    0    0    0    0    0    0    0    0    0    0    0
20) = 7  6021  6122    0    0    0    0    0    0    0    0    0    0    0    0    0    0
21) = 7  6023  6024    0    0    0    0    0    0    0    0    0    0    0    0    0    0
22) = 7  6042  6043    0    0    0    0    0    0    0    0    0    0    0    0    0    0
23) = 7  6099  6098    0    0    0    0    0    0    0    0    0    0    0    0    0    0
24) = 7  12591  12593    0    0    0    0    0    0    0    0    0    0    0    0    0    0
25) = 7  18341  18342    0    0    0    0    0    0    0    0    0    0    0    0    0    0
26) = 7  18399  18398    0    0    0    0    0    0    0    0    0    0    0    0    0    0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258    0    7    6
28) = 10  1259    7    0    6
29) = 10  1260    7    6    7    6
30) = 10  12183   7    6
31) = 10  12185    7    6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258   18   18    9
33) = 11  1259   11    9    6
34) = 11  1260   17    6    5    10
35) = 11  12183    8    5
36) = 11  12185    8    5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258    1   18   60    3
38) = 12  1259    1   18   88    6
    
```

39) = 12 1260 1 8 45 72 88
 40) = 12 12183 1 30 19
 41) = 12 12185 1 23 12

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS	LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS.		GIVEWAY DATA								
							ONLY	A1	A2	LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100			
42)	=	30	4011	4042	0	0	22	0	0	0	0	0	200	0	715	0	0
43)	=	30	4111	4131	0	0	22	0	0	0	0	0	200	0	715	0	0
44)	=	30	4112	0	0	0	0	0	0	0	0	0	200	0	715	0	0
45)	=	30	4121	4111	0	0	22	0	0	0	0	0	80	0	1500	0	0
46)	=	30	4122	0	0	0	0	0	0	0	0	0	80	0	1500	0	0
47)	=	30	4131	4121	0	0	22	0	0	0	0	0	200	0	715	0	0
48)	=	30	4132	0	0	0	0	0	0	0	0	0	200	0	715	0	0
49)	=	30	5941	5921	5922	0	50	50	0	0	0	0	77	0	1000	0	0
50)	=	30	5942	0	0	0	0	0	0	0	0	0	77	0	1000	0	0

LINK CARDS: FIXED DATA GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
				START STAGE	LAG	START STAGE	LAG					
51)	=	31	4041	0	0	0	0	65	0	1881	0	0
52)	=	31	4042	0	0	0	0	65	0	1815	0	0
53)	=	31	4043	0	0	0	0	65	0	0	0	0
54)	=	31	4196	0	0	0	0	200	0	0	0	0
55)	=	31	4197	0	0	0	0	200	0	1800	0	0
56)	=	31	4198	0	0	0	0	200	0	0	0	0
57)	=	31	4199	0	0	0	0	200	0	1800	0	0
58)	=	31	5821	1258	1	18	2	12	0	83	0	3670
59)	=	31	5822	0	0	0	0	0	0	83	0	0
60)	=	31	5841	1258	1	18	2	13	0	64	0	1867
61)	=	31	5842	0	0	0	0	0	0	64	0	0
62)	=	31	5843	1258	1	18	2	13	0	64	0	1843
63)	=	31	5844	0	0	0	0	0	0	64	0	0
64)	=	31	5851	1258	3	9	1	0	0	18	0	10000
65)	=	31	5852	1258	3	9	2	0	0	7	0	10000
66)	=	31	5853	1258	3	9	1	0	0	18	0	10000
67)	=	31	5854	1258	2	18	3	0	0	200	0	3412
68)	=	31	5855	0	0	0	0	0	0	200	0	0
69)	=	31	5911	1259	3	6	1	5	0	200	0	1708
70)	=	31	5921	1259	1	11	2	0	0	200	0	4064
71)	=	31	5922	1259	1	11	2	0	0	200	0	1842
72)	=	31	5923	0	0	0	0	0	0	200	0	0
73)	=	31	5941	1259	1	10	3	2	0	77	0	1631
74)	=	31	5942	0	0	0	0	0	0	77	0	0
75)	=	31	5943	1259	1	10	3	0	0	77	0	1931
76)	=	31	5944	0	0	0	0	0	0	77	0	0
77)	=	31	5951	1259	2	6	1	0	0	9	0	10000
78)	=	31	5997	0	0	0	0	0	0	200	0	0
79)	=	31	5998	0	0	0	0	0	0	200	0	1800
80)	=	31	5999	0	0	0	0	0	0	200	0	1800
81)	=	31	6011	1260	3	5	4	0	0	80	0	1800
82)	=	31	6012	0	0	0	0	0	0	80	0	0
83)	=	31	6013	1260	2	6	4	1	0	80	0	1616
84)	=	31	6014	0	0	0	0	0	0	80	0	0
85)	=	31	6021	1260	2	5	3	0	0	137	0	1631
86)	=	31	6023	1260	1	17	3	0	0	137	0	1771
87)	=	31	6024	0	0	0	0	0	0	137	0	0
88)	=	31	6041	1260	1	17	2	0	0	200	0	1881
89)	=	31	6042	1260	1	17	2	0	0	200	0	1881
90)	=	31	6043	0	0	0	0	0	0	200	0	0
91)	=	31	6051	1260	4	10	1	0	0	18	0	10000
92)	=	31	6053	1260	4	10	1	0	0	18	0	10000
93)	=	31	6054	1260	4	10	1	0	0	18	0	10000
94)	=	31	6098	0	0	0	0	0	0	200	0	0
95)	=	31	6099	0	0	0	0	0	0	200	0	3600
96)	=	31	6122	0	0	0	0	0	0	137	0	0
97)	=	31	12591	12185	1	8	2	0	0	25	0	3600
98)	=	31	12592	12185	2	5	1	0	0	8	0	10000
99)	=	31	12593	0	0	0	0	0	0	200	0	0
100)	=	31	12597	1259	3	6	1	0	0	9	0	10000
101)	=	31	12598	1259	2	9	1	0	0	8	0	10000
102)	=	31	18341	12183	1	8	2	0	0	30	0	3746
103)	=	31	18342	0	0	0	0	0	0	30	0	0
104)	=	31	18398	0	0	0	0	0	0	200	0	0
105)	=	31	18399	0	0	0	0	0	0	200	0	3600
106)	=	31	18451	12183	2	5	1	0	0	8	0	10000

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1			ENTRY 2			ENTRY 3			ENTRY 4		
					LINK NO.	FLOW	TIME	LINK NO.	FLOW	TIME	LINK NO.	FLOW	TIME	LINK NO.	FLOW	TIME
107)	=	32	4011	129	0	0	0	17	0	0	0	0	0	0	0	0
108)	=	32	4041	377	0	6013	30	5	6041	347	6	0	0	0	0	0
109)	=	32	4042	325	0	6013	166	5	6042	159	6	0	0	0	0	0
110)	=	32	4043	168	0	6014	90	3000	6043	78	3000	0	0	0	0	0
111)	=	32	4111	224	0	0	0	17	0	0	0	0	0	0	0	0
112)	=	32	4112	74	0	0	0	3000	0	0	0	0	0	0	0	0
113)	=	32	4121	435	0	6021	250	7	6042	191	7	0	0	0	0	0
114)	=	32	4122	120	0	6043	24	3046	6122	96	3046	0	0	0	0	0
115)	=	32	4131	220	0	0	0	17	0	0	0	0	0	0	0	0
116)	=	32	4132	34	0	0	0	3000	0	0	0	0	0	0	0	0
117)	=	32	4136	74	0	4122	74	3000	0	0	0	0	0	0	0	0
118)	=	32	4197	246	0	4121	207	17	4131	39	17	0	0	0	0	0
119)	=	32	4198	46	0	4122	46	3000	0	0	0	0	0	0	0	0
120)	=	32	4199	277	0	4111	49	17	4121	228	17	0	0	0	0	0
121)	=	32	5821	416	0	5921	404	14	0	0	0	0	0	0	0	0
122)	=	32	5822	66	0	5923	70	3013	0	0	0	0	0	0	0	0
123)	=	32	5841	441	0	4011	64	6	4041	377	6	0	0	0	0	0
124)	=	32	5842	64	0	4043	64	3020	0	0	0	0	0	0	0	0
125)	=	32	5843	400	0	4011	65	6	4042	335	6	0	0	0	0	0
126)	=	32	5844	104	0	4043	104	3020	0	0	0	0	0	0	0	0
127)	=	32	5851	10	0	0	0	15	0	0	0	0	0	0	0	0
128)	=	32	5852	10	0	0	0	6	0	0	0	0	0	0	0	0
129)	=	32	5853	10	0	0	0	15	0	0	0	0	0	0	0	0
130)	=	32	5854	646	0	0	0	17	0	0	0	0	0	0	0	0
131)	=	32	5855	126	0	0	0	3020	0	0	0	0	0	0	0	0
132)	=	32	5911	32	0	0	0	17	0	0	0	0	0	0	0	0
133)	=	32	5921	414	0	0	0	17	0	0	0	0	0	0	0	0
134)	=	32	5922	317	0	0	0	17	0	0	0	0	0	0	0	0
135)	=	32	5923	100	0	0	0	3000	0	0	0	0	0	0	0	0
136)	=	32	5941	295	0	5841	111	7	5854	184	7	0	0	0	0	0
137)	=	32	5942	90	0	5842	64	3000	5855	20	3000	0	0	0	0	0
138)	=	32	5943	899	0	5841	330	7	5843	400	7	5854	174	7	0	0
139)	=	32	5944	118	0	5844	104	3000	5855	14	3000	0	0	0	0	0
140)	=	32	5951	10	0	0	0	9	0	0	0	0	0	0	0	0
141)	=	32	5997	120	0	12593	120	3000	0	0	0	0	0	0	0	0
142)	=	32	5998	631	0	12591	631	17	0	0	0	0	0	0	0	0
143)	=	32	5999	48	0	5921	10	17	5943	38	17	0	0	0	0	0
144)	=	32	6011	163	0	4111	87	7	4131	76	7	0	0	0	0	0
145)	=	32	6012	24	0	4112	18	3046	0	0	0	0	0	0	0	0
146)	=	32	6013	196	0	4111	88	7	4131	105	7	0	0	0	0	0

147)	=	32	6014	90	0	4112	56	3046	4132	34	3000	0	0	0	0	0	0
148)	=	32	6021	250	0	5821	106	13	5854	144	11	0	0	0	0	0	0
149)	=	32	6023	478	0	5821	310	13	5854	144	11	0	0	0	0	0	0
150)	=	32	6024	66	0	5822	66	3000	0	0	0	0	0	0	0	0	0
151)	=	32	6041	347	0	0	0	17	0	0	0	0	0	0	0	0	0
152)	=	32	6042	350	0	0	0	17	0	0	0	0	0	0	0	0	0
153)	=	32	6043	102	0	0	0	3000	0	0	0	0	0	0	0	0	0
154)	=	32	6051	10	0	0	0	6	0	0	0	0	0	0	0	0	0
155)	=	32	6053	10	0	0	0	6	0	0	0	0	0	0	0	0	0
156)	=	32	6054	10	0	0	0	9	0	0	0	0	0	0	0	0	0
157)	=	32	6098	90	0	6012	24	3000	6024	66	3000	0	0	0	0	0	0
158)	=	32	6099	641	0	6011	163	17	6023	478	17	0	0	0	0	0	0
159)	=	32	6122	96	0	5855	92	3000	0	0	0	0	0	0	0	0	0
160)	=	32	12591	631	0	5911	19	8	5922	317	4	5941	295	4	0	0	0
161)	=	32	12592	10	0	0	0	7	0	0	0	0	0	0	0	0	0
162)	=	32	12593	120	0	5923	30	3000	5942	90	3000	0	0	0	0	0	0
163)	=	32	12597	10	0	0	0	8	0	0	0	0	0	0	0	0	0
164)	=	32	12598	10	0	0	0	6	0	0	0	0	0	0	0	0	0
165)	=	32	18341	874	0	5911	13	5	5943	861	5	0	0	0	0	0	0
166)	=	32	18342	118	0	5944	118	3000	0	0	0	0	0	0	0	0	0
167)	=	32	18398	118	0	18342	118	3000	0	0	0	0	0	0	0	0	0
168)	=	32	18399	874	0	18341	874	17	0	0	0	0	0	0	0	0	0
169)	=	32	18451	10	0	0	0	9	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

CARD TYPE	LINK NO.	SAT. FLOW	.LANE 1.		.LANE 2.		.LANE 3.	
			CAPAC VEH.	SAT. FLOW	CAPAC VEH.	SAT. FLOW	CAPAC VEH.	SAT. FLOW
170)	=	33	5854	1800	4	0	0	0
171)	=	33	5943	1815	4	0	0	0
172)	=	33	6042	1544	3	0	0	0

*****END OF SUBROUTINE TINPUT*****

96 SECOND CYCLE 96 STEPS

INITIAL SETTINGS

- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10	LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU	-----DELAY-----			----STOPS----		----QUEUE----		PERFORMANCE INDEX.	EXIT NODE	GREEN TIMES								
																		UNIFORM (U+R+O=MEAN Q)	RANDOM+ OVERSAT OF	COST DELAY (\$/H)	MEAN STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX.	AVERAGE EXCESS (PCU)			WEIGHTED SUM OF () VALUES (\$/H)	START END	START END						
1258	3	18	60	3																															
1259	3	18	88	6																															
1260	4	8	45	72	88																														
12183	2	30	19																																
12185	2	23	12																																
4011	129	715	21	17.0	3.8	0.0 + 0.1	(1.9)	0	(0.0)	0																									
4041	377	1881	20	5.9	1.2	0.0 + 0.1	(1.8)	1	(0.1)	0																									
4042	324	1815S	27	5.5	1.4	0.0 + 0.1	(1.7)	1	(0.1)	0																									
4043BL	168	4042L	27	7.8	1.4	0.0 + 0.1	(0.9)	1	(0.0)	0																									
4111	224	715S	45	17.0	5.0	0.0 + 0.3	(4.4)	0	(0.0)	0																									
4112BL	74	4111L	45	24.0	5.0	0.0 + 0.1	(1.5)	0	(0.0)	0																									
4121	434	1500S	39	7.0	2.0	0.0 + 0.2	(3.5)	2	(0.2)	1																									
4122BL	120	4121L	39	64.4	2.0	0.0 + 0.1	(1.0)	2	(0.0)	1																									
4131	220	715S	43	17.0	5.3	0.0 + 0.3	(4.6)	0	(0.0)	0																									
4132BL	34	4131L	43	24.0	5.3	0.0 + 0.1	(0.7)	0	(0.0)	0																									
4196BL	74	4197L	18	24.0	1.2	0.0 + 0.0	(0.4)	1	(0.0)	0																									
4197	246	1800S	18	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0																									
4198BL	46	4199L	18	24.0	1.2	0.0 + 0.0	(0.2)	1	(0.0)	0																									
4199	276	1800S	18	17.0	1.2	0.0 + 0.1	(1.3)	1	(0.1)	0																									
5821	416	3670S	34	14.0	16.5	1.7 + 0.2	(27.1)	34	(0.9)	5																									
5822BL	66	5821L	34	31.8	23.0	0.4 + 0.0	(6.0)	56	(0.5)	5																									
5841	441	1867S	68	6.0	14.0	0.8 + 0.9	(24.4)	79	(7.0)	13																									
5842BL	64	5841L	68	36.5	32.9	0.4 + 0.1	(8.3)	82	(0.7)	13																									
5843	399	1843S	69	6.0	21.2	1.5 + 0.9	(33.4)	66	(5.3)	10																									
5844BL	104	5843L	69	36.5	35.2	0.8 + 0.2	(14.4)	80	(1.0)	10																									
5851	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0																									
5852	10	10000	0	6.0	12.1	0.0 + 0.0	(0.5)	49	(0.0)	0																									
5853	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0																									
5854	646	4066Sf	83	17.0	44.9	6.1 + 2.0	(114.4)	102	(16.2)	22																									
5855BL	126	5854L	83	52.8	44.9	1.2 + 0.4	(22.3)	102	(1.6)	22																									
5911	32	1708	15	17.0	47.4	0.3 + 0.1	(6.0)	97	(0.8)	1																									
5921	414	4064	16	17.0	8.4	0.9 + 0.1	(13.7)	40	(4.1)	5																									
5922	317	1842S	36	17.0	11.2	0.8 + 0.2	(14.0)	48	(3.7)	6																									
5923BL	100	5922L	36	24.0	11.2	0.2 + 0.1	(4.4)	48	(0.6)	6																									
5941	295	1631S	65	7.0	10.1	0.1 + 0.7	(11.8)	42	(2.7)	5																									
5942BL	90	5941L	65	9.2	9.9	0.0 + 0.2	(3.5)	43	(0.5)	5																									
5943	898	2123Sf	61	7.0	6.9	1.0 + 0.7	(24.4)	64	(12.3)	21																									
5944BL	118	5943L	61	9.2	5.5	0.1 + 0.1	(2.5)	55	(0.8)	21																									
5951	10	10000	0	9.0	30.5	0.1 + 0.0	(1.2)	79	(0.0)	0																									
5997BL	120	5998L	42	24.0	1.7	0.0 + 0.1	(0.8)	2	(0.0)	0																									
5998	631	1800S	42	17.0	1.7	0.0 + 0.3	(4.3)	2	(0.3)	0																									
5999	48	1800	3	17.0	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0																									
6011	163	1800S	83</																																

18341	873	3746S	33	5.0	1.0	0.0	0.2	(3.4)	3	(0.1)	1	3.6	12183	38	19
18342BL	118	18341L	33	3.6	0.9	0.0	0.0	(0.4)	2	(0.0)	1	0.5	12183	38	19
18398BL	118	18399L	28	24.0	0.7	0.0	0.0	(0.3)	1	(0.0)	0	0.3			
18399	873	3600S	28	17.0	0.7	0.0	0.2	(2.4)	1	(0.2)	0	2.5			
18451	10	10000	1	9.0	44.2	0.1	0.0	(1.7)	95	(0.0)	0	1.7	12183	24	30

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	111.0	16.2	35.5	22.0	(815.7)	+ (104.3)	+ (0.0)	= 920.0	TOTALS
288.4	25.8	11.2	6.7	3.7	(147.4)	+ (10.8)	+ (0.0)	= 158.2	BUSES
1511.8	85.2	17.7	28.8	18.3	(668.2)	+ (93.6)	+ (0.0)	= 761.8	OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	102.9	+ 66.2	+ 50.9	= 220.1

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 73

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14
- (SECONDS)

1258	3	18	60	3
1259	3	18	88	6
1260	4	8	45	72
12183	2	30	19	
12185	2	23	12	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	111.0	16.2	35.5	22.0	(815.7)	+ (104.3)	+ (0.0)	= 920.0	TOTALS
288.4	25.8	11.2	6.7	3.7	(147.4)	+ (10.8)	+ (0.0)	= 158.2	BUSES
1511.8	85.2	17.7	28.8	18.3	(668.2)	+ (93.6)	+ (0.0)	= 761.8	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 378

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38
- (SECONDS)

1258	3	18	60	3
1259	3	18	88	6
1260	4	8	45	72
12183	2	30	19	
12185	2	23	12	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	111.0	16.2	35.5	22.0	(815.7)	+ (104.3)	+ (0.0)	= 920.0	TOTALS
288.4	25.8	11.2	6.7	3.7	(147.4)	+ (10.8)	+ (0.0)	= 158.2	BUSES
1511.8	85.2	17.7	28.8	18.3	(668.2)	+ (93.6)	+ (0.0)	= 761.8	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 374

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1
- (SECONDS)

1258	3	18	60	3
1259	3	18	88	6
1260	4	8	45	72
12183	2	30	19	
12185	2	23	12	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	111.0	16.2	35.5	22.0	(815.7)	+ (104.3)	+ (0.0)	= 920.0	TOTALS
288.4	25.8	11.2	6.7	3.7	(147.4)	+ (10.8)	+ (0.0)	= 158.2	BUSES
1511.8	85.2	17.7	28.8	18.3	(668.2)	+ (93.6)	+ (0.0)	= 761.8	OTHER

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 775

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14
- (SECONDS)

1258	3	18	60	3
1259	3	18	88	6
1260	4	8	45	72
12183	2	30	19	
12185	2	23	12	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	111.0	16.2	35.5	22.0	(815.7)	+ (104.3)	+ (0.0)	= 920.0	TOTALS
288.4	25.8	11.2	6.7	3.7	(147.4)	+ (10.8)	+ (0.0)	= 158.2	BUSES
1511.8	85.2	17.7	28.8	18.3	(668.2)	+ (93.6)	+ (0.0)	= 761.8	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38
 - (SECONDS)

1258 3 18 60 3
 1259 3 18 88 6
 1260 4 8 45 72 88
 12183 2 30 19
 12185 2 23 12

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1800.2	111.0	16.2	35.5	22.0	(815.7) + (104.3)	+ (0.0)	=	920.0	TOTALS
288.4	25.8	11.2	6.7	3.7	(147.4) + (10.8)	+ (0.0)	=	158.2	BUSES
1511.8	85.2	17.7	28.8	18.3	(668.2) + (93.6)	+ (0.0)	=	761.8	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 405

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1
 - (SECONDS)

1258 3 18 60 3
 1259 3 18 88 6
 1260 4 8 45 72 88
 12183 2 30 19
 12185 2 23 12

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1800.2	111.0	16.2	35.5	22.0	(815.7) + (104.3)	+ (0.0)	=	920.0	TOTALS
288.4	25.8	11.2	6.7	3.7	(147.4) + (10.8)	+ (0.0)	=	158.2	BUSES
1511.8	85.2	17.7	28.8	18.3	(668.2) + (93.6)	+ (0.0)	=	761.8	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 396

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1 -1
 - (SECONDS)

1258 3 18 60 3
 1259 3 18 88 6
 1260 4 8 45 72 88
 12183 2 30 19
 12185 2 23 12

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1800.2	111.0	16.2	35.5	22.0	(815.7) + (104.3)	+ (0.0)	=	920.0	TOTALS
288.4	25.8	11.2	6.7	3.7	(147.4) + (10.8)	+ (0.0)	=	158.2	BUSES
1511.8	85.2	17.7	28.8	18.3	(668.2) + (93.6)	+ (0.0)	=	761.8	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 870

96 SECOND CYCLE 96 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 14 38 -1 14 38 1 -1 1
 - (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1258	3	18	60	3							
1259	3	18	88	6							
1260	4	8	45	72	88						
12183	2	30	19								
12185	2	23	12								

LINK NUMBER	FLOW INFO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE DELAY (SEC)	TIMES PER PCU (SEC)	-----DELAY----- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT OF DELAY (\$/H)	-----STOPS----- MEAN COST OF STOPS /PCU (\$/H)	-----QUEUE----- MAX. AVERAGE EXCESS (PCU) (PCU)	PERFORMANCE INDEX, WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
4011	129	715	21	17.0	3.8	0.0 + 0.1 (1.9)	0 (0.0)	0 (0.0)	0	1.9		36	72
4041	377	1881	20	5.9	1.2	0.0 + 0.1 (1.8)	1 (0.1)	0	0	1.9		36	72
4042	324	1815S	27	5.5	1.4	0.0 + 0.1 (1.7)	1 (0.1)	0	0	1.9		36	72
4043BL	168	4042L	27	7.8	1.4	0.0 + 0.1 (0.9)	1 (0.0)	0	0	0.9		36	72
4111	224	715S	45	17.0	5.0	0.0 + 0.3 (4.4)	0 (0.0)	0	0	4.4		36	72
4112BL	74	4111L	45	24.0	5.0	0.0 + 0.1 (1.5)	0 (0.0)	0	0	1.5		36	72
4121	434	1500S	39	7.0	2.0	0.0 + 0.2 (3.5)	2 (0.2)	1	1	3.8		36	72
4122BL	120	4121L	39	64.4	2.0	0.0 + 0.1 (1.0)	2 (0.0)	1	1	1.0		36	72
4131	220	715S	43	17.0	5.3	0.0 + 0.3 (4.6)	0 (0.0)	0	0	4.6		36	72
4132BL	34	4131L	43	24.0	5.3	0.0 + 0.1 (0.7)	0 (0.0)	0	0	0.7		36	72
4196BL	74	4197L	18	24.0	1.2	0.0 + 0.0 (0.4)	1 (0.0)	0	0	0.4		36	72
4197	246	1800S	18	17.0	1.2	0.0 + 0.1 (1.2)	1 (0.1)	0	0	1.3		36	72
4198BL	46	4199L	18	24.0	1.2	0.0 + 0.0 (0.2)	1 (0.0)	0	0	0.2		36	72
4199	276	1800S	18	17.0	1.2	0.0 + 0.1 (1.3)	1 (0.1)	0	0	1.4		36	72
5821	416	3670S	34	14.0	16.5	1.7 + 0.2 (27.1)	34 (0.9)	5	5	28.0	1258	36	72
5822BL	66	5821L	34	31.8	23.0	0.4 + 0.0 (6.0)	56 (0.5)	5	5	6.4	1258	36	72
5841	441	1867S	68	6.0	14.0	0.8 + 0.9 (24.4)	79 (7.0)	13	13	31.4	1258	36	72
5842BL	64	5841L	68	36.5	32.9	0.4 + 0.1 (8.3)	82 (0.7)	13	13	9.0	1258	36	72
5843	399	1843S	69	6.0	21.2	1.5 + 0.9 (33.4)	66 (5.3)	10	10	38.8	1258	36	72
5844BL	104	5843L	69	36.5	35.2	0.8 + 0.2 (14.4)	80 (1.0)	10	10	15.5	1258	36	72
5851	10	10000	1	15.0	44.2	0.1 + 0.0 (1.7)	95 (0.0)	0	0	1.7	1258	12	18
5852	10	10000	0	6.0	12.1	0.0 + 0.0 (0.5)	49 (0.0)	0	0	0.5	1258	12	60
5853	10	10000	1	15.0	44.2	0.1 + 0.0 (1.7)	95 (0.0)	0	0	1.7	1258	12	18
5854	646	4066Sf	83	17.0	44.9	6.1 + 2.0 (114.4)	102 (16.2)	22	22	130.6	1258	78	3

5855BL	126	5854L	83	52.8	44.9	1.2 + 0.4	(22.3)	102	(1.6)	22	23.9	1258	78	3	
5911	32	1708	15	17.0	47.4	0.3 + 0.1	(6.0)	97	(0.8)	1	6.7	1259	12	23	
5921	414	4064	16	17.0	8.4	0.9 + 0.1	(13.7)	40	(4.1)	5	17.7	1259	29	88	
5922	317	1842S	36	17.0	11.2	0.8 + 0.2	(14.0)	48	(3.7)	6	17.7	1259	29	88	
5923BL	100	5922L	36	24.0	11.2	0.2 + 0.1	(4.4)	48	(0.6)	6	5.0	1259	29	88	
5941	295	1631S	65	7.0	10.1	0.1 + 0.7	(11.8)	42	(2.7)	5	14.4	1259	28	8	
5942BL	90	5941L	65	9.2	9.9	0.0 + 0.2	(3.5)	43	(0.5)	5	4.0	1259	28	8	
5943	898	2123Sf	61	7.0	61.9	1.0 + 0.7	(24.4)	64	(12.3)	21	+	36.6	1259	28	6
5944BL	118	5943L	61	9.2	5.5	0.1 + 0.1	(2.5)	55	(0.8)	21	+	3.4	1259	28	6
5951	10	10000	0	9.0	30.5	0.1 + 0.0	(1.2)	79	(0.0)	0	1.2	1259	94	18	
5997BL	120	5998L	42	24.0	1.7	0.0 + 0.1	(0.8)	2	(0.0)	0	0.8				
5998	631	1800S	42	17.0	1.7	0.0 + 0.3	(4.3)	2	(0.3)	0	4.5				
5999	48	1800	3	17.0	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2				
6011	163	1800S	83	7.0	83.5	1.9 + 1.9	(53.7)	135	(5.1)	7	58.8	1260	77	88	
6012BL	24	6011L	83	64.4	83.4	0.3 + 0.3	(7.9)	135	(0.4)	7	8.3	1260	77	88	
6013	196	1616S	43	7.0	25.4	1.1 + 0.3	(19.6)	74	(3.4)	6	23.0	1260	51	89	
6014BL	90	6013L	43	43.7	25.4	0.5 + 0.1	(9.0)	74	(0.8)	6	9.9	1260	51	89	
6021	249	1631S	88	11.8	74.2	2.8 + 2.4	(72.9)	129	(6.1)	12	79.0	1260	50	72	
6023	477	1771S	61	12.4	19.5	1.9 + 0.7	(36.6)	50	(4.6)	7	41.2	1260	25	72	

96 SECOND CYCLE 96 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY (SEC)	-----DELAY-----		-----STOPS-----		-----QUEUE-----		PERFORMANCE INDEX	EXIT NODE	GREEN TIMES	
						UNIFORM (U+R+O=MEAN Q)	RANDOM+ OVERSAT DELAY (\$/H)	MEAN COST OF STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX.	AVERAGE EXCESS (PCU)			WEIGHTED SUM OF () VALUES	START END
6024BL	66	6023L	61	16.4	18.3	0.2 + 0.1	(4.8)	40	(0.3)	7	5.1	1260	25	72	
6041	347	1881	84	17.0	61.8	3.5 + 2.5	(84.6)	118	(10.1)	11	94.7	1260	25	45	
6042	350	2395Sf	86	17.0	57.6	3.4 + 2.2	(79.5)	115	(9.9)	14	89.4	1260	25	45	
6043BL	102	6042L	86	24.0	57.6	1.0 + 0.7	(23.2)	115	(1.5)	14	24.6	1260	25	45	
6051	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.8	1260	2	8	
6053	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.8	1260	2	8	
6054	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.8	1260	2	8	
6098BL	90	6099L	20	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2				
6099	640	3600S	20	17.0	0.6	0.0 + 0.1	(1.6)	1	(0.1)	0	1.7				
6122BL	96	6021L	88	16.4	88.3	1.4 + 0.9	(33.4)	133	(1.6)	12	35.0	1260	50	72	
12591	631	3600S	26	4.1	1.2	0.1 + 0.1	(3.0)	5	(0.0)	1	3.0	12185	31	12	
12592	10	10000	1	7.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	12185	17	23	
12593BL	120	12591L	26	24.0	2.6	0.1 + 0.0	(1.2)	18	(0.3)	1	1.5	12185	31	12	
12597	10	10000	1	8.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1259	12	18	
12598	10	10000	1	6.0	33.1	0.1 + 0.0	(1.3)	82	(0.0)	0	1.3	1259	1	18	
18341	873	3746S	33	5.0	1.0	0.0 + 0.2	(3.4)	3	(0.1)	1	3.6	12183	38	19	
18342BL	118	18341L	33	3.6	0.9	0.0 + 0.0	(0.4)	2	(0.0)	1	0.5	12183	38	19	
18398BL	118	18399L	28	24.0	0.7	0.0 + 0.0	(0.3)	1	(0.0)	0	0.3				
18399	873	3600S	28	17.0	0.7	0.0 + 0.2	(2.4)	1	(0.2)	0	2.5				
18451	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	12183	24	30	

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	TOTALS
(PCU-RM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1800.2	111.0	16.2	35.5	22.0	(815.7)	+ (104.3)	+ (0.0)	= 920.0	TOTALS
288.4	25.8	11.2	6.7	3.7	(147.4)	+ (10.8)	+ (0.0)	= 158.2	BUSES
1511.8	85.2	17.7	28.8	18.3	(668.2)	+ (93.6)	+ (0.0)	= 761.8	OTHER

ROUTE

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	102.9	+	66.2	+	50.9	=	220.1

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 405

PROGRAM TRANSYT FINISHED

Option 1 IP 96 seconds cycle time

PRT File
IP : 1200-1300

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED IP OPT1 96S.DAT" at 14:48 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE = 96
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15869 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME    STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
          (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
          (SEC)  PER  MINS. (SEC)  (SEC)  0=NO  1=YES  CYCLE  %  %  1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
3) =  2    1258  1260  1259  12183  12185  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
          LIST OF NODES TO BE OPTIMISED
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) =  7    4042  4043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5) =  7    4111  4112  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6) =  7    4121  4122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7) =  7    4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8) =  7    4197  4196  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9) =  7    4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10) = 7    5821  5822  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11) = 7    5841  5842  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12) = 7    5843  5844  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13) = 7    5854  5855  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14) = 7    5922  5923  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15) = 7    5941  5942  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
16) = 7    5943  5944  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
17) = 7    5998  5997  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
18) = 7    6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
19) = 7    6013  6014  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
20) = 7    6021  6122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
21) = 7    6023  6024  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
22) = 7    6042  6043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
23) = 7    6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
24) = 7    12591 12593  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
25) = 7    18341 18342  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
26) = 7    18399 18398  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10   1258  0  7  6
28) = 10   1259  7  0  6
29) = 10   1260  7  6  6
30) = 10   12183  7  6
31) = 10   12185  7  6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11   1258  18  18  9
33) = 11   1259  11  9  6
34) = 11   1260  17  6  5  10
35) = 11   12183  8  5
36) = 11   12185  9  5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12   1258  1  16  54  1
38) = 12   1259  1  16  87  4
    
```


39) = 12 1260 1 0 36 64 80
 40) = 12 12183 1 28 17
 41) = 12 12185 1 21 10

LINK CARDS: GIVEWAY DATA														
CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS LINK1 NO.	LINKS LINK2 NO.	LINK1 GIVEWAY ONLY		GIVEWAY COEFFS.		LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
						%	X100	A1	A2					
42)	30	4011	4042	0	0	22	0	0	0	200	0	715	0	0
43)	30	4111	4131	0	0	22	0	0	0	200	0	715	0	0
44)	30	4112	0	0	0	0	0	0	0	200	0	715	0	0
45)	30	4121	4111	0	0	22	0	0	0	80	0	1500	0	0
46)	30	4122	0	0	0	0	0	0	0	80	0	1500	0	0
47)	30	4131	4121	0	0	22	0	0	0	200	0	715	0	0
48)	30	4132	0	0	0	0	0	0	0	200	0	715	0	0
49)	30	5941	5921	5922	0	50	50	0	0	77	0	1000	0	0
50)	30	5942	0	0	0	0	0	0	0	77	0	1000	0	0

LINK CARDS: FIXED DATA														
CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN			SECOND GREEN			LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
				START STAGE	LAG	END STAGE	LAG	START STAGE	LAG					
51)	31	4041	0	0	0	0	0	0	0	65	0	1881	0	0
52)	31	4042	0	0	0	0	0	0	0	65	0	1815	0	0
53)	31	4043	0	0	0	0	0	0	0	65	0	0	0	0
54)	31	4196	0	0	0	0	0	0	0	200	0	0	0	0
55)	31	4197	0	0	0	0	0	0	0	200	0	1800	0	0
56)	31	4198	0	0	0	0	0	0	0	200	0	0	0	0
57)	31	4199	0	0	0	0	0	0	0	200	0	1800	0	0
58)	31	5821	1258	1	18	2	12	0	0	54	0	3670	0	0
59)	31	5822	0	0	0	0	0	0	0	54	0	0	0	0
60)	31	5841	1258	1	18	2	13	0	0	64	0	1867	0	0
61)	31	5842	0	0	0	0	0	0	0	64	0	0	0	0
62)	31	5843	1258	1	18	2	13	0	0	64	0	1843	0	0
63)	31	5844	0	0	0	0	0	0	0	64	0	0	0	0
64)	31	5851	1258	3	9	1	0	0	0	18	0	10000	0	0
65)	31	5852	1258	3	9	2	0	0	0	7	0	10000	0	0
66)	31	5853	1258	3	9	1	0	0	0	18	0	10000	0	0
67)	31	5854	1258	2	18	3	0	0	0	200	0	3412	0	0
68)	31	5855	0	0	0	0	0	0	0	200	0	0	0	0
69)	31	5911	1259	3	6	1	5	0	0	200	0	1708	0	0
70)	31	5921	1259	1	11	2	0	0	0	200	0	4064	0	0
71)	31	5922	1259	1	11	2	0	0	0	200	0	1842	0	0
72)	31	5923	0	0	0	0	0	0	0	200	0	0	0	0
73)	31	5941	1259	1	10	3	2	0	0	77	0	1631	0	0
74)	31	5942	0	0	0	0	0	0	0	77	0	0	0	0
75)	31	5943	1259	1	10	3	0	0	0	77	0	1931	0	0
76)	31	5944	0	0	0	0	0	0	0	77	0	0	0	0
77)	31	5951	1259	2	6	1	0	0	0	9	0	10000	0	0
78)	31	5997	0	0	0	0	0	0	0	200	0	0	0	0
79)	31	5998	0	0	0	0	0	0	0	200	0	1800	0	0
80)	31	5999	0	0	0	0	0	0	0	200	0	1800	0	0
81)	31	6011	1260	3	5	4	0	0	0	80	0	1800	0	0
82)	31	6012	0	0	0	0	0	0	0	80	0	0	0	0
83)	31	6013	1260	2	6	4	1	0	0	80	0	1616	0	0
84)	31	6014	0	0	0	0	0	0	0	80	0	0	0	0
85)	31	6021	1260	2	5	3	0	0	0	137	0	1631	0	0
86)	31	6023	1260	1	17	3	0	0	0	137	0	1771	0	0
87)	31	6024	0	0	0	0	0	0	0	137	0	0	0	0
88)	31	6041	1260	1	17	2	0	0	0	200	0	1881	0	0
89)	31	6042	1260	1	17	2	0	0	0	200	0	1881	0	0
90)	31	6043	0	0	0	0	0	0	0	200	0	0	0	0
91)	31	6051	1260	4	10	1	0	0	0	6	0	10000	0	0
92)	31	6053	1260	4	10	1	0	0	0	6	0	10000	0	0
93)	31	6054	1260	4	10	1	0	0	0	7	0	10000	0	0
94)	31	6098	0	0	0	0	0	0	0	200	0	0	0	0
95)	31	6099	0	0	0	0	0	0	0	200	0	3600	0	0
96)	31	6122	0	0	0	0	0	0	0	137	0	0	0	0
97)	31	12591	12185	1	9	2	0	0	0	25	0	3600	0	0
98)	31	12592	12185	2	5	1	0	0	0	8	0	10000	0	0
99)	31	12593	0	0	0	0	0	0	0	25	0	0	0	0
100)	31	12597	1259	3	6	1	0	0	0	9	0	10000	0	0
101)	31	12598	1259	2	9	1	0	0	0	8	0	10000	0	0
102)	31	18341	12183	1	8	2	0	0	0	30	0	3746	0	0
103)	31	18342	0	0	0	0	0	0	0	30	0	0	0	0
104)	31	18398	0	0	0	0	0	0	0	200	0	0	0	0
105)	31	18399	0	0	0	0	0	0	0	200	0	3600	0	0
106)	31	18451	12183	2	5	1	0	0	0	8	0	10000	0	0

LINK CARDS: FLOW DATA													
CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1		ENTRY 2		ENTRY 3		ENTRY 4		CRUISE TIME
					LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW	
107)	32	4011	118	0	0	0	17	0	0	0	0	0	0
108)	32	4041	348	0	6013	33	5	6041	315	6	0	0	0
109)	32	4042	380	0	6013	232	5	6042	148	6	0	0	0
110)	32	4043	158	0	6014	94	3000	6043	64	3000	0	0	0
111)	32	4111	287	0	0	0	17	0	0	0	0	0	0
112)	32	4112	78	0	0	0	3000	0	0	0	0	0	0
113)	32	4121	417	0	6021	242	7	6042	172	7	0	0	0
114)	32	4122	102	0	6043	18	3038	6122	84	3038	0	0	0
115)	32	4131	217	0	0	0	17	0	0	0	0	0	0
116)	32	4132	36	0	0	0	3000	0	0	0	0	0	0
117)	32	4136	66	0	4122	66	3000	0	0	0	0	0	0
118)	32	4197	228	0	4121	203	17	4131	25	17	0	0	0
119)	32	4198	36	0	4122	36	3000	0	0	0	0	0	0
120)	32	4199	257	0	4111	43	17	4121	214	17	0	0	0
121)	32	5821	482	0	5911	10	14	5921	461	14	0	0	0
122)	32	5822	52	0	5923	52	3015	0	0	0	0	0	0
123)	32	5841	417	0	4011	69	6	4041	348	6	0	0	0
124)	32	5842	76	0	4043	76	3000	0	0	0	0	0	0
125)	32	5843	412	0	4011	49	6	4042	363	6	0	0	0
126)	32	5844	80	0	4043	80	3000	0	0	0	0	0	0
127)	32	5851	10	0	0	0	15	0	0	0	0	0	0
128)	32	5852	10	0	0	0	6	0	0	0	0	0	0
129)	32	5853	10	0	0	0	15	0	0	0	0	0	0
130)	32	5854	673	0	0	0	17	0	0	0	0	0	0
131)	32	5855	122	0	0	0	3020	0	0	0	0	0	0
132)	32	5911	34	0	0	0	17	0	0	0	0	0	0
133)	32	5921	471	0	0	0	17	0	0	0	0	0	0
134)	32	5922	326	0	0	0	17	0	0	0	0	0	0
135)	32	5923	84	0	0	0	3000	0	0	0	0	0	0
136)	32	5941	316	0	5841	146	7	5854	178	7	0	0	0
137)	32	5942	96	0	5842	76	3000	5855	20	3000	0	0	0
138)	32	5943	854	0	5841	271	7	5843	412	7	5854	179	7
139)	32	5944	100	0	5844	80	3000	5855	20	3000	0	0	0
140)	32	5951	10	0	0	0	9	0	0	0	0	0	0
141)	32	5997	128	0	12593	128	3000	0	0	0	0	0	0
142)	32	5998	654	0	12591	654	17	0	0	0	0	0	0
143)	32	5999	31	0	5921	10	17	5943	31	17	0	0	0
144)	32	6011	166	0	4111	122	7	4131	49	7	0	0	0
145)	32	6012	24	0	4112	24	3038	0	0	0	0	0	0
146)	32	6013	265	0	4111	122	7	4131	143	7	0	0	0

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38
 - (SECONDS)

1258 3 16 54 1
 1259 3 16 87 4
 1260 4 0 36 64 80
 12183 2 28 17
 12185 2 21 10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1781.6	108.9	16.4	36.2	21.7	(821.2) + (107.8)	+ (0.0)	=	929.1	TOTALS
243.5	20.7	11.8	5.6	3.3	(126.1) + (9.6)	+ (0.0)	=	135.7	BUSES
1538.1	88.2	17.4	30.6	18.4	(695.2) + (98.2)	+ (0.0)	=	793.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 404

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1
 - (SECONDS)

1258 3 16 54 1
 1259 3 16 87 4
 1260 4 0 36 64 80
 12183 2 28 17
 12185 2 21 10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1781.6	108.9	16.4	36.2	21.7	(821.2) + (107.8)	+ (0.0)	=	929.1	TOTALS
243.5	20.7	11.8	5.6	3.3	(126.1) + (9.6)	+ (0.0)	=	135.7	BUSES
1538.1	88.2	17.4	30.6	18.4	(695.2) + (98.2)	+ (0.0)	=	793.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 404

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1 -1
 - (SECONDS)

1258 3 16 54 1
 1259 3 16 87 4
 1260 4 0 36 64 80
 12183 2 28 17
 12185 2 21 10

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1781.6	108.9	16.4	36.2	21.7	(821.2) + (107.8)	+ (0.0)	=	929.1	TOTALS
243.5	20.7	11.8	5.6	3.3	(126.1) + (9.6)	+ (0.0)	=	135.7	BUSES
1538.1	88.2	17.4	30.6	18.4	(695.2) + (98.2)	+ (0.0)	=	793.4	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 873

96 SECOND CYCLE 96 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 14 38 -1 14 38 1 -1 1
 - (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1258	3	16	54	1							
1259	3	16	87	4							
1260	4	0	36	64	80						
12183	2	28	17								
12185	2	21	10								

LINK NUMBER	FLOW INFO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE DELAY (SEC)	TIMES PER PCU (SEC)	-----DELAY----- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT OF DELAY (\$/H)	COST OF DELAY (\$/H)	-----STOPS----- MEAN STOPS /PCU	COST OF STOPS (\$/H)	-----QUEUE----- MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX, WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
4011	118	715	20	17.0	3.8	0.0 + 0.1	(1.7)	0	(0.0)	0	1.7				
4041	348	1881	18	5.9	1.2	0.0 + 0.1	(1.6)	1	(0.1)	0	1.7				
4042	380	1815S	30	5.4	1.4	0.0 + 0.1	(2.1)	1	(0.2)	0	2.3				
4043BL	158	4042L	30	7.8	1.4	0.0 + 0.1	(0.9)	1	(0.0)	0	0.9				
4111	287	715S	55	17.0	6.1	0.0 + 0.5	(6.9)	0	(0.0)	1	6.9				
4112BL	78	4111L	55	24.0	6.1	0.0 + 0.1	(1.9)	0	(0.0)	1	1.9				
4121	417	1500S	37	7.0	2.0	0.0 + 0.2	(3.3)	0	(0.0)	0	3.3				
4122BL	102	4121L	37	56.4	2.0	0.0 + 0.1	(0.8)	0	(0.0)	0	0.8				
4131	217	715S	42	17.0	5.2	0.0 + 0.3	(4.4)	0	(0.0)	0	4.4				
4132BL	36	4131L	42	24.0	5.2	0.0 + 0.1	(0.7)	0	(0.0)	0	0.7				
4196BL	66	4197L	16	24.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0	0.3				
4197	228	1800S	16	17.0	1.2	0.0 + 0.1	(1.1)	1	(0.1)	0	1.1				
4198BL	36	4199L	16	24.0	1.2	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2				
4199	257	1800S	16	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0	1.3				
5821	482	3670S	42	14.0	20.2	2.4 + 0.3	(38.4)	44	(0.5)	7	38.9	1258	34	66	
5822BL	52	5821L	42	30.2	27.2	0.4 + 0.0	(5.6)	61	(0.0)	7	5.6	1258	34	66	
5841	417	1867S	75	6.0	22.2	1.4 + 1.2	(36.6)	102	(8.5)	13	45.1	1258	34	67	
5842BL	76	5841L	75	7.7	28.3	0.4 + 0.2	(8.5)	78	(0.7)	13	9.2	1258	34	67	
5843	412	1843S	75	6.0	27.2	1.9 + 1.3	(44.3)	72	(6.0)	10	50.2	1258	34	67	
5844BL	80	5843L	75	7.7	29.0	0.4 + 0.2	(9.1)	76	(0.8)	10	9.9	1258	34	67	
5851	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1258	10	16	
5852	10	10000	0	6.0	14.2	0.0 + 0.0	(0.6)	53	(0.0)	0	0.6	1258	10	54	
5853	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1258	10	16	
5854	673	3412Sf	86	17.0	46.6	6.2 + 2.5	(123.7)	106	(17.5)	23	141.2	1258	72	1	

5855BL	122	5854L	86	52.8	46.6	1.1 + 0.5	(22.4)	106	(1.6)	23	24.0	1258	72	1
5911	34	1708	16	17.0	47.6	0.4 + 0.1	(6.4)	97	(0.8)	1	7.2	1259	10	21
5921	471	4064	18	17.0	8.1	0.9 + 0.1	(15.0)	40	(4.6)	5	19.6	1259	27	87
5922	326	1842S	35	17.0	10.6	0.7 + 0.2	(13.6)	46	(3.7)	5	17.3	1259	27	87
5923BL	84	5922L	35	24.0	10.6	0.2 + 0.1	(3.5)	46	(0.5)	5	4.0	1259	27	87
5941	316	1631S	72	7.0	13.8	0.2 + 1.0	(17.3)	56	(3.8)	7	21.0	1259	26	6
5942BL	96	5941L	72	9.2	14.4	0.1 + 0.3	(5.5)	70	(0.8)	7	6.3	1259	26	6
5943	854	2123Sf	58	7.0	5.7	0.7 + 0.6	(19.2)	59	(10.8)	20	29.9	1259	26	4
5944BL	100	5943L	58	9.2	5.5	0.1 + 0.1	(2.2)	58	(0.7)	20	2.9	1259	26	4
5951	10	10000	0	9.0	31.3	0.1 + 0.0	(1.2)	80	(0.0)	0	1.2	1259	93	16
5997BL	128	5998L	43	24.0	1.8	0.0 + 0.1	(0.9)	2	(0.0)	0	0.9			
5998	654	1800S	43	17.0	1.8	0.0 + 0.3	(4.6)	2	(0.3)	0	4.9			
5999	31	1800	2	17.0	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1			
6011	166	1800S	84	7.0	86.3	1.9 + 2.1	(56.5)	137	(5.3)	7	61.9	1260	69	80
6012BL	24	6011L	84	56.4	86.5	0.3 + 0.3	(8.2)	137	(0.4)	7	8.6	1260	69	80
6013	265	1616S	53	7.0	26.7	1.5 + 0.4	(27.9)	78	(4.8)	8	32.8	1260	42	81
6014BL	94	6013L	53	37.7	26.7	0.5 + 0.1	(9.9)	78	(0.9)	8	10.8	1260	42	81
6021	241	1631S	80	11.7	58.8	2.5 + 1.4	(55.9)	112	(5.2)	10	61.1	1260	41	64
6023	569	1771S	71	12.4	21.6	2.3 + 1.1	(48.5)	77	(8.3)	10	56.8	1260	17	64

96 SECOND CYCLE 96 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX	EXIT NODE	GREEN TIMES	
						UNIFORM	RANDOM+ OVERSAT	COST OF DELAY	MEAN STOPS /PCU	COST OF STOPS	MEAN MAX.			AVERAGE EXCESS	WEIGHTED SUM OF () VALUES	1ST END	2ND END
(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O=MEAN Q)	(\$/H)	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	(\$/H)		(SECONDS)	(SECONDS)
6024BL	56	6023L	71	16.4	22.5	0.2 + 0.1	(5.0)	75	(0.5)	10	5.5	1260	17	64	
6041	315	1881	80	17.0	58.4	3.2 + 1.9	(72.6)	114	(8.9)	10	81.4	1260	17	36	
6042	320	2421Sf	80	17.0	51.4	3.1 + 1.5	(64.9)	107	(8.4)	12	73.4	1260	17	36	
6043BL	82	6042L	80	24.0	51.4	0.8 + 0.4	(16.6)	107	(1.1)	12	17.7	1260	17	36	
6051	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1260	90	0	
6053	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1260	90	0	
6054	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1260	90	0	
6098BL	80	6099L	23	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2				
6099	735	3600S	23	17.0	0.6	0.0 + 0.1	(1.9)	1	(0.1)	0	2.0				
6122BL	84	6021L	80	16.4	68.4	1.1 + 0.5	(22.6)	121	(1.3)	10	23.9	1260	41	64	
12591	654	3600S	27	4.1	1.1	0.0 + 0.2	(2.9)	4	(0.0)	1	2.9	12185	30	10	
12592	10	10000	1	7.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	12185	15	21	
12593BL	128	12591L	27	3.0	0.9	0.0 + 0.0	(0.4)	2	(0.0)	1	0.5	12185	30	10	
12597	10	10000	1	8.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1259	10	16	
12598	10	10000	1	6.0	33.9	0.1 + 0.0	(1.3)	83	(0.0)	0	1.3	1259	0	16	
18341	835	3746S	31	5.0	1.0	0.0 + 0.2	(3.3)	3	(0.1)	1	3.4	12183	36	17	
18342BL	100	18341L	31	3.6	1.0	0.0 + 0.0	(0.4)	3	(0.0)	1	0.4	12183	36	17	
18398BL	100	18399L	26	24.0	0.7	0.0 + 0.0	(0.3)	1	(0.0)	0	0.3				
18399	835	3600S	26	17.0	0.7	0.0 + 0.2	(2.2)	1	(0.1)	0	2.4				
18451	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	12183	22	28	

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	TOTALS
(PCU-RM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.6	108.9	16.4	36.2	21.7	(821.2)	+	(107.8)	+	(0.0) = 929.1
243.5	20.7	11.8	5.6	3.3	(126.1)	+	(9.6)	+	(0.0) = 135.7
1538.1	88.2	17.4	30.6	18.4	(695.2)	+	(98.2)	+	(0.0) = 793.4

ROUTE

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	101.9	+	66.6	+	51.1	=	219.6

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 405

PROGRAM TRANSYT FINISHED

Option 1 PM 96 seconds cycle time

PRT File
PM : 1730-1830

1 T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED PM OPT1 96S.DAT" at 14:31 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 64
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE = 96
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
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CORE REQUESTED = 16040 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS  CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
          (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
          96    96    60    2      3      0  1    100  100  0  2    0    0    1420  260
CARD  CARD
NO.   TYPE
3) = 2  1258  1260  1259  12183  12185  0  0  0  0  0  0  0  0  0  0  0  0
    
```

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LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET.....  SECOND SET.....  THIRD SET.....
NO.   TYPE
4) = 7  4042  4043  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5) = 7  4111  4112  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6) = 7  4121  4122  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7) = 7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8) = 7  4197  4196  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9) = 7  4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10) = 7  5821  5822  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11) = 7  5841  5842  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12) = 7  5843  5844  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13) = 7  5854  5855  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14) = 7  5922  5923  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15) = 7  5941  5942  0  0  0  0  0  0  0  0  0  0  0  0  0  0
16) = 7  5943  5944  0  0  0  0  0  0  0  0  0  0  0  0  0  0
17) = 7  5998  5997  0  0  0  0  0  0  0  0  0  0  0  0  0  0
18) = 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0
19) = 7  6013  6014  0  0  0  0  0  0  0  0  0  0  0  0  0  0
20) = 7  6021  6122  0  0  0  0  0  0  0  0  0  0  0  0  0  0
21) = 7  6023  6024  0  0  0  0  0  0  0  0  0  0  0  0  0  0
22) = 7  6042  6043  0  0  0  0  0  0  0  0  0  0  0  0  0  0
23) = 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0  0
24) = 7  12591  12593  0  0  0  0  0  0  0  0  0  0  0  0  0  0
25) = 7  18341  18342  0  0  0  0  0  0  0  0  0  0  0  0  0  0
26) = 7  18399  18398  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0  7  6
28) = 10  1259  7  0  6
29) = 10  1260  7  6  6
30) = 10  12183  7  6  6
31) = 10  12185  7  6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  18  18  9
33) = 11  1259  11  9  6
34) = 11  1260  17  6  5  10
35) = 11  12183  8  5
36) = 11  12185  9  5
    
```

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NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Dbl  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1  81  28  66
38) = 12  1259  1  80  52  68
    
```

39) = 12 1260 1 70 10 38 54
 40) = 12 12183 1 92 81
 41) = 12 12185 1 85 74

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS LINK1	LINKS LINK2	LINK1 GIVEWAY COEFFS.		LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
						ONLY % FLOW	A1 X100					
42)	=	30	4011	4042	0	0	22	0	0	200	0	715
43)	=	30	4111	4131	0	0	22	0	0	200	0	715
44)	=	30	4112	0	0	0	0	0	0	200	0	715
45)	=	30	4121	4111	0	0	22	0	0	80	0	1500
46)	=	30	4122	0	0	0	0	0	0	80	0	1500
47)	=	30	4131	4121	0	0	22	0	0	200	0	715
48)	=	30	4132	0	0	0	0	0	0	200	0	715
49)	=	30	5941	5921	5922	0	50	50	0	77	0	1000
50)	=	30	5942	0	0	0	0	0	0	77	0	1000

LINK CARDS: FIXED DATA GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
				START STAGE	END LAG	START STAGE	END LAG					
51)	=	31	4041	0	0	0	0	65	0	1881	0	0
52)	=	31	4042	0	0	0	0	65	0	1815	0	0
53)	=	31	4043	0	0	0	0	65	0	1800	0	0
54)	=	31	4098	0	0	0	0	200	0	1800	0	0
55)	=	31	4196	0	0	0	0	200	0	1800	0	0
56)	=	31	4197	0	0	0	0	200	0	1800	0	0
57)	=	31	4198	0	0	0	0	200	0	1800	0	0
58)	=	31	4199	0	0	0	0	200	0	1800	0	0
59)	=	31	5821	1258	1	18	2	54	0	3670	0	0
60)	=	31	5822	0	0	0	0	54	0	1867	0	0
61)	=	31	5841	1258	1	18	2	64	0	1867	0	0
62)	=	31	5842	0	0	0	0	64	0	1843	0	0
63)	=	31	5843	1258	1	18	2	64	0	1843	0	0
64)	=	31	5844	0	0	0	0	64	0	10000	0	0
65)	=	31	5851	1258	3	9	1	18	0	10000	0	0
66)	=	31	5852	1258	3	9	1	7	0	10000	0	0
67)	=	31	5853	1258	3	9	1	18	0	10000	0	0
68)	=	31	5854	1258	2	18	3	200	0	3412	0	0
69)	=	31	5855	0	0	0	0	200	0	1708	0	0
70)	=	31	5911	1259	3	6	1	200	0	4064	0	0
71)	=	31	5921	1259	1	11	2	200	0	1842	0	0
72)	=	31	5922	1259	1	11	2	200	0	1842	0	0
73)	=	31	5923	0	0	0	0	200	0	1631	0	0
74)	=	31	5941	1259	1	10	3	77	0	1931	0	0
75)	=	31	5942	0	0	0	0	77	0	10000	0	0
76)	=	31	5943	1259	1	10	3	77	0	10000	0	0
77)	=	31	5944	0	0	0	0	77	0	10000	0	0
78)	=	31	5951	1259	2	6	1	9	0	3600	0	0
79)	=	31	5997	0	0	0	0	200	0	1800	0	0
80)	=	31	5998	0	0	0	0	200	0	1800	0	0
81)	=	31	5999	0	0	0	0	200	0	1800	0	0
82)	=	31	6011	1260	3	5	4	80	0	1616	0	0
83)	=	31	6012	0	0	0	0	80	0	1771	0	0
84)	=	31	6013	1260	2	6	4	137	0	1771	0	0
85)	=	31	6014	0	0	0	0	137	0	1881	0	0
86)	=	31	6021	1260	2	5	3	200	0	10000	0	0
87)	=	31	6023	1260	1	17	3	200	0	10000	0	0
88)	=	31	6024	0	0	0	0	200	0	10000	0	0
89)	=	31	6041	1260	1	17	2	200	0	10000	0	0
90)	=	31	6042	1260	1	17	2	200	0	10000	0	0
91)	=	31	6043	0	0	0	0	200	0	3600	0	0
92)	=	31	6051	1260	4	10	1	6	0	3600	0	0
93)	=	31	6053	1260	4	10	1	6	0	3600	0	0
94)	=	31	6054	1260	4	10	1	7	0	3600	0	0
95)	=	31	6098	0	0	0	0	200	0	10000	0	0
96)	=	31	6099	0	0	0	0	200	0	10000	0	0
97)	=	31	6122	0	0	0	0	137	0	10000	0	0
98)	=	31	12591	12185	1	9	2	25	0	10000	0	0
99)	=	31	12592	12185	2	5	1	8	0	10000	0	0
100)	=	31	12593	0	0	0	0	25	0	10000	0	0
101)	=	31	12597	1259	3	6	1	9	0	10000	0	0
102)	=	31	12598	1259	2	9	1	8	0	10000	0	0
103)	=	31	18341	12183	1	8	2	30	0	3746	0	0
104)	=	31	18342	0	0	0	0	30	0	10000	0	0
105)	=	31	18399	0	0	0	0	200	0	10000	0	0
106)	=	31	18399	0	0	0	0	200	0	3600	0	0
107)	=	31	18451	12183	2	5	1	8	0	10000	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1			ENTRY 2			ENTRY 3			ENTRY 4		
					LINK NO.	FLOW	CRUISE TIME	LINK NO.	FLOW	CRUISE TIME	LINK NO.	FLOW	CRUISE TIME	LINK NO.	FLOW	CRUISE TIME
108)	=	32	4011	84	0	0	17	0	0	0	0	0	0	0	0	0
109)	=	32	4041	359	0	6013	109	5	6041	250	6	0	0	0	0	0
110)	=	32	4042	401	0	6013	128	5	6041	70	6	6042	203	6	0	0
111)	=	32	4043	154	0	6014	94	3000	6043	60	3000	0	0	0	0	0
112)	=	32	4098	10	0	4042	10	17	0	0	0	0	0	0	0	0
113)	=	32	4111	256	0	0	0	17	0	0	0	0	0	0	0	0
114)	=	32	4112	68	0	0	0	3000	0	0	0	0	0	0	0	0
115)	=	32	4121	462	0	6021	262	7	6042	200	7	0	0	0	0	0
116)	=	32	4122	108	0	6043	18	3045	6122	90	3045	0	0	0	0	0
117)	=	32	4131	188	0	0	0	17	0	0	0	0	0	0	0	0
118)	=	32	4132	36	0	0	0	3000	0	0	0	0	0	0	0	0
119)	=	32	4196	68	0	4122	68	3000	0	0	0	0	0	0	0	0
120)	=	32	4197	256	0	4121	235	17	4131	21	17	0	0	0	0	0
121)	=	32	4198	40	0	4122	40	3000	0	0	0	0	0	0	0	0
122)	=	32	4199	270	0	4111	35	17	4121	235	17	0	0	0	0	0
123)	=	32	5821	604	0	5921	597	14	0	0	0	0	0	0	0	0
124)	=	32	5822	74	0	5923	62	3013	0	0	0	0	0	0	0	0
125)	=	32	5841	401	0	4011	42	6	4041	359	6	0	0	0	0	0
126)	=	32	5842	92	0	4043	92	3000	0	0	0	0	0	0	0	0
127)	=	32	5843	433	0	4011	42	6	4042	391	6	0	0	0	0	0
128)	=	32	5844	60	0	4043	60	3000	0	0	0	0	0	0	0	0
129)	=	32	5851	10	0	0	0	15	0	0	0	0	0	0	0	0
130)	=	32	5852	10	0	0	0	6	0	0	0	0	0	0	0	0
131)	=	32	5853	10	0	0	0	15	0	0	0	0	0	0	0	0
132)	=	32	5854	602	0	0	0	17	0	0	0	0	0	0	0	0
133)	=	32	5855	124	0	0	0	3020	0	0	0	0	0	0	0	0
134)	=	32	5911	28	0	0	0	17	0	0	0	0	0	0	0	0
135)	=	32	5921	607	0	0	0	17	0	0	0	0	0	0	0	0
136)	=	32	5922	374	0	0	0	17	0	0	0	0	0	0	0	0
137)	=	32	5923	92	0	0	0	3000	0	0	0	0	0	0	0	0
138)	=	32	5941	295	0	5841	144	7	5854	151	7	0	0	0	0	0
139)	=	32	5942	92	0	5842	92	3000	0	0	0	0	0	0	0	0
140)	=	32	5943	841	0	5841	257	7	5843	433	7	5854	151	7	0	0
141)	=	32	5944	90	0	5844	60	3000	5855	30	3000	0	0	0	0	0
142)	=	32	5951	10	0	0	0	9	0	0	0	0	0	0	0	0
143)	=	32	5997	122	0	12593	122	3000	0	0	0	0	0	0	0	0
144)	=	32	5998	685	0	12591	685	17	0	0	0	0	0	0	0	0
145)	=	32	5999	34	0	5921	10	17	5943	24	17	0	0	0	0	0
146)	=	32	6011	168	0	4111	84	7	4131	84	7	0	0	0	0	0

12593BL	122	12591L	28	3.0	0.9	0.0	0.0	(0.4)	1	(0.0)	1	0.4	12185	94	74
12597	10	10000	1	8.0	44.2	0.1	0.0	(1.7)	95	(0.0)	0	1.7	1259	74	80
12598	10	10000	0	6.0	31.3	0.1	0.0	(1.2)	80	(0.0)	0	1.2	1259	61	80
18341	829	3746S	30	5.0	1.0	0.0	0.0	(3.2)	3	(0.1)	1	3.3	12183	4	81
18342BL	90	18341L	30	3.6	1.1	0.0	0.0	(0.4)	4	(0.0)	1	0.4	12183	4	81
18398BL	90	18399L	26	24.0	0.7	0.0	0.0	(0.2)	1	(0.0)	0	0.2			
18399	829	3600S	26	17.0	0.7	0.0	0.0	(2.2)	1	(0.1)	0	2.3			
18451	10	10000	1	9.0	44.2	0.1	0.0	(1.7)	95	(0.0)	0	1.7	12183	86	92

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	111.1	16.6	36.3	21.5	(820.4)	(109.7)	(0.0)	=	930.1
243.5	21.2	11.5	5.7	3.2	(126.3)	(9.6)	(0.0)	=	135.9
1602.2	90.0	17.8	30.6	18.3	(694.1)	(100.2)	(0.0)	=	794.2

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	105.8	66.6	52.0	224.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 74

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14
- (SECONDS)

1258	3	81	28	66
1259	3	80	52	68
1260	4	70	10	38
12183	2	92	81	
12185	2	85	74	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	111.1	16.6	36.3	21.5	(820.4)	(109.7)	(0.0)	=	930.1
243.5	21.2	11.5	5.7	3.2	(126.3)	(9.6)	(0.0)	=	135.9
1602.2	90.0	17.8	30.6	18.3	(694.1)	(100.2)	(0.0)	=	794.2

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 379

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38
- (SECONDS)

1258	3	81	28	66
1259	3	80	52	68
1260	4	70	10	38
12183	2	92	81	
12185	2	85	74	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	111.1	16.6	36.3	21.5	(820.4)	(109.7)	(0.0)	=	930.1
243.5	21.2	11.5	5.7	3.2	(126.3)	(9.6)	(0.0)	=	135.9
1602.2	90.0	17.8	30.6	18.3	(694.1)	(100.2)	(0.0)	=	794.2

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 369

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1
- (SECONDS)

1258	3	81	28	66
1259	3	80	52	68
1260	4	70	10	38
12183	2	92	81	
12185	2	85	74	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	111.1	16.6	36.3	21.5	(820.4)	(109.7)	(0.0)	=	930.1
243.5	21.2	11.5	5.7	3.2	(126.3)	(9.6)	(0.0)	=	135.9
1602.2	90.0	17.8	30.6	18.3	(694.1)	(100.2)	(0.0)	=	794.2

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 742

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14
- (SECONDS)

1258	3	81	28	66
1259	3	80	52	68
1260	4	70	10	38
12183	2	92	81	
12185	2	85	74	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1845.8	111.1	16.6	36.3	21.5	(820.4)	(109.7)	(0.0)	=	930.1

5851	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1258	75	81
5852	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1258	75	81
5853	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1258	75	81
5854	602	4097sf	81	17.0	44.7	5.8 + 1.7	(106.2)	101	(15.0)	20		121.2	1258	46	66
5855BL	124	5854L	81	52.8	44.7	1.2 + 0.4	(21.9)	101	(1.6)	20		23.4	1258	46	66
5911	28	1708	13	17.0	47.1	0.3 + 0.1	(5.2)	97	(0.7)	1		5.9	1259	74	85
5921	607	4064	25	17.0	9.8	1.5 + 0.2	(23.5)	45	(6.7)	8		30.2	1259	91	52
5922	374	1842S	42	17.0	12.8	1.0 + 0.3	(19.0)	53	(4.8)	7		23.8	1259	91	52
5923BL	92	5922L	42	24.0	12.8	0.3 + 0.1	(4.7)	53	(0.6)	7		5.3	1259	91	52
5941	295	1631S	72	7.0	15.9	0.4 + 0.9	(18.5)	62	(3.8)	8		22.3	1259	90	70
5942BL	92	5941L	72	9.2	18.4	0.2 + 0.3	(6.7)	96	(1.1)	8		7.8	1259	90	70
5943	841	2123sf	56	7.0	5.2	0.6 + 0.6	(17.2)	53	(9.4)	17	+	26.7	1259	90	68
5944BL	90	5943L	56	9.2	4.4	0.0 + 0.1	(1.6)	34	(0.4)	17	+	2.0	1259	90	68
5951	10	10000	0	9.0	28.9	0.1 + 0.0	(1.1)	77	(0.0)	0		1.1	1259	58	80
5997BL	122	5998L	45	24.0	1.8	0.0 + 0.1	(0.9)	2	(0.0)	0		0.9			
5998	685	1800S	45	17.0	1.8	0.0 + 0.3	(4.9)	2	(0.3)	0		5.2			
5999	33	1800	2	17.0	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
6011	168	1800S	83	7.0	82.3	1.9 + 1.9	(54.5)	134	(5.3)	7		59.8	1260	43	54
6012BL	18	6011L	83	63.4	82.2	0.2 + 0.2	(5.8)	133	(0.3)	7		6.1	1260	43	54
6013	237	1616S	49	7.0	25.8	1.4 + 0.3	(24.1)	76	(4.2)	7		28.3	1260	16	55
6014BL	94	6013L	49	40.9	25.8	0.5 + 0.1	(9.6)	76	(0.9)	7		10.5	1260	16	55
6021	263	1631S	87	11.9	67.9	2.8 + 2.2	(70.5)	125	(6.2)	12		76.7	1260	15	38

96 SECOND CYCLE 96 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES DELAY	-----DELAY----- UNIFORM (U+R+O=MEAN Q)	RANDOM+ OVERSAT DELAY	COST OF DELAY (\$/H)	----STOPS---- MEAN STOPS /PCU	COST OF STOPS (\$/H)	----QUEUE---- MEAN AVERAGE EXCESS	PERFORMANCE INDEX WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END	TIMES START 1ST 2ND (SECONDS)
6023	618	1771S	78	12.5	23.1	2.4 + 1.5	(56.2)	76	(9.0)	11		65.2	1260	87	38
6024BL	68	6023L	78	16.4	24.1	0.3 + 0.2	(6.5)	73	(0.6)	11		7.1	1260	87	38
6041	320	1881	82	17.0	59.9	3.2 + 2.1	(75.6)	116	(9.1)	10		84.7	1260	87	10
6042	403	2781sf	83	17.0	52.5	3.9 + 2.0	(83.4)	107	(10.6)	14		94.1	1260	87	10
6043BL	78	6042L	83	24.0	52.5	0.8 + 0.4	(16.2)	107	(1.1)	14		17.2	1260	87	10
6051	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1260	64	70
6053	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1260	64	70
6054	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1260	64	70
6098BL	86	6099L	24	24.0	0.7	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
6099	786	3600S	24	17.0	0.7	0.0 + 0.1	(2.0)	1	(0.1)	0		2.2			
6122BL	90	6021L	87	16.4	81.5	1.3 + 0.7	(28.9)	129	(1.5)	12		30.4	1260	15	38
12591	685	3600S	28	4.1	11.2	0.1 + 0.2	(3.2)	4	(0.0)	1		3.2	12185	94	74
12592	10	10000	1	7.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	12185	79	85
12593BL	122	12591L	28	3.0	0.9	0.0 + 0.0	(0.4)	1	(0.0)	1		0.4	12185	94	74
12597	10	10000	1	8.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1259	74	80
12598	10	10000	0	6.0	31.3	0.1 + 0.0	(1.2)	80	(0.0)	0		1.2	1259	61	80
18341	829	3746S	30	5.0	1.0	0.0 + 0.2	(3.2)	3	(0.1)	1		3.3	12183	4	81
18342BL	90	18341L	30	3.6	1.1	0.0 + 0.0	(0.4)	4	(0.0)	1		0.4	12183	4	81
18398BL	90	18399L	26	24.0	0.7	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
18399	829	3600S	26	17.0	0.7	0.0 + 0.2	(2.2)	1	(0.1)	0		2.3			
18451	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	12183	86	92

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)				
1845.8	111.1	16.6	36.3	21.5	(820.4)	+	(109.7)	+	(0.0)	=	930.1	TOTALS
243.5	21.2	11.5	5.7	3.2	(126.3)	+	(9.6)	+	(0.0)	=	135.9	BUSES
1602.2	90.0	17.8	30.6	18.3	(694.1)	+	(100.2)	+	(0.0)	=	794.2	OTHER

ROUTE

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
	105.8	+	66.6	+	52.0	=	224.3

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 409

PROGRAM TRANSYT FINISHED

OPTION 2 88 SECONDS CYCLE TIME

Option 2 AM 88 seconds cycle time

PRT File
AM : 0830-0930

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED AM OPT2 88.DAT" at 14:33 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE = 88
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15285 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD CARD
NO. TYPE
( 1) = TITLE:-
CARD CARD CYCLE NO. OF TIME EFFECTIVE-GREEN EQUISAT 0=UNEQUAL FLOW CRUISE-SPEEDS OPTIMISE EXTRA HILL- DELAY STOP
NO. TYPE TIME STEPS PERIOD DISPLACEMENTS SETTINGS CYCLE SCALE SCALE CARD32 0=NONE COPIES CLIMB VALUE VALUE
          (SEC) CYCLE PER 1-1200 START END 0=NO 1=EQUAL 10-200 50-200 0=TIMES 1=O/SET FINAL OUTPUT P PER P PER
          (SEC) CYCLE MINS. (SEC) (SEC) 1=YES CYCLE % % 1=SPEEDS 2=FULL OUTPUT 1=FULL PCU-H 100
          (SEC) CYCLE MINS. (SEC) (SEC) 3 0 1 100 100 0 2 0 0 1420 260
CARD CARD
NO. TYPE
3) = 2 1258 1260 1259 12183 12185 0 0 0 0 0 0 0 0 0 0 0 0
    
```

```

LINKS HAVING SHARED STOPLINES
CARD CARD FIRST SET..... SECOND SET..... THIRD SET.....
NO. TYPE
4) = 7 4042 4043 0 0 0 0 0 0 0 0 0 0 0 0 0
5) = 7 4111 4112 0 0 0 0 0 0 0 0 0 0 0 0 0
6) = 7 4121 4122 0 0 0 0 0 0 0 0 0 0 0 0 0
7) = 7 4131 4132 0 0 0 0 0 0 0 0 0 0 0 0 0
8) = 7 4197 4196 0 0 0 0 0 0 0 0 0 0 0 0 0
9) = 7 4199 4198 0 0 0 0 0 0 0 0 0 0 0 0 0
10) = 7 5821 5822 0 0 0 0 0 0 0 0 0 0 0 0 0
11) = 7 5841 5842 0 0 0 0 0 0 0 0 0 0 0 0 0
12) = 7 5843 5844 0 0 0 0 0 0 0 0 0 0 0 0 0
13) = 7 5854 5855 0 0 0 0 0 0 0 0 0 0 0 0 0
14) = 7 5922 5923 0 0 0 0 0 0 0 0 0 0 0 0 0
15) = 7 5941 5942 0 0 0 0 0 0 0 0 0 0 0 0 0
16) = 7 5943 5944 0 0 0 0 0 0 0 0 0 0 0 0 0
17) = 7 5998 5997 0 0 0 0 0 0 0 0 0 0 0 0 0
18) = 7 6011 6012 0 0 0 0 0 0 0 0 0 0 0 0 0
19) = 7 6013 6014 0 0 0 0 0 0 0 0 0 0 0 0 0
20) = 7 6021 6122 0 0 0 0 0 0 0 0 0 0 0 0 0
21) = 7 6023 6024 0 0 0 0 0 0 0 0 0 0 0 0 0
22) = 7 6042 6043 0 0 0 0 0 0 0 0 0 0 0 0 0
23) = 7 6099 6098 0 0 0 0 0 0 0 0 0 0 0 0 0
24) = 7 12591 12593 0 0 0 0 0 0 0 0 0 0 0 0 0
25) = 7 18341 18342 0 0 0 0 0 0 0 0 0 0 0 0 0
26) = 7 18399 18398 0 0 0 0 0 0 0 0 0 0 0 0 0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD CARD NODE S1 S2 S3 S4 S5 S6 S7 S8 S9 S10
NO. TYPE NO.
27) = 10 1258 7 7 6
28) = 10 1259 7 0 6
29) = 10 1260 7 6 7 6
30) = 10 12183 7 6
31) = 10 12185 7 6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD CARD NODE S1 S2 S3 S4 S5 S6 S7 S8 S9 S10
NO. TYPE NO.
32) = 11 1258 24 6 9
33) = 11 1259 11 9 6
34) = 11 1260 24 6 5 10
35) = 11 12183 8 5
36) = 11 12185 8 5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD CARD NODE Sg1/Dbl S1 S2 S3 S4 S5 S6 S7 S8 S9 S10
NO. TYPE NO. Cycled
37) = 12 1258 1 0 48 73
38) = 12 1259 1 0 63 76
    
```

39) = 12 1260 1 84 36 56 68
 40) = 12 12183 1 12 1
 41) = 12 12185 1 5 82

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS		LINK1 ONLY		GIVEWAY		COEFFS.		LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
				LINK1 NO.	LINK2 NO.	%	A1 X100	A2 X100								
42)	30	4011	4042	0	0	0	0	22	0	0	0	200	0	715	0	0
43)	30	4111	4131	0	0	0	0	22	0	0	0	200	0	715	0	0
44)	30	4112	0	0	0	0	0	0	0	0	0	200	0	715	0	0
45)	30	4121	4111	0	0	0	0	22	0	0	0	80	0	1500	0	0
46)	30	4122	0	0	0	0	0	0	0	0	0	80	0	1500	0	0
47)	30	4131	4121	0	0	0	0	22	0	0	0	200	0	715	0	0
48)	30	4132	0	0	0	0	0	0	0	0	0	200	0	715	0	0
49)	30	5941	5921	5922	0	0	0	50	50	0	0	77	0	1000	0	0
50)	30	5942	0	0	0	0	0	0	0	0	0	77	0	1000	0	0

LINK CARDS: FIXED DATA GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
				START STAGE	END LAG	START STAGE	END LAG					
51)	31	4041	0	0	0	0	0	65	0	3762	0	0
52)	31	4042	0	0	0	0	0	65	0	1815	0	0
53)	31	4043	0	0	0	0	0	65	0	0	0	0
54)	31	4196	0	0	0	0	0	200	0	0	0	0
55)	31	4197	0	0	0	0	0	200	0	1800	0	0
56)	31	4198	0	0	0	0	0	200	0	0	0	0
57)	31	4199	0	0	0	0	0	200	0	1800	0	0
58)	31	5821	1258	1	24	2	0	83	0	5503	0	0
59)	31	5822	0	0	0	0	0	83	0	0	0	0
60)	31	5841	1258	1	24	2	1	64	0	1867	0	0
61)	31	5842	0	0	0	0	0	64	0	0	0	0
62)	31	5843	1258	1	24	2	1	64	0	3685	0	0
63)	31	5844	0	0	0	0	0	64	0	0	0	0
64)	31	5851	1258	3	9	1	0	24	0	10000	0	0
65)	31	5852	1258	3	9	1	0	7	0	10000	0	0
66)	31	5853	1258	3	9	1	0	24	0	10000	0	0
67)	31	5854	1258	2	6	3	0	200	0	3412	0	0
68)	31	5855	0	0	0	0	0	200	0	0	0	0
69)	31	5911	1259	3	6	1	5	0	0	1708	0	0
70)	31	5921	1259	1	11	2	0	200	0	4064	0	0
71)	31	5922	1259	1	11	2	0	200	0	1842	0	0
72)	31	5923	0	0	0	0	0	200	0	0	0	0
73)	31	5941	1259	1	10	3	2	77	0	1631	0	0
74)	31	5942	0	0	0	0	0	77	0	0	0	0
75)	31	5943	1259	1	10	3	0	77	0	1931	0	0
76)	31	5944	0	0	0	0	0	77	0	0	0	0
77)	31	5951	1259	2	6	1	0	9	0	10000	0	0
78)	31	5997	0	0	0	0	0	200	0	0	0	0
79)	31	5998	0	0	0	0	0	200	0	1800	0	0
80)	31	5999	0	0	0	0	0	200	0	1800	0	0
81)	31	6011	1260	3	5	4	0	80	0	1800	0	0
82)	31	6012	0	0	0	0	0	80	0	0	0	0
83)	31	6013	1260	2	6	4	1	80	0	1616	0	0
84)	31	6014	0	0	0	0	0	80	0	0	0	0
85)	31	6021	1260	2	5	3	0	137	0	1631	0	0
86)	31	6023	1260	1	24	3	0	137	0	3543	0	0
87)	31	6024	0	0	0	0	0	137	0	0	0	0
88)	31	6041	1260	1	24	2	0	200	0	1881	0	0
89)	31	6042	1260	1	24	2	0	200	0	1881	0	0
90)	31	6043	0	0	0	0	0	200	0	0	0	0
91)	31	6051	1260	4	10	1	0	24	0	10000	0	0
92)	31	6053	1260	4	10	1	0	24	0	10000	0	0
93)	31	6054	1260	4	10	1	0	18	0	10000	0	0
94)	31	6098	0	0	0	0	0	200	0	0	0	0
95)	31	6099	0	0	0	0	0	200	0	3600	0	0
96)	31	6122	0	0	0	0	0	137	0	0	0	0
97)	31	12591	12185	1	8	2	0	25	0	3600	0	0
98)	31	12592	12185	2	5	1	0	8	0	10000	0	0
99)	31	12593	0	0	0	0	0	200	0	0	0	0
100)	31	12597	1259	3	6	1	0	9	0	10000	0	0
101)	31	12598	1259	2	9	1	0	8	0	10000	0	0
102)	31	18341	12183	1	8	2	0	30	0	3746	0	0
103)	31	18342	0	0	0	0	0	30	0	0	0	0
104)	31	18398	0	0	0	0	0	200	0	0	0	0
105)	31	18399	0	0	0	0	0	200	0	3600	0	0
106)	31	18451	12183	2	5	1	0	8	0	10000	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1		ENTRY 2		ENTRY 3		ENTRY 4	
					LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW
107)	32	4011	129	0	0	0	17	0	0	0	0	0
108)	32	4041	384	0	6013	30	5	6041	354	6	0	0
109)	32	4042	329	0	6013	166	5	6042	163	6	0	0
110)	32	4043	168	0	6014	90	3000	6043	78	3000	0	0
111)	32	4111	224	0	0	0	17	0	0	0	0	0
112)	32	4112	74	0	0	0	3000	0	0	0	0	0
113)	32	4121	435	0	6021	250	7	6042	191	7	0	0
114)	32	4122	120	0	6043	24	3046	6122	96	3046	0	0
115)	32	4131	220	0	0	0	17	0	0	0	0	0
116)	32	4132	34	0	0	0	3000	0	0	0	0	0
117)	32	4136	74	0	4122	74	3000	0	0	0	0	0
118)	32	4197	246	0	4121	207	17	4131	39	17	0	0
119)	32	4198	46	0	4122	46	3000	0	0	0	0	0
120)	32	4199	277	0	4111	49	17	4121	228	17	0	0
121)	32	5821	416	0	5921	404	14	0	0	0	0	0
122)	32	5822	66	0	5923	70	3013	0	0	0	0	0
123)	32	5841	111	0	4011	64	6	4041	47	6	0	0
124)	32	5842	64	0	4043	64	3020	0	0	0	0	0
125)	32	5843	730	0	4011	65	6	4041	337	6	4042	329
126)	32	5844	104	0	4043	104	3020	0	0	0	0	0
127)	32	5851	10	0	0	0	15	0	0	0	0	0
128)	32	5852	10	0	0	0	6	0	0	0	0	0
129)	32	5853	10	0	0	0	15	0	0	0	0	0
130)	32	5854	646	0	0	0	17	0	0	0	0	0
131)	32	5855	126	0	0	0	3020	0	0	0	0	0
132)	32	5911	32	0	0	0	17	0	0	0	0	0
133)	32	5921	414	0	0	0	17	0	0	0	0	0
134)	32	5922	317	0	0	0	17	0	0	0	0	0
135)	32	5923	100	0	0	0	3000	0	0	0	0	0
136)	32	5941	295	0	5841	111	7	5854	184	7	0	0
137)	32	5942	90	0	5842	64	3000	5855	20	3000	0	0
138)	32	5943	899	0	5843	730	7	5854	174	7	0	0
139)	32	5944	118	0	5844	104	3000	5855	14	3000	0	0
140)	32	5951	10	0	0	0	9	0	0	0	0	0
141)	32	5997	120	0	12593	120	3000	0	0	0	0	0
142)	32	5998	631	0	12591	631	17	0	0	0	0	0
143)	32	5999	48	0	5921	10	17	5943	38	17	0	0
144)	32	6011	163	0	4111	87	7	4131	76	7	0	0
145)	32	6012	24	0	4112	18	3046	0	0	0	0	0
146)	32	6013	196	0	4111	88	7	4131	105	7	0	0

18341	873	3746S	33	5.0	1.0	0.0	0.2	(3.6)	3	(0.2)	1	3.7	12183	20	1
18342BL	118	18341L	33	3.6	1.0	0.0	0.0	(0.5)	2	(0.0)	1	0.5	12183	20	1
18398BL	118	18399L	28	24.0	0.7	0.0	0.0	(0.3)	1	(0.0)	0	0.3			
18399	873	3600S	28	17.0	0.7	0.0	0.2	(2.4)	1	(0.2)	0	2.5			
18451	10	10000	1	9.0	40.0	0.1	0.0	(1.6)	94	(0.0)	0	1.6	12183	6	12

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	158.5	11.4	39.5	65.4	(1489.6)	+ (123.9)	+ (0.0)	= 1613.5	TOTALS
288.4	35.3	8.2	7.4	12.5	(282.7)	+ (14.1)	+ (0.0)	= 296.8	BUSES
1514.9	123.2	12.3	32.1	52.9	(1206.9)	+ (109.8)	+ (0.0)	= 1316.7	OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	103.1	+ 120.8	+ 59.9	= 283.8

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 73

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13
- (SECONDS)

1258	3	0	48	73
1259	3	0	63	76
1260	4	84	36	56
12183	2	12	1	68
12185	2	5	82	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	158.5	11.4	39.5	65.4	(1489.6)	+ (123.9)	+ (0.0)	= 1613.5	TOTALS
288.4	35.3	8.2	7.4	12.5	(282.7)	+ (14.1)	+ (0.0)	= 296.8	BUSES
1514.9	123.2	12.3	32.1	52.9	(1206.9)	+ (109.8)	+ (0.0)	= 1316.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 372

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35
- (SECONDS)

1258	3	0	48	73
1259	3	0	63	76
1260	4	84	36	56
12183	2	12	1	68
12185	2	5	82	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	158.5	11.4	39.5	65.4	(1489.6)	+ (123.9)	+ (0.0)	= 1613.5	TOTALS
288.4	35.3	8.2	7.4	12.5	(282.7)	+ (14.1)	+ (0.0)	= 296.8	BUSES
1514.9	123.2	12.3	32.1	52.9	(1206.9)	+ (109.8)	+ (0.0)	= 1316.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 370

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1
- (SECONDS)

1258	3	0	48	73
1259	3	0	63	76
1260	4	84	36	56
12183	2	12	1	68
12185	2	5	82	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	158.5	11.4	39.5	65.4	(1489.6)	+ (123.9)	+ (0.0)	= 1613.5	TOTALS
288.4	35.3	8.2	7.4	12.5	(282.7)	+ (14.1)	+ (0.0)	= 296.8	BUSES
1514.9	123.2	12.3	32.1	52.9	(1206.9)	+ (109.8)	+ (0.0)	= 1316.7	OTHER

NO. OF ENTRIES TO SUBPT = 21
NO. OF LINKS RECALCULATED= 726

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13
- (SECONDS)

1258	3	0	48	73
1259	3	0	63	76
1260	4	84	36	56
12183	2	12	1	68
12185	2	5	82	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	158.5	11.4	39.5	65.4	(1489.6)	+ (123.9)	+ (0.0)	= 1613.5	TOTALS
288.4	35.3	8.2	7.4	12.5	(282.7)	+ (14.1)	+ (0.0)	= 296.8	BUSES
1514.9	123.2	12.3	32.1	52.9	(1206.9)	+ (109.8)	+ (0.0)	= 1316.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 396

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35
 - (SECONDS)

1258 3 0 48 73
 1259 3 0 63 76
 1260 4 84 36 56 68
 12183 2 12 1
 12185 2 5 82

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1803.3	158.5	11.4	39.5	65.4	(1489.6)	+ (123.9)	+ (0.0)	= 1613.5	TOTALS
288.4	35.3	8.2	7.4	12.5	(282.7)	+ (14.1)	+ (0.0)	= 296.8	BUSES
1514.9	123.2	12.3	32.1	52.9	(1206.9)	+ (109.8)	+ (0.0)	= 1316.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 405

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1
 - (SECONDS)

1258 3 1 49 74
 1259 3 1 64 77
 1260 4 84 36 56 68
 12183 2 13 2
 12185 2 6 83

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1803.3	158.5	11.4	39.5	65.4	(1488.9)	+ (124.3)	+ (0.0)	= 1613.3	TOTALS
288.4	35.3	8.2	7.4	12.5	(282.7)	+ (14.1)	+ (0.0)	= 296.8	BUSES
1514.9	123.2	12.3	32.1	52.9	(1206.2)	+ (110.2)	+ (0.0)	= 1316.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 396

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1 -1
 - (SECONDS)

1258 3 1 49 74
 1259 3 1 64 77
 1260 4 84 36 56 68
 12183 2 13 2
 12185 2 6 83

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1803.3	158.5	11.4	39.5	65.4	(1488.9)	+ (124.3)	+ (0.0)	= 1613.3	TOTALS
288.4	35.3	8.2	7.4	12.5	(282.7)	+ (14.1)	+ (0.0)	= 296.8	BUSES
1514.9	123.2	12.3	32.1	52.9	(1206.2)	+ (110.2)	+ (0.0)	= 1316.4	OTHER

NO. OF ENTRIES TO SUBPT = 21
 NO. OF LINKS RECALCULATED= 811

88 SECOND CYCLE 88 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 13 35 -1 13 35 1 -1 1
 - (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1258	3	1	49	74							
1259	3	1	64	77							
1260	4	85	37	57	69						
12183	2	13	2								
12185	2	6	83								

LINK NUMBER	FLOW INFO LINK (PCU/H)	SAT FLOW (PCU/H)	SAT DEGREE (%)	MEAN PER CRUISE DELAY (SEC)	TIMES PCU (SEC)	-----DELAY----- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT OF DELAY (\$/H)	COST OF DELAY (\$/H)	-----STOPS----- MEAN STOPS /PCU	COST OF STOPS (\$/H)	-----QUEUE----- MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX (\$/H)	EXIT NODE	GREEN START	TIMES END	START END (SECONDS)
4011	129	715	21	17.0	3.8	0.0 + 0.1	(1.9)	0	(0.0)	0	0	0	1.9				
4041	384	3762	10	5.9	0.5	0.0 + 0.1	(0.8)	1	(0.1)	0	0	0	0.9				
4042	328	1815S	27	5.5	1.4	0.0 + 0.1	(1.8)	2	(0.1)	0	0	0	1.9				
4043BL	168	4042L	27	7.8	1.4	0.0 + 0.1	(0.9)	2	(0.0)	0	0	0	0.9				
4111	224	715S	45	17.0	5.0	0.0 + 0.3	(4.4)	0	(0.0)	0	0	0	4.4				
4112BL	74	4111L	45	24.0	5.0	0.0 + 0.1	(1.5)	0	(0.0)	0	0	0	1.5				
4121	386<	1500S	35	7.0	1.9	0.0 + 0.2	(3.0)	0	(0.0)	0	0	0	3.0				
4122BL	120	4121L	35	64.4	1.9	0.0 + 0.1	(0.9)	0	(0.0)	0	0	0	0.9				
4131	220	715S	42	17.0	5.1	0.0 + 0.3	(4.5)	0	(0.0)	0	0	0	4.5				
4132BL	34	4131L	42	24.0	5.1	0.0 + 0.0	(0.7)	0	(0.0)	0	0	0	0.7				
4196BL	74	4197L	16	24.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0	0	0	0.4				
4197	223<	1800S	16	17.0	1.2	0.0 + 0.1	(1.1)	1	(0.1)	0	0	0	1.1				
4198BL	46	4199L	17	24.0	1.2	0.0 + 0.0	(0.2)	1	(0.0)	0	0	0	0.2				
4199	251<	1800S	17	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0	0	0	1.3				
5821	416	5503S	31	14.0	19.2	2.0 + 0.2	(31.4)	60	(1.5)	8	8	8	33.0	1258	25	49	
5822BL	66	5821L	31	31.8	28.0	0.5 + 0.0	(7.3)	63	(0.5)	8	8	8	7.8	1258	25	49	
5841	111	1867S	32	6.0	22.0	0.5 + 0.1	(9.6)	54	(1.2)	3	3	3	10.8	1258	25	50	
5842BL	64	5841L	32	36.5	37.4	0.6 + 0.1	(9.4)	98	(0.8)	3	3	3	10.2	1258	25	50	
5843	729	3685S	77	6.0	25.7	3.8 + 1.4	(73.9)	48	(7.0)	12	12	12	80.9	1258	25	50	
5844BL	104	5843L	77	36.5	42.9	1.0 + 0.2	(17.6)	102	(1.3)	12	12	12	18.9	1258	25	50	
5851	10	10000	1	15.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	0	0	1.6	1258	83	1	
5852	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	0	0	1.6	1258	83	1	
5853	10	10000	1	15.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	0	0	1.6	1258	83	1	
5854	646	4132Sf	82	17.0	41.7	5.6 + 1.9	(106.2)	102	(16.2)	20	20	20	122.4	1258	55	74	

5855BL	126	5854L	82	52.8	41.7	1.1 + 0.4	(20.7)	102	(1.6)	20	22.3	1258	55	74	
5911	32	1708	14	17.0	42.5	0.3 + 0.1	(5.4)	95	(0.8)	1	6.1	1259	83	6	
5921	414	4064	17	17.0	8.6	0.9 + 0.1	(14.1)	42	(4.3)	4	18.4	1259	12	64	
5922	317	1842S	38	17.0	11.6	0.8 + 0.2	(14.5)	51	(4.0)	6	18.5	1259	12	64	
5923BL	100	5922L	38	24.0	11.6	0.3 + 0.1	(4.6)	51	(0.6)	6	5.2	1259	12	64	
5941	294	1631S	66	7.0	11.3	0.2 + 0.7	(13.1)	44	(2.8)	5	15.9	1259	11	79	
5942BL	90	5941L	66	9.2	12.9	0.1 + 0.2	(4.6)	71	(0.8)	5	5.4	1259	11	79	
5943	898	21455f	62	7.0	9.0	1.5 + 0.7	(31.9)	83	(15.8)	24	+	47.7	1259	11	77
5944BL	118	5943L	62	9.2	7.3	0.1 + 0.1	(3.4)	80	(1.2)	24	+	4.6	1259	11	77
5951	10	10000	0	9.0	27.5	0.1 + 0.0	(1.1)	78	(0.0)	0	1.1	1259	70	1	
5997BL	120	5998L	42	24.0	1.7	0.0 + 0.1	(0.8)	2	(0.0)	0	0.8				
5998	630	1800S	42	17.0	1.7	0.0 + 0.3	(4.3)	2	(0.3)	0	4.6				
5999	48	1800	3	17.0	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2				
6011	163	1800S	114	7.0	328.2	1.9 + 12.9	(211.0)	248	(9.5)	19	+	220.5	1260	62	69
6012BL	24	6011L	114	64.4	327.8	0.3 + 1.9	(31.0)	248	(0.7)	19	+	31.8	1260	62	69
6013	196	1616S	56	7.0	32.6	1.4 + 0.4	(25.2)	88	(4.1)	6	+	29.3	1260	43	70
6014BL	90	6013L	56	43.7	32.6	0.6 + 0.2	(11.6)	88	(1.0)	6	+	12.6	1260	43	70
6021	249	1631S	116	11.8	334.4	3.4 + 19.8	(328.4)	240	(11.5)	36	+	339.9	1260	42	57
6023	477	3543S	36	12.4	16.1	1.9 + 0.3	(30.2)	39	(3.5)	5	+	33.8	1260	21	57

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN TIMES PER PCU CRUISE DELAY (SEC)	UNIFORM DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT OF DELAY (\$/H)	COST OF DELAY (\$/H)	MEAN STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END (SECONDS)	TIMES START END (SECONDS)	
6024BL	66	6023L	36	16.4	9.9	0.1 + 0.0	(2.6)	19	(0.2)	5	+	2.7	1260	21	57
6041	354	1881	97	17.0	110.0	3.5 + 7.4	(153.7)	166	(14.4)	16	+	168.1	1260	21	37
6042	354	2516Sf	94	17.0	77.4	3.3 + 4.3	(108.0)	139	(12.1)	16	+	120.1	1260	21	37
6043BL	102	6042L	94	24.0	77.4	1.0 + 1.2	(31.1)	139	(1.8)	16	+	32.9	1260	21	37
6051	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	+	1.6	1260	79	85
6053	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	+	1.6	1260	79	85
6054	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	+	1.6	1260	79	85
6098BL	87	6099L	20	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0	+	0.2			
6099	620<	3600S	20	17.0	0.6	0.0 + 0.1	(1.5)	1	(0.1)	0	+	1.6			
6122BL	96	6021L	116	16.4	346.4	1.6 + 7.6	(131.2)	261	(3.1)	36	+	134.3	1260	42	57
12591	630	3600S	26	4.1	1.2	0.1 + 0.1	(3.0)	5	(0.1)	1	+	3.1	12185	14	83
12592	10	10000	1	7.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	+	1.6	12185	0	6
12593BL	120	12591L	26	24.0	2.6	0.1 + 0.0	(1.2)	18	(0.3)	1	+	1.5	12185	14	83
12597	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	+	1.6	1259	83	1
12598	10	10000	1	6.0	30.0	0.1 + 0.0	(1.2)	82	(0.0)	0	+	1.2	1259	73	1
18341	873	3746S	33	5.0	1.0	0.0 + 0.2	(3.6)	3	(0.2)	1	+	3.7	12183	21	2
18342BL	118	18341L	33	3.6	1.0	0.0 + 0.0	(0.5)	2	(0.0)	1	+	0.5	12183	21	2
18398BL	118	18399L	28	24.0	0.7	0.0 + 0.0	(0.3)	1	(0.0)	0	+	0.3			
18399	873	3600S	28	17.0	0.7	0.0 + 0.2	(2.4)	1	(0.2)	0	+	2.5			
18451	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	+	1.6	12183	7	13

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-RM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1803.3	158.5	11.4	39.5	65.4	(1489.3)	+ (123.9)	+ (0.0)	= 1613.2	TOTALS
288.4	35.3	8.2	7.4	12.5	(282.7)	+ (14.1)	+ (0.0)	= 296.8	BUSES
1514.9	123.2	12.3	32.1	52.9	(1206.7)	+ (109.8)	+ (0.0)	= 1316.5	OTHER

ROUTE

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
	103.1	+	120.8	+	59.9	=	283.7

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 405

PROGRAM TRANSYT FINISHED

Option 2 IP 88 Seconds Cycle time

PRT File
IP : 1200-1300

1 T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED IP OPT2 88.DAT" at 14:35 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 88
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15285 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
              (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
              (SEC)  CYCLE  MINS. (SEC) (SEC)  1=YES  CYCLE  %  %  1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
3) =  2    1258  1260  1259  12183  12185  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
              LIST OF NODES TO BE OPTIMISED
    
```

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LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) =  7  4042  4043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5) =  7  4111  4112  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6) =  7  4121  4122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7) =  7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8) =  7  4197  4196  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9) =  7  4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10) = 7  5821  5822  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11) = 7  5841  5842  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12) = 7  5843  5844  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13) = 7  5854  5855  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14) = 7  5922  5923  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15) = 7  5941  5942  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
16) = 7  5943  5944  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
17) = 7  5998  5997  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
18) = 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
19) = 7  6013  6014  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
20) = 7  6021  6122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
21) = 7  6023  6024  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
22) = 7  6042  6043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
23) = 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
24) = 7  12591 12593 0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
25) = 7  18341 18342 0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
26) = 7  18399 18398 0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0  7  6
28) = 10  1259  7  0  6
29) = 10  1260  7  6  7  6
30) = 10  12183  7  6
31) = 10  12185  7  6
    
```

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NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  24  18  9
33) = 11  1259  11  9  6
34) = 11  1260  24  6  5  10
35) = 11  12183  8  5
36) = 11  12185  9  5
    
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NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1  23  55  8
38) = 12  1259  1  23  83  11
    
```


18341	835	3746S	31	5.0	1.0	0.0	0.2	(3.1)	2	(0.1)	0		3.2	12183	58	39
18342BL	100	18341L	31	3.6	0.9	0.0	0.0	(0.4)	1	(0.0)	0		0.4	12183	58	39
18398BL	100	18399L	26	24.0	0.7	0.0	0.0	(0.3)	1	(0.0)	0		0.3			
18399	835	3600S	26	17.0	0.7	0.0	0.2	(2.2)	1	(0.2)	0		2.4			
18451	10	10000	1	9.0	40.0	0.1	0.0	(1.6)	94	(0.0)	0		1.6	12183	44	50

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	140.1	12.7	40.8	45.6	(1226.3)	+ (119.2)	+ (0.0)	= 1345.5	TOTALS
298.7	32.8	9.1	8.9	8.0	(241.1)	+ (14.9)	+ (0.0)	= 256.0	BUSES
1483.1	107.3	13.8	31.8	37.5	(985.2)	+ (104.3)	+ (0.0)	= 1089.6	OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	102.5	+ 99.5	+ 57.9	= 259.9

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 73

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13
- (SECONDS)

1258	3	23	55	8					
1259	3	23	83	11					
1260	4	17	55	76	1				
12183	2	50	39						
12185	2	28	17						

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	140.1	12.7	40.8	45.6	(1226.3)	+ (119.2)	+ (0.0)	= 1345.5	TOTALS
298.7	32.8	9.1	8.9	8.0	(241.1)	+ (14.9)	+ (0.0)	= 256.0	BUSES
1483.1	107.3	13.8	31.8	37.5	(985.2)	+ (104.3)	+ (0.0)	= 1089.6	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 378

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35
- (SECONDS)

1258	3	23	55	8					
1259	3	23	83	11					
1260	4	17	55	76	1				
12183	2	50	39						
12185	2	28	17						

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	140.1	12.7	40.8	45.6	(1226.3)	+ (119.2)	+ (0.0)	= 1345.5	TOTALS
298.7	32.8	9.1	8.9	8.0	(241.1)	+ (14.9)	+ (0.0)	= 256.0	BUSES
1483.1	107.3	13.8	31.8	37.5	(985.2)	+ (104.3)	+ (0.0)	= 1089.6	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 356

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1
- (SECONDS)

1258	3	23	55	8					
1259	3	23	83	11					
1260	4	17	55	76	1				
12183	2	50	39						
12185	2	28	17						

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	140.1	12.7	40.8	45.6	(1226.3)	+ (119.2)	+ (0.0)	= 1345.5	TOTALS
298.7	32.8	9.1	8.9	8.0	(241.1)	+ (14.9)	+ (0.0)	= 256.0	BUSES
1483.1	107.3	13.8	31.8	37.5	(985.2)	+ (104.3)	+ (0.0)	= 1089.6	OTHER

NO. OF ENTRIES TO SUBPT = 25
NO. OF LINKS RECALCULATED= 861

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13
- (SECONDS)

1258	3	23	55	8					
1259	3	23	83	11					
1260	4	17	55	76	1				
12183	2	50	39						
12185	2	28	17						

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	140.1	12.7	40.8	45.6	(1226.3)	+ (119.2)	+ (0.0)	= 1345.5	TOTALS
298.7	32.8	9.1	8.9	8.0	(241.1)	+ (14.9)	+ (0.0)	= 256.0	BUSES
1483.1	107.3	13.8	31.8	37.5	(985.2)	+ (104.3)	+ (0.0)	= 1089.6	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 398

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35
 - (SECONDS)

	1258	1259	1260	12183	12185	TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	
	3	3	4	2	2	1781.9	140.1	12.7	40.8	45.6	(1226.3)	(119.2)	(0.0)	1345.5	TOTALS
						298.7	32.8	9.1	8.9	8.0	(241.1)	(14.9)	(0.0)	256.0	BUSES
						1483.1	107.3	13.8	31.8	37.5	(985.2)	(104.3)	(0.0)	1089.6	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 398

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1
 - (SECONDS)

	1258	1259	1260	12183	12185	TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	
	3	3	4	2	2	1781.9	140.1	12.7	40.8	45.6	(1226.3)	(119.2)	(0.0)	1345.5	TOTALS
						298.7	32.8	9.1	8.9	8.0	(241.1)	(14.9)	(0.0)	256.0	BUSES
						1483.1	107.3	13.8	31.8	37.5	(985.2)	(104.3)	(0.0)	1089.6	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 396

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1 -1
 - (SECONDS)

	1258	1259	1260	12183	12185	TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	
	3	3	4	2	2	1781.9	140.1	12.7	40.8	45.6	(1226.3)	(119.2)	(0.0)	1345.5	TOTALS
						298.7	32.8	9.1	8.9	8.0	(241.1)	(14.9)	(0.0)	256.0	BUSES
						1483.1	107.3	13.8	31.8	37.5	(985.2)	(104.3)	(0.0)	1089.6	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 869

88 SECOND CYCLE 88 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 13 35 -1 13 35 1 -1 1
 - (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10	LINK NUMBER	FLOW INFO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE DELAY (SEC)	TIMES PER PCU (SEC)	-----DELAY----- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT OF DELAY (\$/H)	COST OF DELAY (\$/H)	-----STOPS----- MEAN STOPS /PCU	COST OF STOPS (\$/H)	-----QUEUE----- MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX, WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END (SECONDS)	TIMES START END (SECONDS)
1258	3	23	55	8								4011	118	715	20	17.0	3.8	0.0 + 0.1 (1.7)	0	(0.0)	0	0	1.7					
1259	3	23	83	11								4041	351	3762	9	5.9	0.5	0.0 + 0.1 (0.7)	1	(0.1)	0	0	0.8					
1260	4	17	55	76	1							4042	378	1815S	30	5.4	1.4	0.0 + 0.1 (2.1)	2	(0.2)	0	0	2.3					
12183	2	50	39									4043BL	158	4042L	30	7.8	1.4	0.0 + 0.1 (0.9)	2	(0.0)	0	0	0.9					
12185	2	28	17									4111	287	715S	55	17.0	6.1	0.0 + 0.5 (6.9)	0	(0.0)	1	0	6.9					
												4112BL	78	4111L	55	24.0	6.1	0.0 + 0.1 (1.9)	0	(0.0)	1	0	1.9					
												4121	406<	1500S	36	7.0	2.0	0.0 + 0.2 (3.2)	2	(0.2)	1	0	3.4					
												4122BL	102	4121L	36	56.4	2.0	0.0 + 0.1 (0.8)	2	(0.0)	1	0	0.8					
												4131	217	715S	42	17.0	5.1	0.0 + 0.3 (4.4)	0	(0.0)	0	0	4.4					
												4132BL	36	4131L	42	24.0	5.1	0.0 + 0.1 (0.7)	0	(0.0)	0	0	0.7					
												4196BL	66	4197L	16	24.0	1.2	0.0 + 0.0 (0.3)	1	(0.0)	0	0	0.3					
												4197	222	1800S	16	17.0	1.2	0.0 + 0.1 (1.0)	1	(0.1)	0	0	1.1					
												4198BL	36	4199L	16	24.0	1.2	0.0 + 0.0 (0.2)	1	(0.0)	0	0	0.2					
												4199	251	1800S	16	17.0	1.2	0.0 + 0.1 (1.2)	1	(0.1)	0	0	1.3					
												5821	482	5503S	41	14.0	21.9	2.6 + 0.3 (41.7)	71	(0.8)	10	0	42.5	1258	47	67		
												5822BL	52	5821L	41	30.2	33.4	0.4 + 0.0 (6.8)	69	(0.0)	10	0	6.9	1258	47	67		
												5841	146	1867S	48	6.0	25.7	0.7 + 0.3 (14.8)	55	(1.6)	3	0	16.4	1258	47	68		
												5842BL	76	5841L	48	7.7	39.0	0.7 + 0.2 (11.7)	69	(0.7)	3	0	12.3	1258	47	68		
												5843	684	3685S	83	6.0	36.3	4.8 + 2.1 (98.0)	71	(9.7)	16	0	107.7	1258	47	68		
												5844BL	80	5843L	83	7.7	44.5	0.7 + 0.2 (14.0)	81	(0.8)	16	0	14.8	1258	47	68		
												5851	10	10000	1	15.0	40.0	0.1 + 0.0 (1.6)	94	(0.0)	0	0	1.6	1258	17	23		
												5852	10	10000	0	6.0	14.3	0.0 + 0.0 (0.6)	56	(0.0)	0	0	0.6	1258	17	55		
												5853	10	10000	1	15.0	40.0	0.1 + 0.0 (1.6)	94	(0.0)	0	0	1.6	1258	17	23		
												5854	397	3412Sf	85	17.0	43.1	3.3 + 1.4 (67.5)	106	(10.3)	21	0	77.8	1258	73	8		

5855BL	398	5854L	85	52.8	43.1	3.4 + 1.4	(67.7)	106	(5.3)	21	72.9	1258	73	8	
5911	34	1708	15	17.0	42.6	0.3 + 0.1	(5.7)	96	(0.8)	1	6.5	1259	17	28	
5921	471	4064	20	17.0	10.3	1.2 + 0.1	(19.1)	47	(5.4)	6	24.5	1259	34	83	
5922	326	1842S	39	17.0	13.4	1.0 + 0.3	(17.2)	55	(4.4)	6	21.6	1259	34	83	
5923BL	84	5922L	39	24.0	13.4	0.2 + 0.1	(4.4)	55	(0.6)	6	5.0	1259	34	83	
5941	316	1631S	69	7.0	14.0	0.4 + 0.8	(17.4)	67	(4.5)	8	21.8	1259	33	13	
5942BL	96	5941L	69	9.2	15.0	0.1 + 0.3	(5.7)	82	(1.0)	8	6.7	1259	33	13	
5943	854	21455f	58	7.0	8.3	1.4 + 0.6	(28.1)	76	(13.8)	21	+	41.9	1259	33	11
5944BL	100	5943L	58	9.2	7.9	0.1 + 0.1	(3.1)	77	(1.0)	21	+	4.1	1259	33	11
5951	10	10000	0	9.0	25.1	0.1 + 0.0	(1.0)	74	(0.0)	0	1.0	1259	1	23	
5997BL	128	5998L	43	24.0	1.8	0.0 + 0.1	(0.9)	2	(0.0)	0	0.9				
5998	655	1800S	43	17.0	1.8	0.0 + 0.3	(4.6)	2	(0.3)	0	4.9				
5999	31	1800	2	17.0	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1				
6011	166	1800S	103	7.0	203.8	1.9 + 7.5	(133.5)	216	(8.4)	13	141.9	1260	81	1	
6012BL	24	6011L	103	56.4	204.1	0.3 + 1.1	(19.3)	216	(0.7)	13	20.0	1260	81	1	
6013	265	1616S	65	7.0	33.9	1.8 + 0.7	(35.4)	92	(5.7)	8	41.1	1260	61	2	
6014BL	94	6013L	65	37.7	33.9	0.6 + 0.2	(12.6)	92	(1.1)	8	13.7	1260	61	2	
6021	242	1631S	104	11.7	179.0	2.9 + 9.1	(170.9)	202	(9.3)	20	180.2	1260	60	76	
6023	570	3543S	43	12.4	15.0	2.0 + 0.3	(33.7)	37	(4.0)	5	37.7	1260	41	76	

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY (SEC)	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX	EXIT NODE	GREEN TIMES	
						UNIFORM (U+R+O=MEAN Q)	RANDOM+ OVERSAT DELAY (\$/H)	MEAN COST OF STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX.	AVERAGE EXCESS (PCU)			WEIGHTED SUM OF () VALUES	START END
6024BL	56	6023L	43	16.4	10.1	0.1 + 0.0	(2.2)	20	(0.1)	5	2.4	1260	41	76	
6041	318	1881	99	17.0	130.2	3.2 + 8.3	(163.3)	179	(14.0)	16	177.4	1260	41	55	
6042	318	2601Sf	90	17.0	69.8	3.1 + 3.1	(87.5)	130	(10.2)	13	97.7	1260	41	55	
6043BL	82	6042L	90	24.0	69.8	0.8 + 0.8	(22.6)	130	(1.3)	13	23.9	1260	41	55	
6051	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1260	11	17	
6053	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1260	11	17	
6054	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1260	11	17	
6098BL	79	6099L	22	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2				
6099	731	3600S	22	17.0	0.6	0.0 + 0.1	(1.9)	1	(0.1)	0	2.0				
6122BL	84	6021L	104	16.4	193.2	1.3 + 3.2	(64.0)	208	(2.2)	20	66.2	1260	60	76	
12591	655	3600S	28	4.1	1.2	0.1 + 0.2	(3.0)	4	(0.0)	1	3.0	12185	37	17	
12592	10	10000	1	7.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	12185	22	28	
12593BL	128	12591L	28	3.0	0.9	0.0 + 0.0	(0.5)	2	(0.0)	1	0.5	12185	37	17	
12597	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	1259	17	23	
12598	10	10000	0	6.0	27.5	0.1 + 0.0	(1.1)	78	(0.0)	0	1.1	1259	4	23	
18341	835	3746S	31	5.0	1.0	0.0 + 0.2	(3.1)	2	(0.1)	0	3.2	12183	58	39	
18342BL	100	18341L	31	3.6	0.9	0.0 + 0.0	(0.4)	1	(0.0)	0	0.4	12183	58	39	
18398BL	100	18399L	26	24.0	0.7	0.0 + 0.0	(0.3)	1	(0.0)	0	0.3				
18399	835	3600S	26	17.0	0.7	0.0 + 0.2	(2.2)	1	(0.2)	0	2.4				
18451	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0	1.6	12183	44	50	

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	TOTALS
(PCU-RM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	140.1	12.7	40.8	45.6	(1226.3)	+ (119.2)	+ (0.0)	=	1345.5
298.7	32.8	9.1	8.9	8.0	(241.1)	+ (14.9)	+ (0.0)	=	256.0
1483.1	107.3	13.8	31.8	37.5	(985.2)	+ (104.3)	+ (0.0)	=	1089.6

ROUTE

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	102.5	+	99.5	+	57.9	=	259.9
NO. OF ENTRIES TO SUBPT =	11						
NO. OF LINKS RECALCULATED=	405						
PROGRAM TRANSYT FINISHED							

Option 2 PM 88 seconds cycle time

PRT File
PM : 1730-1830

1 T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED PM OPT2 88.DAT" at 14:37 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 64
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 88
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15448 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME    STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  PER    1-1200  START  END    0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
      (SEC)  CYCLE  MINS. (SEC) (SEC)  1=YES  CYCLE  %    %    1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
3) =  2    1258  1260  1259  12183  12185  0     0     0     0     0     0     0     0     0     0     0     0
      LIST OF NODES TO BE OPTIMISED
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
4) =  7    4042  4043  0     0     0     0     0     0     0     0     0     0     0     0     0
5) =  7    4111  4112  0     0     0     0     0     0     0     0     0     0     0     0     0
6) =  7    4121  4122  0     0     0     0     0     0     0     0     0     0     0     0     0
7) =  7    4131  4132  0     0     0     0     0     0     0     0     0     0     0     0     0
8) =  7    4197  4196  0     0     0     0     0     0     0     0     0     0     0     0     0
9) =  7    4199  4198  0     0     0     0     0     0     0     0     0     0     0     0     0
10) = 7    5821  5822  0     0     0     0     0     0     0     0     0     0     0     0     0
11) = 7    5841  5842  0     0     0     0     0     0     0     0     0     0     0     0     0
12) = 7    5843  5844  0     0     0     0     0     0     0     0     0     0     0     0     0
13) = 7    5854  5855  0     0     0     0     0     0     0     0     0     0     0     0     0
14) = 7    5922  5923  0     0     0     0     0     0     0     0     0     0     0     0     0
15) = 7    5941  5942  0     0     0     0     0     0     0     0     0     0     0     0     0
16) = 7    5943  5944  0     0     0     0     0     0     0     0     0     0     0     0     0
17) = 7    5998  5997  0     0     0     0     0     0     0     0     0     0     0     0     0
18) = 7    6011  6012  0     0     0     0     0     0     0     0     0     0     0     0     0
19) = 7    6013  6014  0     0     0     0     0     0     0     0     0     0     0     0     0
20) = 7    6021  6122  0     0     0     0     0     0     0     0     0     0     0     0     0
21) = 7    6023  6024  0     0     0     0     0     0     0     0     0     0     0     0     0
22) = 7    6042  6043  0     0     0     0     0     0     0     0     0     0     0     0     0
23) = 7    6099  6098  0     0     0     0     0     0     0     0     0     0     0     0     0
24) = 7    12591 12593 0     0     0     0     0     0     0     0     0     0     0     0     0
25) = 7    18341 18342 0     0     0     0     0     0     0     0     0     0     0     0     0
26) = 7    18399 18398 0     0     0     0     0     0     0     0     0     0     0     0     0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0   7   6
28) = 10  1259  7   0   6
29) = 10  1260  7   6   6
30) = 10  12183  7   6
31) = 10  12185  7   6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  24  18  9
33) = 11  1259  11  9  6
34) = 11  1260  24  6  5  10
35) = 11  12183  8  5
36) = 11  12185  9  5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1   14  51  87
38) = 12  1259  1   12  72  0
    
```


12593BL	122	12591L	29	3.0	0.9	0.0	0.0	(0.4)	2	(0.0)	1	0.5	12185	26	6
12597	10	10000	1	8.0	40.0	0.1	0.0	(1.6)	94	(0.0)	0	1.6	1259	6	12
12598	10	10000	0	6.0	27.5	0.1	0.0	(1.1)	78	(0.0)	0	1.1	1259	81	12
18341	828	3746S	31	5.0	1.1	0.1	0.2	(3.6)	3	(0.1)	1	3.8	12183	26	7
18342BL	90	18341L	31	3.6	0.9	0.0	0.0	(0.3)	3	(0.0)	1	0.4	12183	26	7
18398BL	90	18399L	26	24.0	0.7	0.0	0.0	(0.2)	1	(0.0)	0	0.2			
18399	828	3600S	26	17.0	0.7	0.0	0.2	(2.2)	1	(0.2)	0	2.3			
18451	10	10000	1	9.0	40.0	0.1	0.0	(1.6)	94	(0.0)	0	1.6	12183	12	18

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	143.1	12.9	39.9	49.9	(1275.1)	(121.8)	(0.0)	=	1397.0
243.5	26.5	9.2	6.6	7.6	(202.6)	(11.2)	(0.0)	=	213.8
1599.3	116.6	13.7	33.3	42.2	(1072.5)	(110.6)	(0.0)	=	1183.1

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	105.6	103.4	57.5	266.5

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 74

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13
- (SECONDS)

1258	3	14	51	87	
1259	3	12	72	0	
1260	4	12	49	71	84
12183	2	18	7		
12185	2	17	6		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	143.1	12.9	39.9	49.9	(1275.1)	(121.8)	(0.0)	=	1397.0
243.5	26.5	9.2	6.6	7.6	(202.6)	(11.2)	(0.0)	=	213.8
1599.3	116.6	13.7	33.3	42.2	(1072.5)	(110.6)	(0.0)	=	1183.1

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 373

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35
- (SECONDS)

1258	3	14	51	87	
1259	3	12	72	0	
1260	4	12	49	71	84
12183	2	18	7		
12185	2	17	6		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	143.1	12.9	39.9	49.9	(1275.1)	(121.8)	(0.0)	=	1397.0
243.5	26.5	9.2	6.6	7.6	(202.6)	(11.2)	(0.0)	=	213.8
1599.3	116.6	13.7	33.3	42.2	(1072.5)	(110.6)	(0.0)	=	1183.1

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 361

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1
- (SECONDS)

1258	3	14	51	87	
1259	3	12	72	0	
1260	4	12	49	71	84
12183	2	18	7		
12185	2	17	6		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	143.1	12.9	39.9	49.9	(1275.1)	(121.8)	(0.0)	=	1397.0
243.5	26.5	9.2	6.6	7.6	(202.6)	(11.2)	(0.0)	=	213.8
1599.3	116.6	13.7	33.3	42.2	(1072.5)	(110.6)	(0.0)	=	1183.1

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 779

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13
- (SECONDS)

1258	3	14	51	87	
1259	3	12	72	0	
1260	4	12	49	71	84
12183	2	18	7		
12185	2	17	6		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	143.1	12.9	39.9	49.9	(1275.1)	(121.8)	(0.0)	=	1397.0

243.5	26.5	9.2	6.6	7.6	(202.6)	+	(11.2)	+	(0.0)	=	213.8	BUSES
1599.3	116.6	13.7	33.3	42.2	(1072.5)	+	(110.6)	+	(0.0)	=	1183.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 398

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35
 - (SECONDS)

1258	3	14	51	87								
1259	3	12	72	0								
1260	4	12	49	71	84							
12183	2	18	7									
12185	2	17	6									

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX				
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)				
1842.8	143.1	12.9	39.9	49.9	(1275.1)	+	(121.8)	+	(0.0)	=	1397.0	TOTALS
243.5	26.5	9.2	6.6	7.6	(202.6)	+	(11.2)	+	(0.0)	=	213.8	BUSES
1599.3	116.6	13.7	33.3	42.2	(1072.5)	+	(110.6)	+	(0.0)	=	1183.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 404

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1
 - (SECONDS)

1258	3	14	51	87								
1259	3	12	72	0								
1260	4	12	49	71	84							
12183	2	18	7									
12185	2	17	6									

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX				
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)				
1842.8	143.1	12.9	39.9	49.9	(1275.1)	+	(121.8)	+	(0.0)	=	1397.0	TOTALS
243.5	26.5	9.2	6.6	7.6	(202.6)	+	(11.2)	+	(0.0)	=	213.8	BUSES
1599.3	116.6	13.7	33.3	42.2	(1072.5)	+	(110.6)	+	(0.0)	=	1183.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1 -1
 - (SECONDS)

1258	3	14	51	87								
1259	3	12	72	0								
1260	4	12	49	71	84							
12183	2	18	7									
12185	2	17	6									

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX				
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)				
1842.8	143.1	12.9	39.9	49.9	(1275.1)	+	(121.8)	+	(0.0)	=	1397.0	TOTALS
243.5	26.5	9.2	6.6	7.6	(202.6)	+	(11.2)	+	(0.0)	=	213.8	BUSES
1599.3	116.6	13.7	33.3	42.2	(1072.5)	+	(110.6)	+	(0.0)	=	1183.1	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 875

88 SECOND CYCLE 88 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 13 35 -1 13 35 1 -1 1
 - (SECONDS)

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE DELAY	TIMES PER PCU	-----DELAY-----	UNIFORM DELAY	RANDOM+ OVERSAT DELAY	COST OF DELAY	----STOPS----	MEAN STOPS	COST OF STOPS	----QUEUE----	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES START
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O=MEAN Q)	(PCU-H/H)	OVERSAT DELAY	(\$/H)	(%)	(\$/H)	(\$/H)	MAX. AVERAGE EXCESS OF () VALUES	WEIGHTED SUM OF () VALUES		1ST END	2ND END
4011	84	715	14	17.0	3.4	0.0 + 0.1	(1.1)	0	(0.0)	0	(0.0)	0	1.1				
4041	408	3762	11	5.7	0.5	0.0 + 0.1	(0.9)	1	(0.1)	0	(0.1)	0	0.9				
4042	340	1815S	27	5.6	1.4	0.0 + 0.1	(1.9)	3	(0.3)	2	(0.3)	2	2.1				
4043BL	154	4042L	27	7.8	1.4	0.0 + 0.1	(0.8)	2	(0.0)	2	(0.0)	2	0.9				
4098	10	1800	1	17.0	1.0	0.0 + 0.0	(0.0)	1	(0.0)	0	(0.0)	0	0.0				
4111	256	715S	49	17.0	5.3	0.0 + 0.4	(5.3)	0	(0.0)	0	(0.0)	0	5.3				
4112BL	68	4111L	49	24.0	5.3	0.0 + 0.1	(1.4)	0	(0.0)	0	(0.0)	0	1.4				
4121	444<	1500S	39	7.0	2.1	0.0 + 0.3	(3.6)	3	(0.3)	1	(0.3)	1	3.9				
4122BL	108	4121L	39	63.4	2.1	0.0 + 0.1	(0.9)	2	(0.0)	1	(0.0)	1	0.9				
4131	188	715S	38	17.0	4.9	0.0 + 0.3	(3.6)	0	(0.0)	0	(0.0)	0	3.6				
4132BL	36	4131L	38	24.0	4.9	0.0 + 0.0	(0.7)	0	(0.0)	0	(0.0)	0	0.7				
4196BL	68	4197L	17	24.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0	(0.0)	0	0.3				
4197	247	1800S	17	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0	(0.1)	0	1.3				
4198BL	40	4199L	17	24.0	1.2	0.0 + 0.0	(0.2)	1	(0.0)	0	(0.0)	0	0.2				
4199	260	1800S	17	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0	(0.1)	0	1.3				
5821	605	5503S	42	14.0	17.4	2.6 + 0.3	(41.6)	72	(1.0)	12	(1.0)	12	42.6	1258		38	63
5822BL	74	5821L	42	28.2	24.3	0.5 + 0.0	(7.1)	57	(0.0)	12	(0.0)	12	7.1	1258		38	63
5841	144	1867S	41	6.0	23.4	0.7 + 0.2	(13.3)	49	(1.4)	3	(1.4)	3	14.7	1258		38	64
5842BL	92	5841L	41	7.7	36.0	0.8 + 0.1	(13.0)	68	(0.8)	3	(0.8)	3	13.8	1258		38	64
5843	689	3685S	66	6.0	23.5	3.6 + 0.9	(63.8)	43	(5.9)	8	(5.9)	8	69.7	1258		38	64
5844BL	60	5843L	66	7.7	36.1	0.5 + 0.1	(8.6)	67	(0.5)	8	(0.5)	8	9.1	1258		38	64

5851	10	10000	1	15.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1258	8	14
5852	10	10000	0	6.0	11.6	0.0 + 0.0	(0.5)	50	(0.0)	0		0.5	1258	8	51
5853	10	10000	1	15.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1258	8	14
5854	602	4169Sf	81	17.0	41.8	5.3 + 1.7	(99.2)	102	(15.0)	19		114.2	1258	69	87
5855BBL	124	5854L	81	52.8	41.8	1.1 + 0.3	(20.4)	102	(1.6)	19		22.0	1258	69	87
5911	28	1708	12	17.0	42.2	0.3 + 0.1	(4.7)	95	(0.7)	1		5.3	1259	6	17
5921	607	4064	26	17.0	10.7	1.6 + 0.2	(25.6)	49	(7.3)	8		33.0	1259	23	72
5922	374	1842S	45	17.0	14.1	1.1 + 0.3	(20.8)	58	(5.3)	7		26.1	1259	23	72
5923BBL	92	5922L	45	24.0	14.1	0.3 + 0.1	(5.1)	58	(0.7)	7		5.8	1259	23	72
5941	295	1631S	71	7.0	16.0	0.4 + 0.9	(18.6)	64	(4.0)	8		22.6	1259	22	2
5942BBL	92	5941L	71	9.2	18.7	0.2 + 0.3	(6.8)	101	(1.2)	8		8.0	1259	22	2
5943	840	2145Sf	57	7.0	5.8	0.8 + 0.6	(19.3)	65	(11.6)	20	+	30.9	1259	22	0
5944BBL	90	5943L	57	9.2	5.6	0.1 + 0.1	(2.0)	58	(0.7)	20	+	2.7	1259	22	0
5951	10	10000	0	9.0	25.1	0.1 + 0.0	(1.0)	74	(0.0)	0		1.0	1259	78	12
5997BBL	122	5998L	45	24.0	1.8	0.0 + 0.1	(0.9)	2	(0.0)	0		0.9			
5998	684	1800S	45	17.0	1.8	0.0 + 0.3	(4.9)	2	(0.3)	0		5.2			
5999	33	1800	2	17.0	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
6011	168	1800S	101	7.0	179.8	1.8 + 6.5	(119.1)	207	(8.1)	12		127.3	1260	76	84
6012BBL	18	6011L	101	63.4	179.6	0.2 + 0.7	(12.7)	206	(0.5)	12		13.2	1260	76	84
6013	237	1616S	58	7.0	30.7	1.5 + 0.5	(28.7)	87	(4.8)	7		33.5	1260	55	85
6014BBL	94	6013L	58	40.9	30.7	0.6 + 0.2	(11.4)	87	(1.0)	7		12.4	1260	55	85
6021	263	1631S	106	11.9	199.8	3.1 + 11.5	(207.2)	211	(10.6)	24	+	217.8	1260	54	71

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN JOURNEY SPEED	PER PCU CRUISE DELAY	UNIFORM DELAY (U+R+O=MEAN Q)	RANDOM+ OVERSAT DELAY (\$/H)	COST OF DELAY (\$/H)	MEAN COST OF STOPS /PCU (\$/H)	STOPS OF STOPS (\$/H)	QUEUE MEAN MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END (SECONDS)	TIMES START 1ST 2ND
6023	618	3543S	47	12.5	14.2	2.0 + 0.4	(34.5)	32	(3.8)	5		38.3	1260	36	71
6024BBL	68	6023L	47	16.4	9.9	0.1 + 0.0	(2.7)	19	(0.2)	5		2.8	1260	36	71
6041	300	1881	100	17.0	143.3	3.1 + 8.8	(169.6)	187	(13.8)	16		183.4	1260	36	49
6042	412	3166Sf	97	17.0	96.2	4.2 + 6.8	(156.3)	153	(15.5)	20		171.8	1260	36	49
6043BBL	78	6042L	97	24.0	96.2	0.8 + 1.3	(29.6)	153	(1.5)	20		31.1	1260	36	49
6051	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1260	6	12
6053	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1260	6	12
6054	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1260	6	12
6098BBL	86	6099L	24	24.0	0.7	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
6099	785	3600S	24	17.0	0.7	0.0 + 0.1	(2.0)	1	(0.1)	0		2.2			
6122BBL	90	6021L	106	16.4	216.4	1.5 + 3.9	(76.8)	218	(2.5)	24	+	79.3	1260	54	71
12591	684	3600S	29	4.1	11.2	0.1 + 0.2	(3.3)	4	(0.1)	1		3.4	12185	26	6
12592	10	10000	1	7.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	12185	11	17
12593BBL	122	12591L	29	3.0	0.9	0.0 + 0.0	(0.4)	2	(0.0)	1		0.5	12185	26	6
12597	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1259	6	12
12598	10	10000	0	6.0	27.5	0.1 + 0.0	(1.1)	78	(0.0)	0		1.1	1259	81	12
18341	828	3746S	31	5.0	1.1	0.1 + 0.2	(3.6)	3	(0.1)	1		3.8	12183	26	7
18342BBL	90	18341L	31	3.6	0.9	0.0 + 0.0	(0.3)	3	(0.0)	1		0.4	12183	26	7
18398BBL	90	18399L	26	24.0	0.7	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
18399	828	3600S	26	17.0	0.7	0.0 + 0.2	(2.2)	1	(0.2)	0		2.3			
18451	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	12183	12	18

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX				
1842.8	143.1	12.9	39.9	49.9	(1275.1)	+	(121.8)	+	(0.0)	=	1397.0	TOTALS
243.5	26.5	9.2	6.6	7.6	(202.6)	+	(11.2)	+	(0.0)	=	213.8	BUSES
1599.3	116.6	13.7	33.3	42.2	(1072.5)	+	(110.6)	+	(0.0)	=	1183.1	OTHER

ROUTE

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
	105.6	+	103.4	+	57.5	=	266.5

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 409

PROGRAM TRANSYT FINISHED

OPTION 2 96 SECONDS CYCLE TIME

Option 2 AM 96 seconds cycle time

PRT File
AM : 0830-0930

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED AM OPT2 96.DAT" at 14:39 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 96
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15869 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS  CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
          (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
          (SEC)  PER  MINS. (SEC)  (SEC)  1=YES  CYCLE  %  %  1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   TYPE  LIST OF NODES TO BE OPTIMISED
NO.   TYPE
3) =  2  1258  1260  1259  12183  12185  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET.....  SECOND SET.....  THIRD SET.....
NO.   TYPE
4) =  7  4042  4043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5) =  7  4111  4112  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6) =  7  4121  4122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7) =  7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8) =  7  4197  4196  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9) =  7  4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10) = 7  5821  5822  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11) = 7  5841  5842  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12) = 7  5843  5844  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13) = 7  5854  5855  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14) = 7  5922  5923  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15) = 7  5941  5942  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
16) = 7  5943  5944  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
17) = 7  5998  5997  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
18) = 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
19) = 7  6013  6014  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
20) = 7  6021  6122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
21) = 7  6023  6024  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
22) = 7  6042  6043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
23) = 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
24) = 7  12591 12593  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
25) = 7  18341 18342  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
26) = 7  18399 18398  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  7  7  6
28) = 10  1259  7  0  6
29) = 10  1260  7  6  7  6
30) = 10  12183  7  6
31) = 10  12185  7  6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  24  6  9
33) = 11  1259  11  9  6
34) = 11  1260  24  6  5  10
35) = 11  12183  8  5
36) = 11  12185  8  5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Dbl  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1  88  46  73
38) = 12  1259  1  86  62  74
    
```


39) = 12 1260 1 72 18 42 56
 40) = 12 12183 1 19 8
 41) = 12 12185 1 91 80

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS LINK1 NO.	LINKS LINK2 NO.	LINK1 GIVEWAY ONLY		LINK2 GIVEWAY ONLY		LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
						%	X100	%	X100					
42)	30	4011	4042	0	0	22	0	0	0	200	0	715	0	0
43)	30	4111	4131	0	0	22	0	0	0	200	0	715	0	0
44)	30	4112	0	0	0	0	0	0	0	200	0	715	0	0
45)	30	4121	4111	0	0	22	0	0	0	80	0	1500	0	0
46)	30	4122	0	0	0	0	0	0	0	80	0	1500	0	0
47)	30	4131	4121	0	0	22	0	0	0	200	0	715	0	0
48)	30	4132	0	0	0	0	0	0	0	200	0	715	0	0
49)	30	5941	5921	5922	0	50	50	0	0	77	0	1000	0	0
50)	30	5942	0	0	0	0	0	0	0	77	0	1000	0	0

LINK CARDS: FIXED DATA GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
				START STAGE	END LAG	START STAGE	END LAG					
51)	31	4041	0	0	0	0	0	65	0	3762	0	0
52)	31	4042	0	0	0	0	0	65	0	1815	0	0
53)	31	4043	0	0	0	0	0	65	0	0	0	0
54)	31	4196	0	0	0	0	0	200	0	0	0	0
55)	31	4197	0	0	0	0	0	200	0	1800	0	0
56)	31	4198	0	0	0	0	0	200	0	0	0	0
57)	31	4199	0	0	0	0	0	200	0	1800	0	0
58)	31	5821	1258	1	24	2	0	83	0	5503	0	0
59)	31	5822	0	0	0	0	0	83	0	0	0	0
60)	31	5841	1258	1	24	2	1	64	0	1867	0	0
61)	31	5842	0	0	0	0	0	64	0	0	0	0
62)	31	5843	1258	1	24	2	1	64	0	3685	0	0
63)	31	5844	0	0	0	0	0	64	0	0	0	0
64)	31	5851	1258	3	9	1	0	24	0	10000	0	0
65)	31	5852	1258	3	9	1	0	7	0	10000	0	0
66)	31	5853	1258	3	9	1	0	24	0	10000	0	0
67)	31	5854	1258	2	6	3	0	200	0	3412	0	0
68)	31	5855	0	0	0	0	0	200	0	0	0	0
69)	31	5911	1259	3	6	1	5	200	0	1708	0	0
70)	31	5921	1259	1	11	2	0	200	0	4064	0	0
71)	31	5922	1259	1	11	2	0	200	0	1842	0	0
72)	31	5923	0	0	0	0	0	200	0	0	0	0
73)	31	5941	1259	1	10	3	2	77	0	1631	0	0
74)	31	5942	0	0	0	0	0	77	0	0	0	0
75)	31	5943	1259	1	10	3	0	77	0	1931	0	0
76)	31	5944	0	0	0	0	0	77	0	0	0	0
77)	31	5951	1259	2	6	1	0	9	0	10000	0	0
78)	31	5997	0	0	0	0	0	200	0	0	0	0
79)	31	5998	0	0	0	0	0	200	0	1800	0	0
80)	31	5999	0	0	0	0	0	200	0	1800	0	0
81)	31	6011	1260	3	5	4	0	80	0	1800	0	0
82)	31	6012	0	0	0	0	0	80	0	0	0	0
83)	31	6013	1260	2	6	4	1	80	0	1616	0	0
84)	31	6014	0	0	0	0	0	80	0	0	0	0
85)	31	6021	1260	2	5	3	0	137	0	1631	0	0
86)	31	6023	1260	1	24	3	0	137	0	3543	0	0
87)	31	6024	0	0	0	0	0	137	0	0	0	0
88)	31	6041	1260	1	24	2	0	200	0	1881	0	0
89)	31	6042	1260	1	24	2	0	200	0	1881	0	0
90)	31	6043	0	0	0	0	0	200	0	0	0	0
91)	31	6051	1260	4	10	1	0	24	0	10000	0	0
92)	31	6053	1260	4	10	1	0	24	0	10000	0	0
93)	31	6054	1260	4	10	1	0	18	0	10000	0	0
94)	31	6098	0	0	0	0	0	200	0	0	0	0
95)	31	6099	0	0	0	0	0	200	0	3600	0	0
96)	31	6122	0	0	0	0	0	137	0	0	0	0
97)	31	12591	12185	1	8	2	0	25	0	3600	0	0
98)	31	12592	12185	2	5	1	0	8	0	10000	0	0
99)	31	12593	0	0	0	0	0	200	0	0	0	0
100)	31	12597	1259	3	6	1	0	9	0	10000	0	0
101)	31	12598	1259	2	9	1	0	8	0	10000	0	0
102)	31	18341	12183	1	8	2	0	30	0	3746	0	0
103)	31	18342	0	0	0	0	0	30	0	0	0	0
104)	31	18398	0	0	0	0	0	200	0	0	0	0
105)	31	18399	0	0	0	0	0	200	0	3600	0	0
106)	31	18451	12183	2	5	1	0	8	0	10000	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1		ENTRY 2		ENTRY 3		ENTRY 4	
					LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW
107)	32	4011	129	0	0	0	17	0	0	0	0	0
108)	32	4041	384	0	6013	30	5	6041	354	6	0	0
109)	32	4042	329	0	6013	166	5	6042	163	6	0	0
110)	32	4043	168	0	6014	90	3000	6043	78	3000	0	0
111)	32	4111	224	0	0	0	17	0	0	0	0	0
112)	32	4112	74	0	0	0	3000	0	0	0	0	0
113)	32	4121	435	0	6021	250	7	6042	191	7	0	0
114)	32	4122	120	0	6043	24	3046	6122	96	3046	0	0
115)	32	4131	220	0	0	0	17	0	0	0	0	0
116)	32	4132	34	0	0	0	3000	0	0	0	0	0
117)	32	4136	74	0	4122	74	3000	0	0	0	0	0
118)	32	4197	246	0	4121	207	17	4131	39	17	0	0
119)	32	4198	46	0	4122	46	3000	0	0	0	0	0
120)	32	4199	277	0	4111	49	17	4121	228	17	0	0
121)	32	5821	416	0	5921	404	14	0	0	0	0	0
122)	32	5822	66	0	5923	70	3013	0	0	0	0	0
123)	32	5841	111	0	4011	64	6	4041	47	6	0	0
124)	32	5842	64	0	4043	64	3020	0	0	0	0	0
125)	32	5843	730	0	4011	65	6	4041	337	6	4042	329
126)	32	5844	104	0	4043	104	3020	0	0	0	0	0
127)	32	5851	10	0	0	0	15	0	0	0	0	0
128)	32	5852	10	0	0	0	6	0	0	0	0	0
129)	32	5853	10	0	0	0	15	0	0	0	0	0
130)	32	5854	646	0	0	0	17	0	0	0	0	0
131)	32	5855	126	0	0	0	3020	0	0	0	0	0
132)	32	5911	32	0	0	0	17	0	0	0	0	0
133)	32	5921	414	0	0	0	17	0	0	0	0	0
134)	32	5922	317	0	0	0	17	0	0	0	0	0
135)	32	5923	100	0	0	0	3000	0	0	0	0	0
136)	32	5941	295	0	5841	111	7	5854	184	7	0	0
137)	32	5942	90	0	5842	64	3000	5855	20	3000	0	0
138)	32	5943	899	0	5843	730	7	5854	174	7	0	0
139)	32	5944	118	0	5844	104	3000	5855	14	3000	0	0
140)	32	5951	10	0	0	0	9	0	0	0	0	0
141)	32	5997	120	0	12593	120	3000	0	0	0	0	0
142)	32	5998	631	0	12591	631	17	0	0	0	0	0
143)	32	5999	48	0	5921	10	17	5943	38	17	0	0
144)	32	6011	163	0	4111	87	7	4131	76	7	0	0
145)	32	6012	24	0	4112	18	3046	0	0	0	0	0
146)	32	6013	196	0	4111	88	7	4131	105	7	0	0

18341	873	3746S	33	5.0	0.9	0.0 +	0.2	(3.1)	1	(0.1)	0	3.2	12183	27	8
18342BL	118	18341L	33	3.6	0.9	0.0 +	0.0	(0.4)	2	(0.0)	0	0.4	12183	27	8
18398BL	118	18399L	28	24.0	0.7	0.0 +	0.0	(0.3)	1	(0.0)	0	0.3			
18399	873	3600S	28	17.0	0.7	0.0 +	0.2	(2.4)	1	(0.2)	0	2.5			
18451	10	10000	1	9.0	44.2	0.1 +	0.0	(1.7)	95	(0.0)	0	1.7	12183	13	19

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	130.7	13.8	38.4	38.6	(1094.1) +	(120.0)	+ (0.0)	= 1214.1	TOTALS
288.4	29.4	9.8	7.2	6.8	(198.6) +	(12.3)	+ (0.0)	= 210.9	BUSES
1514.9	101.3	15.0	31.2	31.8	(895.5) +	(107.7)	+ (0.0)	= 1003.2	OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	103.1	+ 88.8	+ 58.1	= 249.9

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 73

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14
- (SECONDS)

1258	3	88	46	73
1259	3	86	62	74
1260	4	72	18	42
12183	2	19	8	56
12185	2	91	80	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	130.7	13.8	38.4	38.6	(1094.1) +	(120.0)	+ (0.0)	= 1214.1	TOTALS
288.4	29.4	9.8	7.2	6.8	(198.6) +	(12.3)	+ (0.0)	= 210.9	BUSES
1514.9	101.3	15.0	31.2	31.8	(895.5) +	(107.7)	+ (0.0)	= 1003.2	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 378

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38
- (SECONDS)

1258	3	88	46	73
1259	3	86	62	74
1260	4	72	18	42
12183	2	19	8	56
12185	2	91	80	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	130.7	13.8	38.4	38.6	(1094.1) +	(120.0)	+ (0.0)	= 1214.1	TOTALS
288.4	29.4	9.8	7.2	6.8	(198.6) +	(12.3)	+ (0.0)	= 210.9	BUSES
1514.9	101.3	15.0	31.2	31.8	(895.5) +	(107.7)	+ (0.0)	= 1003.2	OTHER

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 435

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1
- (SECONDS)

1258	3	88	46	73
1259	3	86	62	74
1260	4	72	18	42
12183	2	19	8	56
12185	2	91	80	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	130.7	13.8	38.4	38.6	(1094.1) +	(120.0)	+ (0.0)	= 1214.1	TOTALS
288.4	29.4	9.8	7.2	6.8	(198.6) +	(12.3)	+ (0.0)	= 210.9	BUSES
1514.9	101.3	15.0	31.2	31.8	(895.5) +	(107.7)	+ (0.0)	= 1003.2	OTHER

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 773

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14
- (SECONDS)

1258	3	88	46	73
1259	3	86	62	74
1260	4	72	18	42
12183	2	19	8	56
12185	2	91	80	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1803.3	130.7	13.8	38.4	38.6	(1094.1) +	(120.0)	+ (0.0)	= 1214.1	TOTALS
288.4	29.4	9.8	7.2	6.8	(198.6) +	(12.3)	+ (0.0)	= 210.9	BUSES
1514.9	101.3	15.0	31.2	31.8	(895.5) +	(107.7)	+ (0.0)	= 1003.2	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38
 - (SECONDS)

	1258	1259	1260	12183	12185	TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
	3	3	4	2	2	1803.3	130.7	13.8	38.4	38.6	(1094.1) +	(120.0)	(0.0)	1214.1	
	88	86	72	19	91	288.4	29.4	9.8	7.2	6.8	(198.6) +	(12.3)	(0.0)	210.9	BUSES
	46	62	18	8	80	1514.9	101.3	15.0	31.2	31.8	(895.5) +	(107.7)	(0.0)	1003.2	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 405

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1
 - (SECONDS)

	1258	1259	1260	12183	12185	TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
	3	3	4	2	2	1803.3	130.7	13.8	38.4	38.6	(1094.1) +	(120.0)	(0.0)	1214.1	
	88	86	72	19	91	288.4	29.4	9.8	7.2	6.8	(198.6) +	(12.3)	(0.0)	210.9	BUSES
	46	62	18	8	80	1514.9	101.3	15.0	31.2	31.8	(895.5) +	(107.7)	(0.0)	1003.2	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 396

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1 -1
 - (SECONDS)

	1258	1259	1260	12183	12185	TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
	3	3	4	2	2	1803.3	130.7	13.8	38.4	38.6	(1094.1) +	(120.0)	(0.0)	1214.1	
	88	86	72	19	91	288.4	29.4	9.8	7.2	6.8	(198.6) +	(12.3)	(0.0)	210.9	BUSES
	46	62	18	8	80	1514.9	101.3	15.0	31.2	31.8	(895.5) +	(107.7)	(0.0)	1003.2	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 870

96 SECOND CYCLE 96 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 14 38 -1 14 38 1 -1 1
 - (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10	LINK NUMBER (PCU/H)	FLOW INFO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (PCU/H)	MEAN PER CRUISE DELAY (SEC)	TIMES PCU (SEC)	-----DELAY----- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT OF DELAY (\$/H)	COST OF DELAY (\$/H)	-----STOPS----- MEAN STOPS /PCU	COST OF STOPS (\$/H)	-----QUEUE----- MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX (\$/H)	EXIT NODE	GREEN START	TIMES END	START END (SECONDS)						
1258	3	88	46	73								4011	129	715	21	17.0	3.8	0.0 + 0.1 (1.9)	0 (0.0)	0	0 (0.0)	0	0	1.9											
1259	3	86	62	74								4041	384	3762	10	5.9	0.5	0.0 + 0.1 (0.8)	1 (0.1)	0	0 (0.1)	0	0	0.9											
1260	4	72	18	42	56							4042	328	1815S	27	5.5	1.4	0.0 + 0.1 (1.8)	1 (0.1)	0	1 (0.1)	0	0	1.9											
12183	2	19	8									4043B1	168	4042L	27	7.8	1.4	0.0 + 0.1 (0.9)	1 (0.0)	0	1 (0.0)	0	0	0.9											
12185	2	91	80									4111	224	715S	45	17.0	5.0	0.0 + 0.3 (4.4)	0 (0.0)	0	0 (0.0)	0	0	4.4											
												4112B1	74	4111L	45	24.0	5.0	0.0 + 0.1 (1.5)	0 (0.0)	0	0 (0.0)	0	0	1.5											
												4121	429	1500S	38	7.0	2.0	0.0 + 0.2 (3.4)	2 (0.2)	1	2 (0.2)	1	1	3.7											
												4122B1	120	4121L	38	64.4	2.0	0.0 + 0.1 (1.0)	2 (0.0)	2	2 (0.0)	1	1	1.0											
												4131	220	715S	43	17.0	5.3	0.0 + 0.3 (4.6)	0 (0.0)	0	0 (0.0)	0	0	4.6											
												4132B1	34	4131L	43	24.0	5.3	0.0 + 0.0 (0.7)	0 (0.0)	0	0 (0.0)	0	0	0.7											
												4196B1	74	4197L	18	24.0	1.2	0.0 + 0.0 (0.4)	1 (0.0)	0	1 (0.0)	0	0	0.4											
												4197	243	1800S	18	17.0	1.2	0.0 + 0.1 (1.2)	1 (0.1)	1	1 (0.1)	0	0	1.2											
												4198B1	46	4199L	18	24.0	1.2	0.0 + 0.0 (0.2)	1 (0.0)	1	1 (0.0)	0	0	0.2											
												4199	273	1800S	18	17.0	1.2	0.0 + 0.1 (1.3)	1 (0.1)	1	1 (0.1)	0	0	1.4											
												5821	416	5503S	27	14.0	19.0	2.0 + 0.2 (31.2)	65 (1.7)	9	65 (1.7)	9	9	32.9	1258	16	46								
												5822B1	66	5821L	27	31.8	24.4	0.4 + 0.0 (6.4)	54 (0.5)	9	54 (0.5)	9	9	6.8	1258	16	46								
												5841	111	1867S	28	6.0	18.7	0.5 + 0.1 (8.2)	59 (1.3)	3	59 (1.3)	3	3	9.5	1258	16	47								
												5842B1	64	5841L	28	36.5	34.7	0.5 + 0.1 (8.8)	77 (0.6)	3	77 (0.6)	3	3	9.4	1258	16	47								
												5843	729	3685S	68	6.0	14.7	2.1 + 0.9 (42.4)	74 (10.8)	18	74 (10.8)	18	18	53.2	1258	16	47								
												5844B1	104	5843L	68	36.5	35.9	0.9 + 0.1 (14.7)	81 (1.1)	18	81 (1.1)	18	18	15.8	1258	16	47								
												5851	10	10000	1	15.0	44.2	0.1 + 0.0 (1.7)	95 (0.0)	0	95 (0.0)	0	0	1.7	1258	82	88								
												5852	10	10000	1	6.0	44.2	0.1 + 0.0 (1.7)	95 (0.0)	0	95 (0.0)	0	0	1.7	1258	82	88								
												5853	10	10000	1	15.0	44.2	0.1 + 0.0 (1.7)	95 (0.0)	0	95 (0.0)	0	0	1.7	1258	82	88								
												5854	646	4066Sf	83	17.0	44.9	6.1 + 2.0 (114.4)	102 (16.2)	22	102 (16.2)	22	22	130.6	1258	52	73								

5855BL	126	5854L	83	52.8	44.9	1.2 + 0.4	(22.3)	102	(1.6)	22	23.9	1258	52	73	
5911	32	1708	15	17.0	47.4	0.3 + 0.1	(6.0)	97	(0.8)	1	6.7	1259	80	91	
5921	414	4064	16	17.0	7.5	0.8 + 0.1	(12.3)	38	(3.8)	4	16.1	1259	1	62	
5922	317	1842S	35	17.0	10.1	0.7 + 0.2	(12.6)	45	(3.5)	5	16.2	1259	1	62	
5923BL	100	5922L	35	24.0	10.1	0.2 + 0.1	(4.0)	45	(0.6)	5	4.6	1259	1	62	
5941	294	1631S	67	7.0	12.9	0.3 + 0.8	(14.9)	54	(3.4)	5	18.3	1259	0	76	
5942BL	90	5941L	67	9.2	12.9	0.1 + 0.2	(4.6)	65	(0.7)	5	5.3	1259	0	76	
5943	898	2123Sf	61	7.0	9.6	1.7 + 0.7	(34.0)	82	(15.6)	25	+	49.6	0	74	
5944BL	118	5943L	61	9.2	6.9	0.1 + 0.1	(3.2)	64	(0.9)	25	+	4.2	1259	0	74
5951	10	10000	1	9.0	32.2	0.1 + 0.0	(1.3)	81	(0.0)	0	1.3	1259	68	86	
5997BL	120	5998L	42	24.0	1.7	0.0 + 0.1	(0.8)	2	(0.0)	0	0.8				
5998	630	1800S	42	17.0	1.7	0.0 + 0.3	(4.3)	2	(0.3)	0	4.5				
5999	48	1800	3	17.0	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2				
6011	163	1800S	100	7.0	172.3	1.9 + 5.9	(110.8)	195	(7.5)	12	118.2	1260	47	56	
6012BL	24	6011L	100	64.4	172.1	0.3 + 0.9	(16.3)	195	(0.6)	12	16.9	1260	47	56	
6013	196	1616S	50	7.0	30.5	1.3 + 0.3	(23.6)	82	(3.8)	6	27.4	1260	24	57	
6014BL	90	6013L	50	43.7	30.5	0.6 + 0.2	(10.8)	82	(0.9)	6	11.8	1260	24	57	
6021	249	1631S	102	11.8	152.6	2.8 + 7.7	(149.9)	184	(8.8)	20	158.7	1260	23	42	
6023	477	3543S	34	12.4	17.3	2.1 + 0.2	(32.6)	48	(4.4)	7	36.9	1260	0	42	

96 SECOND CYCLE 96 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY (SEC)	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX	EXIT NODE	GREEN TIMES	
						UNIFORM (U+R+O=MEAN Q)	RANDOM+ OVERSAT OF DELAY (\$/H)	MEAN COST OF STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX.	AVERAGE EXCESS (PCU)			WEIGHTED SUM OF () VALUES	1ST END (SECONDS)	2ND END
6024BL	66	6023L	34	16.4	18.5	0.3 + 0.0	(4.8)	39	(0.3)	7	5.1	1260	0	42	
6041	354	1881	95	17.0	97.9	3.7 + 5.9	(136.7)	149	(13.0)	15	149.7	1260	0	18	
6042	354	2449Sf	94	17.0	81.3	3.6 + 4.4	(113.6)	136	(11.9)	17	125.4	1260	0	18	
6043BL	102	6042L	94	24.0	81.3	1.0 + 1.3	(32.7)	136	(1.7)	17	34.5	1260	0	18	
6051	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.8	1260	66	72	
6053	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.8	1260	66	72	
6054	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.8	1260	66	72	
6098BL	90	6099L	20	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2				
6099	640	3600S	20	17.0	0.6	0.0 + 0.1	(1.6)	1	(0.1)	0	1.7				
6122BL	96	6021L	102	16.4	164.8	1.4 + 3.0	(62.4)	188	(2.3)	20	64.7	1260	23	42	
12591	630	3600S	26	4.1	1.2	0.1 + 0.1	(3.0)	5	(0.1)	2	3.1	12185	3	80	
12592	10	10000	1	7.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	12185	85	91	
12593BL	120	12591L	26	24.0	2.6	0.1 + 0.0	(1.2)	18	(0.3)	2	1.5	12185	3	80	
12597	10	10000	1	8.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1259	80	86	
12598	10	10000	1	6.0	34.8	0.1 + 0.0	(1.4)	84	(0.0)	0	1.4	1259	71	86	
18341	873	3746S	33	5.0	0.9	0.0 + 0.2	(3.1)	1	(0.1)	0	3.2	12183	27	8	
18342BL	118	18341L	33	3.6	0.9	0.0 + 0.0	(0.4)	2	(0.0)	0	0.4	12183	27	8	
18398BL	118	18399L	28	24.0	0.7	0.0 + 0.0	(0.3)	1	(0.0)	0	0.3				
18399	873	3600S	28	17.0	0.7	0.0 + 0.2	(2.4)	1	(0.2)	0	2.5				
18451	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	12183	13	19	

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-RM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1803.3	130.7	13.8	38.4	38.6	(1094.1) +	(120.0)	+ (0.0)	= 1214.1
288.4	29.4	9.8	7.2	6.8	(198.6)	+ (12.3)	+ (0.0)	= 210.9
1514.9	101.3	15.0	31.2	31.8	(895.5)	+ (107.7)	+ (0.0)	= 1003.2

ROUTE

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	103.1	+	88.8	+
				58.1
				=
				249.9

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 405

PROGRAM TRANSYT FINISHED

Option 2 IP 96 seconds cycle time

PRT File
IP : 1200-1300

1 T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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Wokingham, Berks.	Web:	www.trlsoftware.co.uk
RG40 3GA, UK		

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED IP OPT2 96.DAT" at 14:41 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE = 96
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 15869 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
          (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
          96    96    60    2      3      0  1    100  100  0  2    2    0    0    1420  260
CARD  CARD
NO.   TYPE
3) = 2  1258  1260  1259  12183  12185  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) = 7  4042  4043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5) = 7  4111  4112  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6) = 7  4121  4122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7) = 7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8) = 7  4197  4196  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9) = 7  4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10) = 7  5821  5822  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11) = 7  5841  5842  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12) = 7  5843  5844  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13) = 7  5854  5855  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14) = 7  5922  5923  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15) = 7  5941  5942  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
16) = 7  5943  5944  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
17) = 7  5998  5997  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
18) = 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
19) = 7  6013  6014  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
20) = 7  6021  6122  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
21) = 7  6023  6024  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
22) = 7  6042  6043  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
23) = 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
24) = 7  12591  12593  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
25) = 7  18341  18342  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
26) = 7  18399  18398  0  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0  7  6
28) = 10  1259  7  0  6
29) = 10  1260  7  6  7  6
30) = 10  12183  7  6
31) = 10  12185  7  6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  24  18  9
33) = 11  1259  11  9  6
34) = 11  1260  24  6  5  10
35) = 11  12183  8  5
36) = 11  12185  9  5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1  26  64  11
38) = 12  1259  1  24  93  12
    
```

39) = 12 1260 1 6 47 71 86
 40) = 12 12183 1 53 42
 41) = 12 12185 1 29 18

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS		LINK1 GIVEWAY		LINK2 GIVEWAY		LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
				LINK1 NO.	LINK2 NO.	ONLY %	A1 X100	A2 X100						
42)	30	4011	4042	0	0	22	0	0	0	200	0	715	0	0
43)	30	4111	4131	0	0	22	0	0	0	200	0	715	0	0
44)	30	4112	0	0	0	0	0	0	0	200	0	715	0	0
45)	30	4121	4111	0	0	22	0	0	0	80	0	1500	0	0
46)	30	4122	0	0	0	0	0	0	0	80	0	1500	0	0
47)	30	4131	4121	0	0	22	0	0	0	200	0	715	0	0
48)	30	4132	0	0	0	0	0	0	0	200	0	715	0	0
49)	30	5941	5921	5922	0	50	50	0	0	77	0	1000	0	0
50)	30	5942	0	0	0	0	0	0	0	77	0	1000	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100		
				START STAGE	END LAG	START STAGE	END LAG							
51)	31	4041	0	0	0	0	0	65	0	3762	0	0		
52)	31	4042	0	0	0	0	0	65	0	1815	0	0		
53)	31	4043	0	0	0	0	0	65	0	0	0	0		
54)	31	4196	0	0	0	0	0	200	0	0	0	0		
55)	31	4197	0	0	0	0	0	200	0	1800	0	0		
56)	31	4198	0	0	0	0	0	200	0	0	0	0		
57)	31	4199	0	0	0	0	0	200	0	1800	0	0		
58)	31	5821	1258	1	24	2	12	0	0	54	0	5503	0	0
59)	31	5822	0	0	0	0	0	0	0	54	0	0	0	0
60)	31	5841	1258	1	24	2	13	0	0	64	0	1867	0	0
61)	31	5842	0	0	0	0	0	0	0	64	0	0	0	0
62)	31	5843	1258	1	24	2	13	0	0	64	0	3685	0	0
63)	31	5844	0	0	0	0	0	0	0	64	0	0	0	0
64)	31	5851	1258	3	9	1	0	0	0	18	0	10000	0	0
65)	31	5852	1258	3	9	2	0	0	0	7	0	10000	0	0
66)	31	5853	1258	3	9	1	0	0	0	18	0	10000	0	0
67)	31	5854	1258	2	18	3	0	0	0	200	0	3412	0	0
68)	31	5855	0	0	0	0	0	0	0	200	0	0	0	0
69)	31	5911	1259	3	6	1	5	0	0	200	0	1708	0	0
70)	31	5921	1259	1	11	2	0	0	0	200	0	4064	0	0
71)	31	5922	1259	1	11	2	0	0	0	200	0	1842	0	0
72)	31	5923	0	0	0	0	0	0	0	200	0	0	0	0
73)	31	5941	1259	1	10	3	2	0	0	77	0	1631	0	0
74)	31	5942	0	0	0	0	0	0	0	77	0	0	0	0
75)	31	5943	1259	1	10	3	0	0	0	77	0	1931	0	0
76)	31	5944	0	0	0	0	0	0	0	77	0	0	0	0
77)	31	5951	1259	2	6	1	0	0	0	9	0	10000	0	0
78)	31	5997	0	0	0	0	0	0	0	200	0	0	0	0
79)	31	5998	0	0	0	0	0	0	0	200	0	1800	0	0
80)	31	5999	0	0	0	0	0	0	0	200	0	1800	0	0
81)	31	6011	1260	3	5	4	0	0	0	80	0	1800	0	0
82)	31	6012	0	0	0	0	0	0	0	80	0	0	0	0
83)	31	6013	1260	2	6	4	1	0	0	80	0	1616	0	0
84)	31	6014	0	0	0	0	0	0	0	80	0	0	0	0
85)	31	6021	1260	2	5	3	0	0	0	137	0	1631	0	0
86)	31	6023	1260	1	24	3	0	0	0	137	0	3543	0	0
87)	31	6024	0	0	0	0	0	0	0	137	0	0	0	0
88)	31	6041	1260	1	24	2	0	0	0	200	0	1881	0	0
89)	31	6042	1260	1	24	2	0	0	0	200	0	1881	0	0
90)	31	6043	0	0	0	0	0	0	0	200	0	0	0	0
91)	31	6051	1260	4	10	1	0	0	0	6	0	10000	0	0
92)	31	6053	1260	4	10	1	0	0	0	6	0	10000	0	0
93)	31	6054	1260	4	10	1	0	0	0	7	0	10000	0	0
94)	31	6098	0	0	0	0	0	0	0	200	0	0	0	0
95)	31	6099	0	0	0	0	0	0	0	200	0	3600	0	0
96)	31	6122	0	0	0	0	0	0	0	137	0	0	0	0
97)	31	12591	12185	1	9	2	0	0	0	25	0	3600	0	0
98)	31	12592	12185	2	5	1	0	0	0	8	0	10000	0	0
99)	31	12593	0	0	0	0	0	0	0	25	0	0	0	0
100)	31	12597	1259	3	6	1	0	0	0	9	0	10000	0	0
101)	31	12598	1259	2	9	1	0	0	0	8	0	10000	0	0
102)	31	18341	12183	1	8	2	0	0	0	30	0	3746	0	0
103)	31	18342	0	0	0	0	0	0	0	30	0	0	0	0
104)	31	18398	0	0	0	0	0	0	0	200	0	0	0	0
105)	31	18399	0	0	0	0	0	0	0	200	0	3600	0	0
106)	31	18451	12183	2	5	1	0	0	0	8	0	10000	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1		ENTRY 2		ENTRY 3		ENTRY 4	
					LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW
107)	32	4011	118	0	0	0	17	0	0	0	0	0
108)	32	4041	351	0	6013	33	5	6041	318	6	0	0
109)	32	4042	378	0	6013	232	5	6042	146	6	0	0
110)	32	4043	158	0	6014	94	3000	6043	64	3000	0	0
111)	32	4111	287	0	0	0	17	0	0	0	0	0
112)	32	4112	78	0	0	0	3000	0	0	0	0	0
113)	32	4121	417	0	6021	242	7	6042	172	7	0	0
114)	32	4122	102	0	6043	18	3038	6122	84	3038	0	0
115)	32	4131	217	0	0	0	17	0	0	0	0	0
116)	32	4132	36	0	0	0	3000	0	0	0	0	0
117)	32	4136	66	0	4122	66	3000	0	0	0	0	0
118)	32	4197	228	0	4121	203	17	4131	25	17	0	0
119)	32	4198	36	0	4122	36	3000	0	0	0	0	0
120)	32	4199	257	0	4111	43	17	4121	214	17	0	0
121)	32	5821	482	0	5911	10	14	5921	461	14	0	0
122)	32	5822	52	0	5923	52	3015	0	0	0	0	0
123)	32	5841	146	0	4011	69	6	4041	77	6	0	0
124)	32	5842	76	0	4043	76	3000	0	0	0	0	0
125)	32	5843	683	0	4011	49	6	4041	274	6	4042	361
126)	32	5844	80	0	4043	80	3000	0	0	0	0	0
127)	32	5851	10	0	0	0	15	0	0	0	0	0
128)	32	5852	10	0	0	0	6	0	0	0	0	0
129)	32	5853	10	0	0	0	15	0	0	0	0	0
130)	32	5854	397	0	0	0	17	0	0	0	0	0
131)	32	5855	398	0	0	0	3020	0	0	0	0	0
132)	32	5911	34	0	0	0	17	0	0	0	0	0
133)	32	5921	471	0	0	0	17	0	0	0	0	0
134)	32	5922	326	0	0	0	17	0	0	0	0	0
135)	32	5923	84	0	0	0	3000	0	0	0	0	0
136)	32	5941	316	0	5841	146	7	5854	178	7	0	0
137)	32	5942	96	0	5842	76	3000	5855	20	3000	0	0
138)	32	5943	854	0	5843	683	7	5854	179	7	0	0
139)	32	5944	100	0	5844	80	3000	5855	20	3000	0	0
140)	32	5951	10	0	0	0	9	0	0	0	0	0
141)	32	5997	128	0	12593	128	3000	0	0	0	0	0
142)	32	5998	654	0	12591	654	17	0	0	0	0	0
143)	32	5999	31	0	5921	10	17	5943	31	17	0	0
144)	32	6011	166	0	4111	122	7	4131	49	7	0	0
145)	32	6012	24	0	4112	24	3038	0	0	0	0	0
146)	32	6013	265	0	4111	122	7	4131	143	7	0	0

147)=	32	6014	94	0	4112	54	3038	4132	36	3000	0	0	0	0	0	0
148)=	32	6021	242	0	5821	84	13	5854	158	11	0	0	0	0	0	0
149)=	32	6023	569	0	5821	398	13	5854	158	11	0	0	0	0	0	0
150)=	32	6024	56	0	5822	52	3000	0	0	0	0	0	0	0	0	0
151)=	32	6041	318	0	0	0	17	0	0	0	0	0	0	0	0	0
152)=	32	6042	318	0	0	0	17	0	0	0	0	0	0	0	0	0
153)=	32	6043	82	0	0	0	3000	0	0	0	0	0	0	0	0	0
154)=	32	6051	10	0	0	0	6	0	0	0	0	0	0	0	0	0
155)=	32	6053	10	0	0	0	6	0	0	0	0	0	0	0	0	0
156)=	32	6054	10	0	0	0	9	0	0	0	0	0	0	0	0	0
157)=	32	6098	80	0	6012	24	3000	6024	56	3000	0	0	0	0	0	0
158)=	32	6099	735	0	6011	166	17	6023	569	17	0	0	0	0	0	0
159)=	32	6122	84	0	5855	82	3000	0	0	0	0	0	0	0	0	0
160)=	32	12591	654	0	5911	12	8	5922	326	4	5941	316	4	0	0	0
161)=	32	12592	10	0	0	0	7	0	0	0	0	0	0	0	0	0
162)=	32	12593	128	0	5923	32	3000	5942	96	3000	0	0	0	0	0	0
163)=	32	12597	10	0	0	0	8	0	0	0	0	0	0	0	0	0
164)=	32	12598	10	0	0	0	6	0	0	0	0	0	0	0	0	0
165)=	32	18341	835	0	5911	12	5	5943	823	5	0	0	0	0	0	0
166)=	32	18342	100	0	5944	100	3000	0	0	0	0	0	0	0	0	0
167)=	32	18398	100	0	18342	100	3000	0	0	0	0	0	0	0	0	0
168)=	32	18399	835	0	18341	835	17	0	0	0	0	0	0	0	0	0
169)=	32	18451	10	0	0	0	9	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

CARD	LINK	LANE 1		LANE 2		LANE 3	
		SAT.	CAPAC	SAT.	CAPAC	SAT.	CAPAC
TYPE	NO.	FLOW	VEH.	FLOW	VEH.	FLOW	VEH.
170)=	33	5854	0	0	0	0	0
171)=	33	5943	1815	4	0	0	0
172)=	33	6042	1544	3	0	0	0

*****END OF SUBROUTINE TINPUT*****

96 SECOND CYCLE 96 STEPS

INITIAL SETTINGS

- (SECONDS)

NODE NO	NUMBER OF STAGES	STAGES														
		1	2	3	4	5	6	7	8	9	10					
1258	3	26	64	11												
1259	3	24	93	12												
1260	4	6	47	71	86											
12183	2	53	42													
12185	2	29	18													

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	MEAN TIMES DELAY (SEC)	-----DELAY-----			----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF (\$/H)	EXIT NODE	GREEN TIMES	
						UNIFORM	RANDOM	COST OF DELAY (\$/H)	MEAN STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX.	AVERAGE EXCESS (PCU)			START	END
4011	118	715	20	17.0	3.8	0.0 + 0.1	(1.7)	0	(0.0)	0		1.7				
4041	351	3762	9	5.9	0.5	0.0 + 0.1	(0.7)	1	(0.1)	0		0.8				
4042	378	1815S	30	5.4	1.4	0.0 + 0.1	(2.1)	1	(0.2)	0		2.3				
4043BL	158	4042L	30	7.8	1.4	0.0 + 0.1	(0.9)	1	(0.0)	0		0.9				
4111	287	715S	55	17.0	6.1	0.0 + 0.5	(6.9)	0	(0.0)	1		6.9				
4112BL	78	4111L	55	24.0	6.1	0.0 + 0.1	(1.9)	0	(0.0)	1		11.9				
4121	417	1500S	37	7.0	2.0	0.0 + 0.2	(3.3)	0	(0.0)	0		3.3				
4122BL	102	4121L	37	56.4	2.0	0.0 + 0.1	(0.8)	0	(0.0)	0		0.8				
4131	217	715S	42	17.0	5.2	0.0 + 0.3	(4.4)	0	(0.0)	0		4.4				
4132BL	36	4131L	42	24.0	5.2	0.0 + 0.1	(0.7)	0	(0.0)	0		0.7				
4196BL	66	4197L	16	24.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0		0.3				
4197	228	1800S	16	17.0	1.2	0.0 + 0.1	(1.1)	1	(0.1)	0		1.1				
4198BL	36	4199L	16	24.0	1.2	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2				
4199	257	1800S	16	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0		1.3				
5821	482	5503S	35	14.0	21.4	2.6 + 0.2	(40.8)	73	(0.8)	10		41.6	1258	50	76	
5822BL	52	5821L	35	30.2	28.2	0.4 + 0.0	(5.8)	60	(0.0)	10		5.8	1258	50	76	
5841	146	1867S	41	6.0	21.6	0.7 + 0.2	(12.4)	80	(2.4)	5		14.8	1258	50	77	
5842BL	76	5841L	41	7.7	26.0	0.4 + 0.1	(7.8)	69	(0.7)	5		8.5	1258	50	77	
5843	684	3685S	71	6.0	21.5	3.0 + 1.1	(58.0)	82	(11.2)	17		69.2	1258	50	77	
5844BL	80	5843L	71	7.7	27.6	0.5 + 0.1	(8.7)	75	(0.7)	17		9.5	1258	50	77	
5851	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1258	20	26	
5852	10	10000	0	6.0	44.2	0.0 + 0.0	(0.6)	53	(0.0)	0		0.6	1258	20	64	
5853	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1258	20	26	
5854	397	3412Sf	86	17.0	46.6	3.7 + 1.5	(73.0)	106	(10.3)	23		83.3	1258	82	11	
5855BL	398	5854L	86	52.8	46.6	3.7 + 1.5	(73.2)	106	(5.3)	23		78.4	1258	82	11	
5911	34	1708	16	17.0	47.6	0.4 + 0.1	(6.4)	97	(0.8)	1		7.2	1259	18	29	
5921	471	4064	19	17.0	9.0	1.1 + 0.1	(16.6)	42	(4.8)	5		21.5	1259	35	93	
5922	326	1842S	36	17.0	11.7	0.8 + 0.2	(15.0)	49	(3.9)	6		18.9	1259	35	93	
5923BL	84	5922L	36	24.0	11.7	0.2 + 0.1	(3.9)	49	(0.5)	6		4.4	1259	35	93	
5941	316	1631S	70	7.0	15.9	0.5 + 0.9	(19.8)	68	(4.5)	9		24.3	1259	34	14	
5942BL	96	5941L	70	9.2	17.8	0.2 + 0.3	(6.8)	86	(1.0)	9		7.8	1259	34	14	
5943	854	2123Sf	58	7.0	8.3	1.4 + 0.6	(28.1)	74	(13.5)	22		41.6	1259	34	12	
5944BL	100	5943L	58	9.2	8.0	0.2 + 0.1	(3.2)	71	(0.9)	22		4.1	1259	34	12	
5951	10	10000	0	9.0	29.7	0.1 + 0.0	(1.2)	78	(0.0)	0		1.2	1259	3	24	
5997BL	128	5998L	43	24.0	1.8	0.0 + 0.1	(0.9)	2	(0.0)	0		0.9				
5998	655	1800S	43	17.0	1.8	0.0 + 0.3	(4.6)	2	(0.3)	0		4.9				
5999	31	1800	2	17.0	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1				
6011	166	1800S	92	7.0	116.7	1.9 + 3.4	(76.4)	161	(6.2)	9		82.7	1260	76	86	
6012BL	24	6011L	92	56.4	116.7	0.3 + 0.5	(11.0)	161	(0.5)	9		11.5	1260	76	86	
6013	265	1616S	61	7.0	32.7	1.8 + 0.6	(34.2)	87	(5.4)	9		39.6	1260	53	87	
6014BL	94	6013L	61	37.7	32.7	0.7 + 0.2	(12.1)	87	(1.0)	9		13.2	1260	53	87	
6021	242	1631S	96	11.7	110.0	2.7 + 4.6	(105.0)	153	(7.1)	15		112.1	1260	52	71	
6023	570	3543S	40	12.4	19.7	2.8 + 0.3	(44.4)	53	(5.8)	9		50.2	1260	30	71	

96 SECOND CYCLE 96 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER PCU	MEAN TIMES DELAY (SEC)	-----DELAY-----			----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF (\$/H)	EXIT NODE	GREEN TIMES	
						UNIFORM	RANDOM	COST OF DELAY (\$/H)	MEAN STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX.	AVERAGE EXCESS (PCU)			START	END
6024BL	56	6023L	40	16.4	23.3	0.3 + 0.0	(5.1)	49	(0.3)	9		5.5	1260	30	71	
6041	318	1881	90	17.0	80.8	3.4 + 3.8	(101.3)	135	(10.5)	12		111.8	1260	30	47	
6042	318	2481Sf	86	17.0	61.7	3.2 + 2.2	(77.4)	117	(9.2)	13		86.6	1260	30	47	
6043BL	82	6042L	86	24.0	61.7	0.8 + 0.6	(20.0)	117	(1.2)	13		21.2	1260	30	47	
6051	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1260	0	6	
6053	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1260	0	6	
6054	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1260	0	6	
6098BL	80	6099L	23	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2				
6099	736	3600S	23	17.0	0.6	0.0 + 0.1	(1.9)	1	(0.1)	0		2.0				
6122BL	84	6021L	96	16.4	118.6	1.1 + 1.6	(39.3)	161	(1.7)	15		41.0	1260	52	71	
12591	655	3600S	27	4.1	1.2	0.1 + 0.2	(3.0)	4	(0.0)	1		3.0	12185	38	18	
12592	10	10000	1	7.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	12185	23	29	
12593BL	128	12591L	27	3.0	0.9	0.0 + 0.0	(0.4)	3	(0.0)	1		0.5	12185	38	18	
12597	10															

18341	835	3746S	31	5.0	0.9	0.0	0.2	(2.9)	1	(0.1)	0	3.0	12183	61	42
18342BL	100	18341L	31	3.6	0.9	0.0	0.0	(0.3)	2	(0.0)	0	0.4	12183	61	42
18398BL	100	18399L	26	24.0	0.7	0.0	0.0	(0.3)	1	(0.0)	0	0.3			
18399	835	3600S	26	17.0	0.7	0.0	0.2	(2.2)	1	(0.1)	0	2.4			
18451	10	10000	1	9.0	44.2	0.1	0.0	(1.7)	95	(0.0)	0	1.7	12183	47	53

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	121.8	14.6	40.0	28.0	(965.8)	+ (111.6)	+ (0.0)	= 1077.3	TOTALS
298.7	30.2	9.9	8.8	5.6	(203.8)	+ (14.1)	+ (0.0)	= 217.9	BUSES
1483.1	91.6	16.2	31.2	22.5	(762.0)	+ (97.5)	+ (0.0)	= 859.5	OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	102.5	+ 78.4	+ 54.4	= 235.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 73

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14
- (SECONDS)

1258	3	26	64	11	
1259	3	24	93	12	
1260	4	6	47	71	86
12183	2	53	42		
12185	2	29	18		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	121.8	14.6	40.0	28.0	(965.8)	+ (111.6)	+ (0.0)	= 1077.3	TOTALS
298.7	30.2	9.9	8.8	5.6	(203.8)	+ (14.1)	+ (0.0)	= 217.9	BUSES
1483.1	91.6	16.2	31.2	22.5	(762.0)	+ (97.5)	+ (0.0)	= 859.5	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 380

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38
- (SECONDS)

1258	3	26	64	11	
1259	3	24	93	12	
1260	4	6	47	71	86
12183	2	53	42		
12185	2	29	18		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	121.8	14.6	40.0	28.0	(965.8)	+ (111.6)	+ (0.0)	= 1077.3	TOTALS
298.7	30.2	9.9	8.8	5.6	(203.8)	+ (14.1)	+ (0.0)	= 217.9	BUSES
1483.1	91.6	16.2	31.2	22.5	(762.0)	+ (97.5)	+ (0.0)	= 859.5	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 362

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1
- (SECONDS)

1258	3	26	64	11	
1259	3	24	93	12	
1260	4	6	47	71	86
12183	2	53	42		
12185	2	29	18		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	121.8	14.6	40.0	28.0	(965.8)	+ (111.6)	+ (0.0)	= 1077.3	TOTALS
298.7	30.2	9.9	8.8	5.6	(203.8)	+ (14.1)	+ (0.0)	= 217.9	BUSES
1483.1	91.6	16.2	31.2	22.5	(762.0)	+ (97.5)	+ (0.0)	= 859.5	OTHER

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 753

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14
- (SECONDS)

1258	3	26	64	11	
1259	3	24	93	12	
1260	4	6	47	71	86
12183	2	53	42		
12185	2	29	18		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	121.8	14.6	40.0	28.0	(965.8)	+ (111.6)	+ (0.0)	= 1077.3	TOTALS
298.7	30.2	9.9	8.8	5.6	(203.8)	+ (14.1)	+ (0.0)	= 217.9	BUSES
1483.1	91.6	16.2	31.2	22.5	(762.0)	+ (97.5)	+ (0.0)	= 859.5	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38
 - (SECONDS)

1258 3 26 64 11
 1259 3 24 93 12
 1260 4 6 47 71 86
 12183 2 53 42
 12185 2 29 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1781.9	121.8	14.6	40.0	28.0	(965.8) + (111.6)	+ (0.0)	= 1077.3	TOTALS	
298.7	30.2	9.9	8.8	5.6	(203.8) + (14.1)	+ (0.0)	= 217.9	BUSES	
1483.1	91.6	16.2	31.2	22.5	(762.0) + (97.5)	+ (0.0)	= 859.5	OTHER	

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 404

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1
 - (SECONDS)

1258 3 26 64 11
 1259 3 24 93 12
 1260 4 6 47 71 86
 12183 2 53 42
 12185 2 29 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1781.9	121.8	14.6	40.0	28.0	(965.8) + (111.6)	+ (0.0)	= 1077.3	TOTALS	
298.7	30.2	9.9	8.8	5.6	(203.8) + (14.1)	+ (0.0)	= 217.9	BUSES	
1483.1	91.6	16.2	31.2	22.5	(762.0) + (97.5)	+ (0.0)	= 859.5	OTHER	

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 396

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1 -1
 - (SECONDS)

1258 3 26 64 11
 1259 3 24 93 12
 1260 4 6 47 71 86
 12183 2 53 42
 12185 2 29 18

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
1781.9	121.8	14.6	40.0	28.0	(965.8) + (111.6)	+ (0.0)	= 1077.3	TOTALS	
298.7	30.2	9.9	8.8	5.6	(203.8) + (14.1)	+ (0.0)	= 217.9	BUSES	
1483.1	91.6	16.2	31.2	22.5	(762.0) + (97.5)	+ (0.0)	= 859.5	OTHER	

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 873

96 SECOND CYCLE 96 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 14 38 -1 14 38 1 -1 1
 - (SECONDS)

NODE NO	NUMBER OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
1258	3	26	64	11							
1259	3	24	93	12							
1260	4	6	47	71	86						
12183	2	53	42								
12185	2	29	18								

LINK NUMBER	FLOW INFO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE DELAY (SEC)	TIMES PER PCU (SEC)	-----DELAY----- UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT OF DELAY (\$/H)	COST OF DELAY (\$/H)	-----STOPS----- MEAN STOPS /PCU	COST OF STOPS (\$/H)	-----QUEUE----- MEAN MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX (\$/H)	EXIT NODE	GREEN START	TIMES END	START END
4011	118	715	20	17.0	3.8	0.0 + 0.1	(1.7)	0	(0.0)	0	1.7	1258	50	76		
4041	351	3762	9	5.9	0.5	0.0 + 0.1	(0.7)	1	(0.1)	0	0.8	1258	50	76		
4042	378	1815S	30	5.4	1.4	0.0 + 0.1	(2.1)	1	(0.2)	0	2.3	1258	50	76		
4043BL	158	4042L	30	7.8	1.4	0.0 + 0.1	(0.9)	1	(0.0)	0	0.9	1258	50	76		
4111	287	715S	55	17.0	6.1	0.0 + 0.5	(6.9)	0	(0.0)	1	6.9	1258	50	76		
4112BL	78	4111L	55	24.0	6.1	0.0 + 0.1	(1.9)	0	(0.0)	1	1.9	1258	50	76		
4121	417	1500S	37	7.0	2.0	0.0 + 0.2	(3.3)	0	(0.0)	0	3.3	1258	50	76		
4122BL	102	4121L	37	56.4	2.0	0.0 + 0.1	(0.8)	0	(0.0)	0	0.8	1258	50	76		
4131	217	715S	42	17.0	5.2	0.0 + 0.3	(4.4)	0	(0.0)	0	4.4	1258	50	76		
4132BL	36	4131L	42	24.0	5.2	0.0 + 0.1	(0.7)	0	(0.0)	0	0.7	1258	50	76		
4196BL	66	4197L	16	24.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0	0.3	1258	50	76		
4197	228	1800S	16	17.0	1.2	0.0 + 0.1	(1.1)	1	(0.1)	0	1.1	1258	50	76		
4198BL	36	4199L	16	24.0	1.2	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2	1258	50	76		
4199	257	1800S	16	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0	1.3	1258	50	76		
5821	482	5503S	35	14.0	21.4	2.6 + 0.2	(40.8)	73	(0.8)	10	41.6	1258	50	76		
5822BL	52	5821L	35	30.2	28.2	0.4 + 0.0	(5.8)	60	(0.0)	10	5.8	1258	50	76		
5841	146	1867S	41	6.0	21.6	0.7 + 0.2	(12.4)	80	(2.4)	5	14.8	1258	50	76		
5842BL	76	5841L	41	7.7	26.0	0.4 + 0.1	(7.8)	69	(0.7)	5	8.5	1258	50	76		
5843	684	3685S	71	6.0	21.5	3.0 + 1.1	(58.0)	82	(11.2)	17	69.2	1258	50	76		
5844BL	80	5843L	71	7.7	27.6	0.5 + 0.1	(8.7)	75	(0.7)	17	9.5	1258	50	76		
5851	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1258	20	26		
5852	10	10000	0	6.0	14.2	0.0 + 0.0	(0.6)	53	(0.0)	0	0.6	1258	20	26		
5853	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0	1.7	1258	20	26		
5854	397	3412Sf	86	17.0	46.6	3.7 + 1.5	(73.0)	106	(10.3)	23	83.3	1258	82	11		

5855BL	398	5854L	86	52.8	46.6	3.7 +	1.5	(73.2)	106	(5.3)	23	78.4	1258	82	11
5911	34	1708	16	17.0	47.6	0.4 +	0.1	(6.4)	97	(0.8)	1	7.2	1259	18	29
5921	471	4064	19	17.0	9.0	1.1 +	0.1	(16.6)	42	(4.8)	5	21.5	1259	35	93
5922	326	1842S	36	17.0	11.7	0.8 +	0.2	(15.0)	49	(3.9)	6	18.9	1259	35	93
5923BL	84	5922L	36	24.0	11.7	0.2 +	0.1	(3.9)	49	(0.5)	6	4.4	1259	35	93
5941	316	1631S	70	7.0	15.9	0.5 +	0.9	(19.8)	68	(4.5)	9	24.3	1259	34	14
5942BL	96	5941L	70	9.2	17.8	0.2 +	0.3	(6.8)	86	(1.0)	9	7.8	1259	34	14
5943	854	2123Sf	58	7.0	8.3	1.4 +	0.6	(28.1)	74	(13.5)	22	41.6	1259	34	12
5944BL	100	5943L	58	9.2	8.0	0.2 +	0.1	(3.2)	71	(0.9)	22	4.1	1259	34	12
5951	10	10000	0	9.0	29.7	0.1 +	0.0	(1.2)	78	(0.0)	0	1.2	1259	3	24
5997BL	128	5998L	43	24.0	1.8	0.0 +	0.1	(0.9)	2	(0.0)	0	0.9			
5998	655	1800S	43	17.0	1.8	0.0 +	0.3	(4.6)	2	(0.3)	0	4.9			
5999	31	1800	2	17.0	1.0	0.0 +	0.0	(0.1)	1	(0.0)	0	0.1			
6011	166	1800S	92	7.0	116.7	1.9 +	3.4	(76.4)	161	(6.2)	9	82.7	1260	76	86
6012BL	24	6011L	92	56.4	116.7	0.3 +	0.5	(11.0)	161	(0.5)	9	11.5	1260	76	86
6013	265	1616S	61	7.0	32.7	1.8 +	0.6	(34.2)	87	(5.4)	9	39.6	1260	53	87
6014BL	94	6013L	61	37.7	32.7	0.7 +	0.2	(12.1)	87	(1.0)	9	13.2	1260	53	87
6021	242	1631S	96	11.7	110.0	2.7 +	4.6	(105.0)	153	(7.1)	15	112.1	1260	52	71
6023	570	3543S	40	12.4	19.7	2.8 +	0.3	(44.4)	53	(5.8)	9	50.2	1260	30	71

96 SECOND CYCLE 96 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX	EXIT NODE	GREEN TIMES	
						UNIFORM	RANDOM+ OVERSAT	COST	MEAN	COST	MEAN			AVERAGE	WEIGHTED SUM	START	END
(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O=MEAN Q)	DELAY (\$/H)	DELAY (\$/H)	STOPS /PCU	STOPS (\$/H)	(PCU)	(PCU)	(\$/H)	OF () VALUES	1ST	2ND
6024BL	56	6023L	40	16.4	23.3	0.3 +	0.0	(5.1)	49	(0.3)	9	5.5	1260	30	71
6041	318	1881	90	17.0	80.8	3.4 +	3.8	(101.3)	135	(10.5)	12	111.8	1260	30	47
6042	318	2481Sf	86	17.0	61.7	3.2 +	2.2	(77.4)	117	(9.2)	13	86.6	1260	30	47
6043BL	82	6042L	86	24.0	61.7	0.8 +	0.6	(20.0)	117	(1.2)	13	21.2	1260	30	47
6051	10	10000	1	6.0	44.2	0.1 +	0.0	(1.7)	95	(0.0)	0	1.7	1260	0	6
6053	10	10000	1	6.0	44.2	0.1 +	0.0	(1.7)	95	(0.0)	0	1.7	1260	0	6
6054	10	10000	1	9.0	44.2	0.1 +	0.0	(1.7)	95	(0.0)	0	1.7	1260	0	6
6098BL	80	6099L	23	24.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	0	0.2			
6099	736	3600S	23	17.0	0.6	0.0 +	0.1	(1.9)	1	(0.1)	0	2.0			
6122BL	84	6021L	96	16.4	118.6	1.1 +	1.6	(39.3)	161	(1.7)	15	41.0	1260	52	71
12591	655	3600S	27	4.1	1.2	0.1 +	0.2	(3.0)	4	(0.0)	1	3.0	12185	38	18
12592	10	10000	1	7.0	44.2	0.1 +	0.0	(1.7)	95	(0.0)	0	1.7	12185	23	29
12593BL	128	12591L	27	3.0	0.9	0.0 +	0.0	(0.4)	3	(0.0)	1	0.5	12185	38	18
12597	10	10000	1	8.0	44.2	0.1 +	0.0	(1.7)	95	(0.0)	0	1.7	1259	18	24
12598	10	10000	1	6.0	32.2	0.1 +	0.0	(1.3)	81	(0.0)	0	1.3	1259	6	24
18341	835	3746S	31	5.0	0.9	0.0 +	0.2	(2.9)	1	(0.1)	0	3.0	12183	61	42
18342BL	100	18341L	31	3.6	0.9	0.0 +	0.0	(0.3)	2	(0.0)	0	0.4	12183	61	42
18398BL	100	18399L	26	24.0	0.7	0.0 +	0.0	(0.3)	1	(0.0)	0	0.3			
18399	835	3600S	26	17.0	0.7	0.0 +	0.2	(2.2)	1	(0.1)	0	2.4			
18451	10	10000	1	9.0	44.2	0.1 +	0.0	(1.7)	95	(0.0)	0	1.7	12183	47	53

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-RM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1781.9	121.8	14.6	40.0	28.0	(965.8)	+ (111.6)	+ (0.0)	= 1077.3
298.7	30.2	9.9	8.8	5.6	(203.8)	+ (14.1)	+ (0.0)	= 217.9
1483.1	91.6	16.2	31.2	22.5	(762.0)	+ (97.5)	+ (0.0)	= 859.5

ROUTE

	CRUISE	DELAY	STOPS	TOTALS
	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	102.5	+	78.4	+
				54.4
				=
				235.3
NO. OF ENTRIES TO SUBPT =	11			
NO. OF LINKS RECALCULATED=	405			
PROGRAM TRANSYT FINISHED				

Option 2 PM 96 seconds cycle time

PRT File
PM : 1730-1830

1 T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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RG40 3GA, UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED PM OPT2 96.DAT" at 14:42 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 64
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 96
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 16040 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME    STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
          (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
          (SEC)  CYCLE  MINS. (SEC) (SEC)  1=YES  CYCLE  %    %    1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
3) =  2    1258  1260  1259  12183  12185  0    0    0    0    0    0    0    0    0    0
          LIST OF NODES TO BE OPTIMISED
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) =  7    4042  4043  0    0    0    0    0    0    0    0    0    0    0    0    0
5) =  7    4111  4112  0    0    0    0    0    0    0    0    0    0    0    0    0
6) =  7    4121  4122  0    0    0    0    0    0    0    0    0    0    0    0    0
7) =  7    4131  4132  0    0    0    0    0    0    0    0    0    0    0    0    0
8) =  7    4197  4196  0    0    0    0    0    0    0    0    0    0    0    0    0
9) =  7    4199  4198  0    0    0    0    0    0    0    0    0    0    0    0    0
10) = 7    5821  5822  0    0    0    0    0    0    0    0    0    0    0    0    0
11) = 7    5841  5842  0    0    0    0    0    0    0    0    0    0    0    0    0
12) = 7    5843  5844  0    0    0    0    0    0    0    0    0    0    0    0    0
13) = 7    5854  5855  0    0    0    0    0    0    0    0    0    0    0    0    0
14) = 7    5922  5923  0    0    0    0    0    0    0    0    0    0    0    0    0
15) = 7    5941  5942  0    0    0    0    0    0    0    0    0    0    0    0    0
16) = 7    5943  5944  0    0    0    0    0    0    0    0    0    0    0    0    0
17) = 7    5998  5997  0    0    0    0    0    0    0    0    0    0    0    0    0
18) = 7    6011  6012  0    0    0    0    0    0    0    0    0    0    0    0    0
19) = 7    6013  6014  0    0    0    0    0    0    0    0    0    0    0    0    0
20) = 7    6021  6122  0    0    0    0    0    0    0    0    0    0    0    0    0
21) = 7    6023  6024  0    0    0    0    0    0    0    0    0    0    0    0    0
22) = 7    6042  6043  0    0    0    0    0    0    0    0    0    0    0    0    0
23) = 7    6099  6098  0    0    0    0    0    0    0    0    0    0    0    0    0
24) = 7    12591 12593  0    0    0    0    0    0    0    0    0    0    0    0    0
25) = 7    18341 18342  0    0    0    0    0    0    0    0    0    0    0    0    0
26) = 7    18399 18398  0    0    0    0    0    0    0    0    0    0    0    0    0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0    7    6
28) = 10  1259  7    0    6
29) = 10  1260  7    6    7    6
30) = 10  12183  7    6
31) = 10  12185  7    6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  24  18  9
33) = 11  1259  11  9  6
34) = 11  1260  24  6  5  10
35) = 11  12183  8  5
36) = 11  12185  9  5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1  15  58  0
38) = 12  1259  1  12  79  0
    
```

39)= 12 1260 1 0 40 66 80
 40)= 12 12183 1 18 7
 41)= 12 12185 1 17 6

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS LINK1	LINKS LINK2	LINKS ONLY	LINKS GIVEWAY		A1	A2	LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
							% FLOW	X100							
42)	=	30	4011	4042	0	0	22	0	0	0	200	0	715	0	0
43)	=	30	4111	4131	0	0	22	0	0	0	200	0	715	0	0
44)	=	30	4112	0	0	0	0	0	0	0	200	0	715	0	0
45)	=	30	4121	4111	0	0	22	0	0	0	80	0	1500	0	0
46)	=	30	4122	0	0	0	0	0	0	0	80	0	1500	0	0
47)	=	30	4131	4121	0	0	22	0	0	0	200	0	715	0	0
48)	=	30	4132	0	0	0	0	0	0	0	200	0	715	0	0
49)	=	30	5941	5921	5922	0	50	50	0	0	77	0	1000	0	0
50)	=	30	5942	0	0	0	0	0	0	0	77	0	1000	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
				START STAGE	END STAGE	START STAGE	END STAGE					
51)	=	31	4041	0	0	0	0	65	0	3762	0	0
52)	=	31	4042	0	0	0	0	65	0	1815	0	0
53)	=	31	4043	0	0	0	0	65	0	0	0	0
54)	=	31	4098	0	0	0	0	200	0	1800	0	0
55)	=	31	4196	0	0	0	0	200	0	0	0	0
56)	=	31	4197	0	0	0	0	200	0	1800	0	0
57)	=	31	4198	0	0	0	0	200	0	0	0	0
58)	=	31	4199	0	0	0	0	200	0	1800	0	0
59)	=	31	5821	1258	1	24	2	12	0	54	0	5503
60)	=	31	5822	0	0	0	0	0	0	54	0	0
61)	=	31	5841	1258	1	24	2	13	0	64	0	1867
62)	=	31	5842	0	0	0	0	0	0	64	0	0
63)	=	31	5843	1258	1	24	2	13	0	64	0	3685
64)	=	31	5844	0	0	0	0	0	0	64	0	0
65)	=	31	5851	1258	3	9	1	0	0	18	0	10000
66)	=	31	5852	1258	3	9	2	0	0	7	0	10000
67)	=	31	5853	1258	3	9	1	0	0	18	0	10000
68)	=	31	5854	1258	2	18	3	0	0	200	0	3412
69)	=	31	5855	0	0	0	0	0	0	200	0	0
70)	=	31	5911	1259	3	6	1	5	0	200	0	1708
71)	=	31	5921	1259	1	11	2	0	0	200	0	4064
72)	=	31	5922	1259	1	11	2	0	0	200	0	1842
73)	=	31	5923	0	0	0	0	0	0	200	0	0
74)	=	31	5941	1259	1	10	3	2	0	77	0	1631
75)	=	31	5942	0	0	0	0	0	0	77	0	0
76)	=	31	5943	1259	1	10	3	0	0	77	0	1931
77)	=	31	5944	0	0	0	0	0	0	77	0	0
78)	=	31	5951	1259	2	6	1	0	0	9	0	10000
79)	=	31	5997	0	0	0	0	0	0	200	0	0
80)	=	31	5998	0	0	0	0	0	0	200	0	1800
81)	=	31	5999	0	0	0	0	0	0	200	0	1800
82)	=	31	6011	1260	3	5	4	0	0	80	0	1800
83)	=	31	6012	0	0	0	0	0	0	80	0	0
84)	=	31	6013	1260	2	6	4	1	0	80	0	1616
85)	=	31	6014	0	0	0	0	0	0	80	0	0
86)	=	31	6021	1260	2	5	3	0	0	137	0	1631
87)	=	31	6023	1260	1	24	3	0	0	137	0	3543
88)	=	31	6024	0	0	0	0	0	0	137	0	0
89)	=	31	6041	1260	1	24	2	0	0	200	0	1881
90)	=	31	6042	1260	1	24	2	0	0	200	0	1881
91)	=	31	6043	0	0	0	0	0	0	200	0	0
92)	=	31	6051	1260	4	10	1	0	0	6	0	10000
93)	=	31	6053	1260	4	10	1	0	0	6	0	10000
94)	=	31	6054	1260	4	10	1	0	0	7	0	10000
95)	=	31	6098	0	0	0	0	0	0	200	0	0
96)	=	31	6099	0	0	0	0	0	0	200	0	3600
97)	=	31	6122	0	0	0	0	0	0	137	0	0
98)	=	31	12591	12185	1	9	2	0	0	25	0	3600
99)	=	31	12592	12185	2	5	1	0	0	8	0	10000
100)	=	31	12593	0	0	0	0	0	0	25	0	0
101)	=	31	12597	1259	3	6	1	0	0	9	0	10000
102)	=	31	12598	1259	2	9	1	0	0	8	0	10000
103)	=	31	18341	12183	1	8	2	0	0	30	0	3746
104)	=	31	18342	0	0	0	0	0	0	30	0	0
105)	=	31	18399	0	0	0	0	0	0	200	0	0
106)	=	31	18399	0	0	0	0	0	0	200	0	3600
107)	=	31	18451	12183	2	5	1	0	0	8	0	10000

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1		ENTRY 2		ENTRY 3		ENTRY 4	
					LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW	LINK NO.	FLOW
108)	=	32	4011	84	0	0	17	0	0	0	0	0
109)	=	32	4041	409	0	6013	109	5	6041	300	6	0
110)	=	32	4042	340	0	6013	128	5	6042	212	6	0
111)	=	32	4043	154	0	6014	94	3000	6043	60	3000	0
112)	=	32	4098	10	0	4042	10	17	0	0	0	0
113)	=	32	4111	256	0	0	0	17	0	0	0	0
114)	=	32	4112	68	0	0	0	3000	0	0	0	0
115)	=	32	4121	462	0	6021	262	7	6042	200	7	0
116)	=	32	4122	108	0	6043	18	3045	6122	90	3045	0
117)	=	32	4131	188	0	0	0	17	0	0	0	0
118)	=	32	4132	36	0	0	0	3000	0	0	0	0
119)	=	32	4196	68	0	4122	68	3000	0	0	0	0
120)	=	32	4197	256	0	4121	235	17	4131	21	17	0
121)	=	32	4198	40	0	4122	40	3000	0	0	0	0
122)	=	32	4199	270	0	4111	35	17	4121	235	17	0
123)	=	32	5821	604	0	5921	597	14	0	0	0	0
124)	=	32	5822	74	0	5923	62	3013	0	0	0	0
125)	=	32	5841	144	0	4011	42	6	4041	102	6	0
126)	=	32	5842	92	0	4043	92	3000	0	0	0	0
127)	=	32	5843	690	0	4011	42	6	4041	317	6	4042
128)	=	32	5844	60	0	4043	60	3000	0	0	0	0
129)	=	32	5851	10	0	0	0	15	0	0	0	0
130)	=	32	5852	10	0	0	0	6	0	0	0	0
131)	=	32	5853	10	0	0	0	15	0	0	0	0
132)	=	32	5854	602	0	0	0	17	0	0	0	0
133)	=	32	5855	124	0	0	0	3020	0	0	0	0
134)	=	32	5911	28	0	0	0	17	0	0	0	0
135)	=	32	5921	607	0	0	0	17	0	0	0	0
136)	=	32	5922	374	0	0	0	17	0	0	0	0
137)	=	32	5923	92	0	0	0	3000	0	0	0	0
138)	=	32	5941	295	0	5841	144	7	5854	151	7	0
139)	=	32	5942	92	0	5842	92	3000	0	0	0	0
140)	=	32	5943	841	0	5843	690	7	5854	151	7	0
141)	=	32	5944	90	0	5844	60	3000	5855	30	3000	0
142)	=	32	5951	10	0	0	0	9	0	0	0	0
143)	=	32	5997	122	0	12593	122	3000	0	0	0	0
144)	=	32	5998	685	0	12591	685	17	0	0	0	0
145)	=	32	5999	34	0	5921	10	17	5943	24	17	0
146)	=	32	6011	168	0	4111	84	7	4131	84	7	0

Table with 15 columns of numerical data representing various parameters for different lanes (147) through (171).

LINK CARDS : FLARE SATURATION FLOW DATA

Table with 10 columns: CARD TYPE, LINK NO., SAT. FLOW, CAPAC. VEH., SAT. FLOW, CAPAC. VEH., SAT. FLOW, CAPAC. VEH., SAT. FLOW, CAPAC. VEH.

*****END OF SUBROUTINE TINPUT*****

96 SECOND CYCLE 96 STEPS

INITIAL SETTINGS
- (SECONDS)

Table with 12 columns: NODE NO, NUMBER OF STAGES, STAGE 1, STAGE 2, STAGE 3, STAGE 4, STAGE 5, STAGE 6, STAGE 7, STAGE 8, STAGE 9, STAGE 10.

Main performance table with columns: LINK NUMBER, FLOW INTO LINK, SAT OF FLOW, DEGREE OF SAT, MEAN PER CRUISE, MEAN TIMES DELAY, DELAY, UNIFORM OVERSAT, RANDOM Q, COST OF DELAY, STOPS OF DELAY, MEAN STOPS, COST OF STOPS, QUEUE MEAN MAX, AVERAGE EXCESS, PERFORMANCE INDEX, WEIGHTED SUM OF VALUES, EXIT NODE, GREEN START, TIMES END, START 1ST, END 2ND.

96 SECOND CYCLE 96 STEPS

Continuation of the main performance table with the same columns as the previous table.

12593BL	122	12591L	28	3.0	0.9	0.0	0.0	(0.4)	2	(0.0)	1	0.4	12185	26	6
12597	10	10000	1	8.0	44.2	0.1	0.0	(1.7)	95	(0.0)	0	1.7	1259	6	12
12598	10	10000	0	6.0	30.5	0.1	0.0	(1.2)	79	(0.0)	0	1.2	1259	88	12
18341	829	3746S	30	5.0	1.1	0.1	0.2	(3.6)	3	(0.1)	1	3.7	12183	26	7
18342BL	90	18341L	30	3.6	0.9	0.0	0.0	(0.3)	3	(0.0)	1	0.4	12183	26	7
18398BL	90	18399L	26	24.0	0.7	0.0	0.0	(0.2)	1	(0.0)	0	0.2			
18399	829	3600S	26	17.0	0.7	0.0	0.2	(2.2)	1	(0.1)	0	2.3			
18451	10	10000	1	9.0	44.2	0.1	0.0	(1.7)	95	(0.0)	0	1.7	12183	12	18

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	123.2	15.0	38.8	31.1	(992.0)	+ (114.5)	+ (0.0)	= 1106.4	TOTALS
243.5	23.0	10.6	6.1	4.6	(151.9)	+ (9.9)	+ (0.0)	= 161.8	BUSES
1599.3	100.2	16.0	32.6	26.5	(840.1)	+ (104.6)	+ (0.0)	= 944.7	OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	105.6	+ 80.5	+ 54.2	= 240.2

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 74

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14
- (SECONDS)

1258	3	15	58	0
1259	3	12	79	0
1260	4	0	40	66
12183	2	18	7	
12185	2	17	6	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	123.2	15.0	38.8	31.1	(992.0)	+ (114.5)	+ (0.0)	= 1106.4	TOTALS
243.5	23.0	10.6	6.1	4.6	(151.9)	+ (9.9)	+ (0.0)	= 161.8	BUSES
1599.3	100.2	16.0	32.6	26.5	(840.1)	+ (104.6)	+ (0.0)	= 944.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 381

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38
- (SECONDS)

1258	3	15	58	0
1259	3	12	79	0
1260	4	0	40	66
12183	2	18	7	
12185	2	17	6	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	123.2	15.0	38.8	31.1	(992.0)	+ (114.5)	+ (0.0)	= 1106.4	TOTALS
243.5	23.0	10.6	6.1	4.6	(151.9)	+ (9.9)	+ (0.0)	= 161.8	BUSES
1599.3	100.2	16.0	32.6	26.5	(840.1)	+ (104.6)	+ (0.0)	= 944.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 363

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1
- (SECONDS)

1258	3	15	58	0
1259	3	12	79	0
1260	4	0	40	66
12183	2	18	7	
12185	2	17	6	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	123.2	15.0	38.8	31.1	(992.0)	+ (114.5)	+ (0.0)	= 1106.4	TOTALS
243.5	23.0	10.6	6.1	4.6	(151.9)	+ (9.9)	+ (0.0)	= 161.8	BUSES
1599.3	100.2	16.0	32.6	26.5	(840.1)	+ (104.6)	+ (0.0)	= 944.7	OTHER

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 760

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14
- (SECONDS)

1258	3	15	58	0
1259	3	12	79	0
1260	4	0	40	66
12183	2	18	7	
12185	2	17	6	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1842.8	123.2	15.0	38.8	31.1	(992.0)	+ (114.5)	+ (0.0)	= 1106.4	TOTALS

243.5	23.0	10.6	6.1	4.6	(151.9) + (9.9)	+ (0.0)	=	161.8	BUSES
1599.3	100.2	16.0	32.6	26.5	(840.1) + (104.6)	+ (0.0)	=	944.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 404

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38
 - (SECONDS)

1258	3	15	58	0						
1259	3	12	79	0						
1260	4	0	40	66	80					
12183	2	18	7							
12185	2	17	6							

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1842.8	123.2	15.0	38.8	31.1	(992.0) + (114.5)	+ (0.0)	=	1106.4	TOTALS
243.5	23.0	10.6	6.1	4.6	(151.9) + (9.9)	+ (0.0)	=	161.8	BUSES
1599.3	100.2	16.0	32.6	26.5	(840.1) + (104.6)	+ (0.0)	=	944.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 408

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1
 - (SECONDS)

1258	3	15	58	0						
1259	3	12	79	0						
1260	4	0	40	66	80					
12183	2	18	7							
12185	2	17	6							

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1842.8	123.2	15.0	38.8	31.1	(992.0) + (114.5)	+ (0.0)	=	1106.4	TOTALS
243.5	23.0	10.6	6.1	4.6	(151.9) + (9.9)	+ (0.0)	=	161.8	BUSES
1599.3	100.2	16.0	32.6	26.5	(840.1) + (104.6)	+ (0.0)	=	944.7	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 400

96 SECOND CYCLE 96 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 14 38 -1 14 38 1 -1
 - (SECONDS)

1258	3	15	58	0						
1259	3	12	79	0						
1260	4	0	40	66	80					
12183	2	18	7							
12185	2	17	6							

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1842.8	123.2	15.0	38.8	31.1	(992.0) + (114.5)	+ (0.0)	=	1106.4	TOTALS
243.5	23.0	10.6	6.1	4.6	(151.9) + (9.9)	+ (0.0)	=	161.8	BUSES
1599.3	100.2	16.0	32.6	26.5	(840.1) + (104.6)	+ (0.0)	=	944.7	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 875

96 SECOND CYCLE 96 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 14 38 -1 14 38 1 -1 1
 - (SECONDS)

1258	3	15	58	0																
1259	3	12	79	0																
1260	4	0	40	66	80															
12183	2	18	7																	
12185	2	17	6																	

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN CRUISE DELAY	PER PCU DELAY	TIMES	UNIFORM DELAY	RANDOM+ OVERSAT DELAY	COST OF DELAY	MEAN COST OF STOPS	STOPS OF STOPS	QUEUE MAX. AVERAGE EXCESS	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES START
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)		(PCU-H/H)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	(\$/H)			(SECONDS)
4011	84	715	14	17.0	3.4		0.0 + 0.1	(1.1)		0 (0.0)			1.1			
4041	409	3762	11	5.7	0.5		0.0 + 0.1	(0.9)		1 (0.1)			0.9			
4042	340	1815S	27	5.6	1.4		0.0 + 0.1	(1.9)		2 (0.2)			2.1			
4043BL	154	4042L	27	7.8	1.4		0.0 + 0.1	(0.8)		2 (0.0)			0.9			
4098	10	1800	1	17.0	1.0		0.0 + 0.0	(0.0)		1 (0.0)			0.0			
4111	256	715S	49	17.0	5.3		0.0 + 0.4	(5.3)		0 (0.0)			5.3			
4112BL	68	4111L	49	24.0	5.3		0.0 + 0.1	(1.4)		0 (0.0)			1.4			
4121	463	1500S	40	7.0	2.1		0.0 + 0.3	(3.8)		3 (0.3)			4.1			
4122BL	108	4121L	40	63.4	2.1		0.0 + 0.1	(0.9)		2 (0.0)			0.9			
4131	188	715S	38	17.0	4.9		0.0 + 0.3	(3.6)		0 (0.0)			3.6			
4132BL	36	4131L	38	24.0	4.9		0.0 + 0.0	(0.7)		0 (0.0)			0.7			
4196BL	68	4197L	18	24.0	1.2		0.0 + 0.0	(0.3)		1 (0.0)			0.3			
4197	256	1800S	18	17.0	1.2		0.0 + 0.1	(1.2)		1 (0.1)			1.3			
4198BL	40	4199L	17	24.0	1.2		0.0 + 0.0	(0.2)		1 (0.0)			0.2			
4199	270	1800S	17	17.0	1.2		0.0 + 0.1	(1.3)		1 (0.1)			1.4			
5821	605	5503S	37	14.0	16.7		2.5 + 0.3	(39.9)		70 (1.0)			40.9	1258	39	70
5822BL	74	5821L	37	28.2	21.4		0.4 + 0.0	(6.3)		51 (0.0)			6.3	1258	39	70
5841	144	1867S	37	6.0	14.8		0.4 + 0.2	(8.4)		47 (1.4)			9.8	1258	39	71
5842BL	92	5841L	37	7.7	18.6		0.4 + 0.1	(6.8)		41 (0.5)			7.2	1258	39	71
5843	690	3685S	59	6.0	12.0		1.6 + 0.7	(32.6)		62 (8.7)			41.3	1258	39	71
5844BL	60	5843L	59	7.7	18.4		0.2 + 0.1	(4.4)		56 (0.4)			4.8	1258	39	71

5851	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1258	9	15
5852	10	10000	0	6.0	11.6	0.0 + 0.0	(0.5)	48	(0.0)	0		0.5	1258	9	58
5853	10	10000	1	15.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1258	9	15
5854	602	4097Sf	81	17.0	44.7	5.8 + 1.7	(106.2)	101	(15.0)	20		121.2	1258	76	0
5855BBL	124	5854L	81	52.8	44.7	1.2 + 0.4	(21.9)	101	(1.6)	20		23.4	1258	76	0
5911	28	1708	13	17.0	47.1	0.3 + 0.1	(5.2)	97	(0.7)	1		5.9	1259	6	17
5921	607	4064	25	17.0	10.3	1.6 + 0.2	(24.7)	46	(6.9)	8		31.5	1259	23	79
5922	374	1842S	43	17.0	13.5	1.1 + 0.3	(19.9)	54	(5.0)	7		24.9	1259	23	79
5923BBL	92	5922L	43	24.0	13.5	0.3 + 0.1	(4.9)	54	(0.6)	7		5.5	1259	23	79
5941	295	1631S	70	7.0	17.1	0.5 + 0.9	(19.9)	63	(3.9)	8		23.8	1259	22	2
5942BBL	92	5941L	70	9.2	20.6	0.2 + 0.3	(7.5)	101	(1.2)	8		8.6	1259	22	2
5943	840	2123Sf	56	7.0	7.3	1.1 + 0.6	(24.3)	70	(12.4)	20	+	36.7	1259	22	0
5944BBL	90	5943L	56	9.2	6.6	0.1 + 0.1	(2.3)	57	(0.6)	20	+	3.0	1259	22	0
5951	10	10000	0	9.0	28.1	0.1 + 0.0	(1.1)	76	(0.0)	0		1.1	1259	85	12
5997BBL	122	5998L	45	24.0	1.8	0.0 + 0.1	(0.9)	2	(0.0)	0		0.9			
5998	685	1800S	45	17.0	1.8	0.0 + 0.3	(4.9)	2	(0.3)	0		5.2			
5999	33	1800	2	17.0	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
6011	168	1800S	99	7.0	166.7	2.0 + 5.8	(110.5)	192	(7.6)	11		118.0	1260	71	80
6012BBL	18	6011L	99	63.4	166.5	0.2 + 0.6	(11.8)	192	(0.4)	11		12.3	1260	71	80
6013	237	1616S	55	7.0	30.1	1.6 + 0.4	(28.1)	82	(4.6)	7		32.7	1260	46	81
6014BBL	94	6013L	55	40.9	30.1	0.6 + 0.2	(11.2)	83	(1.0)	7		12.1	1260	46	81
6021	263	1631S	94	11.9	95.0	2.8 + 4.1	(98.5)	147	(7.3)	15		105.9	1260	45	66

96 SECOND CYCLE 96 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN JOURNEY SPEED	PER PCU CRUISE DELAY	UNIFORM DELAY (U+R+O=MEAN Q)	RANDOM+ OVERSAT DELAY	COST OF DELAY (\$/H)	MEAN COST OF STOPS /PCU	STOPS OF STOPS (\$/H)	QUEUE MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END 1ST 2ND (SECONDS)	
6023	618	3543S	43	12.5	16.6	2.5 + 0.3	(40.4)	43	(5.1)	8		45.5	1260	24	66
6024BBL	68	6023L	43	16.4	19.3	0.3 + 0.0	(5.2)	41	(0.3)	8		5.5	1260	24	66
6041	300	1881	90	17.0	83.1	3.2 + 3.7	(98.4)	136	(10.0)	11		108.4	1260	24	40
6042	412	2939Sf	94	17.0	80.7	4.4 + 4.9	(131.1)	134	(13.6)	18		144.7	1260	24	40
6043BBL	78	6042L	94	24.0	80.7	0.8 + 0.9	(24.8)	134	(1.3)	18		26.1	1260	24	40
6051	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1260	90	0
6053	10	10000	1	6.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1260	90	0
6054	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1260	90	0
6098BBL	86	6099L	24	24.0	0.7	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
6099	786	3600S	24	17.0	0.7	0.0 + 0.1	(2.0)	1	(0.1)	0		2.2			
6122BBL	90	6021L	94	16.4	108.5	1.3 + 1.4	(38.5)	151	(1.7)	15		40.2	1260	45	66
12591	685	3600S	28	4.1	1.2	0.1 + 0.2	(3.3)	5	(0.1)	1		3.3	12185	26	6
12592	10	10000	1	7.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	12185	11	17
12593BBL	122	12591L	28	3.0	0.9	0.0 + 0.0	(0.4)	2	(0.0)	1		0.4	12185	26	6
12597	10	10000	1	8.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	1259	6	12
12598	10	10000	0	6.0	30.5	0.1 + 0.0	(1.2)	79	(0.0)	0		1.2	1259	88	12
18341	829	3746S	30	5.0	1.1	0.1 + 0.2	(3.6)	3	(0.1)	1		3.7	12183	26	7
18342BBL	90	18341L	30	3.6	0.9	0.0 + 0.0	(0.3)	3	(0.0)	1		0.4	12183	26	7
18398BBL	90	18399L	26	24.0	0.7	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
18399	829	3600S	26	17.0	0.7	0.0 + 0.2	(2.2)	1	(0.1)	0		2.3			
18451	10	10000	1	9.0	44.2	0.1 + 0.0	(1.7)	95	(0.0)	0		1.7	12183	12	18

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)
1842.8	123.2	15.0	38.8	31.1	(992.0) + (114.5)	+ (0.0)	=	1106.4
243.5	23.0	10.6	6.1	4.6	(151.9) + (9.9)	+ (0.0)	=	161.8
1599.3	100.2	16.0	32.6	26.5	(840.1) + (104.6)	+ (0.0)	=	944.7

ROUTE

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	105.6	80.5	54.2	240.2

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 409

PROGRAM TRANSYT FINISHED

OPTION 3

Option 3 AM 88 seconds cycle time

PRT File
AM : 0830-0930

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED AM OPT3 88.DAT" at 14:43 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 68
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 88
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 12
    
```

CORE REQUESTED = 16130 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS  CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
      (SEC)  CYCLE  MINS. (SEC) (SEC)  1=YES  CYCLE  %  %  1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
3) =  2    1258  1260  1259  12183  12185  0     0     0     0     0     0     0     0     0     0     0     0
      LIST OF NODES TO BE OPTIMISED
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) =  7    4042  4043  0     0     0     0     0     0     0     0     0     0     0     0     0
5) =  7    4111  4112  0     0     0     0     0     0     0     0     0     0     0     0     0
6) =  7    4121  4122  0     0     0     0     0     0     0     0     0     0     0     0     0
7) =  7    4131  4132  0     0     0     0     0     0     0     0     0     0     0     0     0
8) =  7    4197  4196  0     0     0     0     0     0     0     0     0     0     0     0     0
9) =  7    4199  4198  0     0     0     0     0     0     0     0     0     0     0     0     0
10) = 7    5821  5822  0     0     0     0     0     0     0     0     0     0     0     0     0
11) = 7    5841  5842  0     0     0     0     0     0     0     0     0     0     0     0     0
12) = 7    5843  5844  0     0     0     0     0     0     0     0     0     0     0     0     0
13) = 7    5854  5855  0     0     0     0     0     0     0     0     0     0     0     0     0
14) = 7    5922  5923  0     0     0     0     0     0     0     0     0     0     0     0     0
15) = 7    5941  5942  0     0     0     0     0     0     0     0     0     0     0     0     0
16) = 7    5943  5944  0     0     0     0     0     0     0     0     0     0     0     0     0
17) = 7    5998  5997  0     0     0     0     0     0     0     0     0     0     0     0     0
18) = 7    6011  6012  0     0     0     0     0     0     0     0     0     0     0     0     0
19) = 7    6013  6014  0     0     0     0     0     0     0     0     0     0     0     0     0
20) = 7    6021  6122  0     0     0     0     0     0     0     0     0     0     0     0     0
21) = 7    6023  6024  0     0     0     0     0     0     0     0     0     0     0     0     0
22) = 7    6042  6043  0     0     0     0     0     0     0     0     0     0     0     0     0
23) = 7    6099  6098  0     0     0     0     0     0     0     0     0     0     0     0     0
24) = 7    12591 12593 0     0     0     0     0     0     0     0     0     0     0     0     0
25) = 7    18341 18342 0     0     0     0     0     0     0     0     0     0     0     0     0
26) = 7    18399 18398 0     0     0     0     0     0     0     0     0     0     0     0     0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0     3     6
28) = 10  1259  7     0     6
29) = 10  1260  7     2     6
30) = 10  12183  7     6
31) = 10  12185  7     6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  13    17   10
33) = 11  1259  11     9    6
34) = 11  1260  12    10   12
35) = 11  12183  8     5
36) = 11  12185  8     5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1     2    41  74
38) = 12  1259  1    86    63  74
    
```


6043BL	102	6042L	85	24.0	53.5	0.9 +	0.6	(21.5)	115	(1.5)	13	23.0	1260	5	23
6051	10	10000	1	6.0	37.7	0.1 +	0.0	(1.5)	92	(0.0)	0	1.5	1260	73	81
6053	10	10000	0	6.0	9.2	0.0 +	0.0	(0.4)	44	(0.0)	0	0.4	1260	33	81
6054	10	10000	1	9.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	1260	75	81
6098BL	90	6099L	20	24.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	0	0.2			
6099	640	3600S	20	17.0	0.6	0.0 +	0.1	(1.6)	1	(0.1)	0	1.7			
6122BL	96	6021L	89	16.4	83.4	1.3 +	0.9	(31.6)	136	(1.6)	12	33.2	1260	28	48
6123	10	10000	1	6.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	1260	75	81
6124	10	10000	0	6.0	24.3	0.1 +	0.0	(1.0)	73	(0.0)	0	1.0	1260	58	81
6125	10	10000	0	6.0	24.3	0.1 +	0.0	(1.0)	73	(0.0)	0	1.0	1260	58	81
12591	631	3600S	26	4.1	1.3	0.1 +	0.1	(3.1)	5	(0.1)	1	3.2	12185	11	80
12592	10	10000	1	7.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	12185	85	3
12593BL	120	12591L	26	24.0	2.6	0.1 +	0.0	(1.2)	19	(0.3)	1	1.5	12185	11	80
12597	10	10000	1	8.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	1259	80	86
12598	10	10000	1	6.0	31.8	0.1 +	0.0	(1.3)	84	(0.0)	0	1.3	1259	72	86
18341	873	3746S	33	5.0	1.1	0.0 +	0.2	(3.8)	4	(0.2)	1	4.0	12183	17	86
18342BL	118	18341L	33	3.6	1.0	0.0 +	0.0	(0.5)	3	(0.0)	1	0.5	12183	17	86
18398BL	118	18399L	28	24.0	0.7	0.0 +	0.0	(0.3)	1	(0.0)	0	0.3			
18399	873	3600S	28	17.0	0.7	0.0 +	0.2	(2.4)	1	(0.2)	0	2.5			
18451	10	10000	1	9.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	12183	3	9

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1800.4	108.2	16.6	32.8	21.7	(774.6)	+ (103.3)	+ (0.0)	=	877.9
288.4	25.2	11.5	6.1	3.6	(138.4)	+ (10.9)	+ (0.0)	=	149.3
1512.0	83.0	18.2	26.7	18.1	(636.2)	+ (92.4)	+ (0.0)	=	728.6
									TOTALS
									BUSES
									OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	102.9	+ 62.9	+ 50.5	= 216.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 78

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13
- (SECONDS)

1258	3	2	41	74
1259	3	86	63	74
1260	4	81	23	48
12183	2	9	86	63
12185	2	3	80	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1800.4	108.2	16.6	32.8	21.7	(774.6)	+ (103.3)	+ (0.0)	=	877.9
288.4	25.2	11.5	6.1	3.6	(138.4)	+ (10.9)	+ (0.0)	=	149.3
1512.0	83.0	18.2	26.7	18.1	(636.2)	+ (92.4)	+ (0.0)	=	728.6
									TOTALS
									BUSES
									OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 400

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35
- (SECONDS)

1258	3	2	41	74
1259	3	86	63	74
1260	4	81	23	48
12183	2	9	86	63
12185	2	3	80	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1800.4	108.2	16.6	32.8	21.7	(774.6)	+ (103.3)	+ (0.0)	=	877.9
288.4	25.2	11.5	6.1	3.6	(138.4)	+ (10.9)	+ (0.0)	=	149.3
1512.0	83.0	18.2	26.7	18.1	(636.2)	+ (92.4)	+ (0.0)	=	728.6
									TOTALS
									BUSES
									OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 394

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1
- (SECONDS)

1258	3	2	41	74
1259	3	86	63	74
1260	4	81	23	48
12183	2	9	86	63
12185	2	3	80	

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1800.4	108.2	16.6	32.8	21.7	(774.6)	+ (103.3)	+ (0.0)	=	877.9
288.4	25.2	11.5	6.1	3.6	(138.4)	+ (10.9)	+ (0.0)	=	149.3
1512.0	83.0	18.2	26.7	18.1	(636.2)	+ (92.4)	+ (0.0)	=	728.6
									TOTALS
									BUSES
									OTHER

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 823

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13
- (SECONDS)

1258	3	2	41	74
------	---	---	----	----

4132BL	34	4131L	43	24.0	5.3	0.0 + 0.1	(0.7)	0	(0.0)	0			0.7			
4196BL	74	4197L	18	24.0	1.2	0.0 + 0.0	(0.4)	1	(0.0)	0			0.4			
4197	246	1800S	18	17.0	1.2	0.0 + 0.1	(1.2)	1	(0.1)	0			1.3			
4198BL	46	4199L	18	24.0	1.2	0.0 + 0.0	(0.2)	1	(0.0)	0			0.2			
4199	276	1800S	18	17.0	1.2	0.0 + 0.1	(1.3)	1	(0.1)	0			1.4			
5821	416	3670S	34	14.0	15.8	1.6 + 0.2	(25.9)	36	(0.9)	5			26.8	1258	15	48
5822BL	66	5821L	34	31.8	22.3	0.4 + 0.0	(5.8)	60	(0.5)	5			6.3	1258	15	48
5841	441	1867S	68	6.0	12.8	0.6 + 0.9	(22.2)	68	(6.0)	12	+		28.2	1258	15	49
5842BL	64	5841L	68	36.5	30.4	0.4 + 0.1	(7.7)	83	(0.7)	12	+		8.3	1258	15	49
5843	399	1843S	69	6.0	21.0	1.5 + 0.9	(33.1)	67	(5.4)	9			38.5	1258	15	49
5844BL	104	5843L	69	36.5	32.9	0.7 + 0.2	(13.5)	84	(1.1)	9			14.6	1258	15	49
5851	10	10000	0	8.0	18.0	0.0 + 0.0	(0.7)	63	(0.0)	0			0.7	1258	58	2
5852	10	10000	0	10.0	10.6	0.0 + 0.0	(0.4)	48	(0.0)	0			0.4	1258	84	41
5853	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1258	84	2
5854	646	4097Sf	79	17.0	38.8	5.4 + 1.5	(98.9)	98	(15.6)	19		114.6	1258	54	74	
5855BL	126	5854L	79	52.8	38.8	1.1 + 0.3	(19.3)	98	(1.6)	19		20.9	1258	54	74	
5856	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0		1.6	1258	84	2	
5857	10	10000	0	8.0	18.0	0.0 + 0.0	(0.7)	63	(0.0)	0		0.7	1258	58	2	
5911	32	1708	14	17.0	42.5	0.3 + 0.1	(5.4)	95	(0.8)	1		6.1	1259	80	3	
5921	414	4064	16	17.0	7.7	0.8 + 0.1	(12.6)	40	(4.1)	4		16.7	1259	9	63	
5922	317	1842S	36	17.0	10.5	0.7 + 0.2	(13.1)	48	(3.7)	5		16.8	1259	9	63	
5923BL	100	5922L	36	24.0	10.5	0.2 + 0.1	(4.1)	48	(0.6)	5		4.7	1259	9	63	
5941	295	1631S	69	7.0	12.0	0.1 + 0.8	(13.9)	42	(2.6)	5		16.6	1259	8	76	
5942BL	90	5941L	69	9.2	11.5	0.0 + 0.3	(4.1)	45	(0.5)	5		4.6	1259	8	76	
5943	898	2145Sf	62	7.0	6.8	1.0 + 0.7	(24.1)	64	(12.1)	19	+	36.2	1259	8	74	
5944BL	118	5943L	62	9.2	5.5	0.1 + 0.1	(2.5)	55	(0.8)	19	+	3.4	1259	8	74	
5951	10	10000	0	9.0	29.1	0.1 + 0.0	(1.1)	80	(0.0)	0		1.1	1259	69	86	
5997BL	120	5998L	42	24.0	1.7	0.0 + 0.1	(0.8)	2	(0.0)	0		0.8				
5998	631	1800S	42	17.0	1.7	0.0 + 0.3	(4.3)	2	(0.3)	0		4.6				
5999	48	1800	3	17.0	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2				
6011	163	1800S	83	7.0	80.1	1.7 + 1.9	(51.5)	138	(5.3)	7		56.7	1260	53	63	
6012BL	24	6011L	83	64.4	79.9	0.3 + 0.3	(7.6)	137	(0.4)	7		8.0	1260	53	63	
6013	196	1616S	43	7.0	23.4	1.0 + 0.3	(18.1)	74	(3.4)	5		21.5	1260	29	64	
6014BL	90	6013L	43	43.7	23.4	0.5 + 0.1	(8.3)	74	(0.8)	5		9.2	1260	29	64	

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN CRUISE SPEED	PERCU	MEAN TIMES	UNIFORM DELAY	RANDOM+OVERSAT	COST OF DELAY	MEAN STOPS /PCU	COST OF STOPS	MEAN MAX. QUEUE	AVERAGE EXCESS	PERFORMANCE INDEX	EXIT SUM OF VALUES	GREEN TIMES	START	START	END	END
(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)		(SEC)	(U+R+O-MEAN Q) (PCU-H/H)		(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	(\$/H)		1ST	2ND	(SECONDS)	(SECONDS)	(SECONDS)
6021	249	1631S	89	11.8	71.3	2.5 + 2.4	(70.0)	132	(6.3)	12			76.3	1260	28	48				
6023	477	1771S	61	12.4	18.6	1.8 + 0.7	(35.1)	50	(4.5)	6			39.6	1260	5	48				
6024BL	66	6023L	61	16.4	18.1	0.2 + 0.1	(4.7)	39	(0.3)	6			5.0	1260	5	48				
6041	347	1881	85	17.0	61.1	3.2 + 2.7	(83.6)	122	(10.4)	11			94.0	1260	5	23				
6042	350	2449Sf	85	17.0	53.5	3.1 + 2.1	(73.9)	115	(9.9)	13			83.8	1260	5	23				
6043BL	102	6042L	85	24.0	53.5	0.9 + 0.6	(21.5)	115	(1.5)	13			23.0	1260	5	23				
6051	10	10000	1	6.0	37.7	0.1 + 0.0	(1.5)	92	(0.0)	0			1.5	1260	73	81				
6053	10	10000	0	6.0	9.2	0.0 + 0.0	(0.4)	44	(0.0)	0			0.4	1260	33	81				
6054	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1260	75	81				
6098BL	90	6099L	20	24.0	0.6	0.0 + 0.0	(0.2)	1	(0.0)	0			0.2							
6099	640	3600S	20	17.0	0.6	0.0 + 0.1	(1.6)	1	(0.1)	0			1.7							
6122BL	96	6021L	89	16.4	83.4	1.3 + 0.9	(31.6)	136	(1.6)	12			33.2	1260	28	48				
6123	10	10000	1	6.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1260	75	81				
6124	10	10000	0	6.0	24.3	0.1 + 0.0	(1.0)	73	(0.0)	0			1.0	1260	58	81				
6125	10	10000	0	6.0	24.3	0.1 + 0.0	(1.0)	73	(0.0)	0			1.0	1260	58	81				
12591	631	3600S	26	4.1	11.3	0.1 + 0.1	(3.1)	5	(0.1)	1			3.2	12185	11	80				
12592	10	10000	1	7.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	12185	85	3				
12593BL	120	12591L	26	24.0	2.6	0.1 + 0.0	(1.2)	19	(0.3)	1			1.5	12185	11	80				
12597	10	10000	1	8.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	1259	80	86				
12598	10	10000	1	6.0	31.8	0.1 + 0.0	(1.3)	84	(0.0)	0			1.3	1259	72	86				
18341	873	3746S	33	5.0	1.1	0.0 + 0.2	(3.8)	4	(0.2)	1			4.0	12183	17	86				
18342BL	118	18341L	33	3.6	1.0	0.0 + 0.0	(0.5)	3	(0.0)	1			0.5	12183	17	86				
18398BL	118	18399L	28	24.0	0.7	0.0 + 0.0	(0.3)	1	(0.0)	0			0.3							
18399	873	3600S	28	17.0	0.7	0.0 + 0.2	(2.4)	1	(0.2)	0			2.5							
18451	10	10000	1	9.0	40.0	0.1 + 0.0	(1.6)	94	(0.0)	0			1.6	12183	3	9				

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX				
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)				
1800.4	108.2	16.6	32.8	21.7	(774.6)	+	(103.3)	+	(0.0)	=	877.9	TOTALS
288.4	25.2	11.5	6.1	3.6	(138.4)	+	(10.9)	+	(0.0)	=	149.3	BUSES
1512.0	83.0	18.2	26.7	18.1	(636.2)	+	(92.4)	+	(0.0)	=	728.6	OTHER

ROUTE

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
	102.9	+	62.9	+	50.5	=	216.3

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 425

PROGRAM TRANSYT FINISHED

Option 3 IP 88 seconds cycle time

PRT File
IP : 1200-1300

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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Nine Mile Ride Email: softwarebureau@trl.co.uk
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED IP OPT3 88.DAT" at 14:45 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 68
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 88
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 12
    
```

CORE REQUESTED = 16130 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS  CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
      (SEC)  CYCLE  MINS. (SEC) (SEC)  1=YES  CYCLE  %  %  1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
3) =  2    1258  1260  1259  12183  12185  0     0     0     0     0     0     0     0     0     0     0     0
      LIST OF NODES TO BE OPTIMISED
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE
4) =  7    4042  4043  0     0     0     0     0     0     0     0     0     0     0     0     0
5) =  7    4111  4112  0     0     0     0     0     0     0     0     0     0     0     0
6) =  7    4121  4122  0     0     0     0     0     0     0     0     0     0     0     0
7) =  7    4131  4132  0     0     0     0     0     0     0     0     0     0     0     0
8) =  7    4197  4196  0     0     0     0     0     0     0     0     0     0     0     0
9) =  7    4199  4198  0     0     0     0     0     0     0     0     0     0     0     0
10) = 7    5821  5822  0     0     0     0     0     0     0     0     0     0     0     0
11) = 7    5841  5842  0     0     0     0     0     0     0     0     0     0     0     0
12) = 7    5843  5844  0     0     0     0     0     0     0     0     0     0     0     0
13) = 7    5854  5855  0     0     0     0     0     0     0     0     0     0     0     0
14) = 7    5922  5923  0     0     0     0     0     0     0     0     0     0     0     0
15) = 7    5941  5942  0     0     0     0     0     0     0     0     0     0     0     0
16) = 7    5943  5944  0     0     0     0     0     0     0     0     0     0     0     0
17) = 7    5998  5997  0     0     0     0     0     0     0     0     0     0     0     0
18) = 7    6011  6012  0     0     0     0     0     0     0     0     0     0     0     0
19) = 7    6013  6014  0     0     0     0     0     0     0     0     0     0     0     0
20) = 7    6021  6122  0     0     0     0     0     0     0     0     0     0     0     0
21) = 7    6023  6024  0     0     0     0     0     0     0     0     0     0     0     0
22) = 7    6042  6043  0     0     0     0     0     0     0     0     0     0     0     0
23) = 7    6099  6098  0     0     0     0     0     0     0     0     0     0     0     0
24) = 7    12591 12593  0     0     0     0     0     0     0     0     0     0     0     0
25) = 7    18341 18342  0     0     0     0     0     0     0     0     0     0     0     0
26) = 7    18399 18398  0     0     0     0     0     0     0     0     0     0     0     0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0     3     6
28) = 10  1259  7     0     6
29) = 10  1260  7     2     6
30) = 10  12183  7     6
31) = 10  12185  7     6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  13    17   10
33) = 11  1259  11     9    6
34) = 11  1260  12    10   12
35) = 11  12183  8     5
36) = 11  12185  9     5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Db1  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1     19   55   3
38) = 12  1259  1     16   79   4
    
```

39)= 12 1260 1 3 33 58 73
 40)= 12 12183 1 22 11
 41)= 12 12185 1 21 10

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS NO.	LINK1 NO.	LINK2 NO.	LINK1 GIVEWAY COEFFS.		A1	A2	LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
							% FLOW	X100							
42)=	30	4011	4042	0	0	0	22	0	0	0	200	0	715	0	0
43)=	30	4111	4131	0	0	0	22	0	0	0	200	0	715	0	0
44)=	30	4112	0	0	0	0	0	0	0	0	200	0	715	0	0
45)=	30	4121	4111	0	0	0	22	0	0	0	80	0	1500	0	0
46)=	30	4122	0	0	0	0	0	0	0	0	80	0	1500	0	0
47)=	30	4131	4121	0	0	0	22	0	0	0	200	0	715	0	0
48)=	30	4132	0	0	0	0	0	0	0	0	200	0	715	0	0
49)=	30	5941	5921	5922	0	0	50	50	0	0	77	0	1000	0	0
50)=	30	5942	0	0	0	0	0	0	0	0	77	0	1000	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100		
				START STAGE	END STAGE	START STAGE	END STAGE							
51)=	31	4041	0	0	0	0	0	65	0	1881	0	0		
52)=	31	4042	0	0	0	0	0	65	0	1815	0	0		
53)=	31	4043	0	0	0	0	0	65	0	0	0	0		
54)=	31	4196	0	0	0	0	0	200	0	0	0	0		
55)=	31	4197	0	0	0	0	0	200	0	1800	0	0		
56)=	31	4198	0	0	0	0	0	200	0	0	0	0		
57)=	31	4199	0	0	0	0	0	200	0	1800	0	0		
58)=	31	5821	1258	1	13	2	7	0	0	54	0	3670	0	0
59)=	31	5822	0	0	0	0	0	0	0	54	0	0	0	0
60)=	31	5841	1258	1	13	2	8	0	0	64	0	1867	0	0
61)=	31	5842	0	0	0	0	0	0	0	64	0	0	0	0
62)=	31	5843	1258	1	13	2	8	0	0	64	0	1843	0	0
63)=	31	5844	0	0	0	0	0	0	0	64	0	0	0	0
64)=	31	5851	1258	2	17	1	0	0	0	18	0	10000	0	0
65)=	31	5852	1258	3	10	2	0	0	0	7	0	10000	0	0
66)=	31	5853	1258	3	10	1	0	0	0	18	0	10000	0	0
67)=	31	5854	1258	2	13	3	0	0	0	200	0	3412	0	0
68)=	31	5855	0	0	0	0	0	0	0	200	0	0	0	0
69)=	31	5856	1258	3	10	1	0	0	0	6	0	10000	0	0
70)=	31	5857	1258	2	17	1	0	0	0	6	0	10000	0	0
71)=	31	5911	1259	3	6	1	5	0	0	200	0	1708	0	0
72)=	31	5921	1259	1	11	2	0	0	0	200	0	4064	0	0
73)=	31	5922	1259	1	11	2	0	0	0	200	0	1842	0	0
74)=	31	5923	0	0	0	0	0	0	0	200	0	0	0	0
75)=	31	5941	1259	1	10	3	2	0	0	77	0	1631	0	0
76)=	31	5942	0	0	0	0	0	0	0	77	0	0	0	0
77)=	31	5943	1259	1	10	3	0	0	0	77	0	1931	0	0
78)=	31	5944	0	0	0	0	0	0	0	77	0	0	0	0
79)=	31	5951	1259	2	6	1	0	0	0	9	0	10000	0	0
80)=	31	5997	0	0	0	0	0	0	0	200	0	0	0	0
81)=	31	5998	0	0	0	0	0	0	0	200	0	1800	0	0
82)=	31	5999	0	0	0	0	0	0	0	200	0	1800	0	0
83)=	31	6011	1260	3	5	4	0	0	0	80	0	1800	0	0
84)=	31	6012	0	0	0	0	0	0	0	80	0	0	0	0
85)=	31	6013	1260	2	6	4	1	0	0	80	0	1616	0	0
86)=	31	6014	0	0	0	0	0	0	0	80	0	0	0	0
87)=	31	6021	1260	2	5	3	0	0	0	137	0	1631	0	0
88)=	31	6023	1260	1	12	3	0	0	0	137	0	1771	0	0
89)=	31	6024	0	0	0	0	0	0	0	137	0	0	0	0
90)=	31	6041	1260	1	12	2	0	0	0	200	0	1881	0	0
91)=	31	6042	1260	1	12	2	0	0	0	200	0	1881	0	0
92)=	31	6043	0	0	0	0	0	0	0	200	0	0	0	0
93)=	31	6051	1260	4	10	1	0	0	0	6	0	10000	0	0
94)=	31	6053	1260	2	10	1	0	0	0	6	0	10000	0	0
95)=	31	6054	1260	4	12	1	0	0	0	7	0	10000	0	0
96)=	31	6098	0	0	0	0	0	0	0	200	0	0	0	0
97)=	31	6099	0	0	0	0	0	0	0	200	0	3600	0	0
98)=	31	6122	0	0	0	0	0	0	0	137	0	0	0	0
99)=	31	6123	1260	4	12	1	0	0	0	7	0	10000	0	0
100)=	31	6124	1260	3	10	1	0	0	0	6	0	10000	0	0
101)=	31	6125	1260	3	10	1	0	0	0	4	0	10000	0	0
102)=	31	12591	12185	1	9	2	0	0	0	25	0	3600	0	0
103)=	31	12592	12185	2	5	1	0	0	0	8	0	10000	0	0
104)=	31	12593	0	0	0	0	0	0	0	25	0	0	0	0
105)=	31	12597	1259	3	6	1	0	0	0	9	0	10000	0	0
106)=	31	12598	1259	2	9	1	0	0	0	8	0	10000	0	0
107)=	31	18341	12183	1	8	2	0	0	0	30	0	3746	0	0
108)=	31	18342	0	0	0	0	0	0	0	30	0	0	0	0
109)=	31	18398	0	0	0	0	0	0	0	200	0	0	0	0
110)=	31	18399	0	0	0	0	0	0	0	200	0	3600	0	0
111)=	31	18451	12183	2	5	1	0	0	0	8	0	10000	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1			ENTRY 2			ENTRY 3			ENTRY 4		
					LINK NO.	FLOW	TIME	LINK NO.	FLOW	TIME	LINK NO.	FLOW	TIME	LINK NO.	FLOW	TIME
112)=	32	4011	118	0	0	0	0	0	0	0	0	0	0	0	0	
113)=	32	4041	348	0	6013	33	5	6041	315	6	0	0	0	0	0	
114)=	32	4042	380	0	6013	232	5	6042	148	6	0	0	0	0	0	
115)=	32	4043	158	0	6014	94	3000	6043	64	3000	0	0	0	0	0	
116)=	32	4111	287	0	0	0	17	0	0	0	0	0	0	0	0	
117)=	32	4112	78	0	0	0	3000	0	0	0	0	0	0	0	0	
118)=	32	4121	417	0	6021	242	7	6042	172	7	0	0	0	0	0	
119)=	32	4122	102	0	6043	18	3038	6122	84	3038	0	0	0	0	0	
120)=	32	4131	217	0	0	0	17	0	0	0	0	0	0	0	0	
121)=	32	4132	36	0	0	0	3000	0	0	0	0	0	0	0	0	
122)=	32	4196	66	0	4122	66	3000	0	0	0	0	0	0	0	0	
123)=	32	4197	228	0	4121	203	17	4131	25	17	0	0	0	0	0	
124)=	32	4198	36	0	4122	36	3000	0	0	0	0	0	0	0	0	
125)=	32	4199	257	0	4111	43	17	4121	214	17	0	0	0	0	0	
126)=	32	5821	482	0	5911	10	14	5921	461	14	0	0	0	0	0	
127)=	32	5822	52	0	5923	52	3015	0	0	0	0	0	0	0	0	
128)=	32	5841	417	0	4011	69	6	4041	348	6	0	0	0	0	0	
129)=	32	5842	76	0	4043	76	3000	0	0	0	0	0	0	0	0	
130)=	32	5843	412	0	4011	49	6	4042	363	6	0	0	0	0	0	
131)=	32	5844	80	0	4043	80	3000	0	0	0	0	0	0	0	0	
132)=	32	5851	10	0	0	0	15	0	0	0	0	0	0	0	0	
133)=	32	5852	10	0	0	0	15	0	0	0	0	0	0	0	0	
134)=	32	5853	10	0	0	0	15	0	0	0	0	0	0	0	0	
135)=	32	5854	673	0	0	0	17	0	0	0	0	0	0	0	0	
136)=	32	5855	122	0	0	0	3020	0	0	0	0	0	0	0	0	
137)=	32	5856	10	0	0	0	15	0	0	0	0	0	0	0	0	
138)=	32	5857	10	0	0	0	15	0	0	0	0	0	0	0	0	
139)=	32	5911	34	0	0	0	17	0	0	0	0	0	0	0	0	
140)=	32	5921	471	0	0	0	17	0	0	0	0	0	0	0	0	
141)=	32	5922	326	0	0	0	17	0	0	0	0	0	0	0	0	
142)=	32	5923	84	0	0	0	3000	0	0	0	0	0	0	0	0	
143)=	32	5941	316	0	5841	146	7	5854	178	7	0	0	0	0	0	
144)=	32	5942	96	0	5842	76	3000	5855	20	3000	0	0	0	0	0	
145)=	32	5943	854	0	5841	271	7	5843	412	7	5854	179	7	0	0	
146)=	32	5944	100	0	5844	80	3000	5855	20							

6043BL	82	6042L	76	24.0	44.7	0.7 +	0.3	(14.5)	103	(1.1)	10	15.5	1260	15	33
6051	10	10000	1	6.0	37.7	0.1 +	0.0	(1.5)	92	(0.0)	0	1.5	1260	83	3
6053	10	10000	0	6.0	9.2	0.0 +	0.0	(0.4)	44	(0.0)	0	0.4	1260	43	3
6054	10	10000	1	9.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	1260	85	3
6098BL	80	6099L	23	24.0	0.6	0.0 +	0.0	(0.2)	1	(0.0)	0	0.2			
6099	735	3600S	23	17.0	0.6	0.0 +	0.1	(1.9)	1	(0.1)	0	2.0			
6122BL	84	6021L	84	16.4	67.5	1.0 +	0.6	(22.4)	128	(1.3)	10	23.7	1260	38	58
6123	10	10000	1	6.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	1260	85	3
6124	10	10000	0	6.0	24.3	0.1 +	0.0	(1.0)	73	(0.0)	0	1.0	1260	68	3
6125	10	10000	0	6.0	24.3	0.1 +	0.0	(1.0)	73	(0.0)	0	1.0	1260	68	3
12591	654	3600S	28	4.1	1.2	0.1 +	0.2	(3.1)	4	(0.0)	1	3.1	12185	30	10
12592	10	10000	1	7.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	12185	15	21
12593BL	128	12591L	28	3.0	0.9	0.0 +	0.0	(0.5)	3	(0.0)	1	0.5	12185	30	10
12597	10	10000	1	8.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	1259	10	16
12598	10	10000	1	6.0	30.0	0.1 +	0.0	(1.2)	82	(0.0)	0	1.2	1259	0	16
18341	835	3746S	31	5.0	1.1	0.1 +	0.2	(3.7)	3	(0.1)	1	3.8	12183	30	11
18342BL	100	18341L	31	3.6	0.9	0.0 +	0.0	(0.4)	3	(0.0)	1	0.4	12183	30	11
18398BL	100	18399L	26	24.0	0.7	0.0 +	0.0	(0.3)	1	(0.0)	0	0.3			
18399	835	3600S	26	17.0	0.7	0.0 +	0.2	(2.2)	1	(0.2)	0	2.4			
18451	10	10000	1	9.0	40.0	0.1 +	0.0	(1.6)	94	(0.0)	0	1.6	12183	16	22

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX	
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
1781.9	106.3	16.8	34.0	21.2	(783.3)	+	(106.6)	+	(0.0)	= 889.9 TOTALS
243.5	20.2	12.0	5.1	3.3	(119.4)	+	(9.5)	+	(0.0)	= 128.9 BUSES
1538.4	86.1	17.9	28.9	17.9	(664.0)	+	(97.1)	+	(0.0)	= 761.0 OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	+	DELAY LITRES PER HOUR	+	STOPS LITRES PER HOUR	=	TOTALS LITRES PER HOUR
	101.9		63.6		50.5		216.0

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 78

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13
- (SECONDS)

1258	3	19	55	3	
1259	3	16	79	4	
1260	4	3	33	58	73
12183	2	22	11		
12185	2	21	10		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX		
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)		
1781.9	106.3	16.8	34.0	21.2	(783.3)	+	(106.6)	+	(0.0)	= 889.9 TOTALS
243.5	20.2	12.0	5.1	3.3	(119.4)	+	(9.5)	+	(0.0)	= 128.9 BUSES
1538.4	86.1	17.9	28.9	17.9	(664.0)	+	(97.1)	+	(0.0)	= 761.0 OTHER

NO. OF ENTRIES TO SUBPT = 12
NO. OF LINKS RECALCULATED= 470

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35
- (SECONDS)

1258	3	19	55	3	
1259	3	16	79	4	
1260	4	3	33	58	73
12183	2	22	11		
12185	2	21	10		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX		
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)		
1781.9	106.3	16.8	34.0	21.2	(783.3)	+	(106.6)	+	(0.0)	= 889.9 TOTALS
243.5	20.2	12.0	5.1	3.3	(119.4)	+	(9.5)	+	(0.0)	= 128.9 BUSES
1538.4	86.1	17.9	28.9	17.9	(664.0)	+	(97.1)	+	(0.0)	= 761.0 OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 388

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1
- (SECONDS)

1258	3	19	55	3	
1259	3	16	79	4	
1260	4	3	33	58	73
12183	2	22	11		
12185	2	21	10		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX		
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)		
1781.9	106.3	16.8	34.0	21.2	(783.3)	+	(106.6)	+	(0.0)	= 889.9 TOTALS
243.5	20.2	12.0	5.1	3.3	(119.4)	+	(9.5)	+	(0.0)	= 128.9 BUSES
1538.4	86.1	17.9	28.9	17.9	(664.0)	+	(97.1)	+	(0.0)	= 761.0 OTHER

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 813

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13
- (SECONDS)

1258	3	19	55	3
------	---	----	----	---

Option 3 PM 88 seconds cycle time

PRT File
PM : 1730-1830

1 T R A N S Y T 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "NOTTING HILL PROPOSED PM OPT3 88.DAT" at 14:46 on 20130408

TRANSYT 12.0

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 69
NUMBER OF OPTIMISED NODES = 5
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 88
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 4
MAXIMUM LINKS AT ANY NODE = 12
    
```

CORE REQUESTED = 16293 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:-
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS  CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  PER  1-1200  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=O/SET  FINAL  OUTPUT  P PER  P PER
      (SEC)  CYCLE  MINS. (SEC) (SEC)  1=YES  CYCLE  %    %    %    %    2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
3) =  2    1258  1260  1259  12183  12185  0    0    0    0    0    0    0    0    0    0
      LIST OF NODES TO BE OPTIMISED
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD  FIRST SET..... SECOND SET..... THIRD SET.....
NO.   TYPE  NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.   NO.
4) =  7    4042  4043  0    0    0    0    0    0    0    0    0    0    0    0
5) =  7    4111  4112  0    0    0    0    0    0    0    0    0    0    0    0
6) =  7    4121  4122  0    0    0    0    0    0    0    0    0    0    0    0
7) =  7    4131  4132  0    0    0    0    0    0    0    0    0    0    0    0
8) =  7    4197  4196  0    0    0    0    0    0    0    0    0    0    0    0
9) =  7    4199  4198  0    0    0    0    0    0    0    0    0    0    0    0
10) = 7    5821  5822  0    0    0    0    0    0    0    0    0    0    0    0
11) = 7    5841  5842  0    0    0    0    0    0    0    0    0    0    0    0
12) = 7    5843  5844  0    0    0    0    0    0    0    0    0    0    0    0
13) = 7    5854  5855  0    0    0    0    0    0    0    0    0    0    0    0
14) = 7    5922  5923  0    0    0    0    0    0    0    0    0    0    0    0
15) = 7    5941  5942  0    0    0    0    0    0    0    0    0    0    0    0
16) = 7    5943  5944  0    0    0    0    0    0    0    0    0    0    0    0
17) = 7    5998  5997  0    0    0    0    0    0    0    0    0    0    0    0
18) = 7    6011  6012  0    0    0    0    0    0    0    0    0    0    0    0
19) = 7    6013  6014  0    0    0    0    0    0    0    0    0    0    0    0
20) = 7    6021  6122  0    0    0    0    0    0    0    0    0    0    0    0
21) = 7    6023  6024  0    0    0    0    0    0    0    0    0    0    0    0
22) = 7    6042  6043  0    0    0    0    0    0    0    0    0    0    0    0
23) = 7    6099  6098  0    0    0    0    0    0    0    0    0    0    0    0
24) = 7    12591 12593 0    0    0    0    0    0    0    0    0    0    0    0
25) = 7    18341 18342 0    0    0    0    0    0    0    0    0    0    0    0
26) = 7    18399 18398 0    0    0    0    0    0    0    0    0    0    0    0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
27) = 10  1258  0    3    6
28) = 10  1259  7    0    6
29) = 10  1260  7    2    6
30) = 10  12183  7    6
31) = 10  12185  7    6
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
32) = 11  1258  13   17  10
33) = 11  1259  11   9   6
34) = 11  1260  12  10  10  12
35) = 11  12183  8    5
36) = 11  12185  9    5
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Dbl  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.  Cycled
37) = 12  1258  1    7  48  79
38) = 12  1259  1    3  65  79
    
```

39)= 12 1260 1 87 28 54 69
 40)= 12 12183 1 9 86
 41)= 12 12185 1 8 85

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINKS NO.	LINK1 NO.	LINK2 NO.	GIVEWAY ONLY % FLOW	COEFFS.		LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
								A1 X100	A2 X100					
42)=	30	4011	4042	0	0	0	22	0	0	200	0	715	0	0
43)=	30	4111	4131	0	0	0	22	0	0	200	0	715	0	0
44)=	30	4112	0	0	0	0	0	0	0	200	0	715	0	0
45)=	30	4121	4111	0	0	0	22	0	0	80	0	1500	0	0
46)=	30	4122	0	0	0	0	0	0	0	80	0	1500	0	0
47)=	30	4131	4121	0	0	0	22	0	0	200	0	715	0	0
48)=	30	4132	0	0	0	0	0	0	0	200	0	715	0	0
49)=	30	5941	5921	5922	0	0	50	50	0	77	0	1000	0	0
50)=	30	5942	0	0	0	0	0	0	0	77	0	1000	0	0

LINK CARDS: FIXED DATA

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
				START STAGE	END STAGE	START STAGE	END STAGE					
51)=	31	4041	0	0	0	0	0	65	0	1881	0	0
52)=	31	4042	0	0	0	0	0	65	0	1815	0	0
53)=	31	4043	0	0	0	0	0	65	0	1800	0	0
54)=	31	4098	0	0	0	0	0	200	0	1800	0	0
55)=	31	4196	0	0	0	0	0	200	0	1800	0	0
56)=	31	4197	0	0	0	0	0	200	0	1800	0	0
57)=	31	4198	0	0	0	0	0	200	0	1800	0	0
58)=	31	4199	0	0	0	0	0	200	0	1800	0	0
59)=	31	5821	1258	1	13	2	7	54	0	3670	0	0
60)=	31	5822	0	0	0	0	0	54	0	0	0	0
61)=	31	5841	1258	1	13	2	8	64	0	1867	0	0
62)=	31	5842	0	0	0	0	0	64	0	0	0	0
63)=	31	5843	1258	1	13	2	8	64	0	1843	0	0
64)=	31	5844	0	0	0	0	0	64	0	0	0	0
65)=	31	5851	1258	2	17	1	0	18	0	10000	0	0
66)=	31	5852	1258	3	10	2	0	7	0	10000	0	0
67)=	31	5853	1258	3	10	1	0	18	0	10000	0	0
68)=	31	5854	1258	2	13	3	0	200	0	3412	0	0
69)=	31	5855	0	0	0	0	0	200	0	0	0	0
70)=	31	5856	1258	3	10	1	0	10	0	10000	0	0
71)=	31	5857	1258	2	17	0	0	10	0	10000	0	0
72)=	31	5911	1259	3	6	1	5	200	0	1708	0	0
73)=	31	5921	1259	1	11	2	0	200	0	4064	0	0
74)=	31	5922	1259	1	11	2	0	200	0	1842	0	0
75)=	31	5923	0	0	0	0	0	200	0	0	0	0
76)=	31	5941	1259	1	10	3	2	77	0	1631	0	0
77)=	31	5942	0	0	0	0	0	77	0	0	0	0
78)=	31	5943	1259	1	10	3	0	77	0	1931	0	0
79)=	31	5944	0	0	0	0	0	77	0	0	0	0
80)=	31	5951	1259	2	6	1	0	9	0	10000	0	0
81)=	31	5997	0	0	0	0	0	200	0	0	0	0
82)=	31	5998	0	0	0	0	0	200	0	1800	0	0
83)=	31	5999	0	0	0	0	0	200	0	1800	0	0
84)=	31	6011	1260	3	5	4	0	80	0	1800	0	0
85)=	31	6012	0	0	0	0	0	80	0	0	0	0
86)=	31	6013	1260	2	6	4	1	80	0	1616	0	0
87)=	31	6014	0	0	0	0	0	80	0	0	0	0
88)=	31	6021	1260	2	5	3	0	137	0	1631	0	0
89)=	31	6023	1260	1	12	3	0	137	0	1771	0	0
90)=	31	6024	0	0	0	0	0	137	0	0	0	0
91)=	31	6041	1260	1	12	2	0	200	0	1881	0	0
92)=	31	6042	1260	1	12	2	0	200	0	1881	0	0
93)=	31	6043	0	0	0	0	0	200	0	0	0	0
94)=	31	6051	1260	4	10	1	0	6	0	10000	0	0
95)=	31	6053	1260	2	10	1	0	6	0	10000	0	0
96)=	31	6054	1260	4	12	1	0	7	0	10000	0	0
97)=	31	6098	0	0	0	0	0	200	0	0	0	0
98)=	31	6099	0	0	0	0	0	200	0	3600	0	0
99)=	31	6122	0	0	0	0	0	137	0	0	0	0
100)=	31	6123	1260	4	12	1	0	10	0	10000	0	0
101)=	31	6124	1260	3	10	1	0	10	0	10000	0	0
102)=	31	6125	1260	3	10	1	0	10	0	10000	0	0
103)=	31	12591	12185	1	9	2	0	25	0	3600	0	0
104)=	31	12592	12185	2	5	1	0	8	0	10000	0	0
105)=	31	12593	0	0	0	0	0	25	0	0	0	0
106)=	31	12597	1259	3	6	1	0	9	0	10000	0	0
107)=	31	12598	1259	2	9	1	0	8	0	10000	0	0
108)=	31	18341	12183	1	8	2	0	30	0	3746	0	0
109)=	31	18342	0	0	0	0	0	30	0	0	0	0
110)=	31	18398	0	0	0	0	0	200	0	0	0	0
111)=	31	18399	0	0	0	0	0	200	0	3600	0	0
112)=	31	18451	12183	2	5	1	0	8	0	10000	0	0

LINK CARDS: FLOW DATA

CARD NO.	CARD TYPE	LINK NO.	TOTAL FLOW	UNIFORM FLOW	ENTRY 1		ENTRY 2		ENTRY 3		ENTRY 4	
					LINK NO.	FLOW	CRUISE TIME	LINK NO.	FLOW	CRUISE TIME	LINK NO.	FLOW	CRUISE TIME	LINK NO.	FLOW	CRUISE TIME
113)=	32	4011	84	0	0	0	17	0	0	0	0	0
114)=	32	4041	359	0	6013	109	5	6041	250	6	0	0
115)=	32	4042	401	0	6013	128	5	6041	70	6	6042	203
116)=	32	4043	154	0	6014	94	3000	6043	60	3000	0	0
117)=	32	4098	10	0	4042	10	17	0	0	0	0	0
118)=	32	4111	256	0	0	0	17	0	0	0	0	0
119)=	32	4112	68	0	0	0	3000	0	0	0	0	0
120)=	32	4121	462	0	6021	262	7	6042	200	7	0	0
121)=	32	4122	108	0	6043	18	3045	6122	90	3045	0	0
122)=	32	4131	188	0	0	0	17	0	0	0	0	0
123)=	32	4132	36	0	0	0	3000	0	0	0	0	0
124)=	32	4196	68	0	4122	68	3000	0	0	0	0	0
125)=	32	4197	256	0	4121	235	17	4131	21	17	0	0
126)=	32	4198	40	0	4122	40	3000	0	0	0	0	0
127)=	32	4199	270	0	4111	35	17	4121	235	17	0	0
128)=	32	5821	604	0	5921	597	14	0	0	0	0	0
129)=	32	5822	74	0	5923	62	3013	0	0	0	0	0
130)=	32	5841	401	0	4011	42	6	4041	359	6	0	0
131)=	32	5842	92	0	4043	92	3000	0	0	0	0	0
132)=	32	5843	433	0	4011	42	6	4042	391	6	0	0
133)=	32	5844	60	0	4043	60	3000	0	0	0	0	0
134)=	32	5851	10	0	0	0	8	0	0	0	0	0
135)=	32	5852	10	0	0	0	10	0	0	0	0	0
136)=	32	5853	10	0	0	0	8	0	0	0	0	0
137)=	32	5854	602	0	0	0	17	0	0	0	0	0
138)=	32	5855	124	0	0	0	3020	0	0	0	0	0
139)=	32	5856	10	0	0	0	8	0	0	0	0	0
140)=	32	5857	10	0	0	0	8	0	0	0	0	0
141)=	32	5911	28	0	0	0	17	0	0	0	0	0
142)=	32	5921	607	0	0	0	17	0	0	0	0	0
143)=	32	5922	374	0	0	0	17	0	0	0	0	0
144)=	32	5923	92	0	0	0	3000	0	0	0	0	0
145)=	32	5941	295	0	5841	144	7	5854	151	7	0	0
146)=	32	5942	92	0	5842	92	3000	0	0	0	0	0

147)	=	32	5943	841	0	5841	257	7	5843	433	7	5854	151	7	0	0	0
148)	=	32	5944	90	0	5844	60	3000	5855	30	3000	0	0	0	0	0	0
149)	=	32	5951	10	0	0	0	9	0	0	0	0	0	0	0	0	0
150)	=	32	5997	122	0	12593	122	3000	0	0	0	0	0	0	0	0	0
151)	=	32	5998	685	0	12591	685	17	0	0	0	0	0	0	0	0	0
152)	=	32	5999	34	0	5921	10	17	5943	24	17	0	0	0	0	0	0
153)	=	32	6011	168	0	4111	84	7	4131	84	7	0	0	0	0	0	0
154)	=	32	6012	18	0	4112	18	3045	0	0	0	0	0	0	0	0	0
155)	=	32	6013	237	0	4111	137	7	4131	83	7	0	0	0	0	0	0
156)	=	32	6014	94	0	4112	50	3045	4132	36	3000	0	0	0	0	0	0
157)	=	32	6021	262	0	5821	112	13	5854	150	11	0	0	0	0	0	0
158)	=	32	6023	618	0	5821	492	13	5854	150	11	0	0	0	0	0	0
159)	=	32	6024	68	0	5822	74	3000	0	0	0	0	0	0	0	0	0
160)	=	32	6041	320	0	0	0	17	0	0	0	0	0	0	0	0	0
161)	=	32	6042	403	0	0	0	17	0	0	0	0	0	0	0	0	0
162)	=	32	6043	78	0	0	0	3000	0	0	0	0	0	0	0	0	0
163)	=	32	6051	10	0	0	0	6	0	0	0	0	0	0	0	0	0
164)	=	32	6053	10	0	0	0	6	0	0	0	0	0	0	0	0	0
165)	=	32	6054	10	0	0	0	9	0	0	0	0	0	0	0	0	0
166)	=	32	6098	86	0	6012	18	3000	6024	68	3000	0	0	0	0	0	0
167)	=	32	6099	786	0	6011	168	17	6023	618	17	0	0	0	0	0	0
168)	=	32	6122	90	0	5855	94	3000	0	0	0	0	0	0	0	0	0
169)	=	32	6123	10	0	0	0	6	0	0	0	0	0	0	0	0	0
170)	=	32	6124	10	0	0	0	6	0	0	0	0	0	0	0	0	0
171)	=	32	6125	10	0	0	0	6	0	0	0	0	0	0	0	0	0
172)	=	32	12591	685	0	5911	16	8	5922	374	4	5941	295	4	0	0	0
173)	=	32	12592	10	0	0	0	7	0	0	0	0	0	0	0	0	0
174)	=	32	12593	122	0	5923	30	3000	5942	92	3000	0	0	0	0	0	0
175)	=	32	12597	10	0	0	0	8	0	0	0	0	0	0	0	0	0
176)	=	32	12598	10	0	0	0	6	0	0	0	0	0	0	0	0	0
177)	=	32	18341	829	0	5911	12	5	5943	817	5	0	0	0	0	0	0
178)	=	32	18342	90	0	5944	90	3000	0	0	0	0	0	0	0	0	0
179)	=	32	18398	90	0	18342	90	3000	0	0	0	0	0	0	0	0	0
180)	=	32	18399	829	0	18341	829	17	0	0	0	0	0	0	0	0	0
181)	=	32	18451	10	0	0	0	9	0	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

CARD	LINK	SAT.	CAPAC	SAT.	CAPAC	SAT.	CAPAC
TYPE	NO.	FLOW	VEH.	FLOW	VEH.	FLOW	VEH.
182)	=	33	5854	1800	4	0	0
183)	=	33	5943	1815	4	0	0
184)	=	33	6042	1544	5	0	0

*****END OF SUBROUTINE TINPUT*****

88 SECOND CYCLE 88 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE
NO	OF STAGES	1	2	3	4	5	6	7	8	9	10
1258	3	7	48	79							
1259	3	3	65	79							
1260	4	87	28	54	69						
12183	2	9	86								
12185	2	8	85								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU	-----DELAY----- UNIFORM OVERSAT (U+R+O=MEAN Q)	-----STOPS----- MEAN COST /PCU STOPS	-----QUEUE----- MAX. AVERAGE EXCESS	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES END
NUMBER	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(\$/H)	(\$/H)	(PCU)	OF () VALUES (\$/H)		1ST	2ND
4011	84	715	14	17.0	3.5	0.0 + 0.1 (1.2)	0 (0.0)	0	1.2			
4041	359	1881	19	5.7	1.2	0.0 + 0.1 (1.7)	1 (0.1)	0	1.8			
4042	401	1815S	31	5.7	1.9	0.1 + 0.2 (3.0)	20 (2.4)	6	5.3			
4043BL	154	4042L	31	7.8	1.7	0.0 + 0.1 (1.0)	13 (0.2)	6	1.3			
4098	10	1800	1	17.0	1.0	0.0 + 0.0 (0.0)	1 (0.0)	0	0.0			
4111	256	715S	49	17.0	5.3	0.0 + 0.4 (5.3)	0 (0.0)	0	5.3			
4112BL	68	4111L	49	24.0	5.3	0.0 + 0.1 (1.4)	0 (0.0)	0	1.4			
4121	463	1500S	40	6.0	2.1	0.0 + 0.3 (3.8)	3 (0.3)	1	4.2			
4122BL	108	4121L	40	63.4	2.1	0.0 + 0.1 (0.9)	2 (0.0)	1	0.9			
4131	198	715S	38	17.0	4.9	0.0 + 0.3 (3.6)	0 (0.0)	0	3.6			
4132BL	36	4131L	38	24.0	4.9	0.0 + 0.0 (0.7)	0 (0.0)	0	0.7			
4196BL	68	4197L	18	24.0	1.2	0.0 + 0.0 (0.3)	1 (0.0)	0	0.3			
4197	256	1800S	18	17.0	1.2	0.0 + 0.1 (1.2)	1 (0.1)	0	1.3			
4198BL	40	4199L	17	24.0	1.2	0.0 + 0.0 (0.2)	1 (0.0)	0	0.2			
4199	270	1800S	17	17.0	1.2	0.0 + 0.1 (1.3)	1 (0.1)	0	1.4			
5821	605	3670S	45	14.0	14.0	2.0 + 0.4 (33.3)	31 (0.4)	5	33.7	1258	20	55
5822BL	74	5821L	45	28.2	19.7	0.4 + 0.0 (5.7)	50 (0.0)	5	5.8	1258	20	55
5841	401	1867S	63	6.0	12.7	0.7 + 0.7 (20.1)	31 (2.5)	5	22.6	1258	20	56
5842BL	92	5841L	63	7.7	19.8	0.3 + 0.2 (7.2)	41 (0.5)	5	7.7	1258	20	56
5843	433	1843S	64	6.0	13.1	0.8 + 0.8 (22.5)	34 (2.9)	6	25.4	1258	20	56
5844BL	60	5843L	64	7.7	20.1	0.2 + 0.1 (4.7)	43 (0.3)	6	5.1	1258	20	56
5851	10	10000	0	8.0	19.3	0.1 + 0.0 (0.8)	65 (0.0)	0	0.8	1258	65	7
5852	10	10000	0	10.0	9.6	0.0 + 0.0 (0.4)	46 (0.0)	0	0.4	1258	1	48
5853	10	10000	1	8.0	40.0	0.1 + 0.0 (1.6)	94 (0.0)	0	1.6	1258	1	7
5854	602	4169Sf	81	17.0	41.8	5.3 + 1.7 (99.2)	102 (15.0)	19	114.2	1258	61	79
5855BL	124	5854L	81	52.8	41.8	1.1 + 0.3 (20.4)	102 (1.6)	19	22.0	1258	61	79
5856	10	10000	1	8.0	40.0	0.1 + 0.0 (1.6)	94 (0.0)	0	1.6	1258	1	7
5857	10	10000	0	8.0	19.3	0.1 + 0.0 (0.8)	65 (0.0)	0	0.8	1258	65	7
5911	28	1708	12	17.0	42.2	0.3 + 0.1 (4.7)	95 (0.7)	1	5.3	1259	85	8
5921	607	4064	25	17.0	9.7	1.5 + 0.2 (23.1)	46 (6.9)	7	30.1	1259	14	65
5922	374	1842S	43	17.0	12.7	1.0 + 0.3 (18.8)	55 (5.0)	7	23.8	1259	14	65
5923BL	92	5922L	43	24.0	12.7	0.3 + 0.1 (4.6)	55 (0.6)	7	5.3	1259	14	65
5941	295	1631S	74	7.0	17.2	0.4 + 1.1 (20.0)	62 (3.9)	7	23.9	1259	13	81
5942BL	92	5941L	74	9.2	18.5	0.1 + 0.3 (6.7)	94 (1.1)	7	7.8	1259	13	81
5943	841	2145Sf	57	7.0	5.1	0.6 + 0.6 (16.8)	49 (8.8)	15	25.7	1259	13	79
5944BL	90	5943L	57	9.2	4.9	0.1 + 0.1 (1.7)	34 (0.4)	15	2.1	1259	13	79
5951	10	10000	0	9.0	26.6	0.1 + 0.0 (1.1)	77 (0.0)	0	1.1	1259	71	3
5997BL	122	5998L	45	24.0	1.8	0.0 + 0.1 (0.9)	2 (0.0)	0	0.9			
5998	685	1800S	45	17.0	1.8	0.0 + 0.3 (4.9)	2 (0.3)	0	5.2			
5999	33	1800	2	17.0	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0	0.1			
6011	168	1800S	83	7.0	78.9	1.8 + 1.9 (52.3)	136 (5.4)	7	57.6	1260	59	69
6012BL	18	6011L	83	63.4	78.8	0.2 + 0.2 (5.6)	136 (0.3)	7	5.9	1260	59	69
6013	237	1616S	49	7.0	23.7	1.2 + 0.3 (22.2)	76 (4.2)	6	26.4	1260	34	70

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU	-----DELAY----- UNIFORM OVERSAT (U+R+O=MEAN Q)	-----STOPS----- MEAN COST /PCU STOPS	-----QUEUE----- MAX. AVERAGE EXCESS	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES END
NUMBER	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(\$/H)	(\$/H)	(PCU)	OF () VALUES (\$/H)		1ST	2ND
6014BL	94	6013L	49	40.9	23.7	0.5 + 0.1 (8.8)	76 (0.9)	6	9.7	1260	34	70
6021	263	1631S	87	11.9	64.8	2.6 + 2.2 (67.2)	126 (6.3)	11	73.5	1260	33	54
6023	618	1771S	78	12.5	21.6	2.2 + 1.5 (52.8)	57 (6.7)	8	59.4	1260	11	54

6024BL	68	6023L	78	16.4	23.2	0.3 +	0.2 (	6.2)	52 (	0.4)	8	6.7	1260	11	54
6041	320	1881	83	17.0	59.5	3.0 +	2.3 (	75.1)	120 (	9.5)	10	84.6	1260	11	28
6042	403	2881sf	82	17.0	48.4	3.6 +	1.8 (	76.9)	107 (	10.6)	13	87.5	1260	11	28
6043BL	78	6042L	82	24.0	48.4	0.7 +	0.3 (	14.9)	107 (	1.0)	13	15.9	1260	11	28
6051	10	10000	1	6.0	37.7	0.1 +	0.0 (	1.5)	92 (	0.0)	0	1.5	1260	79	87
6053	10	10000	0	6.0	8.7	0.0 +	0.0 (	0.3)	43 (	0.0)	0	0.3	1260	38	87
6054	10	10000	1	9.0	40.0	0.1 +	0.0 (	1.6)	94 (	0.0)	0	1.6	1260	81	87
6098BL	86	6099L	24	24.0	0.7	0.0 +	0.0 (	0.2)	1 (	0.0)	0	0.2			
6099	786	3600S	24	17.0	0.7	0.0 +	0.1 (	2.0)	1 (	0.1)	0	2.2			
6122BL	90	6021L	87	16.4	76.6	1.2 +	0.7 (	27.2)	131 (	1.5)	11	28.7	1260	33	54
6123	10	10000	1	6.0	40.0	0.1 +	0.0 (	1.6)	94 (	0.0)	0	1.6	1260	81	87
6124	10	10000	0	6.0	24.3	0.1 +	0.0 (	1.0)	73 (	0.0)	0	1.0	1260	64	87
6125	10	10000	0	6.0	24.3	0.1 +	0.0 (	1.0)	73 (	0.0)	0	1.0	1260	64	87
12591	685	3600S	29	4.1	1.3	0.1 +	0.2 (	3.4)	5 (	0.1)	1	3.5	12185	17	85
12592	10	10000	1	7.0	40.0	0.1 +	0.0 (	1.6)	94 (	0.0)	0	1.6	12185	2	8
12593BL	122	12591L	29	3.0	0.9	0.0 +	0.0 (	0.4)	2 (	0.0)	1	0.5	12185	17	85
12597	10	10000	1	8.0	40.0	0.1 +	0.0 (	1.6)	94 (	0.0)	0	1.6	1259	85	3
12598	10	10000	0	6.0	29.1	0.1 +	0.0 (	1.1)	80 (	0.0)	0	1.2	1259	74	3
18341	829	3746S	31	5.0	1.1	0.1 +	0.2 (	3.7)	3 (	0.1)	1	3.8	12183	17	86
18342BL	90	18341L	31	3.6	0.9	0.0 +	0.0 (	0.3)	4 (	0.0)	1	0.4	12183	17	86
18398BL	90	18399L	26	24.0	0.7	0.0 +	0.0 (	0.2)	1 (	0.0)	0	0.2			
18399	829	3600S	26	17.0	0.7	0.0 +	0.2 (	2.2)	1 (	0.2)	0	2.4			
18451	10	10000	1	9.0	40.0	0.1 +	0.0 (	1.6)	94 (	0.0)	0	1.6	12183	3	9

*** f - average saturation flow for flared link ***

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1846.3	108.5	17.0	33.6	21.5	(781.9) + (101.8)	+ (0.0)	= 883.7	TOTALS
243.5	20.7	11.7	5.3	3.2	(120.6) + (9.1)	+ (0.0)	= 129.6	BUSES
1602.7	87.8	18.3	28.3	18.3	(661.4) + (92.7)	+ (0.0)	= 754.1	OTHER

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	105.8	+ 63.5	+ 48.4	= 217.6

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 79

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13
- (SECONDS)

1258	3	7	48	79	
1259	3	3	65	79	
1260	4	87	28	54	69
12183	2	9	86		
12185	2	8	85		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1846.3	108.5	17.0	33.6	21.5	(781.9) + (101.8)	+ (0.0)	= 883.7	TOTALS
243.5	20.7	11.7	5.3	3.2	(120.6) + (9.1)	+ (0.0)	= 129.6	BUSES
1602.7	87.8	18.3	28.3	18.3	(661.4) + (92.7)	+ (0.0)	= 754.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 399

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35
- (SECONDS)

1258	3	7	48	79	
1259	3	3	65	79	
1260	4	87	28	54	69
12183	2	9	86		
12185	2	8	85		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1846.3	108.5	17.0	33.6	21.5	(781.9) + (101.8)	+ (0.0)	= 883.7	TOTALS
243.5	20.7	11.7	5.3	3.2	(120.6) + (9.1)	+ (0.0)	= 129.6	BUSES
1602.7	87.8	18.3	28.3	18.3	(661.4) + (92.7)	+ (0.0)	= 754.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 383

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1
- (SECONDS)

1258	3	7	48	79	
1259	3	3	65	79	
1260	4	87	28	54	69
12183	2	9	86		
12185	2	8	85		

TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
1846.3	108.5	17.0	33.6	21.5	(781.9) + (101.8)	+ (0.0)	= 883.7	TOTALS
243.5	20.7	11.7	5.3	3.2	(120.6) + (9.1)	+ (0.0)	= 129.6	BUSES
1602.7	87.8	18.3	28.3	18.3	(661.4) + (92.7)	+ (0.0)	= 754.1	OTHER

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 807

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13

- (SECONDS)

1258	3	7	48	79																
1259	3	3	65	79																
1260	4	87	28	54	69															
12183	2	9	86																	
12185	2	8	85																	
TOTAL DISTANCE TRAVELLED		TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX											
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)											
1846.3	108.5	17.0	33.6	21.5	(781.9) + (101.8)	+ (0.0)	=	883.7	TOTALS											
243.5	20.7	11.7	5.3	3.2	(120.6) + (9.1)	+ (0.0)	=	129.6	BUSES											
1602.7	87.8	18.3	28.3	18.3	(661.4) + (92.7)	+ (0.0)	=	754.1	OTHER											

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 424

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35
- (SECONDS)

1258	3	7	48	79																
1259	3	3	65	79																
1260	4	87	28	54	69															
12183	2	9	86																	
12185	2	8	85																	
TOTAL DISTANCE TRAVELLED		TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX											
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)											
1846.3	108.5	17.0	33.6	21.5	(781.9) + (101.8)	+ (0.0)	=	883.7	TOTALS											
243.5	20.7	11.7	5.3	3.2	(120.6) + (9.1)	+ (0.0)	=	129.6	BUSES											
1602.7	87.8	18.3	28.3	18.3	(661.4) + (92.7)	+ (0.0)	=	754.1	OTHER											

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 428

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1
- (SECONDS)

1258	3	7	48	79																
1259	3	3	65	79																
1260	4	87	28	54	69															
12183	2	9	86																	
12185	2	8	85																	
TOTAL DISTANCE TRAVELLED		TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX											
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)											
1846.3	108.5	17.0	33.6	21.5	(781.9) + (101.8)	+ (0.0)	=	883.7	TOTALS											
243.5	20.7	11.7	5.3	3.2	(120.6) + (9.1)	+ (0.0)	=	129.6	BUSES											
1602.7	87.8	18.3	28.3	18.3	(661.4) + (92.7)	+ (0.0)	=	754.1	OTHER											

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 424

88 SECOND CYCLE 88 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 13 35 -1 13 35 1 -1
- (SECONDS)

1258	3	7	48	79																
1259	3	3	65	79																
1260	4	87	28	54	69															
12183	2	9	86																	
12185	2	8	85																	
TOTAL DISTANCE TRAVELLED		TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF DELAY	TOTAL PENALTY FOR EXCESS QUEUES	TOTAL PERFORMANCE INDEX											
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)											
1846.3	108.5	17.0	33.6	21.5	(781.9) + (101.8)	+ (0.0)	=	883.7	TOTALS											
243.5	20.7	11.7	5.3	3.2	(120.6) + (9.1)	+ (0.0)	=	129.6	BUSES											
1602.7	87.8	18.3	28.3	18.3	(661.4) + (92.7)	+ (0.0)	=	754.1	OTHER											

NO. OF ENTRIES TO SUBPT = 23
NO. OF LINKS RECALCULATED= 927

88 SECOND CYCLE 88 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 13 35 -1 13 35 1 -1 1
- (SECONDS)

1258	3	7	48	79																
1259	3	3	65	79																
1260	4	87	28	54	69															
12183	2	9	86																	
12185	2	8	85																	
LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE DELAY	TIMES PER PCU	-----DELAY----- UNIFORM DELAY (U+R+O=MEAN Q)	RANDOM+ OVERSAT DELAY	COST OF DELAY	----STOPS---- MEAN STOPS /PCU	COST OF STOPS	----QUEUE---- MEAN MAX. AVERAGE	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES	EXIT NODE	GREEN START	TIMES END					
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	(\$/H)		1ST	2ND					
4011	84	715	14	17.0	3.5	0.0 + 0.1	(1.2)	0	(0.0)	0		1.2								
4041	359	1881	19	5.7	1.2	0.0 + 0.1	(1.7)	1	(0.1)	0		1.8								
4042	401	1815S	31	5.7	1.9	0.1 + 0.2	(3.0)	20	(2.4)	6		5.3								
4043BL	154	4042L	31	7.8	1.7	0.0 + 0.1	(1.0)	13	(0.2)	6		1.3								
4098	10	1800	1	17.0	1.0	0.0 + 0.0	(0.0)	1	(0.0)	0		0.0								
4111	256	715S	49	17.0	5.3	0.0 + 0.4	(5.3)	0	(0.0)	0		5.3								

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