

WEST HENDON

TRANSPORT ASSESSMENT ANNEX: TRANSYT OUTPUT FILES

March 2013

Halcrow

the 1990s, the number of people in the UK who are aged 65 and over has increased from 10.5 million to 13.5 million, and the number of people aged 75 and over has increased from 4.5 million to 6.5 million (Office for National Statistics 2002).

There is a growing awareness of the need to address the health care needs of the elderly population. The Department of Health (2000) has set out a strategy for the NHS to meet the needs of the elderly population. The strategy is based on the following principles:

- To ensure that the elderly population has access to the same range of services as other age groups.
- To ensure that the elderly population has access to the same quality of care as other age groups.
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Base TRANSYT Model Outputs

As reported in Transport Assessment Appendix R

PRT

PRT File AM Peak : 2011 Flow 0800-0900

1 TRANSYT 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
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Run with file:- "WEST HENDON A5_BASE_AM_V3.DAT" at 16:43 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 62
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 14028 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD
NO.   TYPE   TIME   NO. OF   TIME EFFECTIVE-GREEN   EQUISAT 0=UNEQUAL FLOW   CRUISE-SPEEDS   OPTIMISE   EXTRA   HILL-   DELAY   STOP
      TYPE   CYCLE  STEPS   PERIOD DISPLACEMENTS   SETTINGS CYCLE SCALE   SCALE   CARD32  0=NONE   COPIES   CLIMB   VALUE   VALUE
      (SEC)  CYCLE  MINS.   START   END   0=NO 1=EQUAL 10-200 50-200 0=TIMES 1=0/SET   FINAL   OUTPUT   P PER   P PER
      (SEC)  CYCLE  (SEC)   (SEC)   (SEC) 1=YES 1=Cycle % % 1=SPEEDS 2=FULL   OUTPUT 1=FULL PCU-H 100
2)= 1      75      75      60      2      3      0      1      100      100      0      0      0      0      1420      260
CARD  CARD
NO.   TYPE
3)= 2      40      41      34      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 2011 2012 0 0 0 0 0 0 0 0 0 0 0 0 0
5)= 7 2030 2031 0 0 0 0 0 0 0 0 0 0 0 0 0
6)= 7 2098 2097 0 0 0 0 0 0 0 0 0 0 0 0 0
7)= 7 3411 3412 0 0 0 0 0 0 0 0 0 0 0 0 0
8)= 7 4012 4011 0 0 0 0 0 0 0 0 0 0 0 0 0
9)= 7 4031 4032 0 0 0 0 0 0 0 0 0 0 0 0 0
10)= 7 4097 4098 0 0 0 0 0 0 0 0 0 0 0 0 0
11)= 7 4199 4198 0 0 0 0 0 0 0 0 0 0 0 0 0
12)= 7 5010 5011 0 0 0 0 0 0 0 0 0 0 0 0 0
13)= 7 6011 6012 0 0 0 0 0 0 0 0 0 0 0 0 0
14)= 7 6020 6021 0 0 0 0 0 0 0 0 0 0 0 0 0
15)= 7 6099 6098 0 0 0 0 0 0 0 0 0 0 0 0 0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD   NODE
NO.   TYPE   NO.
16)= 10 34      7 1 5
17)= 10 40      7 7
18)= 10 41      12 3 12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD   NODE
NO.   TYPE   NO.
19)= 11 34      8 12 12
20)= 11 40      5 6
21)= 11 41      18 3 11
    
```

NODE CARDS: STAGE CHANGE TIMES (WORKING)

```

CARD  CARD   NODE   Sg1/Dbl
NO.   TYPE   NO.   Cycled
22)= 12 34      1 12 50 67
23)= 12 40      1 26 67
24)= 12 41      1 0 36 42
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD   LINK   PRIORITY LINKS   LINK1 GIVEWAY COEFFS.
NO.   TYPE   NO.   NO.   NO.   % FLOW   X100   A1   A2
25)= 30 1040 1030 0 0 0 22 0 0 0 0 0 0 0 0 0
26)= 30 2010 2030 0 0 0 50 0 0 0 0 0 0 0 0 0
27)= 30 2040 2030 2011 0 0 22 19 0 0 0 0 0 0 0 0 0
28)= 30 2041 2030 0 0 0 22 0 0 0 0 0 0 0 0 0
29)= 30 4030 0 4010 37 0 50 0 0 0 0 0 0 0 0 0 0
30)= 30 6010 6020 0 0 0 22 0 0 0 0 0 0 0 0 0
    
```

LINK CARDS: FIXED DATA
FIRST GREEN SECOND GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)	31	4010	40	1	5	2	0	0	0	0	0	200	0	1949	0	0
57)	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)	31	4030	40	1	5	2	4	0	0	0	0	45	0	1774	0	0
62)	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)	31	4110	41	1	12	3	0	0	0	0	0	56	0	1919	0	0
68)	31	4111	41	1	16	3	0	0	0	0	0	56	0	2040	0	0
69)	31	4120	41	3	11	1	0	0	0	0	0	200	0	1959	0	0
70)	31	4121	41	3	11	1	0	0	0	0	0	200	0	1773	0	0
71)	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)	31	4150	41	3	11	1	0	0	0	0	0	12	0	10000	0	0
74)	31	4151	41	1	12	3	0	0	0	0	0	11	0	10000	0	0
75)	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)	31	-4200	41	2	3	3	0	0	0	0	0	20	0	1800	0	0
78)	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
79)	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
80)	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
81)	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
82)	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
83)	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
85)	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
86)	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
87)	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
88)	32	1010	814	0	4010	727	15	4021	87	15	0	0	0	0	0	0
89)	32	1011	22	0	4011	22	3200	0	0	0	0	0	0	0	0	0
90)	32	1030	1006	0	3430	622	19	3443	384	19	0	0	0	0	0	0
91)	32	1031	22	0	3431	22	3200	0	0	0	0	0	0	0	0	0
92)	32	1040	44	0	0	0	20	0	0	0	0	0	0	0	0	0
93)	32	1099	10	0	1030	20	18	0	0	0	0	0	0	0	0	0
94)	32	2010	65	0	2011	65	3	0	0	0	0	0	0	0	0	0
95)	32	2011	1017	0	4110	672	23	4121	345	18	0	0	0	0	0	0
96)	32	2012	50	0	4111	50	3200	0	0	0	0	0	0	0	0	0
97)	32	2030	1319	0	0	0	18	0	0	0	0	0	0	0	0	0
98)	32	2031	50	0	0	0	3200	0	0	0	0	0	0	0	0	0
99)	32	2040	34	0	0	0	18	0	0	0	0	0	0	0	0	0
100)	32	2041	19	0	0	0	18	0	0	0	0	0	0	0	0	0
101)	32	2097	50	0	2012	50	3200	0	0	0	0	0	0	0	0	0
102)	32	2098	986	0	2011	952	18	2040	34	18	0	0	0	0	0	0
103)	32	2099	741	0	2010	65	18	2030	676	18	0	0	0	0	0	0
104)	32	3010	662	0	2030	643	17	2041	19	17	0	0	0	0	0	0
105)	32	3011	50	0	2031	50	3200	0	0	0	0	0	0	0	0	0
106)	32	3410	672	0	1010	672	6	0	0	0	0	0	0	0	0	0
107)	32	3411	142	0	1010	142	6	0	0	0	0	0	0	0	0	0
108)	32	3412	22	0	1011	22	3220	0	0	0	0	0	0	0	0	0
109)	32	3430	622	0	4130	622	11	0	0	0	0	0	0	0	0	0
110)	32	3431	22	0	4131	22	3200	0	0	0	0	0	0	0	0	0
111)	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
112)	32	3442	383	0	5010	383	7	0	0	0	0	0	0	0	0	0
113)	32	3443	384	0	5010	384	7	0	0	0	0	0	0	0	0	0
114)	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
116)	32	3499	525	0	3411	142	18	3442	383	10	0	0	0	0	0	0
117)	32	4010	727	0	0	0	18	0	0	0	0	0	0	0	0	0
118)	32	4011	22	0	0	0	3200	0	0	0	0	0	0	0	0	0
119)	32	4012	154	0	0	0	18	0	0	0	0	0	0	0	0	0
120)	32	4020	479	0	0	0	20	0	0	0	0	0	0	0	0	0
121)	32	4021	87	0	0	0	18	0	0	0	0	0	0	0	0	0
122)	32	4030	211	0	1030	211	5	0	0	0	0	0	0	0	0	0
123)	32	4031	819	0	1030	775	5	1040	44	4	0	0	0	0	0	0
124)	32	4032	22	0	1031	22	3226	0	0	0	0	0	0	0	0	0
125)	32	4097	1376	0	4020	479	18	4030	78	18	4031	819	18	0	0	0
126)	32	4098	22	0	4032	22	3200	0	0	0	0	0	0	0	0	0
127)	32	4099	287	0	4012	154	18	4030	133	18	0	0	0	0	0	0
128)	32	4110	672	0	7010	672	7	0	0	0	0	0	0	0	0	0
129)	32	4111	50	0	7011	50	3211	0	0	0	0	0	0	0	0	0
130)	32	4120	229	0	0	0	20	0	0	0	0	0	0	0	0	0
131)	32	4121	345	0												

147)= 32 6099 731 0 6011 731 18 0 0 0 0 0 0 0 0 0 0 0
 148)= 32 7010 672 0 3410 672 8 0 0 0 0 0 0 0 0 0 0 0
 149)= 32 7011 50 0 3412 22 3200 3440 28 3200 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.	
150)=	33	4110	2040	4	0	0	0	0
151)=	33	4130	1696	3	0	0	0	0

GRAPH PLOT CARDS

CARD NO.	CARD TYPE	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
152)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
153)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
154)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
155)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD NO.	CARD TYPE	ROUTE NUMBER	ROUTE DESCRIPTION
162)=	41	1	Southbound
163)=	41	2	Northbound

CARD NO.	CARD TYPE	ROUTE NUMBER	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
164)=	42	1	2030	3010	4130	3430	1030	4031	4097						
165)=	42	2	4010	1010	3410	7010	4110	2011	2098						

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

75 SECOND CYCLE 75 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
34	3	12	50	67							
40	2	26	67								
41	3	0	36	42							

LINK NUMBER	FLOW INFO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER DELAY	-----DELAY----- UNIFORM RANDOM+ (U+R+O-MEAN Q) DELAY	COST OVERSAT OF (\$/H)	-----STOPS----- MEAN COST STOPS OF /PCU STOPS (\$/H)	-----QUEUE----- MEAN MAX. AVERAGE EXCESS (PCU) (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF (\$/H)	EXIT NODE	GREEN START END	TIMES START 2ND (SECONDS)
1010	814	2055	40	15.0	1.4	0.0 + 0.3 (4.7)	2 (0.2)	0 (0.0)*	4.9				
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1				
1030	1007	2055	49	19.0	1.7	0.0 + 0.5 (6.8)	2 (0.3)	0 (0.0)*	7.1				
1031BL	22	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1				
1040	44	715	9	20.0	4.0	0.0 + 0.0 (0.7)	0 (0.0)	0 (0.0)	0.7				
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0				
2010	65	1000	21	3.0	7.2	0.0 + 0.1 (1.8)	0 (0.0)	0 (0.0)*	1.8				
2011	1017	2115S	50	21.3	1.9	0.1 + 0.5 (7.7)	12 (2.6)	7 (0.0)*	10.3				
2012BL	50	2011L	50	29.3	2.1	0.0 + 0.0 (0.4)	21 (0.1)	7 (0.0)*	0.6				
2030	1319	3786S	36	18.0	0.7	0.0 + 0.3 (3.9)	1 (0.3)	0 (0.0)	4.2				
2031BL	50	2030L	36	22.5	0.7	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.2				
2040	34	600	30	18.0	24.5	0.0 + 0.2 (3.3)	84 (0.6)	0 (0.0)	3.9				
2041	19	715	5	18.0	4.6	0.0 + 0.0 (0.3)	0 (0.0)	0 (0.0)	0.3				
2097BL	50	2098L	13	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0 (0.0)	0.1				
2098	986	8000S	13	18.0	0.3	0.0 + 0.1 (1.0)	0 (0.1)	0 (0.0)	1.1				
2099	740	8000	9	18.0	0.2	0.0 + 0.1 (0.7)	0 (0.1)	0 (0.0)	0.8				
3010	663	2075	32	17.0	1.3	0.0 + 0.2 (3.3)	2 (0.2)	0 (0.0)	3.6				
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2				
3410	672	1910	85	6.0	49.5	6.5 + 2.7 (131.2)	116 (13.3)	16 +	144.5	34	20	50	
3411	142	1993S	20	6.0	27.9	1.0 + 0.1 (15.6)	96 (2.3)	3	17.9	34	20	50	
3412BL	22	3411L	20	36.0	17.7	0.1 + 0.0 (1.5)	79 (0.0)	3	1.5	34	20	50	
3430	623	1972	72	11.0	9.1	0.3 + 1.3 (22.3)	55 (6.5)	12	28.8	34	18	50	
3431BL	22	1915	3	12.9	2.4	0.0 + 0.0 (0.2)	3 (0.0)	0 (0.0)*	0.2	34	18	50	
3440BL	28	1665	14	9.0	40.0	0.2 + 0.1 (4.4)	101 (0.4)	1	4.8	34	4	12	
3442	384	1787	62	7.0	27.9	2.2 + 0.8 (42.3)	90 (8.0)	7	50.3	34	62	12	
3443	384	1577	70	7.0	32.0	2.3 + 1.2 (48.5)	96 (8.7)	8	57.1	34	62	12	
3450	50	10000	4	10.0	30.0	0.4 + 0.0 (5.9)	88 (0.0)	1	5.9	34	58	67	
3451	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	34	20	50	
3499	525	8000	7	12.2	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0	0.5				
4010	727	1949	76	18.0	22.9	3.1 + 1.5 (65.8)	86 (13.3)	14	79.1	40	31	67	
4011BL	22	4012L	21	22.5	13.4	0.1 + 0.0 (1.2)	57 (0.2)	2	1.3	40	31	67	
4012	154	1707S	21	18.0	13.4	0.5 + 0.1 (8.2)	57 (1.9)	2	10.0	40	31	67	
4020	479	1754	71	20.0	28.3	2.6 + 1.2 (53.5)	93 (7.6)	10	61.1	40	73	26	
4021	87	1641	14	18.0	18.2	0.4 + 0.1 (6.2)	66 (1.2)	1	7.5	40	73	26	
4030	211	1774	79	5.0	50.5	1.2 + 1.8 (42.0)	130 (3.9)	6	46.0	40	31	71	
4031	819	1907S	89	4.9	28.0	2.6 + 3.8 (90.4)	80 (9.4)	16 +	99.8	40	31	67	
4032BL	22	4031L	89	39.8	39.1	0.1 + 0.1 (3.4)	111 (0.0)	16 (1.9)*	193.6	40	31	67	
4097	1376	8000S	17	18.0	0.3	0.0 + 0.1 (1.5)	0 (0.1)	0	1.6				
4098BL	22	4097L	17	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0				
4099	287	8000	4	18.0	0.2	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3				
4110	672	2383f	68	7.0	34.2	5.3 + 1.1 (90.8)	81 (6.0)	11 +	96.7	41	12	42	
4111BL	50	2040	7	26.4	21.9	0.3 + 0.0 (4.3)	60 (0.0)	1	4.3	41	16	42	
4120	229	1959	38	20.0	25.3	1.3 + 0.3 (22.8)	82 (3.2)	4	26.0	41	53	0	
4121	345	1773	63	18.0	31.4	2.1 + 0.9 (42.7)	94 (6.9)	7	49.6	41	53	0	
4130	663	2488f	80	5.0	31.5	3.9 + 1.9 (82.4)	98 (9.3)	14 +	91.7	41	12	36	

75 SECOND CYCLE 75 STEPS

LINK NUMBER	FLOW INFO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER DELAY	-----DELAY----- UNIFORM RANDOM+ (U+R+O-MEAN Q) DELAY	COST OVERSAT OF (\$/H)	-----STOPS----- MEAN COST STOPS OF /PCU STOPS (\$/H)	-----QUEUE----- MEAN MAX. AVERAGE EXCESS (PCU) (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF (\$/H)	EXIT NODE	GREEN START END	TIMES START 2ND (SECONDS)
4131BL	50	1696	12	31.8	26.3	0.3 + 0.1 (5.2)	82 (0.0)	1	5.2	41	18	36	
4150	50	10000	2	10.0	19.0	0.3 + 0.0 (3.7)	70 (0.0)	1	3.7	41	53	0	
4151	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	41	12	42	
4198BL	28	4199L	4	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0				

4199	269	8000S	4	18.0	0.2	0.0 +	0.0 (0.2)	0 (0.0)	0	0.3
5010	767	3929S	20	3.0	0.6	0.0 +	0.1 (1.7)	1 (0.1)	0	1.9
5011BL	28	5010L	20	3.6	0.6	0.0 +	0.0 (0.1)	1 (0.0)	0	0.1
6010	94	715	17	18.0	3.9	0.0 +	0.1 (1.4)	0 (0.0)	0	1.4
6011	731	1618S	47	18.0	2.1	0.0 +	0.4 (6.0)	3 (0.4)	0	6.5
6012BL	28	6011L	47	22.5	2.1	0.0 +	0.0 (0.2)	3 (0.0)	0	0.2
6020	673	1800S	39	18.0	1.6	0.0 +	0.3 (4.3)	2 (0.3)	0	4.7
6021BL	28	6020L	39	22.5	1.6	0.0 +	0.0 (0.2)	2 (0.0)	0	0.2
6098BL	28	6099L	9	64.8	0.2	0.0 +	0.0 (0.0)	0 (0.0)	0	0.0
6099	731	8000S	9	18.0	0.2	0.0 +	0.1 (0.7)	0 (0.1)	0	0.8
7010	672	2055	33	8.0	1.3	0.0 +	0.2 (3.5)	2 (0.2)	0	3.6
7011BL	50	1915	3	8.0	1.0	0.0 +	0.0 (0.2)	1 (0.0)	0	0.2
-4200	10	1800	10	10.0	55.0	0.1 +	0.1 (2.2)	120 (0.0)	0	2.2

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

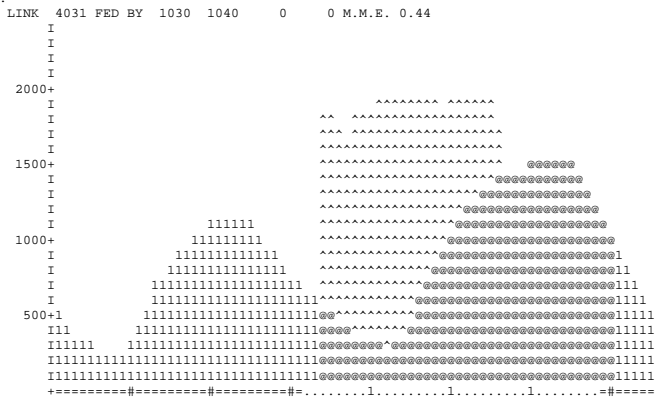
TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	
3108.7	142.5	21.8	37.3	23.0	(856.2) +	(108.1) +	(190.2) =	1154.5	TOTALS
96.7	5.9	16.3	1.1	0.4	(21.9) +	(0.9) +	(190.2) =	213.0	BUSES
3011.9	136.6	22.0	36.2	22.6	(834.2) +	(107.2) +	(0.0) =	941.5	OTHER

970.7	40.7	23.9	6.7	8.1	(210.6) +	(26.2) +	(0.0) =	236.8	ROUTE 1
842.6	43.3	19.4	15.0	6.5	(304.5) +	(35.7) +	(0.0) =	340.2	ROUTE 2

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	176.7	69.6	49.5	295.8

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 62

CYCLIC FLOW PROFILE GRAPHS



PROGRAM TRANSYT FINISHED

PRT

PRT File PM Peak : 2011 Flow 1700-1800

1 TRANSYT 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:- "WEST HENDON A5_BASE_PM_V3.DAT" at 16:43 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 61
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13827 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD
NO.   TYPE   TIME   NO. OF   TIME EFFECTIVE-GREEN   EQUISAT 0=UNEQUAL FLOW   CRUISE-SPEEDS   OPTIMISE   EXTRA   HILL-   DELAY   STOP
      TYPE   CYCLE  STEPS   PERIOD DISPLACEMENTS   SETTINGS CYCLE SCALE   SCALE   CARD32  0=NONE   COPIES   CLIMB   VALUE   VALUE
      (SEC)  CYCLE  MINS.  (SEC)  (SEC)  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=0/SET  FINAL   OUTPUT  P PER  P PER
      (SEC)  CYCLE  MINS.  (SEC)  (SEC)  3     0     1     100    100    1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
2)=   1
      75    75    60    2    3     0     1     100    100    0     0     0     0     1420  260
CARD  CARD
NO.   TYPE
3)=   2    40    41    34    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    2011  2012    0    0    0    0    0    0    0    0    0    0    0    0    0
5)=   7    2030  2031    0    0    0    0    0    0    0    0    0    0    0    0    0
6)=   7    2098  2097    0    0    0    0    0    0    0    0    0    0    0    0    0
7)=   7    3411  3412    0    0    0    0    0    0    0    0    0    0    0    0    0
8)=   7    4012  4011    0    0    0    0    0    0    0    0    0    0    0    0    0
9)=   7    4031  4032    0    0    0    0    0    0    0    0    0    0    0    0    0
10)=  7    4097  4098    0    0    0    0    0    0    0    0    0    0    0    0    0
11)=  7    4199  4198    0    0    0    0    0    0    0    0    0    0    0    0    0
12)=  7    5010  5011    0    0    0    0    0    0    0    0    0    0    0    0    0
13)=  7    6011  6012    0    0    0    0    0    0    0    0    0    0    0    0    0
14)=  7    6020  6021    0    0    0    0    0    0    0    0    0    0    0    0    0
15)=  7    6099  6098    0    0    0    0    0    0    0    0    0    0    0    0    0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD   NODE
NO.   TYPE   NO.
16)=  10    34      7    1    5
17)=  10    40      7    12
18)=  10    41      12   12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD   NODE
NO.   TYPE   NO.
19)=  11    34      8    12   12
20)=  11    40     15    6
21)=  11    41     18    11
    
```

NODE CARDS: STAGE CHANGE TIMES (WORKING)

```

CARD  CARD   NODE   Sg1/Dbl
NO.   TYPE   NO.   Cycled
22)=  12    34      1    40   5   21
23)=  12    40      1    45   22
24)=  12    41      1    40
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD   LINK   PRIORITY LINKS   LINK1 GIVEWAY COEFFS.
NO.   TYPE   NO.   LINK1 LINK2   ONLY   A1   A2
      NO.   NO.   % FLOW  X100  X100
25)=  30    1040  1030    0    0    22    0    0    0    0    0
26)=  30    2010  2030    0    0    50    0    0    0    0    0
27)=  30    2040  2030  2011    0    22    19    0    0    0    0
28)=  30    2041  2030    0    0    22    0    0    0    0    0
29)=  30    4030    0  4010    4    0    50    0    0    0    0
30)=  30    6010  6020    0    0    22    0    0    0    0    0
      LINK   STOP   MAX   DELAY   DISPSN
      LENGTH WT.X100  FLOW WT.X100  WT.X100  X100
      200    0    715    0    0
      31     0    1000   0    0
      200    0    600    0    0
      200    0    715    0    0
      45     0    1000   0    0
      200    0    715    0    0
    
```

LINK CARDS: FIXED DATA
FIRST GREEN SECOND GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)	31	4010	40	1	15	2	0	0	0	0	0	200	0	1949	0	0
57)	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)	31	4030	40	1	5	2	1	0	0	0	0	45	0	1774	0	0
62)	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)	31	4110	41	1	12	2	0	0	0	0	0	56	0	1919	0	0
68)	31	4111	41	1	16	2	0	0	0	0	0	56	0	2040	0	0
69)	31	4120	41	2	11	1	0	0	0	0	0	200	0	1959	0	0
70)	31	4121	41	2	11	1	0	0	0	0	0	200	0	1773	0	0
71)	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)	31	4150	41	2	11	1	0	0	0	0	0	12	0	10000	0	0
74)	31	4151	41	1	12	2	0	0	0	0	0	11	0	10000	0	0
75)	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
78)	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
79)	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
80)	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
81)	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
82)	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
83)	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
85)	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
86)	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
87)	32	1010	859	0	4010	799	15	4021	60	15	0	0	0	0	0	0
88)	32	1011	25	0	4011	25	3200	0	0	0	0	0	0	0	0	0
89)	32	1030	875	0	3430	606	19	3443	269	19	0	0	0	0	0	0
90)	32	1031	25	0	3431	25	3200	0	0	0	0	0	0	0	0	0
91)	32	1040	151	0	0	0	20	0	0	0	0	0	0	0	0	0
92)	32	1099	10	0	1030	10	18	0	0	0	0	0	0	0	0	0
93)	32	2010	66	0	2011	66	3	0	0	0	0	0	0	0	0	0
94)	32	2011	1025	0	4110	673	23	4121	352	18	0	0	0	0	0	0
95)	32	2012	53	0	4111	53	3200	0	0	0	0	0	0	0	0	0
96)	32	2030	1045	0	0	0	18	0	0	0	0	0	0	0	0	0
97)	32	2031	53	0	0	0	3200	0	0	0	0	0	0	0	0	0
98)	32	2040	55	0	0	0	18	0	0	0	0	0	0	0	0	0
99)	32	2041	31	0	0	0	18	0	0	0	0	0	0	0	0	0
100)	32	2097	53	0	2012	53	3200	0	0	0	0	0	0	0	0	0
101)	32	2098	1014	0	2011	959	18	2040	55	18	0	0	0	0	0	0
102)	32	2099	484	0	2010	66	18	2030	418	18	0	0	0	0	0	0
103)	32	3010	658	0	2030	627	17	2041	31	17	0	0	0	0	0	0
104)	32	3011	53	0	2031	53	3200	0	0	0	0	0	0	0	0	0
105)	32	3410	673	0	1010	673	6	0	0	0	0	0	0	0	0	0
106)	32	3411	186	0	1010	186	6	0	0	0	0	0	0	0	0	0
107)	32	3412	25	0	1011	25	3219	0	0	0	0	0	0	0	0	0
108)	32	3430	606	0	4130	606	11	0	0	0	0	0	0	0	0	0
109)	32	3431	25	0	4131	25	3200	0	0	0	0	0	0	0	0	0
110)	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
111)	32	3442	401	0	5010	401	7	0	0	0	0	0	0	0	0	0
112)	32	3443	269	0	5010	269	19	0	0	0	0	0	0	0	0	0
113)	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
114)	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)	32	3499	587	0	3411	186	18	3442	401	18	0	0	0	0	0	0
116)	32	4010	799	0	0	0	18	0	0	0	0	0	0	0	0	0
117)	32	4011	25	0	0	0	3200	0	0	0	0	0	0	0	0	0
118)	32	4012	378	0	0	0	18	0	0	0	0	0	0	0	0	0
119)	32	4020	219	0	0	0	20	0	0	0	0	0	0	0	0	0
120)	32	4021	60	0	0	0	18	0	0	0	0	0	0	0	0	0
121)	32	4030	236	0	1030	236	5	0	0	0	0	0	0	0	0	0
122)	32	4031	780	0	1030	629	5	1040	151	4	0	0	0	0	0	0
123)	32	4032	25	0	1031	25	3210	0	0	0	0	0	0	0	0	0
124)	32	4097	1009	0	4020	219	18	4030	10	18	4031	780	18	0	0	0
125)	32	4098	25	0	4032	25	3200	0	0	0	0	0	0	0	0	0
126)	32	4099	604	0	4012	378	18	4030	226	18	0	0	0	0	0	0
127)	32	4110	673	0	7010	673	8	0	0	0	0	0	0	0	0	0
128)	32	4111	53	0	7011	53	3216	0	0	0	0	0	0	0	0	0
129)	32	4120	217	0	0	0	20	0	0	0	0	0	0	0	0	0
130)	32	4121	352	0	0	0	18	0	0	0	0	0	0	0	0	0
131)	32	4130	658													

147)= 32 7011 53 0 3412 25 3200 3440 28 3200 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.
148)=	33	4110	2040	4	0	0	0
149)=	33	4130	1696	3	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
150)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0
151)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0
152)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0
153)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0
154)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0
155)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0
156)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0
157)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0
158)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0

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

75 SECOND CYCLE 75 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
34	3	40	5	21							
40	2	45	22								
41	2	0	40								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY----- UNIFORM OVERSAT	RANDOM+ COST OF DELAY	----STOPS---- MEAN COST OF STOPS	----QUEUE---- MEAN AVERAGE EXCESS	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES	EXIT NODE	GREEN START 1ST	TIMES START 2ND
1010	859	2055	42	15.0	1.5	0.0 + 0.4 (5.1)	2 (0.2)	0 (0.0)*	5.3				
1011BL	25	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1				
1030	875	2055	43	19.0	1.5	0.0 + 0.4 (5.3)	2 (0.3)	0 (0.0)*	5.5				
1031BL	25	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1				
1040	151	715	29	20.0	4.8	0.0 + 0.2 (2.9)	0 (0.0)	0 (0.0)	2.9				
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0				
2010	66	1000	15	3.0	4.6	0.0 + 0.1 (1.2)	0 (0.0)	0 (0.0)*	1.2				
2011	1025	2115S	51	21.3	2.3	0.2 + 0.5 (9.4)	25 (5.6)	12 (0.0)*	15.1				
2012BL	53	2011L	51	29.3	3.0	0.0 + 0.0 (0.6)	51 (0.4)	12 (0.0)*	1.0				
2030	1045	3786S	29	18.0	0.7	0.0 + 0.2 (2.8)	1 (0.2)	0 (0.0)	3.0				
2031BL	53	2030L	29	22.5	0.7	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1				
2040	55	600	33	18.0	20.3	0.1 + 0.2 (4.4)	54 (0.6)	1 (0.0)	5.0				
2041	31	715	7	18.0	4.1	0.0 + 0.0 (0.5)	0 (0.0)	0 (0.0)	0.5				
2097BL	53	2098L	13	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0 (0.0)	0.1				
2098	1015	8000S	13	18.0	0.3	0.0 + 0.1 (1.0)	0 (0.1)	0 (0.0)	1.1				
2099	484	8000	6	18.0	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0 (0.0)	0.5				
3010	658	2075	32	17.0	1.3	0.0 + 0.2 (3.3)	2 (0.2)	0 (0.0)	3.5				
3011BL	53	1945	3	20.8	1.0	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2				
3410	673	1910	80	6.0	43.9	6.2 + 2.0 (116.5)	111 (12.7)	16 +	129.2	34	48	5	
3411	186	1993S	24	6.0	27.2	1.3 + 0.1 (20.0)	97 (3.1)	4	23.0	34	48	5	
3412BL	25	3411L	24	35.0	20.3	0.1 + 0.0 (2.0)	82 (0.0)	4	2.0	34	48	5	
3430	605	1972	66	11.0	30.0	4.1 + 1.0 (71.6)	107 (12.4)	14	84.0	34	46	5	
3431BL	25	1915	3	12.9	14.8	0.1 + 0.0 (1.5)	92 (0.3)	0 (0.0)*	1.8	34	46	5	
3440BL	28	1665	16	9.0	42.5	0.2 + 0.1 (4.7)	104 (0.4)	1	5.1	34	33	40	
3442	401	1787	70	7.0	32.7	2.5 + 1.2 (51.7)	97 (9.1)	8	60.9	34	17	40	
3443	269	1577	53	19.0	28.6	1.6 + 0.6 (30.3)	91 (0.8)	5	31.1	34	17	40	
3450	50	10000	4	10.0	31.0	0.4 + 0.0 (6.1)	90 (0.0)	1	6.1	34	13	21	
3451	50	10000	1	10.0	12.5	0.2 + 0.0 (2.5)	56 (0.0)	1	2.5	34	48	5	
3499	586	8000	7	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6				
4010	799	1949	81	18.0	24.8	3.4 + 2.1 (78.2)	91 (15.4)	16	93.6	40	60	22	
4011BL	25	4012L	37	22.5	9.0	0.0 + 0.0 (0.9)	47 (0.2)	4	1.1	40	50	22	
4012	378	1707S	37	18.0	9.0	0.7 + 0.3 (13.4)	47 (3.8)	4	17.2	40	50	22	
4020	219	1754	52	20.0	33.6	1.5 + 0.5 (29.0)	96 (3.6)	4	32.6	40	28	45	
4021	60	1641	15	18.0	27.9	0.4 + 0.1 (6.6)	83 (1.1)	1	7.7	40	28	45	
4030	236	1774	64	5.0	27.3	0.9 + 0.9 (25.4)	109 (3.7)	4	29.1	40	50	23	
4031	779	1907S	66	4.8	8.1	0.8 + 0.9 (24.8)	38 (4.3)	7	29.1	40	50	22	
4032BL	25	4031L	66	23.8	7.3	0.0 + 0.0 (0.7)	21 (0.0)	7 (0.0)*	0.7	40	50	22	
4097	1008	8000S	13	18.0	0.3	0.0 + 0.1 (1.0)	0 (0.1)	0 (0.0)	1.1				
4098BL	25	4097L	13	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0				
4099	604	8000	8	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6				
4110	673	2415F	72	8.0	24.0	3.2 + 1.3 (63.7)	109 (6.4)	15 +	70.1	41	12	40	
4111BL	53	2040	8	31.4	18.4	0.2 + 0.0 (3.8)	84 (0.0)	1	3.9	41	16	40	
4120	217	1959	33	20.0	22.9	1.1 + 0.2 (19.6)	78 (2.9)	4	22.5	41	51	0	
4121	352	1773	60	18.0	28.3	2.0 + 0.7 (39.3)	90 (6.7)	7	46.0	41	51	0	
4130	658	2428F	70	5.0	23.9	3.2 + 1.2 (62.1)	85 (7.9)	12 +	70.0	41	12	40	

75 SECOND CYCLE 75 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY----- UNIFORM OVERSAT	RANDOM+ COST OF DELAY	----STOPS---- MEAN COST OF STOPS	----QUEUE---- MEAN AVERAGE EXCESS	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES	EXIT NODE	GREEN START 1ST	TIMES START 2ND
4131BL	53	1696	10	31.8	22.5	0.3 + 0.1 (4.7)	76 (0.0)	1	4.7	41	18	40	
4150	50	10000	2	10.0	17.5	0.2 + 0.0 (3.5)	67 (0.0)	1	3.5	41	51	0	
4151	50	10000	1	10.0	14.9	0.2 + 0.0 (2.9)	62 (0.0)	1	2.9	41	12	40	
4198BL	28	4199L	4	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0				
4199	270	8000S	4	18.0	0.2	0.0 + 0.0 (0.2)	0 (0.0)	0 (0.0)	0.3				
5010	670	3929S	18	3.0	0.6	0.0 + 0.1 (1.5)	1 (0.1)	0 (0.0)	1.6				
5011BL	28	5010L	18	3.6	0.6	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1				
6010	126	715	21	18.0	3.9	0.0 + 0.1 (1.9)	0 (0.0)	0 (0.0)	1.9				
6011	620	1618S	40	18.0	1.9	0.0 + 0.3 (4.5)	2 (0.3)	0 (0.0)	4.9				
6012BL	28	6011L	40	22.5	1.9	0.0 + 0.0 (0.2)	2 (0.0)	0 (0.0)	0.2				
6020	544	1800S	32	18.0	1.5	0.0 + 0.2 (3.1)	2 (0.2)	0 (0.0)	3.4				
6021BL	28	6020L	32	22.5	1.5	0.0 + 0.0 (0.2)	2 (0.0)	0 (0.0)	0.2				
6098BL	28	6099L	8	64.8	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0				
6099	620	8000S	8	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6				
7010	673	2055	33	8.0	1.3	0.0 + 0.2 (3.5)	2 (0.2)	0 (0.0)	3.6				
7011BL	53	1915	3	8.0	1.0	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2				

*** 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-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
2955.8	132.4	22.3	35.2	17.0	(741.2) + (103.5) + (0.0)	=	844.8		

102.6	6.0	17.0	1.0	0.4	(20.2)	+	(1.4)	+	(0.0)	=	21.7	BUSES
2853.2	126.4	22.6	34.2	16.6	(721.0)	+	(102.1)	+	(0.0)	=	823.1	OTHER

ROUTE

	CRUISE	DELAY	STOPS	TOTALS			
	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	169.1	+	60.1	+	47.4	=	276.6

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 61

PROGRAM TRANSYT FINISHED

PRT

PRT File Sat Peak : 2011 Flow 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:- "WEST HENDON A5_BASE_SAT V2.DAT" at 16:43 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 66
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13521 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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  MINS.  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
              (SEC)  MINS.  (SEC)  (SEC)  3  0  1  100  100  0  0  0  1420  260
CARD  CARD
NO.   TYPE
3)= 2  40  41  34  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  2011  2012  0  0  0  0  0  0  0  0  0  0  0  0  0
5)= 7  2030  2031  0  0  0  0  0  0  0  0  0  0  0  0  0
6)= 7  2098  2097  0  0  0  0  0  0  0  0  0  0  0  0  0
7)= 7  3411  3412  0  0  0  0  0  0  0  0  0  0  0  0  0
8)= 7  4012  4011  0  0  0  0  0  0  0  0  0  0  0  0  0
9)= 7  4031  4032  0  0  0  0  0  0  0  0  0  0  0  0  0
10)= 7  4097  4098  0  0  0  0  0  0  0  0  0  0  0  0  0
11)= 7  4111  4200  0  0  0  0  0  0  0  0  0  0  0  0  0
12)= 7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0
13)= 7  4198  4198  0  0  0  0  0  0  0  0  0  0  0  0  0
14)= 7  5010  5011  0  0  0  0  0  0  0  0  0  0  0  0  0
15)= 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0
16)= 7  6020  6021  0  0  0  0  0  0  0  0  0  0  0  0  0
17)= 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
18)= 10  34  7  1  5
19)= 10  40  7  7
20)= 10  41  12  6  12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
21)= 11  34  8  12  12
22)= 11  40  5  6
23)= 11  41  12  0  11
    
```

NODE CARDS: STAGE CHANGE TIMES (WORKING)

```

CARD  CARD  NODE  Sgl/Dbl
NO.   TYPE  NO.  Cycled
24)= 12  34  1  12  45  58
25)= 12  40  1  26  4
26)= 12  41  1  0  26  43
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY  LINKS  LINK1  LINK2  LINK1  GIVEWAY  COEFFS.
NO.   TYPE  NO.   LINK1  LINK2  ONLY  A1  A2
              % FLOW  X100  X100
27)= 30  1040  1030  0  0  0  22  0  0  0  0  0  0  0  0  0  0  0  0
28)= 30  2010  2030  0  0  0  50  0  0  0  0  0  0  0  0  0  0  0  0
29)= 30  2040  2030  2011  0  0  22  19  0  0  0  0  0  0  0  0  0  0  0
30)= 30  2041  2030  0  0  0  22  0  0  0  0  0  0  0  0  0  0  0  0
31)= 30  4030  0  4010  37  0  50  0  0  0  0  0  0  0  0  0  0  0  0
32)= 30  6010  6020  0  0  0  22  0  0  0  0  0  0  0  0  0  0  0  0
    
```


147)=	32	6012	24	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
148)=	32	6020	449	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
149)=	32	6021	28	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
150)=	32	6098	24	0	6012	24	3233	0	0	0	0	0	0	0	0	0	0	0
151)=	32	6099	552	0	6011	552	18	0	0	0	0	0	0	0	0	0	0	0
152)=	32	7010	732	0	3410	732	8	0	0	0	0	0	0	0	0	0	0	0
153)=	32	7011	50	0	3412	22	3200	3440	28	3200	0	0	0	0	0	0	0	0

GRAPH PLOT CARDS

CARD	CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
154)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD	CARD	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE
NO.	TYPE	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT
155)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD	CARD	ROUTE	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NUMBER	DESCRIPTION	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
162)=	41	1	Southbound																
163)=	41	2	Northbound																
CARD	CARD	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO	TYPE	NUMBER	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
164)=	42	1	2030	3010	4130	3430	1030	4031	4097										
165)=	42	2	4010	1010	3410	7010	4110	2011	2098										

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

66 SECOND CYCLE 66 STEPS

INITIAL SETTINGS

- (SECONDS)

NODE	NUMBER	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE
NO	OF STAGES	1	2	3	4	5	6	7	8	9	10								
34	3	12	45	58															
40	2	26	4																
41	3	0	26	43															

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES							
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM RANDOM+ COST	MEAN COST	MEAN AVERAGE	INDEX.	NODE	START	START	END	END	END	END	END	END	END
	LINK	LINK	SAT	CRUISE	DELAY	(U+R+O-MEAN Q) DELAY	/PCU STOPS	EXCESS	OF () VALUES		1ST	2ND							
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	(\$/H)							
1010	873	2055	42	15.0	1.5	0.0 + 0.4 (5.2)	2 (0.3)	0 (0.0)*	5.5										
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0	0.1										
1030	897	2055	44	19.0	1.6	0.0 + 0.4 (5.5)	2 (0.3)	0 (0.0)*	5.8										
1031BL	22	1915	1	48.4	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1										
1040	109	715	21	20.0	4.4	0.0 + 0.1 (1.9)	0 (0.0)	0	1.9										
1099	11	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0										
2010	55	1000	13	3.0	5.0	0.0 + 0.1 (1.1)	0 (0.0)	0 (0.0)*	1.1										
2011	1026	2115S	51	21.6	1.7	0.0 + 0.5 (7.0)	3 (0.6)	1	7.6										
2012BL	50	2011L	51	68.5	1.7	0.0 + 0.0 (0.3)	3 (0.0)	1 (0.0)*	0.4										
2030	1108	3786S	31	18.0	0.7	0.0 + 0.2 (3.0)	1 (0.2)	0	3.2										
2031BL	50	2030L	31	22.5	0.7	0.0 + 0.0 (0.1)	1 (0.0)	0	0.1										
2040	33	600	23	18.0	17.0	0.0 + 0.2 (2.2)	33 (0.2)	0	2.4										
2041	17	715	4	18.0	4.1	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3										
2097BL	50	2098L	13	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0	0.1										
2098	996	8000S	13	18.0	0.3	0.0 + 0.1 (1.0)	0 (0.1)	0	1.1										
2099	585	8000	7	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0	0.6										
3010	595	2075	29	17.0	1.2	0.0 + 0.2 (2.9)	2 (0.2)	0	3.1										
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0 (0.2)	1 (0.0)	0	0.2										
3410	732	1910	97	6.0	72.5	5.5 + 9.3 (209.3)	158 (19.7)	23	+	229.0	34	20	45						
3411	141	1993S	21	6.0	20.7	0.7 + 0.1 (11.5)	89 (2.2)	3	13.7	34	20	45							
3412BL	22	3411L	21	36.0	13.6	0.1 + 0.0 (1.2)	67 (0.0)	3	1.2	34	20	45							
3430	566	1972	68	11.0	8.4	0.3 + 1.0 (18.7)	57 (6.2)	10	24.9	34	18	45							
3431BL	22	1915	3	12.9	2.3	0.0 + 0.0 (0.2)	4 (0.0)	0 (0.0)*	0.2	34	18	45							
3440BL	28	1665	12	9.0	34.1	0.2 + 0.1 (3.8)	98 (0.4)	1	4.2	34	4	12							
3442	313	1787	52	7.0	24.1	1.5 + 0.5 (29.7)	86 (6.3)	5	36.0	34	57	12							
3443	331	1577	63	7.0	27.7	1.7 + 0.8 (36.1)	93 (7.2)	6	43.4	34	57	12							
3450	50	10000	6	10.0	29.8	0.4 + 0.0 (5.9)	94 (0.0)	1	5.9	34	53	58							
3451	50	10000	1	10.0	12.9	0.2 + 0.0 (2.5)	61 (0.0)	1	2.5	34	20	45							
3499	454	8000	6	12.5	0.2	0.0 + 0.0 (0.4)	0 (0.0)	0	0.5										
4010	803	1949	68	18.0	13.4	1.9 + 1.1 (42.6)	69 (11.7)	11	54.3	40	31	4							
4011BL	22	4012L	20	22.5	8.0	0.0 + 0.0 (0.7)	45 (0.1)	2	0.8	40	31	4							
4012	186	1707S	20	18.0	8.0	0.3 + 0.1 (5.9)	45 (1.8)	2	7.6	40	31	4							
4020	235	1754	52	20.0	29.3	1.4 + 0.5 (27.1)	95 (3.8)	4	30.9	40	10	26							
4021	70	1641	17	18.0	24.1	0.4 + 0.1 (6.7)	82 (1.2)	1	7.9	40	10	26							
4030	147	1774	39	5.0	18.8	0.5 + 0.3 (10.9)	75 (1.6)	2	12.5	40	31	8							
4031	848	1907S	75	4.9	12.4	1.4 + 1.5 (41.4)	52 (6.2)	9	+	47.6	40	31	4						
4032BL	22	4031L	75	5.1	16.9	0.1 + 0.0 (1.5)	70 (0.2)	9	(0.0)*	3.9	40	31	4						
4097	1083	8000S	14	18.0	0.3	0.0 + 0.1 (1.1)	0 (0.1)	0	1.2										
4098BL	22	4097L	14	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0										
4099	333	8000	4	18.0	0.2	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3										
4110	623	1919	67	7.0	28.0	3.8 + 1.0 (68.7)	77 (5.3)	9	74.0	41	12	43							
4111BL	50	2040S	16	45.4	14.3	0.2 + 0.0 (2.8)	66 (0.0)	2	2.8	41	12	43							
4120	181	1959	47	20.0	32.2	1.2 + 0.4 (23.0)	98 (3.0)	3	26.0	41	54	0							
4121	295	1773	84	18.0	55.9	2.1 + 2.5 (65.1)	134 (8.4)	8	73.5	41	54	0							
4130	368	2056	79	5.0	41.4	2.5 + 1.8 (60.2)	116 (6.1)	8	66.2	41	12	26							

66 SECOND CYCLE 66 STEPS

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES							
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM RANDOM+ COST	MEAN COST	MEAN AVERAGE	INDEX.	NODE	START	START	END	END	END	END	END	END	END
	LINK	LINK	SAT	CRUISE	DELAY	(U+R+O-MEAN Q) DELAY	/PCU STOPS	EXCESS	OF () VALUES		1ST	2ND							
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	(\$/H)							
4131BL	50	1696S	72	31.8	39.8	0.3 + 0.2 (7.8)	114 (0.0)	6	7.9	41	12	26							
4132	227	4131L	72	5.0	39.9	1.5 + 1.0 (35.7)	114 (3.												

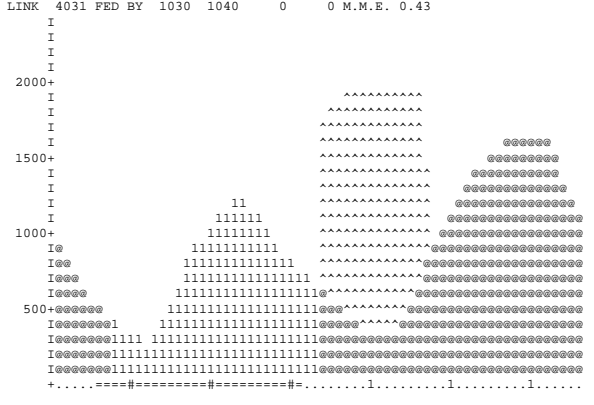
6010	194	715	32	18.0	4.3	0.0	0.2	(3.3)	0	(0.0)	0	3.3	
6011	552	1618S	36	18.0	1.7	0.0	0.3	(3.8)	3	(0.3)	0	4.1	
6012BL	24	6011L	36	22.5	1.7	0.0	0.0	(0.2)	3	(0.0)	0	0.2	
6020	449	1800S	26	18.0	1.4	0.0	0.2	(2.4)	2	(0.2)	0	2.6	
6021BL	28	6020L	26	22.5	1.4	0.0	0.0	(0.2)	2	(0.0)	0	0.2	
6098BL	24	6099L	7	64.8	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0	
6099	552	8000S	7	18.0	0.2	0.0	0.0	(0.5)	0	(0.0)	0	0.6	
7010	732	2055	36	8.0	1.4	0.0	0.3	(3.9)	2	(0.2)	0	4.1	
7011BL	50	1915	3	8.0	1.0	0.0	0.0	(0.2)	1	(0.0)	0	0.2	
TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAYS	TOTAL COST OF STOPS	TOTAL 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)					
2791.9	130.3	21.4	29.0	26.2	(783.5)	+ (99.1)	+ (2.2)	=	884.9	TOTALS			
95.1	6.4	14.8	0.9	0.5	(19.5)	+ (0.9)	+ (2.2)	=	22.6	BUSES			
2696.7	123.8	21.8	28.2	25.7	(764.0)	+ (98.2)	+ (0.0)	=	862.3	OTHER			

820.6	31.2	26.3	4.2	5.2	(132.7)	+ (19.3)	+ (0.0)	=	152.1	ROUTE	1		
875.7	46.6	18.8	11.2	12.6	(337.8)	+ (37.8)	+ (0.0)	=	375.6		2		

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	+	DELAY LITRES PER HOUR	+	STOPS LITRES PER HOUR	=	TOTALS LITRES PER HOUR
	159.0		63.5		45.8		268.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 63

CYCLIC FLOW PROFILE GRAPHS



PROGRAM TRANSYT FINISHED



TRANSYT Model Outputs

As reported in Transport Assessment Appendix S

PRT

PRT File

AM Peak : 2011 Flow + Committed + Full Dev 0800-0900

1 TRANSYT 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:- "WEST HENDON A5_110FULL_DEV_AM.DAT" at 16:42 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES = 5
NUMBER OF LINKS = 86
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 = 19076 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

CARD CARD

NO. TYPE
(1)= TITLE:- West Hendon Broadway Base Model

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS	PER CYCLE	TIME PERIOD	EFFECTIVE-GREEN DISPLACEMENTS	START (SEC)	END (SEC)	0=NO SETTINGS	1=EQUAL CYCLE	SCALE	CRUISE-SPEEDS SCALE	OPTIMISE	EXTRA COPIES	HILL-CLIMB OUTPUT	DELAY VALUE	STOP VALUE
2)	1	88	88	60	2	3	0	1	100	100	0	0	2	0	0	1420	260
LIST OF NODES TO BE OPTIMISED																	
3)	2	40	41	34	1	5	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET	SECOND SET	THIRD SET	FOURTH SET	FIFTH SET	SIXTH SET	SEVENTH SET	EIGHTH SET	NINTH SET	TENTH SET	ELEVENTH SET	TWELFTH SET	THIRTEENTH SET	FOURTEENTH SET	FIFTEENTH SET	SIXTEENTH SET	SEVENTEENTH SET	EIGHTEENTH SET	NINETEENTH SET	TWENTIETH SET	
4)	7	110	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5)	7	130	131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6)	7	210	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7)	7	330	331	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8)	7	430	431	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9)	7	510	511	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10)	7	530	531	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11)	7	610	611	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12)	7	630	631	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13)	7	1031	1032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14)	7	2011	2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15)	7	2030	2031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16)	7	2098	2097	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17)	7	3411	3412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18)	7	3430	3431	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19)	7	3442	3440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20)	7	4010	4011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21)	7	4031	4032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22)	7	4097	4098	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23)	7	4110	4111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24)	7	4131	4132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25)	7	5010	5011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26)	7	5020	5021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27)	7	6020	6021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28)	7	6030	6031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29)	7	6099	6098	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 NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
30)	10	1	7	7								
31)	10	5	7	7								
32)	10	34	6	3	5							
33)	10	40	7	0	7	3						
34)	10	41	7	7	5							

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
35)	11	1	15	5								
36)	11	5	13	5								
37)	11	34	8	10	9							
38)	11	40	15	5	5	9						
39)	11	41	11	6	5							

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sg1/Db1	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
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NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 86

88 SECOND CYCLE 88 STEPS

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

1	2	30	17		
5	2	82	70		
34	3	22	76	1	
40	4	26	73	78	14
41	3	31	87	21	

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)	
3701.9	211.2	17.5	67.7	41.4	(1548.1)	+ (195.0)	+ (40.3)	= 1783.3	TOTALS
88.4	5.4	16.4	1.4	0.7	(29.8)	+ (4.0)	+ (40.3)	= 74.1	BUSES
3613.5	205.9	17.6	66.2	40.7	(1518.3)	+ (191.0)	+ (0.0)	= 1709.3	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 553

88 SECOND CYCLE 88 STEPS

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

1	2	30	17		
5	2	82	70		
34	3	22	76	1	
40	4	26	73	78	14
41	3	31	87	21	

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)	
3701.9	211.2	17.5	67.7	41.4	(1548.1)	+ (195.0)	+ (40.3)	= 1783.3	TOTALS
88.4	5.4	16.4	1.4	0.7	(29.8)	+ (4.0)	+ (40.3)	= 74.1	BUSES
3613.5	205.9	17.6	66.2	40.7	(1518.3)	+ (191.0)	+ (0.0)	= 1709.3	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 567

88 SECOND CYCLE 88 STEPS

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

1	2	30	17		
5	2	82	70		
34	3	22	76	1	
40	4	26	73	78	14
41	3	31	87	21	

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)	
3701.9	211.2	17.5	67.7	41.4	(1548.1)	+ (195.0)	+ (40.3)	= 1783.3	TOTALS
88.4	5.4	16.4	1.4	0.7	(29.8)	+ (4.0)	+ (40.3)	= 74.1	BUSES
3613.5	205.9	17.6	66.2	40.7	(1518.3)	+ (191.0)	+ (0.0)	= 1709.3	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 989

88 SECOND CYCLE 88 STEPS

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

1	2	30	17		
5	2	82	70		
34	3	22	76	1	
40	4	26	73	78	14
41	3	31	87	21	

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)	
3701.9	211.2	17.5	67.7	41.4	(1548.1)	+ (195.0)	+ (40.3)	= 1783.3	TOTALS
88.4	5.4	16.4	1.4	0.7	(29.8)	+ (4.0)	+ (40.3)	= 74.1	BUSES
3613.5	205.9	17.6	66.2	40.7	(1518.3)	+ (191.0)	+ (0.0)	= 1709.3	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 639

88 SECOND CYCLE 88 STEPS

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

1	2	30	17		
5	2	82	70		
34	3	22	76	1	
40	4	26	73	78	14
41	3	31	87	21	

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)	
3701.9	211.2	17.5	67.7	41.4	(1548.1)	+ (195.0)	+ (40.3)	= 1783.3	TOTALS

88.4 5.4 16.4 1.4 0.7 (29.8) + (4.0) + (40.3) = 74.1 BUSES
 3613.5 205.9 17.6 66.2 40.7 (1518.3) + (191.0) + (0.0) = 1709.3 OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 669

88 SECOND CYCLE 88 STEPS

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

1 2 30 17
 5 2 82 70
 34 3 22 76 1
 40 4 26 73 14
 41 3 31 87 21

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)	
3701.9	211.2	17.5	67.7	41.4	(1548.1) + (195.0)	(40.3)	= 1783.3	TOTALS	
88.4	5.4	16.4	1.4	0.7	(29.8) + (4.0)	(40.3)	= 74.1	BUSES	
3613.5	205.9	17.6	66.2	40.7	(1518.3) + (191.0)	(0.0)	= 1709.3	OTHER	

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 634

88 SECOND CYCLE 88 STEPS

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

1 2 30 17
 5 2 82 70
 34 3 22 76 1
 40 4 26 73 14
 41 3 31 87 21

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)	
3701.9	211.2	17.5	67.7	41.4	(1548.1) + (195.0)	(40.3)	= 1783.3	TOTALS	
88.4	5.4	16.4	1.4	0.7	(29.8) + (4.0)	(40.3)	= 74.1	BUSES	
3613.5	205.9	17.6	66.2	40.7	(1518.3) + (191.0)	(0.0)	= 1709.3	OTHER	

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 1302

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
1	2	30	17								
5	2	82	70								
34	3	22	76	1							
40	4	26	73	78	14						
41	3	31	87	21							

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE (SEC)	TIMES PER PCU DELAY (SEC)	UNIFORM DELAY (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+OVERSAT DELAY (PCU-H/H)	COST OF DELAY (\$/H)	STOPS MEAN (PCU)	COST OF STOPS (\$/H)	QUEUE MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX OF () VALUES (\$/H)	EXIT NODE	GREEN START	TIMES END
110	1088	3940S	41	8.2	1.7	0.2 + 0.3	(7.4)	4 (0.7)	1	8.1	1	45	17			
111BL	22	110L	41	8.8	1.1	0.0 + 0.0	(0.1)	1 (0.0)	1	0.1	1	45	17			
130	1306	4030S	48	12.0	6.1	1.8 + 0.4	(31.6)	31 (6.6)	11	38.2	1	45	17			
131BL	22	130L	48	12.8	1.6	0.0 + 0.0	(0.1)	10 (0.0)	11	0.2	1	45	17			
210	1088	3940S	28	8.0	0.6	0.0 + 0.2	(2.7)	1 (0.1)	0 (0.0)*	2.8						
211BL	22	210L	28	8.4	0.6	0.0 + 0.0	(0.1)	1 (0.0)	0	0.1						
220	56	715	12	18.0	5.3	0.0 + 0.1	(1.2)	21 (0.2)	0	1.4						
299	39	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0 (0.0)	0	0.0						
330	1296	4030S	33	7.5	0.7	0.0 + 0.2	(3.4)	1 (0.1)	0	3.5						
331BL	22	330L	33	7.4	0.7	0.0 + 0.0	(0.1)	1 (0.0)	0	0.1						
340	10	715	2	18.0	4.3	0.0 + 0.0	(0.2)	0 (0.0)	0	0.2						
399	10	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0 (0.0)	0	0.0						
430	1634	3960S	43	5.4	0.8	0.0 + 0.4	(5.1)	1 (0.1)	0	5.2						
431BL	50	430L	43	5.7	0.8	0.0 + 0.0	(0.2)	1 (0.0)	0	0.2						
440	10	715	3	18.0	5.5	0.0 + 0.0	(0.2)	4 (0.0)	0	0.2						
510	1425	3970S	51	8.2	7.6	2.5 + 0.5	(42.9)	36 (8.2)	13	51.1	5	7	70			
511BL	50	510L	51	8.7	7.8	0.1 + 0.0	(1.5)	36 (0.3)	13	1.8	5	7	70			
530	1396	3950S	50	6.1	6.4	2.0 + 0.5	(35.2)	43 (1.2)	15	36.4	5	7	70			
531BL	50	530L	50	6.9	6.4	0.1 + 0.0	(1.3)	43 (0.3)	15	1.6	5	7	70			
610	1425	2132S	69	7.0	7.5	1.9 + 1.1	(42.0)	76 (17.5)	21	59.5						
611BL	50	610L	69	7.5	5.4	0.0 + 0.0	(1.1)	66 (0.5)	21	1.5						
620	10	658	7	18.0	23.4	0.0 + 0.0	(0.9)	91 (0.2)	0	1.1						
630	1392	3995S	36	5.0	0.7	0.0 + 0.3	(3.9)	0 (0.0)	0	3.9						
631BL	50	630L	36	5.4	0.7	0.0 + 0.0	(0.1)	0 (0.0)	0	0.1						
699	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0 (0.0)	0	0.0						
1030	144	1833	8	2.0	1.1	0.0 + 0.0	(0.6)	1 (0.0)	0	0.6						
1031	1162	3960S	30	2.0	0.6	0.0 + 0.2	(3.0)	1 (0.1)	0 (0.0)*	3.1						
1032BL	22	1031L	30	2.1	0.6	0.0 + 0.0	(0.1)	1 (0.0)	0	0.1						
1040	54	715	8	20.0	2.9	0.0 + 0.0	(0.6)	0 (0.0)	0	0.6						
1099	9	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0 (0.0)	0	0.0						
2010	74	850	26	3.0	8.4	0.0 + 0.2	(2.5)	0 (0.0)	0 (0.0)*	2.5						
2011	1427	2055S	72	6.0	3.3	0.1 + 1.2	(18.8)	16 (3.7)	17	22.5						
2012BL	50	2011L	72	6.4	3.2	0.0 + 0.0	(0.6)	9 (0.1)	17 (0.4)*	40.2						
2030	1554	4033S	40	18.0	0.7	0.0 + 0.3	(4.5)	1 (0.3)	0	4.8						
2031BL	50	2030L	40	22.5	0.7	0.0 + 0.0	(0.1)	1 (0.0)	0	0.2						
2040	36	600	61	18.0	88.6	0.1 + 0.7	(12.6)	196 (1.5)	1	14.1						
2041	18	715	5	18.0	5.2	0.0 + 0.0	(0.4)	0 (0.0)	0	0.4						
2097BL	50	2098L	18	22.5	0.3	0.0 + 0.0	(0.1)	0 (0.0)	0	0.1						
2098	1389	8000S	18	18.0	0.3	0.0 + 0.1	(1.5)	0 (0.1)	0	1.6						
2099	254	8000	3	18.0	0.2	0.0 + 0.0	(0.2)	0 (0.0)	0	0.2						
3410	161	1791	69	9.0	37.4	0.6 + 1.1	(23.8)	105 (2.6)	4	26.3	34	29	1			
3411	943	2430Sf	73	9.1	27.6	5.9 + 1.3	(102.8)	75 (10.7)	17	113.6	34	29	76			
3412BL	22	3411L	73	38.8	28.7	0.1 + 0.0	(2.5)	97 (0.3)	17	2.8	34	29	76			

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU		-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES	
				CRUISE	PER PCU	UNIFORM	RANDOM+ OVERSAT COST DELAY (\$/H)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	MEAN MAX.	AVERAGE EXCESS (PCU)			START	END
3430	1644	3704S	81	9.1	20.1	7.2 + 2.0	(130.2)	74	(19.7)	32	+	149.9	34	30	79
3431BL	50	3430L	81	9.8	14.7	0.1 + 0.1	(2.9)	62	(0.4)	32		3.3	34	30	79
3440BL	28	3442L	84	7.2	52.1	0.3 + 0.1	(5.8)	113	(0.5)	15		6.2	34	8	22
3442	505	3730S	84	7.0	52.1	5.0 + 2.4	(103.8)	113	(8.1)	15		111.9	34	8	22
3443	292	1641	63	7.0	37.6	2.2 + 0.8	(43.3)	96	(4.0)	7		47.3	34	86	22
3450	50	10000	1	10.0	8.7	0.1 + 0.0	(1.7)	43	(0.0)	1		1.7	34	27	76
3451	50	10000	3	10.0	33.6	0.4 + 0.0	(6.6)	86	(0.0)	1		6.6	34	10	22
4010	1169	3804S	83	18.0	32.5	8.1 + 2.4	(149.9)	96	(23.7)	29		173.6	40	41	73
4011BL	22	4010L	83	22.5	32.5	0.2 + 0.0	(2.8)	96	(0.3)	29		3.1	40	41	73
4020	627	2834F	97	18.0	83.8	5.6 + 9.0	(207.3)	146	(19.3)	24		226.7	40	83	14
4030	144	1833	79	4.0	73.0	1.2 + 1.7	(41.5)	136	(2.6)	5		44.1	40	41	80
4031	1216	3960S	72	4.0	18.9	5.1 + 1.3	(90.5)	42	(6.9)	14		97.4	40	41	78
4032BL	22	4031L	72	38.2	27.9	0.1 + 0.0	(2.4)	88	(0.0)	14	(0.0)*	3.2	40	41	78
4097	1737	8000S	22	18.0	0.3	0.0 + 0.1	(2.0)	0	(0.1)	0		2.1			
4098BL	22	4097L	22	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
4099	333	8000	4	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0		0.3			
4110	1398	3922S	71	15.7	15.9	5.0 + 1.2	(87.6)	87	(19.6)	31		107.2	41	42	87
4111BL	50	4110L	71	25.0	16.6	0.2 + 0.0	(3.3)	75	(0.5)	31		3.8	41	42	87
4120	407	2292F	92	18.0	73.3	3.8 + 4.5	(117.7)	135	(11.6)	14		129.3	41	5	21
4130	310	2018	80	7.0	58.2	3.1 + 1.9	(71.1)	123	(5.1)	9		76.2	41	42	1
4131	1086	1905S	85	7.0	20.6	3.7 + 2.6	(88.4)	103	(15.0)	30	+	103.4	41	26	87
4132BL	50	4131L	85	7.0	20.7	0.2 + 0.1	(4.1)	105	(0.8)	30	+	4.8	41	26	87
4150	50	10000	7	10.0	41.5	0.5 + 0.0	(8.2)	96	(0.0)	1		8.2	41	26	31
4199	142	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
5010	797	3910S	21	3.0	0.6	0.0 + 0.1	(1.8)	1	(0.1)	0		1.9			
5011BL	28	5010L	21	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
5020	852	1975S	45	9.0	1.6	0.0 + 0.4	(5.5)	2	(0.1)	0		5.7			
5021BL	28	5020L	45	7.2	1.6	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6010	35	715	6	18.0	3.6	0.0 + 0.0	(0.5)	0	(0.0)	0		0.5			
6011	74	1618	5	18.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0		0.4			
6020	762	1800S	44	18.0	1.8	0.0 + 0.4	(5.4)	2	(0.3)	0		5.7			
6021BL	28	6020L	44	22.5	1.8	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6030	852	1975S	45	3.0	1.6	0.0 + 0.4	(5.5)	2	(0.3)	0		5.8			
6031BL	28	6030L	45	3.6	1.6	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6098BL	28	6099L	12	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
6099	926	8000S	12	18.0	0.3	0.0 + 0.1	(0.9)	0	(0.1)	0		1.0			
-180	50	10000	5	10.0	37.8	0.5 + 0.0	(7.4)	92	(0.0)	1		7.5	1	22	30
-580	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	5	75	82
-3460	10	10000	0	10.0	22.1	0.1 + 0.0	(0.9)	70	(0.0)	0		0.9	34	84	22
-3461	10	10000	1	10.0	41.3	0.1 + 0.0	(1.6)	96	(0.0)	0		1.6	34	84	1
-4080	10	10000	0	10.0	11.1	0.0 + 0.0	(0.4)	49	(0.0)	0		0.4	40	78	34
-4081	10	10000	1	10.0	34.6	0.1 + 0.0	(1.4)	88	(0.0)	0		1.4	40	23	34
-4082	10	10000	1	10.0	38.8	0.1 + 0.0	(1.5)	93	(0.0)	0		1.5	40	19	26

*** 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)				
3701.9	211.2	17.5	67.7	41.4	(1548.1)	+	(195.0)	+	(40.3)	=	1783.3	TOTALS
88.4	5.4	16.4	1.4	0.7	(29.8)	+	(4.0)	+	(40.3)	=	74.1	BUSES
3613.5	205.9	17.6	66.2	40.7	(1518.3)	+	(191.0)	+	(0.0)	=	1709.3	OTHER
										ROUTE		
951.1	48.5	19.6	17.4	6.1	(334.1)	+	(33.3)	+	(0.0)	=	367.4	1
653.7	27.7	23.6	5.7	3.8	(134.5)	+	(26.1)	+	(0.0)	=	160.5	2

88 SECOND CYCLE 88 STEPS

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	218.1	+	127.1	+	89.3	=	434.5
NO. OF ENTRIES TO SUBPT =	11						
NO. OF LINKS RECALCULATED=	662						
PROGRAM TRANSYT FINISHED							

PRT

PRT File

PM Peak : 2011 Flow + Committed + Full Dev 1700-1800

1 TRANSYT 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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Run with file:- "WEST HENDON A5_110FULL_DEV_PM.DAT" at 16:42 on 20130312

TRANST 12.0

West Hendon Broadway Proposed Model PM

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 86
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 = 19076 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1) = TITLE:- West Hendon Broadway Proposed Model PM
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  MINS.  (SEC)  (SEC)  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
      2)= 1  88    88    60    2    3    0    1    100    100    0    2    0    0    1420  260
CARD  CARD
NO.   TYPE
3)= 2  40    41    34    1    5    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  110  111  0  0  0  0  0  0  0  0  0  0  0  0  0
5)= 7  130  131  0  0  0  0  0  0  0  0  0  0  0  0  0
6)= 7  210  211  0  0  0  0  0  0  0  0  0  0  0  0  0
7)= 7  330  331  0  0  0  0  0  0  0  0  0  0  0  0  0
8)= 7  430  431  0  0  0  0  0  0  0  0  0  0  0  0  0
9)= 7  510  511  0  0  0  0  0  0  0  0  0  0  0  0  0
10)= 7  530  531  0  0  0  0  0  0  0  0  0  0  0  0  0
11)= 7  610  611  0  0  0  0  0  0  0  0  0  0  0  0  0
12)= 7  630  631  0  0  0  0  0  0  0  0  0  0  0  0  0
13)= 7  1031 1032 0  0  0  0  0  0  0  0  0  0  0  0  0
14)= 7  2011 2012 0  0  0  0  0  0  0  0  0  0  0  0  0
15)= 7  2030 2031 0  0  0  0  0  0  0  0  0  0  0  0  0
16)= 7  2098 2097 0  0  0  0  0  0  0  0  0  0  0  0  0
17)= 7  3411 3412 0  0  0  0  0  0  0  0  0  0  0  0  0
18)= 7  3430 3431 0  0  0  0  0  0  0  0  0  0  0  0  0
19)= 7  3442 3440 0  0  0  0  0  0  0  0  0  0  0  0  0
20)= 7  4010 4011 0  0  0  0  0  0  0  0  0  0  0  0  0
21)= 7  4031 4032 0  0  0  0  0  0  0  0  0  0  0  0  0
22)= 7  4097 4098 0  0  0  0  0  0  0  0  0  0  0  0  0
23)= 7  4110 4111 0  0  0  0  0  0  0  0  0  0  0  0  0
24)= 7  4131 4132 0  0  0  0  0  0  0  0  0  0  0  0  0
25)= 7  5010 5011 0  0  0  0  0  0  0  0  0  0  0  0  0
26)= 7  5020 5021 0  0  0  0  0  0  0  0  0  0  0  0  0
27)= 7  6020 6021 0  0  0  0  0  0  0  0  0  0  0  0  0
28)= 7  6030 6031 0  0  0  0  0  0  0  0  0  0  0  0  0
29)= 7  6099 6098 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.
30)= 10  1    7  7
31)= 10  5    7  7
32)= 10  34   7  3  5
33)= 10  40   7  0  7  3
34)= 10  41   7  7  5
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
35)= 11  1    15  5
36)= 11  5    13  5
37)= 11  34   8  10  9
38)= 11  40   15  5  5  9
39)= 11  41   10  6  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.
    
```


NO.	TYPE	NO.	Cycled
40)=	12	1	55
41)=	12	5	43
42)=	12	34	76
43)=	12	40	70
44)=	12	41	44

LINK CARDS: GIVEWAY DATA															
CARD NO.	CARD TYPE	LINK NO.	LINK1 NO.	LINK2 NO.	LINK1 ONLY % FLOW	LINK1 GIVEWAY COEFFS.		LINK1 X100	LINK2 X100	STOP	LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
						A1	A2								
45)=	30	220	210	0	0	22	0	0	0	0	200	0	715	0	0
46)=	30	340	330	0	0	22	0	0	0	0	200	0	715	0	0
47)=	30	440	430	0	0	22	0	0	0	0	200	0	715	0	0
48)=	30	620	610	630	50	22	19	0	0	0	200	0	658	0	0
49)=	30	630	0	610	100	0	35	0	0	0	48	0	850	0	0
50)=	30	631	0	0	0	0	0	0	0	0	48	0	850	0	0
51)=	30	1040	1030	0	0	22	0	0	0	0	200	0	715	0	0
52)=	30	2010	2030	0	0	35	0	0	0	0	28	0	850	0	0
53)=	30	2040	2030	2011	0	22	19	0	0	0	200	0	600	0	0
54)=	30	2041	2030	0	0	22	0	0	0	0	200	0	715	0	0
55)=	30	3410	3430	0	0	50	0	0	0	0	85	0	1000	0	0
56)=	30	4030	4010	0	0	50	0	0	0	0	35	0	1000	0	0
57)=	30	4130	4110	0	0	50	0	0	0	0	62	0	1000	0	0
58)=	30	6010	6020	0	0	22	0	0	0	0	200	0	715	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	START STAGE	LAG								
59)=	31	110	1	1	15	2	0	0	0	0	78	0	3940	0	0
60)=	31	111	0	0	0	0	0	0	0	0	78	0	0	0	0
61)=	31	130	1	1	15	2	0	0	0	0	114	0	4030	0	0
62)=	31	131	0	0	0	0	0	0	0	0	114	0	0	0	0
63)=	31	-180	1	2	5	1	0	0	0	0	12	0	10000	0	0
64)=	31	210	0	0	0	0	0	0	0	0	75	0	3940	0	0
65)=	31	211	0	0	0	0	0	0	0	0	75	0	0	0	0
66)=	31	299	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)=	31	330	0	0	0	0	0	0	0	0	66	0	4030	0	0
68)=	31	331	0	0	0	0	0	0	0	0	66	0	0	0	0
69)=	31	399	0	0	0	0	0	0	0	0	200	0	8000	0	0
70)=	31	430	0	0	0	0	0	0	0	0	51	0	3960	0	0
71)=	31	431	0	0	0	0	0	0	0	0	51	0	0	0	0
72)=	31	510	5	1	13	2	0	0	0	0	77	0	3970	0	0
73)=	31	511	0	0	0	0	0	0	0	0	77	0	0	0	0
74)=	31	530	5	1	13	2	0	0	0	0	61	0	3950	0	0
75)=	31	531	0	0	0	0	0	0	0	0	61	0	0	0	0
76)=	31	-580	5	2	5	1	0	0	0	0	12	0	10000	0	0
77)=	31	610	0	0	0	0	0	0	0	0	67	0	2132	0	0
78)=	31	611	0	0	0	0	0	0	0	0	67	0	0	0	0
79)=	31	630	0	0	0	0	0	0	0	0	48	0	3995	0	0
80)=	31	631	0	0	0	0	0	0	0	0	48	0	0	0	0
81)=	31	633	0	0	0	0	0	0	0	0	200	0	8000	0	0
82)=	31	1030	0	0	0	0	0	0	0	0	19	0	1833	0	0
83)=	31	1031	0	0	0	0	0	0	0	0	19	0	3960	0	0
84)=	31	1032	0	0	0	0	0	0	0	0	19	0	0	0	0
85)=	31	1099	0	0	0	0	0	0	0	0	200	0	8000	0	0
86)=	31	2011	0	0	0	0	0	0	0	0	57	0	2055	0	0
87)=	31	2012	0	0	0	0	0	0	0	0	57	0	0	0	0
88)=	31	2030	0	0	0	0	0	0	0	0	200	0	4033	0	0
89)=	31	2031	0	0	0	0	0	0	0	0	200	0	0	0	0
90)=	31	2097	0	0	0	0	0	0	0	0	200	0	0	0	0
91)=	31	2098	0	0	0	0	0	0	0	0	200	0	8000	0	0
92)=	31	2099	0	0	0	0	0	0	0	0	200	0	8000	0	0
93)=	31	3410	34	1	7	3	0	0	0	0	85	0	1791	0	0
94)=	31	3411	34	1	7	2	0	0	0	0	85	0	2055	0	0
95)=	31	3412	0	0	0	0	0	0	0	0	85	0	0	0	0
96)=	31	3430	34	1	8	2	0	0	0	0	87	0	3704	0	0
97)=	31	3431	0	0	0	0	0	0	0	0	87	0	0	0	0
98)=	31	3440	0	0	0	0	0	0	0	0	64	0	0	0	0
99)=	31	3442	34	3	7	1	0	0	0	0	64	0	3730	0	0
100)=	31	3443	34	2	10	1	0	0	0	0	64	0	1641	0	0
101)=	31	3450	34	1	5	2	0	0	0	0	6	0	10000	0	0
102)=	31	3451	34	3	9	1	0	0	0	0	6	0	10000	0	0
103)=	31	-3460	34	2	5	1	0	0	0	0	6	0	10000	0	0
104)=	31	-3461	34	2	8	3	0	0	0	0	6	0	10000	0	0
105)=	31	4010	40	1	15	2	0	0	0	0	200	0	3804	0	0
106)=	31	4011	0	0	0	0	0	0	0	0	200	0	0	0	0
107)=	31	4020	40	3	5	4	0	0	0	0	200	0	1754	0	0
108)=	31	4030	40	1	15	3	2	0	0	0	35	0	1833	0	0
109)=	31	4031	40	1	15	3	0	0	0	0	35	0	3960	0	0
110)=	31	4032	0	0	0	0	0	0	0	0	35	0	0	0	0
111)=	31	-4080	40	2	5	1	8	0	0	0	6	0	10000	0	0
112)=	31	-4081	40	4	9	1	8	0	0	0	6	0	10000	0	0
113)=	31	-4082	40	4	5	1	0	0	0	0	12	0	10000	0	0
114)=	31	4097	0	0	0	0	0	0	0	0	200	0	8000	0	0
115)=	31	4098	0	0	0	0	0	0	0	0	200	0	0	0	0
116)=	31	4099	0	0	0	0	0	0	0	0	200	0	8000	0	0
117)=	31	4110	41	1	10	2	0	0	0	0	143	0	3922	0	0
118)=	31	4111	0	0	0	0	0	0	0	0	143	0	0	0	0
119)=	31	4120	41	2	6	3	0	0	0	0	200	0	1657	0	0
120)=	31	4130	41	1	10	2	2	0	0	0	62	0	2018	0	0
121)=	31	4131	41	3	5	2	0	0	0	0	62	0	1905	0	0
122)=	31	4132	0	0	0	0	0	0	0	0	62	0	0	0	0
123)=	31	4150	41	3	5	1	0	0	0	0	11	0	10000	0	0
124)=	31	4199	0	0	0	0	0	0	0	0	200	0	8000	0	0
125)=	31	5010	0	0	0	0	0	0	0	0	32	0	3910	0	0
126)=	31	5011	0	0	0	0	0	0	0	0	32	0	0	0	0
127)=	31	5020	0	0	0	0	0	0	0	0	64	0	1975	0	0
128)=	31	5021	0	0	0	0	0	0	0	0	64	0	0	0	0
129)=	31	6011	0	0	0	0	0	0	0	0	200	0	1618	0	0
130)=	31	6020	0	0	0	0	0	0	0	0	200	0	1800	0	0
131)=	31	6021	0	0	0	0	0	0	0	0	200	0	0	0	0
132)=	31	6030	0	0	0	0	0	0	0	0	32	0	1975	0	0
133)=	31	6031	0	0	0	0	0	0	0	0	32	0	0	0	0
134)=	31	6098	0	0	0	0	0	0	0	0	200	0	0	0	0
135)=	31	6099	0	0	0	0	0	0	0	0	200	0	8000	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
136)=	32	110	1186	0	4010	1115	8	4020	71	10	0	0	0	0	0	
137)=	32	111	22	0	4011	22	3200	0	0	0	0	0	0	0	0	
138)=	32	130	1089	0	330	1079	12	340	10	18	0	0	0	0	0	
139)=	32	131	22	0	331	22	3200	0	0	0	0	0	0	0	0	
140)=	32	-180	50	0	0	0	10	0	0	0	0	0	0	0	0	
141)=	32	210	1186	0	110	1186	8	0	0	0	0	0	0	0	0	
142)=	32	211	22	0	111	22	3200	0	0	0	0	0	0	0	0	
143)=	32	220	27	0	0	0	18	0	0	0	0	0	0	0	0	
144)=	32	299	56	0	210	56	18	0	0	0	0	0	0	0	0	
145)=	32	330	1079	0	3430	799	7	3443	280	9	0	0</				

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY-----	UNIFORM CRUISE	RANDOM+OVERSAT (Q)	COST OF DELAY (\$/H)	----STOPS----	MEAN STOPS /PCU	COST OF STOPS (\$/H)	-----QUEUE-----	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES END	START END
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O-MEAN Q)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	OF () VALUES (\$/H)			1ST	2ND	(SECONDS)
110	1185	3940S	43	8.1	1.8	0.2 + 0.4	(8.5)	8	(1.6)	2		10.1	1	70	43			
111BL	22	110L	43	8.8	1.4	0.0 + 0.0	(0.1)	2	(0.0)	2		0.1	1	70	43			
130	1086	4030S	39	12.1	3.8	0.8 + 0.3	(16.4)	16	(2.8)	5		19.2	1	70	43			
131BL	22	130L	39	12.8	3.9	0.0 + 0.0	(0.3)	15	(0.0)	5		0.4	1	70	43			
210	1185	3940S	31	8.0	0.7	0.0 + 0.2	(3.1)	1	(0.1)	0	(0.0)*	3.2						
211BL	22	210L	31	8.4	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1						
220	27	715	6	18.0	4.3	0.0 + 0.0	(0.5)	0	(0.0)	0		0.5						
299	57	8000	1	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1						
330	1076	4030S	27	7.5	0.6	0.0 + 0.2	(2.6)	1	(0.1)	0		2.7						
331BL	22	330L	27	7.4	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1						
340	10	715	2	18.0	3.9	0.0 + 0.0	(0.2)	0	(0.0)	0		0.2						
399	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0						
430	1205	3960S	32	5.2	0.7	0.0 + 0.2	(3.2)	1	(0.1)	0		3.2						
431BL	50	430L	32	5.7	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1						
440	10	715	2	18.0	4.2	0.0 + 0.0	(0.2)	0	(0.0)	0		0.2						
510	1403	3970S	50	8.1	2.5	0.5 + 0.5	(13.9)	9	(2.0)	3		15.9	5	56	31			
511BL	50	510L	50	8.7	1.3	0.0 + 0.0	(0.2)	1	(0.0)	3		0.3	5	56	31			
530	1247	3950S	45	6.1	6.0	1.7 + 0.4	(29.6)	40	(1.0)	13		30.7	5	56	31			
531BL	50	530L	45	6.9	6.0	0.1 + 0.0	(1.2)	40	(0.3)	13		1.5	5	56	31			
610	1403	2132S	68	7.0	3.8	0.5 + 1.0	(21.1)	38	(8.6)	13		29.6						
611BL	50	610L	68	7.5	3.4	0.0 + 0.0	(0.7)	27	(0.2)	13		0.9						
620	10	658	6	18.0	17.2	0.0 + 0.0	(0.7)	88	(0.2)	0		0.9						
630	1245	3995S	32	5.0	0.7	0.0 + 0.2	(3.3)	0	(0.0)	0		3.3						
631BL	50	630L	32	5.4	0.7	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1						
633	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0						
1030	243	1833	13	2.0	1.1	0.0 + 0.1	(1.1)	1	(0.1)	0	(0.0)*	1.1						
1031	843	3960S	22	2.0	0.6	0.0 + 0.1	(1.9)	1	(0.1)	0	(0.0)*	2.0						
1032BL	22	1031L	22	2.1	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1						
1040	200	715	30	20.0	3.9	0.0 + 0.2	(3.1)	0	(0.0)	0		3.1						
1099	52	8000	1	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0						
2010	70	850	19	3.0	5.9	0.0 + 0.1	(1.6)	0	(0.0)	0	(0.0)*	1.6						
2011	1402	2055S	71	6.0	3.1	0.0 + 1.2	(16.9)	7	(1.7)	9	(0.0)*	18.6						
2012BL	50	2011L	71	6.4	3.0	0.0 + 0.0	(0.6)	6	(0.0)	9	(0.0)*	0.6						
2030	1311	4033S	34	18.0	0.7	0.0 + 0.2	(3.5)	1	(0.2)	0		3.7						
2031BL	50	2030L	34	22.5	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1						
2040	55	600	73	18.0	105.0	0.4 + 1.2	(22.8)	156	(1.8)	2		24.6						
2041	31	715	7	18.0	4.7	0.0 + 0.0	(0.6)	0	(0.0)	0		0.6						
2097BL	50	2098L	18	22.5	0.3	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1						
2098	1387	8000S	18	18.0	0.3	0.0 + 0.1	(1.5)	0	(0.1)	0		1.6						
2099	167	8000	2	18.0	0.2	0.0 + 0.0	(0.2)	0	(0.0)	0		0.2						
3410	192	1791	46	9.0	12.3	0.2 + 0.4	(9.3)	52	(1.5)	3		10.9	34	83	55			
3411	963	2430Sf	74	9.1	20.6	4.1 + 1.4	(78.2)	57	(8.3)	13		86.5	34	83	42			
3412BL	22	3411L	74	38.8	26.5	0.1 + 0.0	(2.3)	91	(0.3)	13		2.6	34	83	42			

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY-----	UNIFORM CRUISE	RANDOM+OVERSAT (Q)	COST OF DELAY (\$/H)	----STOPS----	MEAN STOPS /PCU	COST OF STOPS (\$/H)	-----QUEUE-----	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES END	START END
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O-MEAN Q)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	OF () VALUES (\$/H)			1ST	2ND	(SECONDS)
3430	1215	3704S	64	9.1	15.6	4.4 + 0.8	(74.7)	77	(15.1)	26		89.7	34	84	42			
3431BL	50	3430L	64	9.8	13.6	0.2 + 0.0	(2.7)	77	(0.5)	26		3.2	34	84	42			
3440BL	28	3442L	80	7.2	48.7	0.3 + 0.1	(5.4)	109	(0.4)	14		5.8	34	62	76			
3442	480	3730S	80	7.0	48.7	4.7 + 1.8	(92.1)	109	(7.4)	14		99.6	34	62	76			
3443	279	1641	60	7.0	36.8	2.1 + 0.7	(40.5)	94	(3.8)	7		44.2	34	52	76			
3450	50	10000	1	10.0	8.7	0.1 + 0.0	(1.7)	43	(0.0)	1		1.7	34	81	42			
3451	50	10000	3	10.0	33.6	0.4 + 0.0	(6.6)	86	(0.0)	1		6.6	34	64	76			
4010	1522	3804S	92	18.0	34.8	9.7 + 5.0	(208.9)	103	(33.2)	40		242.1	40	85	35			
4011BL	22	4010L	92	22.5	34.8	0.1 + 0.1	(3.0)	103	(0.3)	40		3.3	40	85	35			
4020	303	3395f	87	18.0	74.8	3.3 + 3.0	(89.4)	133	(8.5)	10		97.9	40	50	58			
4030	243	1833	92	4.0	87.7	1.6 + 4.3	(84.1)	154	(5.0)	10		89.1	40	85	47			
4031	991	3960S	46	4.0	8.1	1.8 + 0.4	(31.8)	44	(5.9)	12		37.7	40	85	45			
4032BL	22	4031L	46	38.2	18.2	0.1 + 0.0	(1.6)	74	(0.0)	12	(0.0)*	1.6	40	85	45			
4097	1223	8000S	16	18.0	0.3	0.0 + 0.1	(1.3)	0	(0.1)	0		1.4						
4098BL	22	4097L	16	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0						
4099	651	8000	8	18.0	0.2	0.0 + 0.0	(0.6)	0	(0.0)	0		0.7						
4110	1443	3922S	60	15.7	7.9	2.4 + 0.7	(44.7)	41	(9.4)	15		54.1	41	54	21			
4111BL	50	4110L	60	25.0	9.6	0.1 + 0.0	(1.9)	41	(0.3)	15		2.2	41	54	21			
4120	215	3007f	79	18.0	67.9	2.3 + 1.7	(57.6)	125	(5.7)	7		63.3	41	27	34			
4130	165	2018	91	7.0	89.1	0.5 + 3.5	(58.0)	155	(3.4)	6		61.4	41	54	23			
4131	1083	1905S	74	7.0	9.3	1.5 + 1.3	(39.8)	70	(10.2)	18		50.0	41	39	21			
4132BL	50	4131L	74	7.0	8.8	0.1 + 0.1	(1.7)	65	(0.5)	18		2.2	41	39	21			
4150	50	10000	7	10.0	41.5	0.5 + 0.0	(8.2)	96	(0.0)	1		8.2	41	39	44			
4199	297	8000	4	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0		0.3						
5010	759	3910S	20	3.0	0.6	0.0 + 0.1	(1.7)	1	(0.1)	0		1.8						
5011BL	28	5010L	20	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1						
5020	610	1975S	32	9.0	1.3	0.0 + 0.2	(3.2)	2	(0.1)	0		3.3						
5021BL	28	5020L	32	7.2	1.3	0.0 + 0.0	(0.1)	2	(0.0)	0		0.2						
6010	97	715	17	18.0	3.9	0.0 + 0.1	(1.5)	0	(0.0)	0		1.5						
6011	144	1618	9	18.0	1.2	0.0 + 0.0	(0.7)	1	(0.0)	0		0.7						
6020	662	1800S	38	18.0	1.6	0.0 + 0.3	(4.2)	2	(0.3)	0		4.5						
6021BL	28	6020L	38	22.5	1.6	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2						
6030	610	1975S	32	3.0	1.3	0.0 + 0.2	(3.2)	2	(0.2)	0		3.4						
6031BL	28	6030L	32	3.6	1.3	0.0 + 0.0	(0.1)	2	(0.0)	0		0.2						
6098BL	28	6099L	10	22.5	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0						
6099	754	8000S	10	18.0	0.2	0.0 + 0.1	(0.7)	0	(0.0)	0		0.8						
-180	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	1	48	55			
-580	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	5	36	43			
-3460	10	10000	0	10.0	20.0	0.1 + 0.0	(0.8)	66	(0.0)	0		0.8	34	47	76			
-3461	10	10000	1	10.0	41.3	0.1 + 0.0	(1.6)	96	(0.0)	0								

FUEL CONSUMPTION PREDICTIONS 204.2 + 92.6 + 65.1 = 361.9

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 86

88 SECOND CYCLE 88 STEPS

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

1	2	55	43		
5	2	43	31		
34	3	76	42	55	
40	4	70	35	45	58
41	3	44	21	34	

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)	
3473.2	174.8	19.9	45.0	34.0	(1122.4)	+ (141.7)	+ (0.0)	= 1264.1	TOTALS
88.4	4.9	18.1	1.1	0.6	(23.0)	+ (3.0)	+ (0.0)	= 25.9	BUSES
3384.8	169.9	19.9	44.0	33.5	(1099.4)	+ (138.7)	+ (0.0)	= 1238.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 575

88 SECOND CYCLE 88 STEPS

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

1	2	55	43		
5	2	43	31		
34	3	76	42	55	
40	4	70	35	45	58
41	3	44	21	34	

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)	
3473.2	174.8	19.9	45.0	34.0	(1122.4)	+ (141.7)	+ (0.0)	= 1264.1	TOTALS
88.4	4.9	18.1	1.1	0.6	(23.0)	+ (3.0)	+ (0.0)	= 25.9	BUSES
3384.8	169.9	19.9	44.0	33.5	(1099.4)	+ (138.7)	+ (0.0)	= 1238.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 570

88 SECOND CYCLE 88 STEPS

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

1	2	55	43		
5	2	43	31		
34	3	76	42	55	
40	4	70	35	45	58
41	3	44	21	34	

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)	
3473.2	174.8	19.9	45.0	34.0	(1122.4)	+ (141.7)	+ (0.0)	= 1264.1	TOTALS
88.4	4.9	18.1	1.1	0.6	(23.0)	+ (3.0)	+ (0.0)	= 25.9	BUSES
3384.8	169.9	19.9	44.0	33.5	(1099.4)	+ (138.7)	+ (0.0)	= 1238.1	OTHER

NO. OF ENTRIES TO SUBPT = 21
 NO. OF LINKS RECALCULATED= 826

88 SECOND CYCLE 88 STEPS

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

1	2	55	43		
5	2	43	31		
34	3	76	42	55	
40	4	70	35	45	58
41	3	44	21	34	

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)	
3473.2	174.8	19.9	45.0	34.0	(1122.4)	+ (141.7)	+ (0.0)	= 1264.1	TOTALS
88.4	4.9	18.1	1.1	0.6	(23.0)	+ (3.0)	+ (0.0)	= 25.9	BUSES
3384.8	169.9	19.9	44.0	33.5	(1099.4)	+ (138.7)	+ (0.0)	= 1238.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 614

88 SECOND CYCLE 88 STEPS

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

1	2	55	43		
5	2	43	31		
34	3	76	42	55	
40	4	70	35	45	58
41	3	44	21	34	

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)	
3473.2	174.8	19.9	45.0	34.0	(1122.4)	+ (141.7)	+ (0.0)	= 1264.1	TOTALS
88.4	4.9	18.1	1.1	0.6	(23.0)	+ (3.0)	+ (0.0)	= 25.9	BUSES
3384.8	169.9	19.9	44.0	33.5	(1099.4)	+ (138.7)	+ (0.0)	= 1238.1	OTHER

3473.2	174.8	19.9	45.0	34.0	(1122.4) + (141.7) + (0.0) =	1264.1	TOTALS
88.4	4.9	18.1	1.1	0.6	(23.0) + (3.0) + (0.0) =	25.9	BUSES
3384.8	169.9	19.9	44.0	33.5	(1099.4) + (138.7) + (0.0) =	1238.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 662

88 SECOND CYCLE 88 STEPS

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

1	2	56	44		
5	2	43	31		
34	3	76	42	55	
40	4	70	35	45	58
41	3	44	21	34	

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)	
3473.2	174.8	19.9	45.0	34.0	(1122.5) + (141.6)	+ (0.0)	=	1264.1	TOTALS
88.4	4.9	18.1	1.1	0.6	(23.0) + (3.0)	+ (0.0)	=	25.9	BUSES
3384.8	169.9	19.9	44.0	33.5	(1099.5) + (138.6)	+ (0.0)	=	1238.1	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 620

88 SECOND CYCLE 88 STEPS

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

1	2	56	44		
5	2	43	31		
34	3	76	42	55	
40	4	70	35	45	58
41	3	44	21	34	

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)	
3473.2	174.8	19.9	45.0	34.0	(1122.5) + (141.6)	+ (0.0)	=	1264.1	TOTALS
88.4	4.9	18.1	1.1	0.6	(23.0) + (3.0)	+ (0.0)	=	25.9	BUSES
3384.8	169.9	19.9	44.0	33.5	(1099.5) + (138.6)	+ (0.0)	=	1238.1	OTHER

NO. OF ENTRIES TO SUBPT = 21
 NO. OF LINKS RECALCULATED= 1122

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
1	2	56	44								
5	2	43	31								
34	3	76	42	55							
40	4	70	35	45	58						
41	3	44	21	34							

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY (SEC)	UNIFORM DELAY (PCU-H/H)	RANDOM+ OVERSAT DELAY (PCU-H/H)	COST OF DELAY (\$/H)	STOPS MEAN (/PCU)	COST OF STOPS (\$/H)	QUEUE MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX OF () VALUES (\$/H)	EXIT NODE	GREEN START	TIMES END	START END
		(PCU/H)	(PCU/H)	(%)	(SEC)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	(\$/H)		1ST (SECONDS)	2ND (SECONDS)	
110	1185	3940S	43	8.1	1.8	0.2 +	0.4 (8.3)	7 (1.5)	2	9.9	1	71	44				
111BL	22	110L	43	8.8	1.3	0.0 +	0.0 (0.1)	2 (0.0)	2	0.1	1	71	44				
130	1086	4030S	39	12.1	3.6	0.8 +	0.3 (15.5)	16 (2.7)	4	18.3	1	71	44				
131BL	22	130L	39	12.8	3.7	0.0 +	0.0 (0.3)	13 (0.0)	4	0.4	1	71	44				
210	1185	3940S	31	8.0	0.7	0.0 +	0.2 (3.1)	1 (0.1)	0 (0.0)*	3.2							
211BL	22	210L	31	8.4	0.7	0.0 +	0.0 (0.1)	1 (0.0)	0	0.1							
220	27	715	6	18.0	4.3	0.0 +	0.0 (0.5)	0 (0.0)	0	0.5							
299	57	8000	1	18.0	0.2	0.0 +	0.0 (0.1)	0 (0.0)	0	0.1							
330	1076	4030S	27	7.5	0.6	0.0 +	0.2 (2.6)	1 (0.1)	0	2.7							
331BL	22	330L	27	7.4	0.6	0.0 +	0.0 (0.1)	1 (0.0)	0	0.1							
340	10	715	2	18.0	3.9	0.0 +	0.0 (0.2)	0 (0.0)	0	0.2							
399	11	8000	0	18.0	0.2	0.0 +	0.0 (0.0)	0 (0.0)	0	0.0							
430	1205	3960S	32	5.2	0.7	0.0 +	0.2 (3.2)	1 (0.1)	0	3.2							
431BL	50	430L	32	5.7	0.7	0.0 +	0.0 (0.1)	1 (0.0)	0	0.1							
440	10	715	2	18.0	4.2	0.0 +	0.0 (0.2)	0 (0.0)	0	0.2							
510	1403	3970S	50	8.1	2.5	0.5 +	0.5 (13.9)	9 (2.0)	3	15.9	5	56	31				
511BL	50	510L	50	8.7	1.3	0.0 +	0.0 (0.2)	1 (0.0)	3	0.3	5	56	31				
530	1247	3950S	45	6.1	6.0	1.7 +	0.4 (29.6)	40 (1.0)	13	30.7	5	56	31				
531BL	50	530L	45	6.9	6.0	0.1 +	0.0 (1.2)	40 (0.3)	13	1.5	5	56	31				
610	1403	2132S	68	7.0	3.8	0.5 +	1.0 (21.1)	38 (8.6)	13	29.6							
611BL	50	610L	68	7.5	3.4	0.0 +	0.0 (0.7)	27 (0.2)	13	0.9							
620	10	658	6	18.0	17.1	0.0 +	0.0 (0.7)	88 (0.2)	0	0.9							
630	1245	3995S	32	5.0	0.7	0.0 +	0.2 (3.3)	0 (0.0)	0	3.3							
631BL	50	630L	32	5.4	0.7	0.0 +	0.0 (0.1)	0 (0.0)	0	0.1							
633	11	8000	0	18.0	0.2	0.0 +	0.0 (0.0)	0 (0.0)	0	0.0							
1030	243	1833	13	2.0	1.1	0.0 +	0.1 (1.1)	1 (0.1)	0 (0.0)*	1.1							
1031	843	3960S	22	2.0	0.6	0.0 +	0.1 (1.9)	1 (0.1)	0 (0.0)*	2.0							
1032BL	22	1031L	22	2.1	0.6	0.0 +	0.0 (0.1)	1 (0.0)	0	0.1							
1040	200	715	30	20.0	3.9	0.0 +	0.2 (3.1)	0 (0.0)	0	3.1							
1099	52	8000	1	18.0	0.2	0.0 +	0.0 (0.0)	0 (0.0)	0	0.0							
2010	70	850	19	3.0	5.9	0.0 +	0.1 (1.6)	0 (0.0)	0 (0.0)*	1.6							
2011	1402	2055S	71	6.0	3.1	0.0 +	1.2 (16.9)	7 (1.7)	9 (0.0)*	18.6							
2012BL	50	2011L	71	6.4	3.0	0.0 +	0.0 (0.6)	6 (0.0)	9 (0.0)*	0.6							
2030	1311	4033S	34	18.0	0.7	0.0 +	0.2 (3.5)	1 (0.2)	0	3.7							
2031BL	50	2030L	34	22.5	0.7	0.0 +	0.0 (0.1)	1 (0.0)	0	0.1							
2040	55	600	73	18.0	104.9	0.4 +	1.2 (22.8)	156 (1.8)	2	24.6							
2041	31	715	7	18.0	4.7	0.0 +	0.0 (0.6)	0 (0.0)	0	0.6							
2097BL	50	2098L	18	22.5	0.3	0.0 +	0.0 (0.1)	0 (0.0)	0	0.1							
2098	1387	8000S	18	18.0	0.3	0.0 +	0.1 (1.5)	0 (0.1)	0	1.6							
2099	167	8000	2	18.0	0.2	0.0 +	0.0 (0.2)	0 (0.0)	0	0.2							
3410	192	1791	46	9.0	12.4	0.2 +	0.4 (9.4)	53 (1.5)	2	10.9	34	83	55				
3411	963	2430Sf	74	9.1	20.6	4.1 +	1.4 (78.3)	56 (8.3)	13	86.6	34	83	42				
3412BL	22	3411L	74	38.8	26.6	0.1 +	0.0 (2.3)	91 (0.3)	13	2.6	34	83	42				

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU		-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES START END (SECONDS)	
				CRUISE DELAY (SEC)	PER PCU DELAY (SEC)	UNIFORM (U+R+Q) (PCU-H/H)	RANDOM+OVERSAT (R) (PCU-H/H)	COST OF DELAY (\$/H)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	MEAN MAX. (PCU)			AVERAGE EXCESS (PCU)	1ST	2ND
3430	1215	3704S	64	9.1	15.6	4.4	0.8	(74.7)	77	(15.1)	26	89.7	34	84	42
3431BL	50	3430L	64	9.8	13.6	0.2	0.0	(2.7)	77	(0.5)	26	3.2	34	84	42
3440BL	28	3442L	80	7.2	48.7	0.3	0.1	(5.4)	109	(0.4)	14	5.8	34	62	76
3442	480	3730S	80	7.0	48.7	4.7	1.8	(92.1)	109	(7.4)	14	99.6	34	62	76
3443	279	1641	60	7.0	36.8	2.1	0.7	(40.5)	94	(3.8)	7	44.2	34	52	76
3450	50	10000	1	10.0	8.7	0.1	0.0	(1.7)	43	(0.0)	1	1.7	34	81	42
3451	50	10000	3	10.0	33.6	0.4	0.0	(6.6)	86	(0.0)	1	6.6	34	64	76
4010	1522	3804S	92	18.0	34.8	9.7	5.0	(208.9)	103	(33.2)	40	242.1	40	85	35
4011BL	22	4010L	92	22.5	34.8	0.1	0.1	(3.0)	103	(0.3)	40	3.3	40	85	35
4020	303	3395F	87	18.0	74.8	3.3	3.0	(89.4)	133	(8.5)	10	97.9	40	50	58
4030	243	1833	92	4.0	87.9	1.6	4.3	(84.2)	154	(5.0)	10	89.2	40	85	47
4031	991	3960S	46	4.0	8.3	1.9	0.4	(32.4)	44	(5.9)	12	38.3	40	85	45
4032BL	22	4031L	46	38.2	18.4	0.1	0.0	(1.6)	75	(0.0)	12	(0.0)*	40	85	45
4097	1223	8000S	16	18.0	0.3	0.0	0.1	(1.3)	0	(0.1)	0	1.4			
4098BL	22	4097L	16	22.5	0.3	0.0	0.0	(0.0)	0	(0.0)	0	0.0			
4099	651	8000	8	18.0	0.2	0.0	0.0	(0.6)	0	(0.0)	0	0.7			
4110	1443	3922S	60	15.7	7.9	2.4	0.7	(44.7)	41	(9.5)	15	54.2	41	54	21
4111BL	50	4110L	60	25.0	9.6	0.1	0.0	(1.9)	41	(0.3)	15	2.2	41	54	21
4120	215	3007F	79	18.0	67.9	2.3	1.7	(57.6)	125	(5.7)	7	63.3	41	27	34
4130	165	2018	91	7.0	89.4	0.5	3.6	(58.2)	156	(3.4)	6	61.6	41	54	23
4131	1083	1905S	74	7.0	9.3	1.5	1.3	(39.8)	70	(10.2)	18	50.0	41	39	21
4132BL	50	4131L	74	7.0	8.8	0.1	0.1	(1.7)	65	(0.5)	18	2.2	41	39	21
4150	50	10000	7	10.0	41.5	0.5	0.0	(8.2)	96	(0.0)	1	8.2	41	39	44
4199	297	8000	4	18.0	0.2	0.0	0.0	(0.3)	0	(0.0)	0	0.3			
5010	759	3910S	20	3.0	0.6	0.0	0.1	(1.7)	1	(0.1)	0	1.8			
5011BL	28	5010L	20	3.6	0.6	0.0	0.0	(0.1)	1	(0.0)	0	0.1			
5020	610	1975S	32	9.0	1.3	0.0	0.2	(3.2)	2	(0.1)	0	3.3			
5021BL	28	5020L	32	7.2	1.3	0.0	0.0	(0.1)	2	(0.0)	0	0.2			
6010	97	715	17	18.0	3.9	0.0	0.1	(1.5)	0	(0.0)	0	1.5			
6011	144	1618	9	18.0	1.2	0.0	0.0	(0.7)	1	(0.0)	0	0.7			
6020	662	1800S	38	18.0	1.6	0.0	0.3	(4.2)	2	(0.3)	0	4.5			
6021BL	28	6020L	38	22.5	1.6	0.0	0.0	(0.2)	2	(0.0)	0	0.2			
6030	610	1975S	32	3.0	1.3	0.0	0.2	(3.2)	2	(0.2)	0	3.4			
6031BL	28	6030L	32	3.6	1.3	0.0	0.0	(0.1)	2	(0.0)	0	0.2			
6098BL	28	6099L	10	22.5	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0			
6099	754	8000S	10	18.0	0.2	0.0	0.1	(0.7)	0	(0.0)	0	0.8			
-180	50	10000	6	10.0	38.9	0.5	0.0	(7.7)	93	(0.0)	1	7.7	1	49	56
-580	50	10000	6	10.0	38.9	0.5	0.0	(7.7)	93	(0.0)	1	7.7	5	36	43
-3460	10	10000	0	10.0	20.0	0.1	0.0	(0.8)	66	(0.0)	0	0.8	34	47	76
-3461	10	10000	1	10.0	41.3	0.1	0.0	(1.6)	96	(0.0)	0	1.6	34	50	55
-4080	10	10000	0	10.0	14.3	0.0	0.0	(0.6)	56	(0.0)	0	0.6	40	40	78
-4081	10	10000	1	10.0	34.6	0.1	0.0	(1.4)	88	(0.0)	0	1.4	40	67	78
-4082	10	10000	1	10.0	38.8	0.1	0.0	(1.5)	93	(0.0)	0	1.5	40	63	70

*** 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)	
3473.2	174.8	19.9	45.0	34.0	(1122.5) + (141.6)	+ (0.0)	=	1264.1	TOTALS
88.4	4.9	18.1	1.1	0.6	(23.0) + (3.0)	+ (0.0)	=	25.9	BUSES
3384.8	169.9	19.9	44.0	33.5	(1099.5) + (138.6)	+ (0.0)	=	1238.1	OTHER

796.1	34.1	23.4	9.4	3.4	(182.4) + (32.5)	+ (0.0)	=	214.9	ROUTE 1
670.0	24.0	27.9	2.7	2.6	(75.5) + (12.9)	+ (0.0)	=	88.4	ROUTE 2

88 SECOND CYCLE 88 STEPS

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR		DELAY LITRES PER HOUR		STOPS LITRES PER HOUR		TOTALS LITRES PER HOUR	
	204.2		+	92.7		+	65.0	= 361.8
NO. OF ENTRIES TO SUBPT =	11							
NO. OF LINKS RECALCULATED=	662							
PROGRAM TRANSYT FINISHED								

PRT

PRT File Sat Peak : 2011 Flow + Committed + Full Dev

1 TRANSYT 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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Run with file:- "WEST HENDON A5_110FULL_DEV_SAT.DAT" at 16:42 on 20130312

TRANST 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES = 5
NUMBER OF LINKS = 86
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 = 19076 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

CARD CARD

NO. TYPE
(1)= TITLE:- West Hendon Broadway Base Model

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS	PER CYCLE	TIME PERIOD	EFFECTIVE-GREEN DISPLACEMENTS	0=NONE	1=EQUAL	SCALE	CRUISE-SPEEDS	OPTIMISE	EXTRA	HILL-CLIMB	DELAY	STOP
2)	1	88	88	60	2	3	0	1	100	0	2	0	0	1420	260
LIST OF NODES TO BE OPTIMISED															
3)	2	40	41	34	1	5	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET	SECOND SET	THIRD SET	FOURTH SET	FIFTH SET	SIXTH SET	SEVENTH SET	EIGHTH SET	NINTH SET	TENTH SET	ELEVENTH SET	TWELFTH SET	THIRTEENTH SET	FOURTEENTH SET	FIFTEENTH SET
4)	7	110	111	0	0	0	0	0	0	0	0	0	0	0	0	0
5)	7	130	131	0	0	0	0	0	0	0	0	0	0	0	0	0
6)	7	210	211	0	0	0	0	0	0	0	0	0	0	0	0	0
7)	7	330	331	0	0	0	0	0	0	0	0	0	0	0	0	0
8)	7	430	431	0	0	0	0	0	0	0	0	0	0	0	0	0
9)	7	510	511	0	0	0	0	0	0	0	0	0	0	0	0	0
10)	7	530	531	0	0	0	0	0	0	0	0	0	0	0	0	0
11)	7	610	611	0	0	0	0	0	0	0	0	0	0	0	0	0
12)	7	630	631	0	0	0	0	0	0	0	0	0	0	0	0	0
13)	7	1031	1032	0	0	0	0	0	0	0	0	0	0	0	0	0
14)	7	2011	2012	0	0	0	0	0	0	0	0	0	0	0	0	0
15)	7	2030	2031	0	0	0	0	0	0	0	0	0	0	0	0	0
16)	7	2098	2097	0	0	0	0	0	0	0	0	0	0	0	0	0
17)	7	3411	3412	0	0	0	0	0	0	0	0	0	0	0	0	0
18)	7	3430	3431	0	0	0	0	0	0	0	0	0	0	0	0	0
19)	7	3442	3440	0	0	0	0	0	0	0	0	0	0	0	0	0
20)	7	4010	4011	0	0	0	0	0	0	0	0	0	0	0	0	0
21)	7	4031	4032	0	0	0	0	0	0	0	0	0	0	0	0	0
22)	7	4097	4098	0	0	0	0	0	0	0	0	0	0	0	0	0
23)	7	4110	4111	0	0	0	0	0	0	0	0	0	0	0	0	0
24)	7	4131	4132	0	0	0	0	0	0	0	0	0	0	0	0	0
25)	7	5010	5011	0	0	0	0	0	0	0	0	0	0	0	0	0
26)	7	5020	5021	0	0	0	0	0	0	0	0	0	0	0	0	0
27)	7	6020	6021	0	0	0	0	0	0	0	0	0	0	0	0	0
28)	7	6030	6031	0	0	0	0	0	0	0	0	0	0	0	0	0
29)	7	6099	6098	0	0	0	0	0	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
30)	10	1	7	7								
31)	10	5	7	7								
32)	10	34	6	3	5							
33)	10	40	7	0	7	3						
34)	10	41	7	7	5							

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
35)	11	1	15	5								
36)	11	5	13	5								
37)	11	34	8	10	9							
38)	11	40	15	5	5	9						
39)	11	41	11	6	5							

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sg1/Db1	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
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LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY (SEC)	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES	
						UNIFORM (U+R+O-MEAN Q)	RANDOM+ OVERSAT DELAY (\$/H)	MEAN STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			START 1ST	END 2ND
110	1149	3940S	42	8.1	1.9	0.3 + 0.4	(8.8)	5	(0.9)	1		9.7	1	42	15
111BL	22	110L	42	8.8	1.1	0.0 + 0.0	(0.1)	1	(0.0)	1		0.1	1	42	15
130	1131	4030S	41	12.1	6.1	1.6 + 0.3	(27.3)	38	(6.9)	11		34.2	1	42	15
131BL	22	130L	41	12.8	2.6	0.0 + 0.0	(0.2)	7	(0.0)	11		0.2	1	42	15
210	1149	3940S	30	8.0	0.7	0.0 + 0.2	(2.9)	1	(0.1)	0	(0.0)*	3.1			
211BL	22	210L	30	8.4	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
220	25	715	5	18.0	4.4	0.0 + 0.0	(0.4)	7	(0.0)	0		0.5			
299	21	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
330	1121	4030S	28	7.6	0.6	0.0 + 0.2	(2.8)	1	(0.1)	0		2.9			
331BL	22	330L	28	7.4	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
340	10	715	2	18.0	4.0	0.0 + 0.0	(0.2)	0	(0.0)	0		0.2			
399	9	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
430	1327	3960S	35	5.1	0.7	0.0 + 0.3	(3.6)	1	(0.1)	0		3.7			
431BL	50	430L	35	5.7	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
440	10	715	2	18.0	4.5	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
510	1375	3970S	49	8.1	5.6	1.7 + 0.5	(30.6)	40	(8.8)	14		39.4	5	10	73
511BL	50	510L	49	8.7	6.6	0.1 + 0.0	(1.3)	38	(0.3)	14		1.6	5	10	73
530	1300	3950S	47	6.1	6.1	1.8 + 0.4	(31.4)	41	(1.1)	14		32.5	5	10	73
531BL	50	530L	47	6.9	6.1	0.1 + 0.0	(1.2)	41	(0.3)	14		1.5	5	10	73
610	1375	2132S	67	7.0	6.9	1.7 + 1.0	(37.2)	76	(16.8)	19	+	54.1			
611BL	50	610L	67	7.5	4.4	0.0 + 0.0	(0.9)	51	(0.4)	19	+	1.2			
620	10	658	6	18.0	21.0	0.0 + 0.0	(0.8)	86	(0.2)	0		1.0			
630	1298	3995S	34	5.0	0.7	0.0 + 0.2	(3.5)	0	(0.0)	0		3.5			
631BL	50	630L	34	5.4	0.7	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
699	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
1030	161	1833	9	2.0	1.1	0.0 + 0.0	(0.7)	1	(0.0)	0		0.7			
1031	971	3960S	25	2.0	0.6	0.0 + 0.2	(2.3)	1	(0.1)	0	(0.0)*	2.4			
1032BL	22	1031L	25	2.1	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
1040	200	715	29	20.0	3.7	0.0 + 0.2	(3.0)	0	(0.0)	0		3.0			
1099	52	8000	1	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
2010	58	850	16	3.0	5.9	0.0 + 0.1	(1.4)	0	(0.0)	0	(0.0)*	1.4			
2011	1374	2055S	69	6.0	3.0	0.1 + 1.1	(16.4)	13	(2.8)	14	+	19.2			
2012BL	50	2011L	69	6.4	2.9	0.0 + 0.0	(0.6)	6	(0.0)	14	(0.1)*	11.0			
2030	1354	4033S	35	18.0	0.7	0.0 + 0.3	(3.7)	1	(0.2)	0		3.9			
2031BL	50	2030L	35	22.5	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
2040	33	600	41	18.0	49.3	0.1 + 0.3	(6.4)	142	(1.0)	1		7.4			
2041	17	715	4	18.0	4.6	0.0 + 0.0	(0.3)	0	(0.0)	0		0.3			
2097BL	50	2098L	17	22.5	0.3	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
2098	1349	8000S	17	18.0	0.3	0.0 + 0.1	(1.5)	0	(0.1)	0		1.5			
2099	131	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
3410	138	1791	58	9.0	31.8	0.5 + 0.7	(17.3)	109	(2.3)	3		19.6	34	39	11
3411	1016	2430Sf	78	9.0	20.7	4.1 + 1.7	(82.8)	72	(11.1)	18	+	93.9	34	39	86
3412BL	22	3411L	78	38.8	30.7	0.1 + 0.0	(2.7)	98	(0.3)	18	+	3.0	34	39	86

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. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES	
						UNIFORM (U+R+O-MEAN Q)	RANDOM+ OVERSAT DELAY (\$/H)	MEAN STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			START 1ST	END 2ND
3430	1337	3704S	66	9.1	6.7	1.6 + 0.9	(35.2)	24	(5.2)	9		40.4	34	40	1
3431BL	50	3430L	66	9.8	4.7	0.0 + 0.0	(0.9)	19	(0.1)	9		1.1	34	40	1
3440BL	28	3442L	63	7.2	41.6	0.3 + 0.1	(4.6)	99	(0.4)	10		5.0	34	18	32
3442	375	3730S	63	7.0	41.6	3.5 + 0.8	(61.6)	99	(5.3)	10		66.9	34	18	32
3443	322	1641	69	7.0	40.4	2.5 + 1.1	(51.3)	100	(4.6)	8		55.9	34	8	32
3450	50	10000	1	10.0	8.7	0.1 + 0.0	(1.7)	43	(0.0)	1		1.7	34	37	86
3451	50	10000	3	10.0	33.6	0.4 + 0.0	(6.6)	86	(0.0)	1		6.6	34	20	32
4010	1268	3804S	71	18.0	21.6	6.4 + 1.2	(108.1)	79	(21.3)	26		129.4	40	38	79
4011BL	22	4010L	71	22.5	21.6	0.1 + 0.0	(1.9)	79	(0.2)	26		2.1	40	38	79
4020	337	3395f	79	18.0	57.2	3.5 + 1.9	(76.0)	116	(8.3)	10		84.3	40	1	11
4030	161	1833	74	4.0	59.5	1.3 + 1.3	(37.8)	124	(2.7)	5		40.5	40	38	86
4031	1118	3960S	54	4.0	12.6	3.3 + 0.6	(55.5)	39	(5.9)	11		61.4	40	38	84
4032BL	22	4031L	54	38.2	18.9	0.1 + 0.0	(1.6)	77	(0.0)	11	(0.0)*	1.7	40	38	84
4097	1371	8000S	17	18.0	0.3	0.0 + 0.1	(1.5)	0	(0.1)	0		1.6			
4098BL	22	4097L	17	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
4099	364	8000	5	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0		0.4			
4110	1391	3922S	59	15.5	6.6	1.8 + 0.7	(36.0)	44	(9.8)	19		45.7	41	44	10
4111BL	50	4110L	59	25.0	9.4	0.1 + 0.0	(1.8)	64	(0.5)	19		2.3	41	44	10
4120	157	3007f	57	18.0	53.4	1.7 + 0.7	(33.1)	109	(3.6)	4		36.7	41	16	23
4130	315	2018	70	7.0	40.2	2.4 + 1.1	(49.9)	106	(4.5)	8		54.4	41	44	12
4131	985	1905S	67	7.0	13.0	2.6 + 1.0	(50.5)	84	(11.1)	22	+	61.6	41	28	10
4132BL	50	4131L	67	7.0	13.1	0.1 + 0.0	(2.6)	86	(0.6)	22	+	3.2	41	28	10
4150	50	10000	7	10.0	41.5	0.5 + 0.0	(8.2)	96	(0.0)	1		8.2	41	28	33
4199	149	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
5010	697	3910S	19	3.0	0.6	0.0 + 0.1	(1.6)	1	(0.1)	0		1.6			
5011BL	28	5010L	19	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
5020	675	1975S	36	9.0	1.4	0.0 + 0.3	(3.8)	2	(0.1)	0		3.9			
5021BL	28	5020L	36	7.2	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6010	171	715	29	18.0	4.3	0.0 + 0.2	(2.9)	0	(0.0)	0		2.9			
6011	19	1618	1	18.0	1.1	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
6020	526	1800S	31	18.0	1.4	0.0 + 0.2	(3.0)	2	(0.2)	0		3.2			
6021BL	28	6020L	31	22.5	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6030	675	1975S	36	3.0	1.4	0.0 + 0.3	(3.8)	2	(0.2)	0		4.0			
6031BL	28	6030L	36	3.6	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6098BL	28	6099L	9	22.5	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
6099	694	8000S	9	18.0	0.2	0.0 + 0.0	(0.7)	0	(0.0)	0		0.7			
-180	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	1	20	27
-580	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	5	78	85
-3460	10	10000	0	10.0	22.1	0.1 + 0.0	(0.9)	70	(0.0)	0		0.9	34	6	32
-3461	10	10000	1	10.0	41.3	0.1 + 0.0	(1.6)	96	(0.0)	0		1.6	34	6	11
-4080	10	10000	0	10.0	16.1	0.0 + 0.0	(0.6)	59	(0.0)	0		0.6	40	84	31
-4081	10	10000	1	10.0	34.6	0.1 + 0.0	(1.4)	88	(0.0)	0		1.4	40	20	31
-4082	10	10000	1	10.0	38.8	0.1 + 0.0	(1.5)	93	(0.0)	0		1.5	40	16	23

*** 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-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)			
3305.4	157.5	21.0	44.6	21.3	(936.3)	+	(139.0)	+	(10.3)	= 1085.6	TOTALS
88.4	4.8	18.4	1.1	0.4	(21.6)	+	(3.2)	+	(10.3)	= 35.2	BUSES
3217.0	152.7	21.1	43.5	20.9	(914.7)	+	(135.7)	+	(0.0)	= 1050.4	OTHER

88 SECOND CY

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 86

88 SECOND CYCLE 88 STEPS

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

1	2	27	15		
5	2	85	73		
34	3	32	86	11	
40	4	23	79	84	11
41	3	33	10	23	

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)	
3305.4	157.5	21.0	44.6	21.3	(936.3)	+ (139.0)	+ (10.3)	= 1085.6	TOTALS
88.4	4.8	18.4	1.1	0.4	(21.6)	+ (3.2)	+ (10.3)	= 35.2	BUSES
3217.0	152.7	21.1	43.5	20.9	(914.7)	+ (135.7)	+ (0.0)	= 1050.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 613

88 SECOND CYCLE 88 STEPS

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

1	2	27	15		
5	2	85	73		
34	3	32	86	11	
40	4	23	79	84	11
41	3	33	10	23	

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)	
3305.4	157.5	21.0	44.6	21.3	(936.3)	+ (139.0)	+ (10.3)	= 1085.6	TOTALS
88.4	4.8	18.4	1.1	0.4	(21.6)	+ (3.2)	+ (10.3)	= 35.2	BUSES
3217.0	152.7	21.1	43.5	20.9	(914.7)	+ (135.7)	+ (0.0)	= 1050.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 616

88 SECOND CYCLE 88 STEPS

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

1	2	27	15		
5	2	85	73		
34	3	32	86	11	
40	4	23	79	84	11
41	3	33	10	23	

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)	
3305.4	157.5	21.0	44.6	21.3	(936.3)	+ (139.0)	+ (10.3)	= 1085.6	TOTALS
88.4	4.8	18.4	1.1	0.4	(21.6)	+ (3.2)	+ (10.3)	= 35.2	BUSES
3217.0	152.7	21.1	43.5	20.9	(914.7)	+ (135.7)	+ (0.0)	= 1050.4	OTHER

NO. OF ENTRIES TO SUBPT = 19
 NO. OF LINKS RECALCULATED= 854

88 SECOND CYCLE 88 STEPS

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

1	2	27	15		
5	2	85	73		
34	3	32	86	11	
40	4	23	79	84	11
41	3	33	10	23	

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)	
3305.4	157.5	21.0	44.6	21.3	(936.3)	+ (139.0)	+ (10.3)	= 1085.6	TOTALS
88.4	4.8	18.4	1.1	0.4	(21.6)	+ (3.2)	+ (10.3)	= 35.2	BUSES
3217.0	152.7	21.1	43.5	20.9	(914.7)	+ (135.7)	+ (0.0)	= 1050.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 655

88 SECOND CYCLE 88 STEPS

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

1	2	27	15		
5	2	85	73		
34	3	32	86	11	
40	4	23	79	84	11
41	3	33	10	23	

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)	
3305.4	157.5	21.0	44.6	21.3	(936.3)	+ (139.0)	+ (10.3)	= 1085.6	TOTALS

88.4 4.8 18.4 1.1 0.4 (21.6) + (3.2) + (10.3) = 35.2 BUSES
 3217.0 152.7 21.1 43.5 20.9 (914.7) + (135.7) + (0.0) = 1050.4 OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 697

88 SECOND CYCLE 88 STEPS

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

1 2 27 15
 5 2 85 73
 34 3 32 86 11
 40 4 23 79 84 11
 41 3 33 10 23

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)	
3305.4	157.5	21.0	44.6	21.3	(936.3) + (139.0)	+ (10.3)	=	1085.6	TOTALS
88.4	4.8	18.4	1.1	0.4	(21.6) + (3.2)	+ (10.3)	=	35.2	BUSES
3217.0	152.7	21.1	43.5	20.9	(914.7) + (135.7)	+ (0.0)	=	1050.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 657

88 SECOND CYCLE 88 STEPS

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

1 2 27 15
 5 2 85 73
 34 3 32 86 11
 40 4 23 79 84 11
 41 3 33 10 23

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)	
3305.4	157.5	21.0	44.6	21.3	(936.3) + (139.0)	+ (10.3)	=	1085.6	TOTALS
88.4	4.8	18.4	1.1	0.4	(21.6) + (3.2)	+ (10.3)	=	35.2	BUSES
3217.0	152.7	21.1	43.5	20.9	(914.7) + (135.7)	+ (0.0)	=	1050.4	OTHER

NO. OF ENTRIES TO SUBPT = 19
 NO. OF LINKS RECALCULATED= 1171

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
1	2	27	15								
5	2	85	73								
34	3	32	86	11							
40	4	23	79	84	11						
41	3	33	10	23							

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER PCU	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES START
		(PCU/H)	(PCU/H)	(%)	(SEC)	UNIFORM DELAY (SEC)	TOTAL MEAN DELAY (PCU-H/H)	AVERAGE EXCESS (PCU)	OF () VALUES (\$/H)		1ST	2ND
110	1149	3940S	42	8.1	1.9	0.3 + 0.4	(8.8)	5 (0.9)	9.7	1	42	15
111BL	22	110L	42	8.8	1.1	0.0 + 0.0	(0.1)	1 (0.0)	0.1	1	42	15
130	1131	4030S	41	12.1	6.1	1.6 + 0.3	(27.3)	38 (6.9)	34.2	1	42	15
131BL	22	130L	41	12.8	2.6	0.0 + 0.0	(0.2)	7 (0.0)	0.2	1	42	15
210	1149	3940S	30	8.0	0.7	0.0 + 0.2	(2.9)	1 (0.1)	3.1			
211BL	22	210L	30	8.4	0.7	0.0 + 0.0	(0.1)	1 (0.0)	0.1			
220	25	715	5	18.0	4.4	0.0 + 0.0	(0.4)	7 (0.0)	0.5			
299	21	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0 (0.0)	0.0			
330	1121	4030S	28	7.6	0.6	0.0 + 0.2	(2.8)	1 (0.1)	2.9			
331BL	22	330L	28	7.4	0.6	0.0 + 0.0	(0.1)	1 (0.0)	0.1			
340	10	715	2	18.0	4.0	0.0 + 0.0	(0.2)	0 (0.0)	0.2			
399	9	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0 (0.0)	0.0			
430	1327	3960S	35	5.1	0.7	0.0 + 0.3	(3.6)	1 (0.1)	3.7			
431BL	50	430L	35	5.7	0.7	0.0 + 0.0	(0.1)	1 (0.0)	0.1			
440	10	715	2	18.0	4.5	0.0 + 0.0	(0.2)	1 (0.0)	0.2			
510	1375	3970S	49	8.1	5.6	1.7 + 0.5	(30.6)	40 (8.8)	39.4	5	10	73
511BL	50	510L	49	8.7	6.6	0.1 + 0.0	(1.3)	38 (0.3)	1.6	5	10	73
530	1300	3950S	47	6.1	6.1	1.8 + 0.4	(31.4)	41 (1.1)	32.5	5	10	73
531BL	50	530L	47	6.9	6.1	0.1 + 0.0	(1.2)	41 (0.3)	1.5	5	10	73
610	1375	2132S	67	7.0	6.9	1.7 + 1.0	(37.2)	76 (16.8)	54.1			
611BL	50	610L	67	7.5	4.4	0.0 + 0.0	(0.9)	51 (0.4)	1.2			
620	10	658	6	18.0	21.0	0.0 + 0.0	(0.8)	86 (0.2)	1.0			
630	1298	3995S	34	5.0	0.7	0.0 + 0.2	(3.5)	0 (0.0)	3.5			
631BL	50	630L	34	5.4	0.7	0.0 + 0.0	(0.1)	0 (0.0)	0.1			
699	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0 (0.0)	0.0			
1030	161	1833	9	2.0	1.1	0.0 + 0.0	(0.7)	1 (0.0)	0.7			
1031	971	3960S	25	2.0	0.6	0.0 + 0.2	(2.3)	1 (0.1)	2.4			
1032BL	22	1031L	25	2.1	0.6	0.0 + 0.0	(0.1)	1 (0.0)	0.1			
1040	200	715	29	20.0	3.7	0.0 + 0.2	(3.0)	0 (0.0)	3.0			
1099	52	8000	1	18.0	0.2	0.0 + 0.0	(0.0)	0 (0.0)	0.0			
2010	58	850	16	3.0	5.9	0.0 + 0.1	(1.4)	0 (0.0)	1.4			
2011	1374	2055S	69	6.0	3.0	0.1 + 1.1	(16.4)	13 (2.8)	19.2			
2012BL	50	2011L	69	6.4	2.9	0.0 + 0.0	(0.6)	6 (0.0)	11.0			
2030	1354	4033S	35	18.0	0.7	0.0 + 0.3	(3.7)	1 (0.2)	3.9			
2031BL	50	2030L	35	22.5	0.7	0.0 + 0.0	(0.1)	1 (0.0)	0.1			
2040	33	600	41	18.0	49.3	0.1 + 0.3	(6.4)	142 (1.0)	7.4			
2041	17	715	4	18.0	4.6	0.0 + 0.0	(0.3)	0 (0.0)	0.3			
2097BL	50	2098L	17	22.5	0.3	0.0 + 0.0	(0.1)	0 (0.0)	0.1			
2098	1349	8000S	17	18.0	0.3	0.0 + 0.1	(1.5)	0 (0.1)	1.5			
2099	131	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0 (0.0)	0.1			
3410	138	1791	58	9.0	31.8	0.5 + 0.7	(17.3)	109 (2.3)	19.6	34	39	11
3411	1016	2430Sf	78	9.0	20.7	4.1 + 1.7	(82.8)	72 (11.1)	93.9	34	39	86
3412BL	22	3411L	78	38.8	30.7	0.1 + 0.0	(2.7)	98 (0.3)	3.0	34	39	86

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER PCU		-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES	
				CRUISE DELAY (SEC)	PER PCU DELAY (SEC)	UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT COST DELAY (\$/H)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			START 1ST (SECONDS)	START 2ND (SECONDS)
3430	1337	3704S	66	9.1	6.7	1.6 + 0.9	(35.2)	24	(5.2)	9		40.4	34	40	1
3431BL	50	3430L	66	9.8	4.7	0.0 + 0.0	(0.9)	19	(0.1)	9		1.1	34	40	1
3440BL	28	3442L	63	7.2	41.6	0.3 + 0.1	(4.6)	99	(0.4)	10		5.0	34	18	32
3442	375	3730S	63	7.0	41.6	3.5 + 0.8	(61.6)	99	(5.3)	10		66.9	34	18	32
3443	322	1641	69	7.0	40.4	2.5 + 1.1	(51.3)	100	(4.6)	8		55.9	34	8	32
3450	50	10000	1	10.0	8.7	0.1 + 0.0	(1.7)	43	(0.0)	1		1.7	34	37	86
3451	50	10000	3	10.0	33.6	0.4 + 0.0	(6.6)	86	(0.0)	1		6.6	34	20	32
4010	1268	3804S	71	18.0	21.6	6.4 + 1.2	(108.1)	79	(21.3)	26		129.4	40	38	79
4011BL	22	4010L	71	22.5	21.6	0.1 + 0.0	(1.9)	79	(0.2)	26		2.1	40	38	79
4020	337	3395F	79	18.0	57.2	3.5 + 1.9	(76.0)	116	(8.3)	10		84.3	40	1	11
4030	161	1833	74	4.0	59.5	1.3 + 1.3	(37.8)	124	(2.7)	5		40.5	40	38	86
4031	1118	3960S	54	4.0	12.6	3.3 + 0.6	(55.5)	39	(5.9)	11		61.4	40	38	84
4032BL	22	4031L	54	38.2	18.9	0.1 + 0.0	(1.6)	77	(0.0)	11	(0.0)*	1.7	40	38	84
4097	1371	8000S	17	18.0	0.3	0.0 + 0.1	(1.5)	0	(0.1)	0		1.6			
4098BL	22	4097L	17	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
4099	364	8000	5	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0		0.4			
4110	1391	3922S	59	15.5	6.6	1.8 + 0.7	(36.0)	44	(9.8)	19		45.7	41	44	10
4111BL	50	4110L	59	25.0	9.4	0.1 + 0.0	(1.8)	64	(0.5)	19		2.3	41	44	10
4120	157	3007F	57	18.0	53.4	1.7 + 0.7	(33.1)	109	(3.6)	4		36.7	41	16	23
4130	315	2018	70	7.0	40.2	2.4 + 1.1	(49.9)	106	(4.5)	8		54.4	41	44	12
4131	985	1905S	67	7.0	13.0	2.6 + 1.0	(50.5)	84	(11.1)	22	+	61.6	41	28	10
4132BL	50	4131L	67	7.0	13.1	0.1 + 0.0	(2.6)	86	(0.6)	22	+	3.2	41	28	10
4150	50	10000	7	10.0	41.5	0.5 + 0.0	(8.2)	96	(0.0)	1		8.2	41	28	33
4199	149	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
5010	697	3910S	19	3.0	0.6	0.0 + 0.1	(1.6)	1	(0.1)	0		1.6			
5011BL	28	5010L	19	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
5020	675	1975S	36	9.0	1.4	0.0 + 0.3	(3.8)	2	(0.1)	0		3.9			
5021BL	28	5020L	36	7.2	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6010	171	715	29	18.0	4.3	0.0 + 0.2	(2.9)	0	(0.0)	0		2.9			
6011	19	1618	1	18.0	1.1	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
6020	526	1800S	31	18.0	1.4	0.0 + 0.2	(3.0)	2	(0.2)	0		3.2			
6021BL	28	6020L	31	22.5	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6030	675	1975S	36	3.0	1.4	0.0 + 0.3	(3.8)	2	(0.2)	0		4.0			
6031BL	28	6030L	36	3.6	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6038BL	28	6039L	9	22.5	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
6099	694	8000S	9	18.0	0.2	0.0 + 0.0	(0.7)	0	(0.0)	0		0.7			
-180	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	1	20	27
-580	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	5	78	85
-3460	10	10000	0	10.0	22.1	0.1 + 0.0	(0.9)	70	(0.0)	0		0.9	34	6	32
-3461	10	10000	1	10.0	41.3	0.1 + 0.0	(1.6)	96	(0.0)	0		1.6	34	6	11
-4080	10	10000	0	10.0	16.1	0.0 + 0.0	(0.6)	59	(0.0)	0		0.6	40	84	31
-4081	10	10000	1	10.0	34.6	0.1 + 0.0	(1.4)	88	(0.0)	0		1.4	40	20	31
-4082	10	10000	1	10.0	38.8	0.1 + 0.0	(1.5)	93	(0.0)	0		1.5	40	16	23

*** 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)	TOTALS
3305.4	157.5	21.0	44.6	21.3	(936.3)	+ (139.0)	+ (10.3)	= 1085.6	TOTALS
88.4	4.8	18.4	1.1	0.4	(21.6)	+ (3.2)	+ (10.3)	= 35.2	BUSES
3217.0	152.7	21.1	43.5	20.9	(914.7)	+ (135.7)	+ (0.0)	= 1050.4	OTHER
									ROUTE
802.7	33.7	23.8	9.0	3.5	(177.8)	+ (16.9)	+ (0.0)	= 194.8	1
644.9	23.2	27.8	2.4	2.8	(74.1)	+ (15.1)	+ (0.0)	= 89.2	2

88 SECOND CYCLE 88 STEPS

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	195.2	+ 77.6	+ 63.8	= 336.6
NO. OF ENTRIES TO SUBPT =	11			
NO. OF LINKS RECALCULATED=	697			
PROGRAM TRANSYT FINISHED				

PRT

PRT File AM Peak : 2011 Flow 0800-0900

1 TRANSYT 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:- "WEST HENDON A5_BASE_AM_V3.DAT" at 16:43 on 20130312

TRANST 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 62
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 14028 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD
NO.   TYPE   TIME   NO. OF   TIME EFFECTIVE-GREEN   EQUISAT 0=UNEQUAL FLOW   CRUISE-SPEEDS   OPTIMISE   EXTRA   HILL-   DELAY   STOP
      TYPE   CYCLE  STEPS   PERIOD DISPLACEMENTS   SETTINGS CYCLE SCALE   SCALE   CARD32  0=NONE   COPIES   CLIMB   VALUE   VALUE
      (SEC)  CYCLE  MINS.   START   END   0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=0/SET  FINAL   OUTPUT  P PER  P PER
      (SEC)  CYCLE  (SEC)   (SEC)  (SEC)  1=YES  1=Cycle  %      %      1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
2)=   1      75      75      60      2      3      0      1      100     100     0      0      0      0      1420  260
CARD  CARD
NO.   TYPE
3)=   2      40      41      34      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      2011  2012      0      0      0      0      0      0      0      0      0      0      0      0      0
5)=   7      2030  2031      0      0      0      0      0      0      0      0      0      0      0      0      0
6)=   7      2098  2097      0      0      0      0      0      0      0      0      0      0      0      0      0
7)=   7      3411  3412      0      0      0      0      0      0      0      0      0      0      0      0      0
8)=   7      4012  4011      0      0      0      0      0      0      0      0      0      0      0      0      0
9)=   7      4031  4032      0      0      0      0      0      0      0      0      0      0      0      0      0
10)=  7      4097  4098      0      0      0      0      0      0      0      0      0      0      0      0      0
11)=  7      4199  4198      0      0      0      0      0      0      0      0      0      0      0      0      0
12)=  7      5010  5011      0      0      0      0      0      0      0      0      0      0      0      0      0
13)=  7      6011  6012      0      0      0      0      0      0      0      0      0      0      0      0      0
14)=  7      6020  6021      0      0      0      0      0      0      0      0      0      0      0      0      0
15)=  7      6099  6098      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.
16)=  10    34          7      1      5
17)=  10    40          7      7
18)=  10    41         12      3      12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE      S1      S2      S3      S4      S5      S6      S7      S8      S9      S10
NO.   TYPE  NO.
19)=  11    34          8      12     12
20)=  11    40          5      6
21)=  11    41         18      3     11
    
```

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
22)=  12    34      1      12     50     67
23)=  12    40      1      26     67
24)=  12    41      1      0      36     42
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY COEFFS.  LINK  STOP  MAX  DELAY  DISPSN
NO.   TYPE  NO.   NO.   NO.  % FLOW  X100  X100  LENGTH WT.X100  FLOW WT.X100  FLOW WT.X100  X100
25)=  30    1040  1030      0      0      22      0      0      200      0      715      0      0
26)=  30    2010  2030      0      0      50      0      0      31      0      1000     0      0
27)=  30    2040  2030  2011      0      22     19      0      0      200      0      600      0      0
28)=  30    2041  2030      0      0      22      0      0      200      0      715      0      0
29)=  30    4030      0  4010  37      0      50      0      0      45      0      1000     0      0
30)=  30    6010  6020      0      0      22      0      0      200      0      715      0      0
    
```

LINK CARDS: FIXED DATA
FIRST GREEN SECOND GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)	31	4010	40	1	5	2	0	0	0	0	0	200	0	1949	0	0
57)	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)	31	4030	40	1	5	2	4	0	0	0	0	45	0	1774	0	0
62)	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)	31	4110	41	1	12	3	0	0	0	0	0	56	0	1919	0	0
68)	31	4111	41	1	16	3	0	0	0	0	0	56	0	2040	0	0
69)	31	4120	41	3	11	1	0	0	0	0	0	200	0	1959	0	0
70)	31	4121	41	3	11	1	0	0	0	0	0	200	0	1773	0	0
71)	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)	31	4150	41	3	11	1	0	0	0	0	0	12	0	10000	0	0
74)	31	4151	41	1	12	3	0	0	0	0	0	11	0	10000	0	0
75)	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)	31	-4200	41	2	3	3	0	0	0	0	0	20	0	1800	0	0
78)	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
79)	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
80)	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
81)	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
82)	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
83)	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
85)	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
86)	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
87)	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
88)	32	1010	814	0	4010	727	15	4021	87	15	0	0	0	0	0	0
89)	32	1011	22	0	4011	22	3200	0	0	0	0	0	0	0	0	0
90)	32	1030	1006	0	3430	622	19	3443	384	19	0	0	0	0	0	0
91)	32	1031	22	0	3431	22	3200	0	0	0	0	0	0	0	0	0
92)	32	1040	44	0	0	0	20	0	0	0	0	0	0	0	0	0
93)	32	1099	10	0	1030	20	18	0	0	0	0	0	0	0	0	0
94)	32	2010	65	0	2011	65	3	0	0	0	0	0	0	0	0	0
95)	32	2011	1017	0	4110	672	23	4121	345	18	0	0	0	0	0	0
96)	32	2012	50	0	4111	50	3200	0	0	0	0	0	0	0	0	0
97)	32	2030	1319	0	0	0	18	0	0	0	0	0	0	0	0	0
98)	32	2031	50	0	0	0	3200	0	0	0	0	0	0	0	0	0
99)	32	2040	34	0	0	0	18	0	0	0	0	0	0	0	0	0
100)	32	2041	19	0	0	0	18	0	0	0	0	0	0	0	0	0
101)	32	2097	50	0	2012	50	3200	0	0	0	0	0	0	0	0	0
102)	32	2098	986	0	2011	952	18	2040	34	18	0	0	0	0	0	0
103)	32	2099	741	0	2010	65	18	2030	676	18	0	0	0	0	0	0
104)	32	3010	662	0	2030	643	17	2041	19	17	0	0	0	0	0	0
105)	32	3011	50	0	2031	50	3200	0	0	0	0	0	0	0	0	0
106)	32	3410	672	0	1010	672	6	0	0	0	0	0	0	0	0	0
107)	32	3411	142	0	1010	142	6	0	0	0	0	0	0	0	0	0
108)	32	3412	22	0	1011	22	3220	0	0	0	0	0	0	0	0	0
109)	32	3430	622	0	4130	622	11	0	0	0	0	0	0	0	0	0
110)	32	3431	22	0	4131	22	3200	0	0	0	0	0	0	0	0	0
111)	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
112)	32	3442	383	0	5010	383	7	0	0	0	0	0	0	0	0	0
113)	32	3443	384	0	5010	384	7	0	0	0	0	0	0	0	0	0
114)	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
116)	32	3499	525	0	3411	142	18	3442	383	10	0	0	0	0	0	0
117)	32	4010	727	0	0	0	18	0	0	0	0	0	0	0	0	0
118)	32	4011	22	0	0	0	3200	0	0	0	0	0	0	0	0	0
119)	32	4012	154	0	0	0	18	0	0	0	0	0	0	0	0	0
120)	32	4020	479	0	0	0	20	0	0	0	0	0	0	0	0	0
121)	32	4021	87	0	0	0	18	0	0	0	0	0	0	0	0	0
122)	32	4030	211	0	1030	211	5	0	0	0	0	0	0	0	0	0
123)	32	4031	819	0	1030	775	5	1040	44	4	0	0	0	0	0	0
124)	32	4032	22	0	1031	22	3226	0	0	0	0	0	0	0	0	0
125)	32	4097	1376	0	4020	479	18	4030	78	18	4031	819	18	0	0	0
126)	32	4098	22	0	4032	22	3200	0	0	0	0	0	0	0	0	0
127)	32	4099	287	0	4012	154	18	4030	133	18	0	0	0	0	0	0
128)	32	4110	672	0	7010	672	7	0	0	0	0	0	0	0	0	0
129)	32	4111	50	0	7011	50	3211	0	0	0	0	0	0	0	0	0
130)	32	4120	229	0	0	0	20	0	0	0	0	0	0	0	0	0
131)	32	4121	345	0												

147)= 32 6099 731 0 6011 731 18 0 0 0 0 0 0 0 0 0 0 0 0
 148)= 32 7010 672 0 3410 672 8 0 0 0 0 0 0 0 0 0 0 0 0
 149)= 32 7011 50 0 3412 22 3200 3440 28 3200 0 0 0 0 0 0 0 0

LINK CARDS : FLARE SATURATION FLOW DATA

CARD	LINK	SAT.	FLARE	SAT.	FLARE	SAT.	FLARE	SAT.	FLARE
TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
150)=	33	4110	2040	4	0	0	0	0	0
151)=	33	4130	1696	3	0	0	0	0	0

GRAPH PLOT CARDS

CARD	CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
152)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD	CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
153)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD	CARD	ROUTE	ROUTE
NO.	TYPE	NUMBER	DESCRIPTION
162)=	41	1	Southbound
163)=	41	2	Northbound

CARD	CARD	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO	TYPE	NUMBER	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
164)=	42	1	2030	3010	4130	3430	1030	4031	4097						
165)=	42	2	4010	1010	3410	7010	4110	2011	2098						

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

75 SECOND CYCLE 75 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE
NO	OF STAGES	1	2	3	4	5	6	7	8	9	10	
34	3	12	50	67								
40	2	26	67									
41	3	0	36	42								

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES
NUMBER	INFO	FLOW	OF	PER	PER	UNIFORM RANDOM+ COST	MEAN COST	MEAN COST	INDEX.	NODE	START	START
	LINK	LINK	SAT	PCU	CRUISE	OVERSAT OF	OF	OF	WEIGHTED SUM		END	START
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O-MEAN Q) DELAY	STOPS	STOPS	OF () VALUES		1ST	2ND
						(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)		(SECONDS)	(SECONDS)
1010	814	2055	40	15.0	1.4	0.0 + 0.3 (4.7)	2 (0.2)	0 (0.0)*	4.9			
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1			
1030	1007	2055	49	19.0	1.7	0.0 + 0.5 (6.8)	2 (0.3)	0 (0.0)*	7.1			
1031BL	22	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1			
1040	44	715	9	20.0	4.0	0.0 + 0.0 (0.7)	0 (0.0)	0	0.7			
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0			
2010	65	1000	21	3.0	7.2	0.0 + 0.1 (1.8)	0 (0.0)	0 (0.0)*	1.8			
2011	1017	2115S	50	21.3	1.9	0.1 + 0.5 (7.7)	12 (2.6)	7 (0.0)*	10.3			
2012BL	50	2011L	50	29.3	2.1	0.0 + 0.0 (0.4)	21 (0.1)	7 (0.0)*	0.6			
2030	1319	3786S	36	18.0	0.7	0.0 + 0.3 (3.9)	1 (0.3)	0	4.2			
2031BL	50	2030L	36	22.5	0.7	0.0 + 0.0 (0.1)	1 (0.0)	0	0.2			
2040	34	600	30	18.0	24.5	0.0 + 0.2 (3.3)	84 (0.6)	0	3.9			
2041	19	715	5	18.0	4.6	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3			
2097BL	50	2098L	13	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0	0.1			
2098	986	8000S	13	18.0	0.3	0.0 + 0.1 (1.0)	0 (0.1)	0	1.1			
2099	740	8000	9	18.0	0.2	0.0 + 0.1 (0.7)	0 (0.1)	0	0.8			
3010	663	2075	32	17.0	1.3	0.0 + 0.2 (3.3)	2 (0.2)	0	3.6			
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0 (0.2)	1 (0.0)	0	0.2			
3410	672	1910	85	6.0	49.5	6.5 + 2.7 (131.2)	116 (13.3)	16 +	144.5	34	20	50
3411	142	1993S	20	6.0	27.9	1.0 + 0.1 (15.6)	96 (2.3)	3	17.9	34	20	50
3412BL	22	3411L	20	36.0	17.7	0.1 + 0.0 (1.5)	79 (0.0)	3	1.5	34	20	50
3430	623	1972	72	11.0	9.1	0.3 + 1.3 (22.3)	55 (6.5)	12	28.8	34	18	50
3431BL	22	1915	3	12.9	2.4	0.0 + 0.0 (0.2)	3 (0.0)	0 (0.0)*	0.2	34	18	50
3440BL	28	1665	14	9.0	40.0	0.2 + 0.1 (4.4)	101 (0.4)	1	4.8	34	4	12
3442	384	1787	62	7.0	27.9	2.2 + 0.8 (42.3)	90 (8.0)	7	50.3	34	62	12
3443	384	1577	70	7.0	32.0	2.3 + 1.2 (48.5)	96 (8.7)	8	57.1	34	62	12
3450	50	10000	4	10.0	30.0	0.4 + 0.0 (5.9)	88 (0.0)	1	5.9	34	58	67
3451	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	34	20	50
3499	525	8000	7	12.2	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0	0.5			
4010	727	1949	76	18.0	22.9	3.1 + 1.5 (65.8)	86 (13.3)	14	79.1	40	31	67
4011BL	22	4012L	21	22.5	13.4	0.1 + 0.0 (1.2)	57 (0.2)	2	1.3	40	31	67
4012	154	1707S	21	18.0	13.4	0.5 + 0.1 (8.2)	57 (1.9)	2	10.0	40	31	67
4020	479	1754	71	20.0	28.3	2.6 + 1.2 (53.5)	93 (7.6)	10	61.1	40	73	26
4021	87	1641	14	18.0	18.2	0.4 + 0.1 (6.2)	66 (1.2)	1	7.5	40	73	26
4030	211	1774	79	5.0	50.5	1.2 + 1.8 (42.0)	130 (3.9)	6	46.0	40	31	71
4031	819	1907S	89	4.9	28.0	2.6 + 3.8 (90.4)	80 (9.4)	16 +	99.8	40	31	67
4032BL	22	4031L	89	39.8	39.1	0.1 + 0.1 (3.4)	111 (0.0)	16 (1.9)*	193.6	40	31	67
4097	1376	8000S	17	18.0	0.3	0.0 + 0.1 (1.5)	0 (0.1)	0	1.6			
4098BL	22	4097L	17	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0			
4099	287	8000	4	18.0	0.2	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3			
4110	672	2383f	68	7.0	34.2	5.3 + 1.1 (90.8)	81 (6.0)	11 +	96.7	41	12	42
4111BL	50	2040	7	26.4	21.9	0.3 + 0.0 (4.3)	60 (0.0)	1	4.3	41	16	42
4120	229	1959	38	20.0	25.3	1.3 + 0.3 (22.8)	82 (3.2)	4	26.0	41	53	0
4121	345	1773	63	18.0	31.4	2.1 + 0.9 (42.7)	94 (6.9)	7	49.6	41	53	0
4130	663	2488f	80	5.0	31.5	3.9 + 1.9 (82.4)	98 (9.3)	14 +	91.7	41	12	36

75 SECOND CYCLE 75 STEPS

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES
NUMBER	INFO	FLOW	OF	PER	PER	UNIFORM RANDOM+ COST	MEAN COST	MEAN COST	INDEX.	NODE	START	START
	LINK	LINK	SAT	PCU	CRUISE	OVERSAT OF	OF	OF	WEIGHTED SUM		END	START
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O-MEAN Q) DELAY	STOPS	STOPS	OF () VALUES		1ST	2ND
						(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)		(SECONDS)	(SECONDS)
4131BL	50	1696	12	31.8	26.3	0.3 + 0.1 (5.2)	82 (0.0)	1	5.2	41	18	36
4150	50	10000	2	10.0	19.0	0.3 + 0.0 (3.7)	70 (0.0)	1	3.7	41	53	0
4151	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	41	12	42
4198BL	28	4199L	4	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0			

4199	269	8000S	4	18.0	0.2	0.0 +	0.0	(0.2)	0	(0.0)	0	0.3			
5010	767	3929S	20	3.0	0.6	0.0 +	0.1	(1.7)	1	(0.1)	0	1.9			
5011BL	28	5010L	20	3.6	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0	0.1			
6010	94	715	17	18.0	3.9	0.0 +	0.1	(1.4)	0	(0.0)	0	1.4			
6011	731	1618S	47	18.0	2.1	0.0 +	0.4	(6.0)	3	(0.4)	0	6.5			
6012BL	28	6011L	47	22.5	2.1	0.0 +	0.0	(0.2)	3	(0.0)	0	0.2			
6020	673	1800S	39	18.0	1.6	0.0 +	0.3	(4.3)	2	(0.3)	0	4.7			
6021BL	28	6020L	39	22.5	1.6	0.0 +	0.0	(0.2)	2	(0.0)	0	0.2			
6098BL	28	6099L	9	64.8	0.2	0.0 +	0.0	(0.0)	0	(0.0)	0	0.0			
6099	731	8000S	9	18.0	0.2	0.0 +	0.1	(0.7)	0	(0.1)	0	0.8			
7010	672	2055	33	8.0	1.3	0.0 +	0.2	(3.5)	2	(0.2)	0	3.6			
7011BL	50	1915	3	8.0	1.0	0.0 +	0.0	(0.2)	1	(0.0)	0	0.2			
-4200	10	1800	10	10.0	55.0	0.1 +	0.1	(2.2)	120	(0.0)	0	2.2	41	39	42

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

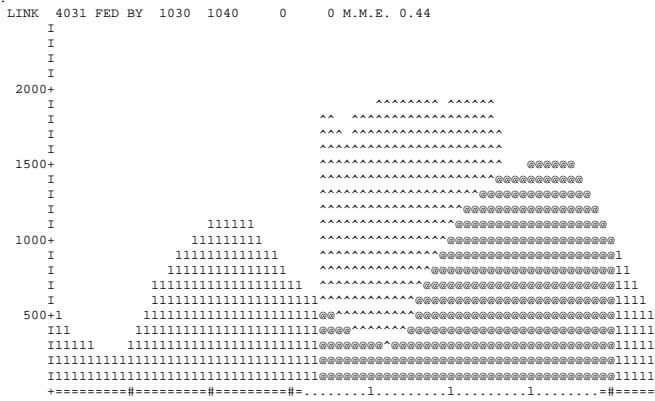
TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	
3108.7	142.5	21.8	37.3	23.0	(856.2) +	(108.1) +	(190.2) =	1154.5	TOTALS
96.7	5.9	16.3	1.1	0.4	(21.9) +	(0.9) +	(190.2) =	213.0	BUSES
3011.9	136.6	22.0	36.2	22.6	(834.2) +	(107.2) +	(0.0) =	941.5	OTHER

970.7	40.7	23.9	6.7	8.1	(210.6) +	(26.2) +	(0.0) =	236.8	ROUTE 1
842.6	43.3	19.4	15.0	6.5	(304.5) +	(35.7) +	(0.0) =	340.2	ROUTE 2

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	176.7	69.6	49.5	295.8

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 62

CYCLIC FLOW PROFILE GRAPHS



PROGRAM TRANSYT FINISHED

PRT

PRT File PM Peak : 2011 Flow 1700-1800

1 TRANSYT 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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Run with file:- "WEST HENDON A5_BASE_PM_V3.DAT" at 16:43 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 61
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13827 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

CARD CARD
NO. TYPE
(1)= TITLE:- West Hendon Broadway Base Model

CARD NO.	CARD TYPE	CYCLE TIME	NO. OF STEPS	TIME PERIOD	EFFECTIVE-DISPLACEMENTS	GREEN START (SEC)	END (SEC)	0=NONE	1=EQUAL	SCALE	CRUISE-SPEEDS	OPTIMISE	EXTRA	HILL-CLIMB	DELAY	STOP	
		(SEC)	CYCLE	MINS.	(SEC)	(SEC)	(SEC)	0=NONE	1=EQUAL	10-200	50-200	0=TIMES	1=0/SET	FINAL OUTPUT	1=FULL	PCU-H	VALUE
2)	1	75	75	60	2	3	0	1	100	100	0	0	0	0	0	1420	260
LIST OF NODES TO BE OPTIMISED																	
3)	2	40	41	34	0	0	0	0	0	0	0	0	0	0	0	0	0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET	SECOND SET	THIRD SET
4)	7	2011	2012	0
5)	7	2030	2031	0
6)	7	2098	2097	0
7)	7	3411	3412	0
8)	7	4012	4011	0
9)	7	4031	4032	0
10)	7	4097	4098	0
11)	7	4199	4198	0
12)	7	5010	5011	0
13)	7	6011	6012	0
14)	7	6020	6021	0
15)	7	6099	6098	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
16)	10	34	7	1	5							
17)	10	40	7	12								
18)	10	41	12	12								

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
19)	11	34	8	12	12							
20)	11	40	15	6								
21)	11	41	18	11								

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sg1/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
22)	12	34	1	40	5	21							
23)	12	40	1	45	22								
24)	12	41	1	0	40								

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINK1 NO.	LINK2 NO.	LINK1 ONLY	GIVEWAY	COEFFS.	LINK LENGTH	STOP WT.X100	MAX FLOW	DELAY WT.X100	DISPSN X100
						% FLOW	X100	A1 X100					
25)	30	1040	0	1030	0	0	22	0	0	0	0	715	0
26)	30	2010	0	2030	0	0	50	0	0	0	0	1000	0
27)	30	2040	0	2030	2011	0	22	19	0	0	0	600	0
28)	30	2041	0	2030	0	0	22	0	0	0	0	715	0
29)	30	4030	0	4010	4	0	50	0	0	0	0	1000	0
30)	30	6010	0	6020	0	0	22	0	0	0	0	715	0

LINK CARDS: FIXED DATA
FIRST GREEN SECOND GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)	31	4010	40	1	15	2	0	0	0	0	0	200	0	1949	0	0
57)	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)	31	4030	40	1	5	2	1	0	0	0	0	45	0	1774	0	0
62)	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)	31	4110	41	1	12	2	0	0	0	0	0	56	0	1919	0	0
68)	31	4111	41	1	16	2	0	0	0	0	0	56	0	2040	0	0
69)	31	4120	41	2	11	1	0	0	0	0	0	200	0	1959	0	0
70)	31	4121	41	2	11	1	0	0	0	0	0	200	0	1773	0	0
71)	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)	31	4150	41	2	11	1	0	0	0	0	0	12	0	10000	0	0
74)	31	4151	41	1	12	2	0	0	0	0	0	11	0	10000	0	0
75)	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
78)	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
79)	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
80)	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
81)	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
82)	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
83)	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
85)	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
86)	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
87)	32	1010	859	0	4010	799	15	4021	60	15	0	0	0	0	0	0
88)	32	1011	25	0	4011	25	3200	0	0	0	0	0	0	0	0	0
89)	32	1030	875	0	3430	606	19	3443	269	19	0	0	0	0	0	0
90)	32	1031	25	0	3431	25	3200	0	0	0	0	0	0	0	0	0
91)	32	1040	151	0	0	0	20	0	0	0	0	0	0	0	0	0
92)	32	1099	10	0	1030	10	18	0	0	0	0	0	0	0	0	0
93)	32	2010	66	0	2011	66	3	0	0	0	0	0	0	0	0	0
94)	32	2011	1025	0	4110	673	23	4121	352	18	0	0	0	0	0	0
95)	32	2012	53	0	4111	53	3200	0	0	0	0	0	0	0	0	0
96)	32	2030	1045	0	0	0	18	0	0	0	0	0	0	0	0	0
97)	32	2031	53	0	0	0	3200	0	0	0	0	0	0	0	0	0
98)	32	2040	55	0	0	0	18	0	0	0	0	0	0	0	0	0
99)	32	2041	31	0	0	0	18	0	0	0	0	0	0	0	0	0
100)	32	2097	53	0	2012	53	3200	0	0	0	0	0	0	0	0	0
101)	32	2098	1014	0	2011	959	18	2040	55	18	0	0	0	0	0	0
102)	32	2099	484	0	2010	66	18	2030	418	18	0	0	0	0	0	0
103)	32	3010	658	0	2030	627	17	2041	31	17	0	0	0	0	0	0
104)	32	3011	53	0	2031	53	3200	0	0	0	0	0	0	0	0	0
105)	32	3410	673	0	1010	673	6	0	0	0	0	0	0	0	0	0
106)	32	3411	186	0	1010	186	6	0	0	0	0	0	0	0	0	0
107)	32	3412	25	0	1011	25	3219	0	0	0	0	0	0	0	0	0
108)	32	3430	606	0	4130	606	11	0	0	0	0	0	0	0	0	0
109)	32	3431	25	0	4131	25	3200	0	0	0	0	0	0	0	0	0
110)	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
111)	32	3442	401	0	5010	401	7	0	0	0	0	0	0	0	0	0
112)	32	3443	269	0	5010	269	19	0	0	0	0	0	0	0	0	0
113)	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
114)	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)	32	3499	587	0	3411	186	18	3442	401	18	0	0	0	0	0	0
116)	32	4010	799	0	0	0	18	0	0	0	0	0	0	0	0	0
117)	32	4011	25	0	0	0	3200	0	0	0	0	0	0	0	0	0
118)	32	4012	378	0	0	0	18	0	0	0	0	0	0	0	0	0
119)	32	4020	219	0	0	0	20	0	0	0	0	0	0	0	0	0
120)	32	4021	60	0	0	0	18	0	0	0	0	0	0	0	0	0
121)	32	4030	236	0	1030	236	5	0	0	0	0	0	0	0	0	0
122)	32	4031	780	0	1030	629	5	1040	151	4	0	0	0	0	0	0
123)	32	4032	25	0	1031	25	3210	0	0	0	0	0	0	0	0	0
124)	32	4097	1009	0	4020	219	18	4030	10	18	4031	780	18	0	0	0
125)	32	4098	25	0	4032	25	3200	0	0	0	0	0	0	0	0	0
126)	32	4099	604	0	4012	378	18	4030	226	18	0	0	0	0	0	0
127)	32	4110	673	0	7010	673	8	0	0	0	0	0	0	0	0	0
128)	32	4111	53	0	7011	53	3216	0	0	0	0	0	0	0	0	0
129)	32	4120	217	0	0	0	20	0	0	0	0	0	0	0	0	0
130)	32	4121	352	0	0	0	18	0	0	0	0	0	0	0	0	0
131)	32	4130	658													

147)= 32 7011 53 0 3412 25 3200 3440 28 3200 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.
148)=	33	4110	2040	4	0	0	0
149)=	33	4130	1696	3	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
150)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0
151)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0
152)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0
153)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0
154)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0
155)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0
156)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0
157)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0
158)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0

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

75 SECOND CYCLE 75 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
34	3	40	5	21							
40	2	45	22								
41	2	0	40								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY----- UNIFORM OVERSAT (\$/H)	RANDOM+ COST OF DELAY (\$/H)	----STOPS---- MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	----QUEUE---- MEAN MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
1010	859	2055	42	15.0	1.5	0.0 + 0.4 (5.1)	2 (0.2)	0 (0.0)*	5.3					
1011BL	25	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1					
1030	875	2055	43	19.0	1.5	0.0 + 0.4 (5.3)	2 (0.3)	0 (0.0)*	5.5					
1031BL	25	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1					
1040	151	715	29	20.0	4.8	0.0 + 0.2 (2.9)	0 (0.0)	0 (0.0)	2.9					
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
2010	66	1000	15	3.0	4.6	0.0 + 0.1 (1.2)	0 (0.0)	0 (0.0)*	1.2					
2011	1025	2115S	51	21.3	2.3	0.2 + 0.5 (9.4)	25 (5.6)	12 (0.0)*	15.1					
2012BL	53	2011L	51	29.3	3.0	0.0 + 0.0 (0.6)	51 (0.4)	12 (0.0)*	1.0					
2030	1045	3786S	29	18.0	0.7	0.0 + 0.2 (2.8)	1 (0.2)	0 (0.0)	3.0					
2031BL	53	2030L	29	22.5	0.7	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1					
2040	55	600	33	18.0	20.3	0.1 + 0.2 (4.4)	54 (0.6)	1 (0.0)	5.0					
2041	31	715	7	18.0	4.1	0.0 + 0.0 (0.5)	0 (0.0)	0 (0.0)	0.5					
2097BL	53	2098L	13	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0 (0.0)	0.1					
2098	1015	8000S	13	18.0	0.3	0.0 + 0.1 (1.0)	0 (0.1)	0 (0.0)	1.1					
2099	484	8000	6	18.0	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0 (0.0)	0.5					
3010	658	2075	32	17.0	1.3	0.0 + 0.2 (3.3)	2 (0.2)	0 (0.0)	3.5					
3011BL	53	1945	3	20.8	1.0	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2					
3410	673	1910	80	6.0	43.9	6.2 + 2.0 (116.5)	111 (12.7)	16 +	129.2			34	48	5
3411	186	1993S	24	6.0	27.2	1.3 + 0.1 (20.0)	97 (3.1)	4	23.0			34	48	5
3412BL	25	3411L	24	35.0	20.3	0.1 + 0.0 (2.0)	82 (0.0)	4	2.0			34	48	5
3430	605	1972	66	11.0	30.0	4.1 + 1.0 (71.6)	107 (12.4)	14	84.0			34	46	5
3431BL	25	1915	3	12.9	14.8	0.1 + 0.0 (1.5)	92 (0.3)	0 (0.0)*	1.8			34	46	5
3440BL	28	1665	16	9.0	42.5	0.2 + 0.1 (4.7)	104 (0.4)	1	5.1			34	33	40
3442	401	1787	70	7.0	32.7	2.5 + 1.2 (51.7)	97 (9.1)	8	60.9			34	17	40
3443	269	1577	53	19.0	28.6	1.6 + 0.6 (30.3)	91 (0.8)	5	31.1			34	17	40
3450	50	10000	4	10.0	31.0	0.4 + 0.0 (6.1)	90 (0.0)	1	6.1			34	13	21
3451	50	10000	1	10.0	12.5	0.2 + 0.0 (2.5)	56 (0.0)	1	2.5			34	48	5
3499	586	8000	7	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6					
4010	799	1949	81	18.0	24.8	3.4 + 2.1 (78.2)	91 (15.4)	16	93.6			40	60	22
4011BL	25	4012L	37	22.5	9.0	0.0 + 0.0 (0.9)	47 (0.2)	4	1.1			40	50	22
4012	378	1707S	37	18.0	9.0	0.7 + 0.3 (13.4)	47 (3.8)	4	17.2			40	50	22
4020	219	1754	52	20.0	33.6	1.5 + 0.5 (29.0)	96 (3.6)	4	32.6			40	28	45
4021	60	1641	15	18.0	27.9	0.4 + 0.1 (6.6)	83 (1.1)	1	7.7			40	28	45
4030	236	1774	64	5.0	27.3	0.9 + 0.9 (25.4)	109 (3.7)	4	29.1			40	50	23
4031	779	1907S	66	4.8	8.1	0.8 + 0.9 (24.8)	38 (4.3)	7	29.1			40	50	22
4032BL	25	4031L	66	23.8	7.3	0.0 + 0.0 (0.7)	21 (0.0)	7 (0.0)*	0.7			40	50	22
4097	1008	8000S	13	18.0	0.3	0.0 + 0.1 (1.0)	0 (0.1)	0 (0.0)	1.1					
4098BL	25	4097L	13	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
4099	604	8000	8	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6					
4110	673	2415F	72	8.0	24.0	3.2 + 1.3 (63.7)	109 (6.4)	15 +	70.1			41	12	40
4111BL	53	2040	8	31.4	18.4	0.2 + 0.0 (3.8)	84 (0.0)	1	3.9			41	16	40
4120	217	1959	33	20.0	22.9	1.1 + 0.2 (19.6)	78 (2.9)	4	22.5			41	51	0
4121	352	1773	60	18.0	28.3	2.0 + 0.7 (39.3)	90 (6.7)	7	46.0			41	51	0
4130	658	2428F	70	5.0	23.9	3.2 + 1.2 (62.1)	85 (7.9)	12 +	70.0			41	12	40

75 SECOND CYCLE 75 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY----- UNIFORM OVERSAT (\$/H)	RANDOM+ COST OF DELAY (\$/H)	----STOPS---- MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	----QUEUE---- MEAN MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
4131BL	53	1696	10	31.8	22.5	0.3 + 0.1 (4.7)	76 (0.0)	1	4.7			41	18	40
4150	50	10000	2	10.0	17.5	0.2 + 0.0 (3.5)	67 (0.0)	1	3.5			41	51	0
4151	50	10000	1	10.0	14.9	0.2 + 0.0 (2.9)	62 (0.0)	1	2.9			41	12	40
4198BL	28	4199L	4	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
4199	270	8000S	4	18.0	0.2	0.0 + 0.0 (0.2)	0 (0.0)	0 (0.0)	0.3					
5010	670	3929S	18	3.0	0.6	0.0 + 0.1 (1.5)	1 (0.1)	0 (0.0)	1.6					
5011BL	28	5010L	18	3.6	0.6	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1					
6010	126	715	21	18.0	3.9	0.0 + 0.1 (1.9)	0 (0.0)	0 (0.0)	1.9					
6011	620	1618S	40	18.0	1.9	0.0 + 0.3 (4.5)	2 (0.3)	0 (0.0)	4.9					
6012BL	28	6011L	40	22.5	1.9	0.0 + 0.0 (0.2)	2 (0.0)	0 (0.0)	0.2					
6020	544	1800S	32	18.0	1.5	0.0 + 0.2 (3.1)	2 (0.2)	0 (0.0)	3.4					
6021BL	28	6020L	32	22.5	1.5	0.0 + 0.0 (0.2)	2 (0.0)	0 (0.0)	0.2					
6098BL	28	6099L	8	64.8	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
6099	620	8000S	8	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6					
7010	673	2055	33	8.0	1.3	0.0 + 0.2 (3.5)	2 (0.2)	0 (0.0)	3.6					
7011BL	53	1915	3	8.0	1.0	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2					

*** 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+ DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
2955.8	132.4	22.3	35.2	17.0	(741.2) + (103.5) + (0.0)	=	844.8	TOTALS	

102.6	6.0	17.0	1.0	0.4	(20.2)	+	(1.4)	+	(0.0)	=	21.7	BUSES
2853.2	126.4	22.6	34.2	16.6	(721.0)	+	(102.1)	+	(0.0)	=	823.1	OTHER

ROUTE

	CRUISE	DELAY	STOPS	TOTALS			
	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	169.1	+	60.1	+	47.4	=	276.6

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 61

PROGRAM TRANSYT FINISHED

PRT

PRT File Sat Peak : 2011 Flow 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:- "WEST HENDON A5_BASE_SAT V2.DAT" at 16:43 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 66
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13521 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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  MINS.  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
              (SEC)  MINS.  (SEC)  (SEC)  3  0  1  100  100  0  0  0  0  1420  260
CARD  CARD
NO.   TYPE
3)=  2  40  41  34  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  2011  2012  0  0  0  0  0  0  0  0  0  0  0  0  0
5)=  7  2030  2031  0  0  0  0  0  0  0  0  0  0  0  0  0
6)=  7  2098  2097  0  0  0  0  0  0  0  0  0  0  0  0  0
7)=  7  3411  3412  0  0  0  0  0  0  0  0  0  0  0  0  0
8)=  7  4012  4011  0  0  0  0  0  0  0  0  0  0  0  0  0
9)=  7  4031  4032  0  0  0  0  0  0  0  0  0  0  0  0  0
10)= 7  4097  4098  0  0  0  0  0  0  0  0  0  0  0  0  0
11)= 7  4111  4200  0  0  0  0  0  0  0  0  0  0  0  0  0
12)= 7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0
13)= 7  4198  4198  0  0  0  0  0  0  0  0  0  0  0  0  0
14)= 7  5010  5011  0  0  0  0  0  0  0  0  0  0  0  0  0
15)= 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0
16)= 7  6020  6021  0  0  0  0  0  0  0  0  0  0  0  0  0
17)= 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
18)= 10  34  7  1  5
19)= 10  40  7  7
20)= 10  41  12  6  12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
21)= 11  34  8  12  12
22)= 11  40  5  6
23)= 11  41  12  0  11
    
```

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
24)= 12  34  1  12  45  58
25)= 12  40  1  26  4
26)= 12  41  1  0  26  43
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY  LINKS  LINK1  LINK2  LINK1  GIVEWAY  COEFFS.
NO.   TYPE  NO.   LINK1  LINK2  ONLY  A1  A2
              % FLOW  X100  X100
27)= 30  1040  1030  0  0  0  22  0  0  0  0  0  0  0  0  0  0  0  0
28)= 30  2010  2030  0  0  0  50  0  0  0  0  0  0  0  0  0  0  0  0
29)= 30  2040  2030  2011  0  0  22  19  0  0  0  0  0  0  0  0  0  0  0
30)= 30  2041  2030  0  0  0  22  0  0  0  0  0  0  0  0  0  0  0  0
31)= 30  4030  0  4010  37  0  50  0  0  0  0  0  0  0  0  0  0  0  0
32)= 30  6010  6020  0  0  0  22  0  0  0  0  0  0  0  0  0  0  0  0
    
```


147)=	32	6012	24	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
148)=	32	6020	449	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
149)=	32	6021	28	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
150)=	32	6098	24	0	6012	24	3233	0	0	0	0	0	0	0	0	0	0	0
151)=	32	6099	552	0	6011	552	18	0	0	0	0	0	0	0	0	0	0	0
152)=	32	7010	732	0	3410	732	8	0	0	0	0	0	0	0	0	0	0	0
153)=	32	7011	50	0	3412	22	3200	3440	28	3200	0	0	0	0	0	0	0	0

GRAPH PLOT CARDS

CARD	CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
154)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD	CARD	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE
NO.	TYPE	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT
155)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD	CARD	ROUTE	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NUMBER	DESCRIPTION	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
162)=	41	1	Southbound																
163)=	41	2	Northbound																
CARD	CARD	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO	TYPE	NUMBER	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
164)=	42	1	2030	3010	4130	3430	1030	4031	4097										
165)=	42	2	4010	1010	3410	7010	4110	2011	2098										

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

66 SECOND CYCLE 66 STEPS

INITIAL SETTINGS

- (SECONDS)

NODE	NUMBER	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE
NO	OF STAGES	1	2	3	4	5	6	7	8	9	10								

34	3	12	45	58															
40	2	26	4																
41	3	0	26	43															

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE	EXIT	GREEN	TIMES				
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM	RANDOM+	COST	MEAN	COST	MEAN	AVERAGE	INDEX.	NODE	START	START	END	END	END
	LINK	SAT	SAT	CRUISE	DELAY	(U+R+O-MEAN	Q) DELAY	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	OF () VALUES		1ST	2ND			
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	(\$/H)		(SECONDS)	(SECONDS)			
1010	873	2055	42	15.0	1.5	0.0 + 0.4	(5.2)	2	(0.3)	0	(0.0)*	5.5							
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0	(0.0)	0.1							
1030	897	2055	44	19.0	1.6	0.0 + 0.4	(5.5)	2	(0.3)	0	(0.0)*	5.8							
1031BL	22	1915	1	48.4	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0	(0.0)*	0.1							
1040	109	715	21	20.0	4.4	0.0 + 0.1	(1.9)	0	(0.0)	0	(0.0)	1.9							
1099	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	(0.0)	0.0							
2010	55	1000	13	3.0	5.0	0.0 + 0.1	(1.1)	0	(0.0)	0	(0.0)*	1.1							
2011	1026	2115S	51	21.6	1.7	0.0 + 0.5	(7.0)	3	(0.6)	1	(0.0)*	7.6							
2012BL	50	2011L	51	68.5	1.7	0.0 + 0.0	(0.3)	3	(0.0)	1	(0.0)*	0.4							
2030	1108	3786S	31	18.0	0.7	0.0 + 0.2	(3.0)	1	(0.2)	0	(0.0)	3.2							
2031BL	50	2030L	31	22.5	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0	(0.0)	0.1							
2040	33	600	23	18.0	17.0	0.0 + 0.2	(2.2)	33	(0.2)	0	(0.0)	2.4							
2041	17	715	4	18.0	4.1	0.0 + 0.0	(0.3)	0	(0.0)	0	(0.0)	0.3							
2097BL	50	2098L	13	22.5	0.3	0.0 + 0.0	(0.1)	0	(0.0)	0	(0.0)	0.1							
2098	996	8000S	13	18.0	0.3	0.0 + 0.1	(1.0)	0	(0.1)	0	(0.1)	1.1							
2099	585	8000	7	18.0	0.2	0.0 + 0.0	(0.6)	0	(0.0)	0	(0.0)	0.6							
3010	595	2075	29	17.0	1.2	0.0 + 0.2	(2.9)	2	(0.2)	0	(0.2)	3.1							
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0	(0.2)	1	(0.0)	0	(0.0)	0.2							
3410	732	1910	97	6.0	72.5	5.5 + 9.3	(209.3)	158	(19.7)	23	+	229.0	34	20	45				
3411	141	1993S	21	6.0	20.7	0.7 + 0.1	(11.5)	89	(2.2)	3		13.7	34	20	45				
3412BL	22	3411L	21	36.0	13.6	0.1 + 0.0	(1.2)	67	(0.0)	3		1.2	34	20	45				
3430	566	1972	68	11.0	8.4	0.3 + 1.0	(18.7)	57	(6.2)	10		24.9	34	18	45				
3431BL	22	1915	3	12.9	2.3	0.0 + 0.0	(0.2)	4	(0.0)	0	(0.0)*	0.2	34	18	45				
3440BL	28	1665	12	9.0	34.1	0.2 + 0.1	(3.8)	98	(0.4)	1		4.2	34	4	12				
3442	313	1787	52	7.0	24.1	1.5 + 0.5	(29.7)	86	(6.3)	5		36.0	34	57	12				
3443	331	1577	63	7.0	27.7	1.7 + 0.8	(36.1)	93	(7.2)	6		43.4	34	57	12				
3450	50	10000	6	10.0	29.8	0.4 + 0.0	(5.9)	94	(0.0)	1		5.9	34	53	58				
3451	50	10000	1	10.0	12.9	0.2 + 0.0	(2.5)	61	(0.0)	1		2.5	34	20	45				
3499	454	8000	6	12.5	0.2	0.0 + 0.0	(0.4)	0	(0.0)	0		0.5							
4010	803	1949	68	18.0	13.4	1.9 + 1.1	(42.6)	69	(11.7)	11		54.3	40	31	4				
4011BL	22	4012L	20	22.5	8.0	0.0 + 0.0	(0.7)	45	(0.1)	2		0.8	40	31	4				
4012	186	1707S	20	18.0	8.0	0.3 + 0.1	(5.9)	45	(1.8)	2		7.6	40	31	4				
4020	235	1754	52	20.0	29.3	1.4 + 0.5	(27.1)	95	(3.8)	4		30.9	40	10	26				
4021	70	1641	17	18.0	24.1	0.4 + 0.1	(6.7)	82	(1.2)	1		7.9	40	10	26				
4030	147	1774	39	5.0	18.8	0.5 + 0.3	(10.9)	75	(1.6)	2		12.5	40	31	8				
4031	848	1907S	75	4.9	12.4	1.4 + 1.5	(41.4)	52	(6.2)	9	+	47.6	40	31	4				
4032BL	22	4031L	75	5.1	16.9	0.1 + 0.0	(1.5)	70	(0.2)	9	(0.0)*	3.9	40	31	4				
4097	1083	8000S	14	18.0	0.3	0.0 + 0.1	(1.1)	0	(0.1)	0		1.2							
4098BL	22	4097L	14	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0							
4099	333	8000	4	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0		0.3							
4110	623	1919	67	7.0	28.0	3.8 + 1.0	(68.7)	77	(5.3)	9		74.0	41	12	43				
4111BL	50	2040S	16	45.4	14.3	0.2 + 0.0	(2.8)	66	(0.0)	2		2.8	41	12	43				
4120	181	1959	47	20.0	32.2	1.2 + 0.4	(23.0)	98	(3.0)	3		26.0	41	54	0				
4121	295	1773	84	18.0	55.9	2.1 + 2.5	(65.1)	134	(8.4)	8		73.5	41	54	0				
4130	368	2056	79	5.0	41.4	2.5 + 1.8	(60.2)	116	(6.1)	8		66.2	41	12	26				

66 SECOND CYCLE 66 STEPS

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE	EXIT	GREEN	TIMES				
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM	RANDOM+	COST	MEAN	COST	MEAN	AVERAGE	INDEX.	NODE	START	START	END	END	END
	LINK	SAT	SAT	CRUISE	DELAY	(U+R+O-MEAN	Q) DELAY	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	OF () VALUES		1ST	2ND			
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)	(\$/H)		(SECONDS)	(SECONDS)			
4131BL	50	1696S	72	31.8	39.8	0.3 + 0.2	(7.8)	114											

PRT

PRT File AM Peak : 2011 Flow 0800-0900

1 TRANSYT 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:- "WEST HENDON A5_BASELINE_AM.DAT" at 16:43 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 62
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 14028 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD
NO.   TYPE   TIME   NO. OF   TIME EFFECTIVE-GREEN   EQUISAT 0=UNEQUAL FLOW   CRUISE-SPEEDS   OPTIMISE   EXTRA   HILL-   DELAY   STOP
      TYPE   CYCLE  STEPS   PERIOD DISPLACEMENTS   SETTINGS CYCLE SCALE   SCALE   CARD32  0=NONE   COPIES   CLIMB   VALUE   VALUE
      (SEC)  CYCLE  MINS.  (SEC)  (SEC)  0=NO 1=YES CYCLE  %   %   0=TIMES 1=0/SET   FINAL   OUTPUT   P PER   P PER
      75    75    60    2    3    0 1 100 100 0 0 0 0 0 1420 260
2)= 1
CARD  CARD
NO.   TYPE
3)= 2 40 41 34 0 0 0 0 0 0 0 0 0 0 0 0 0
    
```

```

LINKS HAVING SHARED STOPLINES
CARD  CARD
NO.   TYPE   FIRST SET..... SECOND SET..... THIRD SET.....
4)= 7 2011 2012 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5)= 7 2030 2031 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6)= 7 2098 2097 0 0 0 0 0 0 0 0 0 0 0 0 0 0
7)= 7 3411 3412 0 0 0 0 0 0 0 0 0 0 0 0 0 0
8)= 7 4012 4011 0 0 0 0 0 0 0 0 0 0 0 0 0 0
9)= 7 4031 4032 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10)= 7 4097 4098 0 0 0 0 0 0 0 0 0 0 0 0 0 0
11)= 7 4199 4198 0 0 0 0 0 0 0 0 0 0 0 0 0 0
12)= 7 5010 5011 0 0 0 0 0 0 0 0 0 0 0 0 0 0
13)= 7 6011 6012 0 0 0 0 0 0 0 0 0 0 0 0 0 0
14)= 7 6020 6021 0 0 0 0 0 0 0 0 0 0 0 0 0 0
15)= 7 6099 6098 0 0 0 0 0 0 0 0 0 0 0 0 0 0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD  NODE
NO.   TYPE  NO.
16)= 10 34 7 1 5
17)= 10 40 7 7
18)= 10 41 12 3 12
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE
NO.   TYPE  NO.
19)= 11 34 8 12 12
20)= 11 40 5 6
21)= 11 41 18 3 11
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD  NODE  Sg1/Dbl
NO.   TYPE  NO.  Cycled
22)= 12 34 1 12 50 67
23)= 12 40 1 26 67
24)= 12 41 1 0 36 42
    
```

```

LINK CARDS: GIVEWAY DATA
CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY COEFFS.
NO.   TYPE  NO.   NO.   NO.  % FLOW  X100  X100
25)= 30 1040 1030 0 0 22 0 0 0 0 0 0 0 0 0 0 0 0
26)= 30 2010 2030 0 0 50 0 0 0 0 0 0 0 0 0 0 0 0
27)= 30 2040 2030 2011 0 22 19 0 0 0 0 0 0 0 0 0 0 0 0
28)= 30 2041 2030 0 0 22 0 0 0 0 0 0 0 0 0 0 0 0
29)= 30 4030 0 4010 37 0 50 0 0 0 0 0 0 0 0 0 0 0 0
30)= 30 6010 6020 0 0 22 0 0 0 0 0 0 0 0 0 0 0 0 0
    
```

```

LINK CARDS: FIXED DATA
FIRST GREEN SECOND GREEN
    
```

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)	31	3450	34	2	8	3	0	34	8	0	12	12	0	10000	0	0
54)	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)	31	4010	40	1	5	2	0	0	0	0	0	200	0	1949	0	0
57)	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)	31	4030	40	1	5	2	4	0	0	0	0	45	0	1774	0	0
62)	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)	31	4110	41	1	12	3	0	0	0	0	0	56	0	1919	0	0
68)	31	4111	41	1	16	3	0	0	0	0	0	56	0	2040	0	0
69)	31	4120	41	3	11	1	0	0	0	0	0	200	0	1959	0	0
70)	31	4121	41	3	11	1	0	41	21	0	0	200	0	1773	0	0
71)	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)	31	4150	41	3	11	1	0	0	0	0	0	12	0	10000	0	0
74)	31	4151	41	1	12	3	0	0	0	0	0	11	0	10000	0	0
75)	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)	31	-4200	41	2	3	3	0	0	0	0	0	20	0	1800	0	0
78)	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
79)	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
80)	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
81)	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
82)	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
83)	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
85)	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
86)	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
87)	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
88)	32	1010	976	0	4010	871	15	4021	105	15	0	0	0	0	0	0
89)	32	1011	22	0	4011	22	3200	0	0	0	0	0	0	0	0	0
90)	32	1030	1156	0	3430	769	19	3443	387	19	0	0	0	0	0	0
91)	32	1031	22	0	3431	22	3200	0	0	0	0	0	0	0	0	0
92)	32	1040	44	0	0	0	20	0	0	0	0	0	0	0	0	0
93)	32	1099	10	0	1030	20	18	0	0	0	0	0	0	0	0	0
94)	32	2010	65	0	2011	65	3	0	0	0	0	0	0	0	0	0
95)	32	2011	1170	0	4110	825	23	4121	345	18	0	0	0	0	0	0
96)	32	2012	50	0	4111	50	3200	0	0	0	0	0	0	0	0	0
97)	32	2030	1466	0	0	0	18	0	0	0	0	0	0	0	0	0
98)	32	2031	50	0	0	0	3200	0	0	0	0	0	0	0	0	0
99)	32	2040	34	0	0	0	18	0	0	0	0	0	0	0	0	0
100)	32	2041	19	0	0	0	18	0	0	0	0	0	0	0	0	0
101)	32	2097	50	0	2012	50	3200	0	0	0	0	0	0	0	0	0
102)	32	2098	1139	0	2011	1105	18	2040	34	18	0	0	0	0	0	0
103)	32	2099	741	0	2010	65	18	2030	676	18	0	0	0	0	0	0
104)	32	3010	809	0	2030	790	17	2041	19	17	0	0	0	0	0	0
105)	32	3011	50	0	2031	50	3200	0	0	0	0	0	0	0	0	0
106)	32	3410	825	0	1010	825	6	0	0	0	0	0	0	0	0	0
107)	32	3411	151	0	1010	151	6	0	0	0	0	0	0	0	0	0
108)	32	3412	22	0	1011	22	3220	0	0	0	0	0	0	0	0	0
109)	32	3430	769	0	4130	769	11	0	0	0	0	0	0	0	0	0
110)	32	3431	22	0	4131	22	3200	0	0	0	0	0	0	0	0	0
111)	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
112)	32	3442	383	0	5010	383	7	0	0	0	0	0	0	0	0	0
113)	32	3443	387	0	5010	387	7	0	0	0	0	0	0	0	0	0
114)	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
116)	32	3499	534	0	3411	151	18	3442	383	10	0	0	0	0	0	0
117)	32	4010	871	0	0	0	18	0	0	0	0	0	0	0	0	0
118)	32	4011	22	0	0	0	3200	0	0	0	0	0	0	0	0	0
119)	32	4012	158	0	0	0	18	0	0	0	0	0	0	0	0	0
120)	32	4020	493	0	0	0	20	0	0	0	0	0	0	0	0	0
121)	32	4021	105	0	0	0	18	0	0	0	0	0	0	0	0	0
122)	32	4030	217	0	1030	217	5	0	0	0	0	0	0	0	0	0
123)	32	4031	963	0	1030	919	5	1040	44	4	0	0	0	0	0	0
124)	32	4032	22	0	1031	22	3226	0	0	0	0	0	0	0	0	0
125)	32	4097	1534	0	4020	493	18	4030	78	18	4031	963	18	0	0	0
126)	32	4098	22	0	4032	22	3200	0	0	0	0	0	0	0	0	0
127)	32	4099	297	0	4012	158	18	4030	139	18	0	0	0	0	0	0
128)	32	4110	825	0	7010	825	7	0	0	0	0	0	0	0	0	0
129)	32	4111	50	0	7011	50	3211	0	0	0	0	0	0	0	0	0
130)	32	4120	238	0	0	0	20	0	0	0	0	0	0	0	0	0
131)	32	4121	3													

147)= 32 6099 736 0 6011 736 18 0 0 0 0 0 0 0 0 0 0 0
 148)= 32 7010 825 0 3410 825 8 0 0 0 0 0 0 0 0 0 0 0
 149)= 32 7011 50 0 3412 22 3200 3440 28 3200 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.	
150)=	33	4110	2040	4	0	0	0	0
151)=	33	4130	1696	3	0	0	0	0

GRAPH PLOT CARDS

CARD NO.	CARD TYPE	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
152)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
153)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
154)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
155)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD NO.	CARD TYPE	ROUTE NUMBER	ROUTE DESCRIPTION
162)=	41	1	Southbound
163)=	41	2	Northbound

CARD NO	CARD TYPE	ROUTE NUMBER	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
164)=	42	1	2030	3010	4130	3430	1030	4031	4097						
165)=	42	2	4010	1010	3410	7010	4110	2011	2098						

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

75 SECOND CYCLE 75 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
34	3	12	50	67							
40	2	26	67								
41	3	0	36	42							

LINK NUMBER	FLOW INFO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES DELAY	-----DELAY----- UNIFORM RANDOM+ (U+R+O-MEAN Q) DELAY	COST OVERSAT OF	-----STOPS----- MEAN COST STOPS OF	-----QUEUE----- MAX. AVERAGE EXCESS	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES	EXIT NODE	GREEN START	TIMES START	END END
(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)		1ST	2ND	(SECONDS)
1010	976	2055	47	15.0	1.7	0.0 + 0.5 (6.4)	2 (0.3)	0 (0.0)*	6.7					
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1					
1030	1154	2055	56	19.0	2.0	0.0 + 0.6 (9.1)	3 (0.4)	1 (0.0)*	9.5					
1031BL	22	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1					
1040	44	715	10	20.0	4.3	0.0 + 0.1 (0.7)	0 (0.0)	0 (0.0)	0.7					
1099	9	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
2010	64	1000	26	3.0	10.0	0.0 + 0.2 (2.5)	0 (0.0)	0 (0.0)*	2.5					
2011	1134<	2115S	56	21.5	2.3	0.1 + 0.6 (10.2)	17 (4.4)	10 (0.0)*	14.7					
2012BL	50	2011L	56	29.3	2.5	0.0 + 0.0 (0.5)	28 (0.2)	10 (0.0)*	0.7					
2030	1466	3786S	40	18.0	0.8	0.0 + 0.3 (4.6)	1 (0.3)	0 (0.0)	4.9					
2031BL	50	2030L	40	22.5	0.8	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2					
2040	34	600	44	18.0	50.1	0.1 + 0.4 (6.7)	120 (0.9)	1 (0.0)	7.6					
2041	19	715	5	18.0	5.0	0.0 + 0.0 (0.4)	0 (0.0)	0 (0.0)	0.4					
2097BL	50	2098L	14	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0 (0.0)	0.1					
2098	1105<	8000S	14	18.0	0.3	0.0 + 0.1 (1.1)	0 (0.1)	0 (0.0)	1.2					
2099	741	8000	9	18.0	0.2	0.0 + 0.1 (0.7)	0 (0.1)	0 (0.0)	0.8					
3010	808	2075	39	17.0	1.4	0.0 + 0.3 (4.5)	2 (0.3)	0 (0.0)	4.8					
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2					
3410	826	1910	105	6.0	150.6	8.5 + 26.1 (490.6)	202 (28.4)	43 +	519.0	34	20	50		
3411	150	1993S	21	6.0	26.5	1.0 + 0.1 (15.7)	95 (2.5)	3	18.1	34	20	50		
3412BL	22	3411L	21	36.0	17.7	0.1 + 0.0 (1.5)	79 (0.0)	3	1.5	34	20	50		
3430	768	1972	88	11.0	19.4	0.6 + 3.6 (58.8)	78 (11.5)	18	70.3	34	18	50		
3431BL	22	1915	3	12.9	2.4	0.0 + 0.0 (0.2)	3 (0.0)	0 (0.0)*	0.2	34	18	50		
3440BL	28	1665	14	9.0	40.0	0.2 + 0.1 (4.4)	101 (0.4)	1	4.8	34	4	12		
3442	383	1787	62	7.0	28.0	2.2 + 0.8 (42.3)	90 (8.0)	7	50.3	34	62	12		
3443	387	1577	71	7.0	32.2	2.3 + 1.2 (49.2)	97 (8.8)	8	58.0	34	62	12		
3450	50	10000	4	10.0	30.0	0.4 + 0.0 (5.9)	88 (0.0)	1	5.9	34	58	67		
3451	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	34	20	50		
3499	534	8000	7	12.3	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0	0.5					
4010	871	1949	91	18.0	35.5	4.2 + 4.4 (122.1)	109 (20.2)	21	142.3	40	31	67		
4011BL	22	4012L	21	22.5	13.5	0.1 + 0.0 (1.2)	57 (0.2)	2	1.4	40	31	67		
4012	158	1707S	21	18.0	13.5	0.5 + 0.1 (8.4)	57 (1.9)	2	10.3	40	31	67		
4020	493	1754	73	20.0	29.2	2.7 + 1.3 (56.8)	94 (7.9)	10	64.7	40	73	26		
4021	105	1641	17	18.0	18.5	0.4 + 0.1 (7.7)	67 (1.5)	2	9.2	40	73	26		
4030	217	1774	124	5.0	428.6	2.4 + 23.4 (366.8)	266 (8.2)	29 +	375.1	40	31	71		
4031	960	1907S	104	5.0	123.2	4.3 + 28.5 (466.6)	191 (26.2)	50 +	492.8	40	31	67		
4032BL	22	4031L	104	39.8	132.3	0.2 + 0.7 (11.5)	197 (0.0)	50 (30.9)*	3100.4	40	31	67		
4097	1475<	8000S	19	18.0	0.3	0.0 + 0.1 (1.6)	0 (0.1)	0	1.7					
4098BL	21	4097L	19	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0					
4099	270<	8000	3	18.0	0.2	0.0 + 0.0 (0.2)	0 (0.0)	0	0.3					
4110	789<	2383f	80	7.0	38.8	6.5 + 2.0 (120.6)	85 (7.7)	15 +	128.3	41	12	42		
4111BL	50	2040	7	26.4	22.0	0.3 + 0.0 (4.3)	60 (0.0)	1	4.4	41	16	42		
4120	238	1959	40	20.0	25.5	1.4 + 0.3 (23.9)	83 (3.4)	4	27.3	41	53	0		
4121	345	1773	63	18.0	31.4	2.1 + 0.9 (42.7)	94 (6.9)	7	49.6	41	53	0		
4130	808	2488f	97	5.0	66.8	5.2 + 9.8 (213.0)	145 (16.7)	26 +	229.7	41	12	36		

75 SECOND CYCLE 75 STEPS

LINK NUMBER	FLOW INFO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES DELAY	-----DELAY----- UNIFORM RANDOM+ (U+R+O-MEAN Q) DELAY	COST OVERSAT OF	-----STOPS----- MEAN COST STOPS OF	-----QUEUE----- MAX. AVERAGE EXCESS	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES	EXIT NODE	GREEN START	TIMES START	END END
(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	(PCU)		1ST	2ND	(SECONDS)
4131BL	50	1696	12	31.8	26.3	0.3 + 0.1 (5.2)	82 (0.0)	1	5.2	41	18	36		
4150	50	10000	2	10.0	19.0	0.3 + 0.0 (3.7)	70 (0.0)	1	3.7	41	53	0		
4151	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	41	12	42		
4198BL	28	4199L	4	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0					

4199	278	8000S	4	18.0	0.2	0.0 +	0.0	(0.3)	0	(0.0)	0	0.3			
5010	770	3929S	20	3.0	0.6	0.0 +	0.1	(1.7)	1	(0.1)	0	1.9			
5011BL	28	5010L	20	3.6	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0	0.1			
6010	94	715	17	18.0	3.9	0.0 +	0.1	(1.4)	0	(0.0)	0	1.4			
6011	736	1618S	47	18.0	2.1	0.0 +	0.4	(6.1)	3	(0.4)	0	6.5			
6012BL	28	6011L	47	22.5	2.1	0.0 +	0.0	(0.2)	3	(0.0)	0	0.2			
6020	676	1800S	39	18.0	1.6	0.0 +	0.3	(4.4)	2	(0.3)	0	4.7			
6021BL	28	6020L	39	22.5	1.6	0.0 +	0.0	(0.2)	2	(0.0)	0	0.2			
6098BL	28	6099L	10	64.8	0.2	0.0 +	0.0	(0.0)	0	(0.0)	0	0.0			
6099	736	8000S	10	18.0	0.2	0.0 +	0.1	(0.7)	0	(0.1)	0	0.8			
7010	789<	2055	38	8.0	1.4	0.0 +	0.3	(4.4)	2	(0.2)	0	4.6			
7011BL	50	1915	3	8.0	1.0	0.0 +	0.0	(0.2)	1	(0.0)	0	0.2			
-4200	10	1800	10	10.0	55.0	0.1 +	0.1	(2.2)	120	(0.0)	0	2.2	41	39	42

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

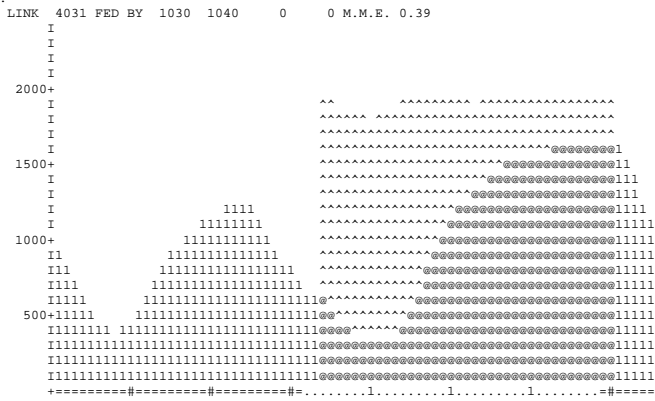
TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	
3420.4	245.5	13.9	46.6	108.3	(2198.9) + (168.9)	+ (3088.9)	=	5456.7	TOTALS
96.7	6.5	14.8	1.1	1.0	(30.2) + (0.9)	+ (3088.9)	=	3120.0	BUSES
3323.6	238.9	13.9	45.4	107.3	(2168.8) + (168.0)	+ (0.0)	=	2336.7	OTHER

1114.4	83.1	13.4	10.0	43.3	(758.2) + (55.6)	+ (0.0)	=	813.8	ROUTE 1
992.2	79.1	12.5	19.3	33.9	(755.5) + (61.4)	+ (0.0)	=	816.9	ROUTE 2

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	194.6	178.3	77.2	450.1

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED = 62

CYCLIC FLOW PROFILE GRAPHS



PROGRAM TRANSYT FINISHED

PRT

PRT File PM Peak : 2011 Flow 1700-1800

1 TRANSYT 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "WEST HENDON A5_BASELINE_PM.DAT" at 16:44 on 20130312

TRANST 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 61
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13827 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD
NO.   TYPE   TIME   NO. OF   TIME EFFECTIVE-GREEN   EQUISAT 0=UNEQUAL FLOW   CRUISE-SPEEDS   OPTIMISE   EXTRA   HILL-   DELAY   STOP
      TYPE   CYCLE  STEPS   PERIOD DISPLACEMENTS   SETTINGS CYCLE SCALE   SCALE   CARD32  0=NONE   COPIES   CLIMB   VALUE   VALUE
      (SEC)  CYCLE  MINS.   (SEC)   (SEC)   0=NO  1=YES  CYCLE  %   %   0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
      2)= 1   75    75    60    2    3    0    1    100  100  0    0    0    0    1420  260
CARD  CARD
NO.   TYPE           LIST OF NODES TO BE OPTIMISED
3)= 2   40    41    34    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   2011  2012    0    0    0    0    0    0    0    0    0    0    0    0    0
5)= 7   2030  2031    0    0    0    0    0    0    0    0    0    0    0    0    0
6)= 7   2098  2097    0    0    0    0    0    0    0    0    0    0    0    0    0
7)= 7   3411  3412    0    0    0    0    0    0    0    0    0    0    0    0    0
8)= 7   4012  4011    0    0    0    0    0    0    0    0    0    0    0    0    0
9)= 7   4031  4032    0    0    0    0    0    0    0    0    0    0    0    0    0
10)= 7  4097  4098    0    0    0    0    0    0    0    0    0    0    0    0    0
11)= 7  4199  4198    0    0    0    0    0    0    0    0    0    0    0    0    0
12)= 7  5010  5011    0    0    0    0    0    0    0    0    0    0    0    0    0
13)= 7  6011  6012    0    0    0    0    0    0    0    0    0    0    0    0    0
14)= 7  6020  6021    0    0    0    0    0    0    0    0    0    0    0    0    0
15)= 7  6099  6098    0    0    0    0    0    0    0    0    0    0    0    0    0
    
```

```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)
CARD  CARD   NODE
NO.   TYPE   NO.
16)= 10   34
17)= 10   40
18)= 10   41
      S1   S2   S3   S4   S5   S6   S7   S8   S9   S10
      7    1    5
      7   12
      12   12
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD   NODE
NO.   TYPE   NO.
19)= 11   34
20)= 11   40
21)= 11   41
      S1   S2   S3   S4   S5   S6   S7   S8   S9   S10
      8   12   12
      15   6
      18   11
    
```

```

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD  CARD   NODE   Sg1/Dbl
NO.   TYPE   NO.   Cycled
22)= 12   34    1    40   5   21
23)= 12   40    1    45  22
24)= 12   41    1    0   40
      S1   S2   S3   S4   S5   S6   S7   S8   S9   S10
    
```

```

LINK CARDS: GIVEWAY DATA
CARD  CARD   LINK   PRIORITY LINKS   LINK1 GIVEWAY COEFFS.
NO.   TYPE   NO.   NO.   NO.   % FLOW   X100   X100
25)= 30   1040  1030    0    0    22    0    0    0    0    0
26)= 30   2010  2030    0    0    50    0    0    0    0    0
27)= 30   2040  2030  2011    0    22   19    0    0    0    0    0
28)= 30   2041  2030    0    0    22    0    0    0    0    0
29)= 30   4030    0  4010    4    0   50    0    0    0    0    0
30)= 30   6010  6020    0    0    22    0    0    0    0    0
      LINK   STOP   MAX   DELAY   DISPSN
      LENGTH WT.X100   FLOW WT.X100   WT.X100   X100
      200    0    715    0    0
      31     0   1000    0    0
      200    0    600    0    0
      200    0    715    0    0
      45     0   1000    0    0
      200    0    715    0    0
    
```

```

LINK CARDS: FIXED DATA
FIRST GREEN   SECOND GREEN
    
```

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)	31	4010	40	1	15	2	0	0	0	0	0	200	0	1949	0	0
57)	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)	31	4030	40	1	5	2	1	0	0	0	0	45	0	1774	0	0
62)	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)	31	4110	41	1	12	2	0	0	0	0	0	56	0	1919	0	0
68)	31	4111	41	1	16	2	0	0	0	0	0	56	0	2040	0	0
69)	31	4120	41	2	11	1	0	0	0	0	0	200	0	1959	0	0
70)	31	4121	41	2	11	1	0	0	0	0	0	200	0	1773	0	0
71)	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)	31	4150	41	2	11	1	0	0	0	0	0	12	0	10000	0	0
74)	31	4151	41	1	12	2	0	0	0	0	0	11	0	10000	0	0
75)	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
78)	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
79)	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
80)	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
81)	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
82)	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
83)	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
85)	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
86)	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
87)	32	1010	1074	0	4010	1005	15	4021	69	15	0	0	0	0	0	0
88)	32	1011	25	0	4011	25	3200	0	0	0	0	0	0	0	0	0
89)	32	1030	1029	0	3430	743	19	3443	286	19	0	0	0	0	0	0
90)	32	1031	25	0	3431	25	3200	0	0	0	0	0	0	0	0	0
91)	32	1040	151	0	0	0	20	0	0	0	0	0	0	0	0	0
92)	32	1099	10	0	1030	10	18	0	0	0	0	0	0	0	0	0
93)	32	2010	66	0	2011	66	3	0	0	0	0	0	0	0	0	0
94)	32	2011	1236	0	4110	884	23	4121	352	18	0	0	0	0	0	0
95)	32	2012	53	0	4111	53	3200	0	0	0	0	0	0	0	0	0
96)	32	2030	1211	0	0	0	18	0	0	0	0	0	0	0	0	0
97)	32	2031	53	0	0	0	3200	0	0	0	0	0	0	0	0	0
98)	32	2040	55	0	0	0	18	0	0	0	0	0	0	0	0	0
99)	32	2041	31	0	0	0	18	0	0	0	0	0	0	0	0	0
100)	32	2097	53	0	2012	53	3200	0	0	0	0	0	0	0	0	0
101)	32	2098	1225	0	2011	1170	18	2040	55	18	0	0	0	0	0	0
102)	32	2099	484	0	2010	66	18	2030	418	18	0	0	0	0	0	0
103)	32	3010	824	0	2030	793	17	2041	31	17	0	0	0	0	0	0
104)	32	3011	53	0	2031	53	3200	0	0	0	0	0	0	0	0	0
105)	32	3410	884	0	1010	884	6	0	0	0	0	0	0	0	0	0
106)	32	3411	190	0	1010	190	6	0	0	0	0	0	0	0	0	0
107)	32	3412	25	0	1011	25	3219	0	0	0	0	0	0	0	0	0
108)	32	3430	743	0	4130	743	11	0	0	0	0	0	0	0	0	0
109)	32	3431	25	0	4131	25	3200	0	0	0	0	0	0	0	0	0
110)	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
111)	32	3442	401	0	5010	401	7	0	0	0	0	0	0	0	0	0
112)	32	3443	286	0	5010	286	19	0	0	0	0	0	0	0	0	0
113)	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
114)	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)	32	3499	591	0	3411	190	18	3442	401	18	0	0	0	0	0	0
116)	32	4010	1005	0	0	0	18	0	0	0	0	0	0	0	0	0
117)	32	4011	25	0	0	0	3200	0	0	0	0	0	0	0	0	0
118)	32	4012	386	0	0	0	18	0	0	0	0	0	0	0	0	0
119)	32	4020	224	0	0	0	20	0	0	0	0	0	0	0	0	0
120)	32	4021	69	0	0	0	18	0	0	0	0	0	0	0	0	0
121)	32	4030	251	0	1030	251	5	0	0	0	0	0	0	0	0	0
122)	32	4031	919	0	1030	768	5	1040	151	4	0	0	0	0	0	0
123)	32	4032	25	0	1031	25	3210	0	0	0	0	0	0	0	0	0
124)	32	4097	1153	0	4020	224	18	4030	10	18	4031	919	18	0	0	0
125)	32	4098	25	0	4032	25	3200	0	0	0	0	0	0	0	0	0
126)	32	4099	627	0	4012	386	18	4030	241	18	0	0	0	0	0	0
127)	32	4110	884	0	7010	884	8	0	0	0	0	0	0	0	0	0
128)	32	4111	53	0	7011	53	3216	0	0	0	0	0	0	0	0	0
129)	32	4120	221	0	0	0	20	0	0	0	0	0	0	0	0	0
130)	32	4121	352	0	0	0	18	0	0	0	0	0	0	0	0	0
131)	32	4130	82													

147)= 32 7011 53 0 3412 25 3200 3440 28 3200 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.
148)=	33	4110	2040	4	0	0	0
149)=	33	4130	1696	3	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
150)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0
151)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0
152)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0
153)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0
154)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0
155)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0
156)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0
157)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0
158)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0

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

75 SECOND CYCLE 75 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
34	3	40	5	21							
40	2	45	22								
41	2	0	40								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY----- UNIFORM OVERSAT (U+R+O-MEAN Q) DELAY (PCU-H/H)	-----STOPS----- MEAN COST OF STOPS (\$/H)	-----QUEUE----- MEAN AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
1010	1056<	2055	51	15.0	1.8	0.0 + 0.5 (7.5)	2 (0.4)	1 (0.0)*	7.9			
1011BL	25	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1			
1030	1028	2055	50	19.0	1.8	0.0 + 0.5 (7.1)	2 (0.3)	1 (0.0)*	7.4			
1031BL	25	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1			
1040	151	715	31	20.0	5.3	0.0 + 0.2 (3.2)	0 (0.0)	0	3.2			
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0			
2010	64	1000	17	3.0	6.0	0.0 + 0.1 (1.5)	0 (0.0)	0 (0.0)*	1.5			
2011	1192<	2115S	59	21.6	2.9	0.3 + 0.7 (13.5)	30 (8.2)	16 (0.1)*	28.2			
2012BL	53	2011L	59	29.3	3.6	0.0 + 0.0 (0.8)	57 (0.4)	16 (0.1)*	7.6			
2030	1211	3786S	33	18.0	0.7	0.0 + 0.2 (3.4)	1 (0.2)	0	3.7			
2031BL	53	2030L	33	22.5	0.7	0.0 + 0.0 (0.1)	1 (0.0)	0	0.2			
2040	55	600	49	18.0	40.3	0.2 + 0.5 (8.7)	105 (1.2)	1	10.0			
2041	31	715	7	18.0	4.4	0.0 + 0.0 (0.5)	0 (0.0)	0	0.5			
2097BL	53	2098L	15	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0	0.1			
2098	1183<	8000S	15	18.0	0.3	0.0 + 0.1 (1.2)	0 (0.1)	0	1.3			
2099	483	8000	6	18.0	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0	0.5			
3010	823	2075	40	17.0	1.4	0.0 + 0.3 (4.7)	2 (0.3)	0	5.0			
3011BL	53	1945	3	20.8	1.0	0.0 + 0.0 (0.2)	1 (0.0)	0	0.2			
3410	871<	1910	104	6.0	136.6	9.0 + 24.1 (469.4)	191 (28.8)	42 +	498.2	34	48	5
3411	186	1993S	24	6.0	24.9	1.1 + 0.1 (18.3)	95 (3.1)	4	21.3	34	48	5
3412BL	25	3411L	24	35.0	20.0	0.1 + 0.0 (2.0)	82 (0.0)	4	2.0	34	48	5
3430	742	1972	81	11.0	34.9	5.2 + 2.0 (102.1)	113 (16.0)	18	118.1	34	46	5
3431BL	25	1915	3	12.9	14.8	0.1 + 0.0 (1.5)	92 (0.3)	0 (0.0)*	1.8	34	46	5
3440BL	28	1665	16	9.0	42.5	0.2 + 0.1 (4.7)	104 (0.4)	1	5.1	34	33	40
3442	401	1787	70	7.0	32.8	2.5 + 1.2 (51.9)	97 (9.1)	8	61.0	34	17	40
3443	286	1577	57	19.0	29.3	1.7 + 0.6 (33.1)	92 (0.8)	6	33.9	34	17	40
3450	50	10000	4	10.0	31.0	0.4 + 0.0 (6.1)	90 (0.0)	1	6.1	34	13	21
3451	50	10000	1	10.0	12.5	0.2 + 0.0 (2.5)	56 (0.0)	1	2.5	34	48	5
3499	587	8000	7	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0	0.6			
4010	1005	1949	102	18.0	94.3	5.5 + 20.8 (373.8)	173 (36.9)	42 +	410.7	40	60	22
4011BL	25	4012L	38	22.5	9.0	0.0 + 0.0 (0.9)	47 (0.2)	4	1.1	40	50	22
4012	386	1707S	38	18.0	9.0	0.7 + 0.3 (13.8)	47 (3.9)	4	17.6	40	50	22
4020	224	1754	53	20.0	33.9	1.5 + 0.6 (30.0)	96 (3.7)	5	33.7	40	28	45
4021	69	1641	18	18.0	28.2	0.4 + 0.1 (7.7)	84 (1.2)	1	8.9	40	28	45
4030	251	1774	92	5.0	88.1	2.1 + 4.1 (87.2)	162 (5.8)	8 +	93.0	40	50	23
4031	918	1907S	77	4.8	11.2	1.2 + 1.6 (40.4)	44 (5.8)	9 +	46.2	40	50	22
4032BL	25	4031L	77	23.8	9.6	0.0 + 0.0 (0.9)	24 (0.0)	9 (0.0)*	4.9	40	50	22
4097	1152	8000S	15	18.0	0.3	0.0 + 0.1 (1.2)	0 (0.1)	0	1.3			
4098BL	25	4097L	15	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0			
4099	627	8000	8	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0	0.6			
4110	840<	2415f	90	8.0	34.6	3.9 + 4.1 (114.5)	116 (8.9)	22 +	123.5	41	12	40
4111BL	53	2040	8	31.4	18.5	0.2 + 0.0 (3.9)	84 (0.0)	1	3.9	41	16	40
4120	221	1959	34	20.0	23.0	1.2 + 0.3 (20.0)	78 (2.9)	4	23.0	41	51	0
4121	352	1773	60	18.0	28.3	2.0 + 0.7 (39.3)	90 (6.7)	7	46.0	41	51	0
4130	823	2428f	88	5.0	34.2	4.5 + 3.4 (110.9)	105 (12.4)	19 +	123.2	41	12	40

75 SECOND CYCLE 75 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY----- UNIFORM OVERSAT (U+R+O-MEAN Q) DELAY (PCU-H/H)	-----STOPS----- MEAN COST OF STOPS (\$/H)	-----QUEUE----- MEAN AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
4131BL	53	1696	10	31.8	22.5	0.3 + 0.1 (4.7)	76 (0.0)	1	4.7	41	18	40
4150	50	10000	2	10.0	17.5	0.2 + 0.0 (3.5)	67 (0.0)	1	3.5	41	51	0
4151	50	10000	1	10.0	14.9	0.2 + 0.0 (2.9)	62 (0.0)	1	2.9	41	12	40
4198BL	28	4199L	4	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0			
4199	302	8000S	4	18.0	0.2	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3			
5010	687	3929S	18	3.0	0.6	0.0 + 0.1 (1.5)	1 (0.1)	0	1.6			
5011BL	28	5010L	18	3.6	0.6	0.0 + 0.0 (0.1)	1 (0.0)	0	0.1			
6010	126	715	22	18.0	3.9	0.0 + 0.1 (1.9)	0 (0.0)	0	1.9			
6011	653	1618S	42	18.0	1.9	0.0 + 0.3 (4.9)	3 (0.4)	0	5.3			
6012BL	28	6011L	42	22.5	1.9	0.0 + 0.0 (0.2)	3 (0.0)	0	0.2			
6020	561	1800S	33	18.0	1.5	0.0 + 0.2 (3.3)	2 (0.2)	0	3.5			
6021BL	28	6020L	33	22.5	1.5	0.0 + 0.0 (0.2)	2 (0.0)	0	0.2			
6098BL	28	6099L	9	64.8	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0	0.0			
6099	653	8000S	9	18.0	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0	0.7			
7010	840<	2055	41	8.0	1.5	0.0 + 0.3 (4.9)	2 (0.2)	0	5.1			
7011BL	53	1915	3	8.0	1.0	0.0 + 0.0 (0.2)	1 (0.0)	0	0.2			

*** 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 STOPS (\$/H)	TOTAL PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	TOTALS
3347.5	204.9	16.3	44.9	69.1	(1619.6) + (159.5) + (16.8)	=	1795.9	

102.6	6.1	16.9	1.0	0.4	(20.6)	+	(1.5)	+	(10.4)	=	32.4	BUSES
3244.9	198.8	16.3	43.9	68.7	(1599.0)	+	(158.0)	+	(6.5)	=	1763.4	OTHER

ROUTE

	CRUISE	DELAY	STOPS	TOTALS			
	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	191.6	+	131.2	+	72.9	=	395.7

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 61

PROGRAM TRANSYT FINISHED

PRT

PRT File Sat Peak : 2011 Flow 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:- "WEST HENDON A5_BASELINE_SAT.DAT" at 16:44 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 66
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13521 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

CARD CARD

(1)= TITLE:- West Hendon Broadway Base Model

CARD NO.	CARD TYPE	CYCLE TIME	NO. OF STEPS PER CYCLE	TIME PERIOD	EFFECTIVE-GREEN PERIOD	DISPLACEMENTS START	END	0=NO	1=EQUAL	SCALE	CRUISE-SPEEDS SCALE	OPTIMISE	EXTRA COPIES	HILL-CLIMB	DELAY VALUE	STOP VALUE
2)	1	66	66	60	2	3	0	1	100	100	0	0	0	0	1420	260

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET	SECOND SET	THIRD SET	FOURTH SET	FIFTH SET	SIXTH SET	SEVENTH SET	EIGHTH SET	NINTH SET	TENTH SET
4)	7	2011	2012	0	0	0	0	0	0	0	0
5)	7	2030	2031	0	0	0	0	0	0	0	0
6)	7	2098	2097	0	0	0	0	0	0	0	0
7)	7	3411	3412	0	0	0	0	0	0	0	0
8)	7	4012	4011	0	0	0	0	0	0	0	0
9)	7	4031	4032	0	0	0	0	0	0	0	0
10)	7	4097	4098	0	0	0	0	0	0	0	0
11)	7	4111	4200	0	0	0	0	0	0	0	0
12)	7	4131	4132	0	0	0	0	0	0	0	0
13)	7	4198	4198	0	0	0	0	0	0	0	0
14)	7	5010	5011	0	0	0	0	0	0	0	0
15)	7	6011	6012	0	0	0	0	0	0	0	0
16)	7	6020	6021	0	0	0	0	0	0	0	0
17)	7	6099	6098	0	0	0	0	0	0	0	0

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
18)	10	34	7	1	5							
19)	10	40	7	7								
20)	10	41	12	6	12							

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
21)	11	34	8	12	12							
22)	11	40	5	6								
23)	11	41	12	0	11							

NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sgl/Dbl Cycled	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
24)	12	34	1	12	45	58							
25)	12	40	1	26	4								
26)	12	41	1	0	26	43							

LINK CARDS: GIVEWAY DATA

CARD NO.	CARD TYPE	LINK NO.	PRIORITY	LINK1 NO.	LINK2 NO.	LINK ONLY	GIVEWAY	COEFFS.	LINK LENGTH	STOP WT.	MAX FLOW	DELAY WT.	DISPNS
27)	30	1040	0	1030	0	0	22	0	0	0	715	0	0
28)	30	2010	0	2030	0	0	50	0	0	0	1000	0	0
29)	30	2040	0	2030	2011	0	22	19	0	0	600	0	0
30)	30	2041	0	2030	0	0	22	0	0	0	715	0	0
31)	30	4030	0	4010	37	0	50	0	0	0	1000	0	0
32)	30	6010	0	6020	0	0	22	0	0	0	715	0	0

147)=	32	6012	24	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
148)=	32	6020	452	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
149)=	32	6021	28	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
150)=	32	6098	24	0	6012	24	3233	0	0	0	0	0	0	0	0	0	0	0
151)=	32	6099	561	0	6011	561	18	0	0	0	0	0	0	0	0	0	0	0
152)=	32	7010	932	0	3410	932	8	0	0	0	0	0	0	0	0	0	0	0
153)=	32	7011	50	0	3412	22	3200	3440	28	3200	0	0	0	0	0	0	0	0

GRAPH PLOT CARDS

CARD	CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
154)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD	CARD	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE
NO.	TYPE	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT
155)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD	CARD	ROUTE	ROUTE
NO.	TYPE	NUMBER	DESCRIPTION
162)=	41	1	Southbound
163)=	41	2	Northbound

CARD	CARD	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO	TYPE	NUMBER	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
164)=	42	1	2030	3010	4130	3430	1030	4031	4097										
165)=	42	2	4010	1010	3410	7010	4110	2011	2098										

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

66 SECOND CYCLE 66 STEPS

INITIAL SETTINGS

- (SECONDS)

NODE	NUMBER	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE
NO	OF STAGES	1	2	3	4	5	6	7	8	9	10								
34	3	12	45	58															
40	2	26	4																
41	3	0	26	43															

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----				----STOPS----		----QUEUE----		PERFORMANCE	EXIT	GREEN	TIMES	
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM	RANDOM+	COST	MEAN	COST	MEAN	AVERAGE	INDEX.	NODE	START	START	END	
	LINK		SAT	CRUISE	DELAY	(U+R+O=MEAN	OVERSAT	OF	STOPS	OF	MAX.	EXCESS	WEIGHTED	SUM	1ST	2ND	END	
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(Q)	DELAY	/PCU	STOPS	(%)	(\$/H)	(\$/H)	(\$/H)	(SECONDS)	(SECONDS)	(SECONDS)	(SECONDS)
1010	1078	2055	52	15.0	1.8	0.0 + 0.6	(7.8)		3	(0.4)			8.3					
1011LBL	22	1915	1	15.2	1.0	0.0 + 0.0	(0.1)		1	(0.0)			0.1					
1030	1001<	2055	49	19.0	1.7	0.0 + 0.5	(6.7)		2	(0.4)			7.1					
1031LBL	22	1915	1	48.4	1.0	0.0 + 0.0	(0.1)		1	(0.0)			0.1					
1040	109	715	22	20.0	4.7	0.0 + 0.1	(2.0)		0	(0.0)			2.0					
1099	10	8000	0	18.0	0.2	0.0 + 0.0	(0.0)		0	(0.0)			0.0					
2010	46	1000	14	3.0	6.2	0.0 + 0.1	(1.1)		0	(0.0)			1.1					
2011	1047<	2115S	52	21.8	1.8	0.0 + 0.5	(7.3)		2	(0.6)			7.9					
2012BL	50	2011L	52	68.5	1.8	0.0 + 0.0	(0.3)		3	(0.0)			0.4					
2030	1272	3786S	35	18.0	0.7	0.0 + 0.3	(3.7)		1	(0.3)			4.0					
2031LBL	50	2030L	35	22.5	0.7	0.0 + 0.0	(0.1)		1	(0.0)			0.2					
2040	33	600	32	18.0	26.9	0.0 + 0.2	(3.5)		91	(0.6)			4.1					
2041	17	715	4	18.0	4.4	0.0 + 0.0	(0.3)		0	(0.0)			0.3					
2097BL	50	2098L	14	22.5	0.3	0.0 + 0.0	(0.1)		0	(0.0)			0.1					
2098	1034<	8000S	14	18.0	0.3	0.0 + 0.1	(1.1)		0	(0.1)			1.1					
2099	575	8000	7	18.0	0.2	0.0 + 0.0	(0.6)		0	(0.0)			0.6					
3010	760	2075	37	17.0	1.4	0.0 + 0.3	(4.1)		2	(0.3)			4.4					
3011LBL	50	1945	3	20.8	0.9	0.0 + 0.0	(0.2)		1	(0.0)			0.2					
3410	931	1910	124	6.0	387.6	8.2 + 92.0	(999.9)		267	(42.5)		110	+	1465.8	34	20	45	
3411	151	1993S	22	6.0	19.3	0.7 + 0.1	(11.5)		90	(2.3)		3		13.8	34	20	45	
3412LBL	22	3411L	22	36.0	13.5	0.1 + 0.0	(1.2)		67	(0.0)		3		1.2	34	20	45	
3430	666<	1972	80	11.0	12.8	0.5 + 1.9	(33.6)		64	(8.9)		13		42.6	34	18	45	
3431LBL	22	1915	3	12.9	2.3	0.0 + 0.0	(0.2)		4	(0.0)		0	(0.0)*	0.2	34	18	45	
3440BL	28	1665	12	9.0	34.1	0.2 + 0.1	(3.8)		98	(0.4)		1		4.2	34	4	12	
3442	311	1787	52	7.0	24.1	1.5 + 0.5	(29.6)		86	(6.3)		5		35.9	34	57	12	
3443	335	1577	64	7.0	27.9	1.7 + 0.9	(36.9)		94	(7.4)		6		44.3	34	57	12	
3450	50	10000	6	10.0	29.8	0.4 + 0.0	(5.9)		94	(0.0)		1		5.9	34	53	58	
3451	50	10000	1	10.0	12.9	0.2 + 0.0	(2.5)		61	(0.0)		1		2.5	34	20	45	
3499	462	8000	6	12.6	0.2	0.0 + 0.0	(0.4)		0	(0.0)		0		0.5				
4010	997	1949	84	18.0	20.0	2.9 + 2.6	(78.6)		88	(18.6)		17		97.2	40	31	4	
4011LBL	22	4012L	21	22.5	8.1	0.0 + 0.0	(0.7)		45	(0.1)		2		0.8	40	31	4	
4012	191	1707S	21	18.0	8.1	0.3 + 0.1	(6.1)		45	(1.8)		2		7.9	40	31	4	
4020	242	1754	54	20.0	29.6	1.4 + 0.6	(28.3)		95	(3.9)		4		32.2	40	10	26	
4021	81	1641	19	18.0	24.4	0.4 + 0.1	(7.8)		83	(1.4)		1		9.2	40	10	26	
4030	150	1774	59	5.0	33.9	0.7 + 0.7	(20.1)		111	(2.5)		3		22.6	40	31	8	
4031	952<	1907S	84	4.9	16.0	1.7 + 2.5	(60.0)		54	(7.7)		11	+	67.7	40	31	4	
4032LBL	22	4031L	84	5.1	20.6	0.1 + 0.1	(1.8)		76	(0.2)		11	(0.4)*	41.3	40	31	4	
4097	1194<	8000S	15	18.0	0.3	0.0 + 0.1	(1.2)		0	(0.1)		0		1.4				
4098BL	22	4097L	15	22.5	0.3	0.0 + 0.0	(0.0)		0	(0.0)		0		0.0				
4099	341	8000	4	18.0	0.2	0.0 + 0.0	(0.3)		0	(0.0)		0		0.3				
4110	665<	1919	71	7.0	29.3	4.2 + 1.2	(76.9)		64	(5.8)		10		82.7	41	12	43	
4111LBL	50	2040S	14	45.4	13.9	0.2 + 0.0	(2.7)		65	(0.0)		2		2.8	41	12	43	
4120	181	1959	47	20.0	32.2	1.2 + 0.4	(23.0)		98	(3.0)		3		26.0	41	54	0	
4121	295	1773	84	18.0	55.9	2.1 + 2.5	(65.1)		134	(8.4)		8		73.5	41	54	0	
4130	532	2056	114	5.0	274.9	4.6 + 36.0	(576.9)		256	(19.5)		46	+	596.3	41	12	26	

66 SECOND CYCLE 66 STEPS

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----				----STOPS----		----QUEUE----		PERFORMANCE	EXIT	GREEN	TIMES	
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM	RANDOM+	COST	MEAN	COST	MEAN	AVERAGE	INDEX.	NODE	START	START	END	
	LINK		SAT	CRUISE	DELAY	(U+R+O=MEAN	OVERSAT	OF	STOPS	OF	MAX.	EXCESS	WEIGHTED	SUM	1ST	2ND	END	
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(Q)	DELAY	/PCU	STOPS	(%)	(\$/H)	(\$/H)	(\$/H)	(SECONDS)	(SECONDS)	(SECONDS)	(SECONDS)
4131LBL	50	1696S	72	31.8	39.9	0.3 + 0.2	(7.9)		114	(0.0)		6		7.9	41	12	26	
4132	228	4131L	72	5.0	39.9	1.5 + 1.0	(35.9)		114	(3.7)		6		39.6	41	12	26	
4150	50	10000	3	10.0	22.6	0.3 + 0.0	(4.5)		81	(0.0)		1		4.5	41	54	0	
4151	50	10000	1	10.0	9.4	0.1 + 0.0	(1.9)		52	(0.0)		0		1.9	41	12	43	
4198BL	28	4199L	3	22.5	0.2	0.0 + 0.0	(0.0)		0	(0.0)		0		0.0				
4199	210	8000S	3	18.0	0.2	0.0 + 0.0	(0.2)		0</									

6010	194	715	32	18.0	4.3	0.0	0.2	(3.3)	0	(0.0)	0	3.3	
6011	561	1618S	36	18.0	1.7	0.0	0.3	(3.9)	3	(0.3)	0	4.2	
6012BL	24	6011L	36	22.5	1.7	0.0	0.0	(0.2)	3	(0.0)	0	0.2	
6020	452	1800S	27	18.0	1.4	0.0	0.2	(2.4)	2	(0.2)	0	2.6	
6021BL	28	6020L	27	22.5	1.4	0.0	0.0	(0.2)	2	(0.0)	0	0.2	
6098BL	24	6099L	7	64.8	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0	
6099	561	8000S	7	18.0	0.2	0.0	0.0	(0.5)	0	(0.0)	0	0.6	
7010	752<	2055	37	8.0	1.4	0.0	0.3	(4.1)	2	(0.2)	0	4.3	
7011BL	50	1915	3	8.0	1.0	0.0	0.0	(0.2)	1	(0.0)	0	0.2	
TOTAL DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF STOPS	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)					
3161.9	268.9	11.8	35.9	148.0	(2610.9)	(149.2)	(39.3)	=	2799.3	TOTALS			
95.1	6.5	14.7	0.9	0.5	(19.8)	(0.9)	(39.3)	=	60.0	BUSES			
3066.8	262.4	11.7	35.0	147.4	(2591.1)	(148.3)	(0.0)	=	2739.4	OTHER			

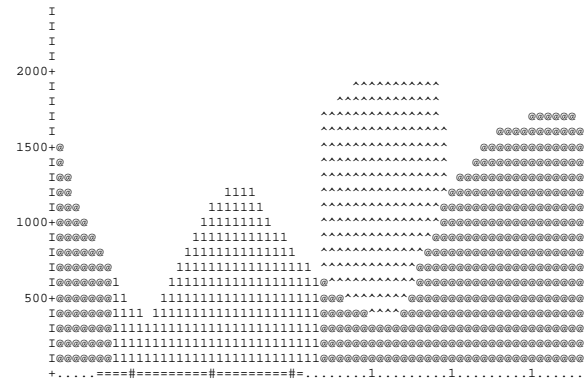
978.0	74.4	13.1	6.7	41.6	(686.2)	(37.2)	(0.0)	=	723.4	ROUTE			
1073.1	140.8	7.6	15.3	97.3	(1599.0)	(68.2)	(0.0)	=	1667.3	1			
										2			

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	180.1	+	211.5	+	68.6	=	460.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 63

CYCLIC FLOW PROFILE GRAPHS

LINK 4031 FED BY 1030 1040 0 0 M.M.E. 0.39



PROGRAM TRANSYT FINISHED

PRT

PRT File AM Peak : 2011 Flow 0800-0900

1 TRANSYT 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:- "WEST HENDON A5_DOMIN_AM.DAT" at 16:44 on 20130312

TRANST 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 62
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 14028 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD
NO.   TYPE   CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
      CYCLE  TIME  STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  MINS.  START  END  0=NO  1=YES  CYCLE  %  %  0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
      (SEC)  CYCLE  (SEC)  (SEC)  (SEC)  3  0  1  100  100  0  0  0  0  1420  260
2)= 1
   75  75  60  2  3  0  1  100  100  0  0  0  0  0  0  0  0
CARD  CARD
NO.   TYPE
3)= 2  40  41  34  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  2011  2012  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5)= 7  2030  2031  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6)= 7  2098  2097  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7)= 7  3411  3412  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8)= 7  4012  4011  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9)= 7  4031  4032  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10)= 7  4097  4098  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11)= 7  4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12)= 7  5010  5011  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13)= 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14)= 7  6020  6021  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15)= 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0  0  0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
16)= 10  34  7  1  5
17)= 10  40  7  7
18)= 10  41  12  3  12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
19)= 11  34  8  12  12
20)= 11  40  5  6
21)= 11  41  18  3  11
    
```

NODE CARDS: STAGE CHANGE TIMES (WORKING)

```

CARD  CARD  NODE  Sg1/Dbl
NO.   TYPE  NO.  Cycled
22)= 12  34  1  12  50  67
23)= 12  40  1  26  67
24)= 12  41  1  0  36  42
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY COEFFS.
NO.   TYPE  NO.   NO.   NO.  % FLOW  X100  X100
25)= 30  1040  1030  0  0  22  0  0  0  0  0  0  0  0  0  0  0
26)= 30  2010  2030  0  0  50  0  0  0  0  0  0  0  0  0  0  0
27)= 30  2040  2030  2011  0  22  19  0  0  0  0  0  0  0  0  0  0
28)= 30  2041  2030  0  0  22  0  0  0  0  0  0  0  0  0  0  0
29)= 30  4030  0  4010  37  0  50  0  0  0  0  0  0  0  0  0  0
30)= 30  6010  6020  0  0  22  0  0  0  0  0  0  0  0  0  0  0
    
```

LINK CARDS: FIXED DATA
FIRST GREEN SECOND GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)=	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)=	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)=	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)=	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)=	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)=	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)=	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)=	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)=	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)=	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)=	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)=	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)=	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)=	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)=	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)=	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)=	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)=	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)=	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)=	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)=	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)=	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)=	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)=	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)=	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)=	31	4010	40	1	5	2	0	0	0	0	0	200	0	1949	0	0
57)=	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)=	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)=	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)=	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)=	31	4030	40	1	5	2	4	0	0	0	0	45	0	1774	0	0
62)=	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)=	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)=	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)=	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)=	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)=	31	4110	41	1	12	3	0	0	0	0	0	56	0	1919	0	0
68)=	31	4111	41	1	16	3	0	0	0	0	0	56	0	2040	0	0
69)=	31	4120	41	3	11	1	0	0	0	0	0	200	0	1959	0	0
70)=	31	4121	41	3	11	1	0	0	0	0	0	200	0	1773	0	0
71)=	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)=	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)=	31	4150	41	3	11	1	0	0	0	0	0	12	0	10000	0	0
74)=	31	4151	41	1	12	3	0	0	0	0	0	11	0	10000	0	0
75)=	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)=	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)=	31	-4200	41	2	3	3	0	0	0	0	0	20	0	1800	0	0
78)=	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
79)=	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
80)=	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
81)=	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
82)=	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
83)=	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)=	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
85)=	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
86)=	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
87)=	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
88)=	32	1010	1008	0	4010	903	15	4021	105	15	0	0	0	0	0	0
89)=	32	1011	22	0	4011	22	3200	0	0	0	0	0	0	0	0	0
90)=	32	1030	1277	0	3430	769	19	3443	508	19	0	0	0	0	0	0
91)=	32	1031	22	0	3431	22	3200	0	0	0	0	0	0	0	0	0
92)=	32	1040	44	0	0	0	20	0	0	0	0	0	0	0	0	0
93)=	32	1099	10	0	1030	20	18	0	0	0	0	0	0	0	0	0
94)=	32	2010	65	0	2011	65	3	0	0	0	0	0	0	0	0	0
95)=	32	2011	1245	0	4110	825	23	4121	420	18	0	0	0	0	0	0
96)=	32	2012	50	0	4111	50	3200	0	0	0	0	0	0	0	0	0
97)=	32	2030	1486	0	0	0	18	0	0	0	0	0	0	0	0	0
98)=	32	2031	50	0	0	0	3200	0	0	0	0	0	0	0	0	0
99)=	32	2040	34	0	0	0	18	0	0	0	0	0	0	0	0	0
100)=	32	2041	19	0	0	0	18	0	0	0	0	0	0	0	0	0
101)=	32	2097	50	0	2012	50	3200	0	0	0	0	0	0	0	0	0
102)=	32	2098	1214	0	2011	1180	18	2040	34	18	0	0	0	0	0	0
103)=	32	2099	741	0	2010	65	18	2030	676	18	0	0	0	0	0	0
104)=	32	3010	829	0	2030	810	17	2041	19	17	0	0	0	0	0	0
105)=	32	3011	50	0	2031	50	3200	0	0	0	0	0	0	0	0	0
106)=	32	3410	825	0	1010	825	6	0	0	0	0	0	0	0	0	0
107)=	32	3411	183	0	1010	183	6	0	0	0	0	0	0	0	0	0
108)=	32	3412	22	0	1011	22	3220	0	0	0	0	0	0	0	0	0
109)=	32	3430	769	0	4130	769	11	0	0	0	0	0	0	0	0	0
110)=	32	3431	22	0	4131	22	3200	0	0	0	0	0	0	0	0	0
111)=	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
112)=	32	3442	422	0	5010	422	7	0	0	0	0	0	0	0	0	0
113)=	32	3443	508	0	5010	508	7	0	0	0	0	0	0	0	0	0
114)=	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)=	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
116)=	32	3499	605	0	3411	183	18	3442	422	10	0	0	0	0	0	0
117)=	32	4010	903	0	0	0	18	0	0	0	0	0	0	0	0	0
118)=	32	4011	22	0	0	0	3200	0	0	0	0	0	0	0	0	0
119)=	32	4012	158	0	0	0	18	0	0	0	0	0	0	0	0	0
120)=	32	4020	493	0	0	0	20	0	0	0	0	0	0	0	0	0
121)=	32	4021	105	0	0	0	18	0	0	0	0	0	0	0	0	0
122)=	32	4030	217	0	1030	217	5	0	0	0	0	0	0	0	0	0
123)=	32	4031	1084	0	1030	1040	5	1040	44	4	0	0	0	0	0	0
124)=	32	4032	22	0	1031	22	3226	0	0	0	0	0	0	0	0	0
125)=	32	4097	1655	0	4020	493	18	4030	78	18	4031	1084	18	0	0	0
126)=	32	4098	22	0	4032	22	3200	0	0	0	0	0	0	0	0	0
127)=	32	4099	297	0	4012	158	18	4030	139	18	0	0	0	0	0	0
128)=	32	4110	825	0	7010	825	7	0	0	0	0	0	0	0	0	0
129)=	32	4111	50	0	7011	50	3211	0	0	0	0	0	0	0	0	0
130)=	32	4120	433	0	0											

147)= 32 6099 808 0 6011 808 18 0 0 0 0 0 0 0 0 0 0 0
 148)= 32 7010 825 0 3410 825 8 0 0 0 0 0 0 0 0 0 0 0
 149)= 32 7011 50 0 3412 22 3200 3440 28 3200 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.	
150)=	33	4110	2040	4	0	0	0	0
151)=	33	4130	1696	3	0	0	0	0

GRAPH PLOT CARDS

CARD NO.	CARD TYPE	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
152)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LINK LIMIT QUEUE	LINK QUEUE WEIGHT	LINK LIMIT QUEUE	LINK QUEUE WEIGHT	LINK LIMIT QUEUE	LINK QUEUE WEIGHT	LINK LIMIT QUEUE	LINK QUEUE WEIGHT	LINK LIMIT QUEUE	LINK QUEUE WEIGHT	LINK LIMIT QUEUE	LINK QUEUE WEIGHT	LINK LIMIT QUEUE	LINK QUEUE WEIGHT
153)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0
154)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0	0	0	0
155)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD NO.	CARD TYPE	ROUTE NUMBER	ROUTE DESCRIPTION
162)=	41	1	Southbound
163)=	41	2	Northbound

CARD NO.	CARD TYPE	ROUTE NUMBER	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
164)=	42	1	2030	3010	4130	3430	1030	4031	4097						
165)=	42	2	4010	1010	3410	7010	1030	2011	2098						

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

75 SECOND CYCLE 75 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE NO	OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
34	3	12	50	67							
40	2	26	67								
41	3	0	36	42							

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER CRUISE DELAY	-----DELAY----- UNIFORM RANDOM+ (U+R+O-MEAN Q) DELAY	COST OVERSAT OF (\$/H)	----STOPS---- MEAN COST STOPS OF \$/PCU STOPS (\$/H)	----QUEUE---- MEAN MAX. AVERAGE EXCESS (PCU) (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END VALUES (SECONDS)	TIMES START END VALUES (SECONDS)
1010	1008	2055	49	15.0	1.7	0.0 + 0.5 (6.8)	2 (0.3)	0 (0.0)*	7.2				
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1				
1030	1277	2055	62	19.0	2.3	0.0 + 0.8 (11.6)	3 (0.6)	1 (0.0)*	12.2				
1031BL	22	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1				
1040	44	715	10	20.0	4.6	0.0 + 0.1 (0.8)	0 (0.0)	0 (0.0)	0.8				
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0				
2010	63	1000	27	3.0	10.6	0.0 + 0.2 (2.6)	0 (0.0)	0 (0.0)*	2.6				
2011	1209<	2115S	60	21.3	2.4	0.1 + 0.7 (11.6)	16 (4.6)	10 (0.0)*	16.2				
2012BL	50	2011L	60	29.3	2.7	0.0 + 0.0 (0.5)	29 (0.2)	10 (0.0)*	0.7				
2030	1486	3786S	41	18.0	0.8	0.0 + 0.3 (4.7)	1 (0.3)	0 (0.0)	5.0				
2031BL	50	2030L	41	22.5	0.8	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2				
2040	34	600	53	18.0	69.6	0.1 + 0.5 (9.3)	144 (1.0)	1 (0.0)	10.4				
2041	19	715	5	18.0	5.0	0.0 + 0.0 (0.4)	0 (0.0)	0 (0.0)	0.4				
2097BL	50	2098L	15	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0 (0.0)	0.1				
2098	1181<	8000S	15	18.0	0.3	0.0 + 0.1 (1.2)	0 (0.1)	0 (0.0)	1.3				
2099	738	8000	9	18.0	0.2	0.0 + 0.1 (0.7)	0 (0.1)	0 (0.0)	0.8				
3010	830	2075	40	17.0	1.4	0.0 + 0.3 (4.7)	2 (0.3)	0 (0.0)	5.1				
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2				
3410	825	1910	104	6.0	148.3	8.4 + 25.6 (482.6)	201 (28.3)	43 +	510.8	34	20	50	50
3411	183	1993S	25	6.0	26.9	1.2 + 0.1 (19.4)	98 (3.0)	4	22.4	34	20	50	50
3412BL	22	3411L	25	36.0	18.4	0.1 + 0.0 (1.6)	82 (0.0)	4	1.6	34	20	50	50
3430	770	1972	89	11.0	19.6	0.5 + 3.7 (59.6)	76 (11.1)	18	70.7	34	18	50	50
3431BL	22	1915	3	12.9	2.4	0.0 + 0.0 (0.2)	3 (0.0)	0 (0.0)*	0.2	34	18	50	50
3440BL	28	1665	14	9.0	40.0	0.2 + 0.1 (4.4)	101 (0.4)	1	4.8	34	4	12	12
3442	422	1787	68	7.0	30.0	2.5 + 1.1 (49.9)	93 (9.2)	9	59.2	34	62	12	12
3443	508	1577	93	7.0	60.2	3.3 + 5.2 (120.5)	135 (16.1)	15 +	136.6	34	62	12	12
3450	50	10000	4	10.0	30.0	0.4 + 0.0 (5.9)	88 (0.0)	1	5.9	34	58	67	67
3451	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	34	20	50	50
3499	606	8000	8	12.4	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6				
4010	903	1949	94	18.0	43.2	4.5 + 6.3 (154.0)	120 (23.0)	24	177.0	40	31	67	67
4011BL	22	4012L	21	22.5	13.5	0.1 + 0.0 (1.2)	57 (0.2)	2	1.4	40	31	67	67
4012	158	1707S	21	18.0	13.5	0.5 + 0.1 (8.4)	57 (1.9)	2	10.3	40	31	67	67
4020	493	1754	73	20.0	29.2	2.7 + 1.3 (56.8)	94 (7.9)	10	64.7	40	73	26	26
4021	105	1641	17	18.0	18.5	0.4 + 0.1 (7.7)	67 (1.5)	2	9.2	40	73	26	26
4030	217	1774	141	5.0	603.4	3.0 + 33.4 (516.4)	266 (8.2)	39 +	524.7	40	31	71	71
4031	1084	1907S	118	5.0	302.7	7.1 + 84.0 (999.9)	254 (39.2)	112 +	1333.4	40	31	67	67
4032BL	22	4031L	118	39.8	309.5	0.2 + 1.7 (26.9)	266 (0.0)	112 (91.3)*	9156.1	40	31	67	67
4097	1468<	8000S	19	18.0	0.3	0.0 + 0.1 (1.6)	0 (0.1)	0 (0.0)	1.7				
4098BL	21	4097L	19	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0				
4099	256<	8000	3	18.0	0.2	0.0 + 0.0 (0.2)	0 (0.0)	0 (0.0)	0.3				
4110	789<	2383f	80	7.0	38.8	6.5 + 2.0 (120.6)	85 (7.7)	15 +	128.3	41	12	42	42
4111BL	50	2040	7	26.4	21.7	0.3 + 0.0 (4.3)	60 (0.0)	1	4.3	41	16	42	42
4120	433	1959	72	20.0	33.7	2.8 + 1.3 (57.6)	99 (7.3)	9	64.9	41	53	0	0
4121	420	1773	77	18.0	37.8	2.8 + 1.7 (62.6)	105 (9.4)	10	72.0	41	53	0	0
4130	830	2488f	100	5.0	86.8	5.4 + 14.6 (284.1)	165 (19.5)	32 +	303.6	41	12	36	36

75 SECOND CYCLE 75 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER CRUISE DELAY	-----DELAY----- UNIFORM RANDOM+ (U+R+O-MEAN Q) DELAY	COST OVERSAT OF (\$/H)	----STOPS---- MEAN COST STOPS OF \$/PCU STOPS (\$/H)	----QUEUE---- MEAN MAX. AVERAGE EXCESS (PCU) (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END VALUES (SECONDS)	TIMES START END VALUES (SECONDS)
4131BL	50	1696	12	31.8	26.3	0.3 + 0.1 (5.2)	82 (0.0)	1	5.2	41	18	36	36
4150	50	10000	2	10.0	19.0	0.3 + 0.0 (3.7)	70 (0.0)	1	3.7	41	53	0	0
4151	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	41	12	42	42
4198BL	28	4199L	7	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0				

4199	493	8000S	7	18.0	0.2	0.0 +	0.0 (0.5)	0 (0.0)	0	0.5
5010	930	3929S	24	3.0	0.6	0.0 +	0.2 (2.2)	1 (0.2)	0	2.4
5011BL	28	5010L	24	3.6	0.6	0.0 +	0.0 (0.1)	1 (0.0)	0	0.1
6010	235	715	42	18.0	5.6	0.0 +	0.4 (5.2)	0 (0.0)	0	5.2
6011	808	1618S	52	18.0	2.3	0.0 +	0.5 (7.3)	3 (0.5)	1	7.8
6012BL	28	6011L	52	22.5	2.3	0.0 +	0.0 (0.3)	3 (0.0)	1	0.3
6020	695	1800S	40	18.0	1.7	0.0 +	0.3 (4.6)	2 (0.3)	0	4.9
6021BL	28	6020L	40	22.5	1.7	0.0 +	0.0 (0.2)	2 (0.0)	0	0.2
6098BL	28	6099L	10	64.8	0.3	0.0 +	0.0 (0.0)	0 (0.0)	0	0.0
6099	808	8000S	10	18.0	0.3	0.0 +	0.1 (0.8)	0 (0.1)	0	0.9
7010	789<	2055	38	8.0	1.4	0.0 +	0.3 (4.4)	2 (0.2)	0	4.6
7011BL	50	1915	3	8.0	1.0	0.0 +	0.0 (0.2)	1 (0.0)	0	0.2
-4200	10	1800	10	10.0	55.0	0.1 +	0.1 (2.2)	120 (0.0)	0	2.2

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

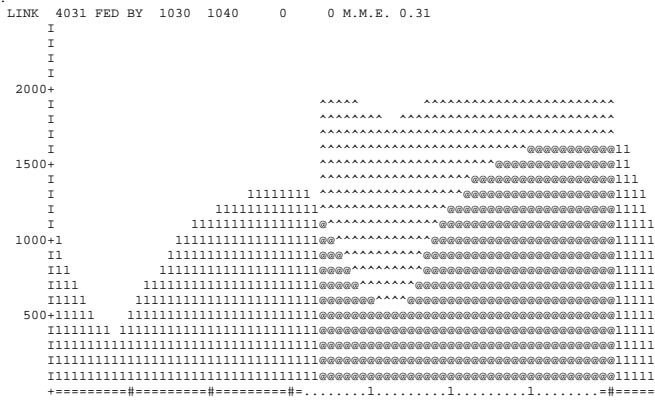
TOTAL DISTANCE TRAVELLED (PCU-KM/H)	TOTAL TIME SPENT (PCU-H/H)	MEAN JOURNEY SPEED (KM/H)	TOTAL UNIFORM DELAY (PCU-H/H)	TOTAL RANDOM+ OVERSAT DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)	
3716.2	340.2	10.9	54.0	188.1	(3437.1) + (203.3)	+ (9129.3)	=	12769.6	TOTALS
96.7	7.6	12.7	1.2	2.1	(45.6) + (0.9)	+ (9129.3)	=	9175.8	BUSES
3619.5	332.5	10.9	52.8	186.0	(3391.4) + (202.3)	+ (0.0)	=	3593.8	OTHER

1173.2	148.3	7.9	13.0	103.9	(1660.5) + (71.2)	+ (0.0)	=	1731.7	ROUTE 1
1037.5	82.0	12.7	19.5	35.5	(781.3) + (64.2)	+ (0.0)	=	845.4	ROUTE 2

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	211.2	278.6	92.8	582.7

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 62

CYCLIC FLOW PROFILE GRAPHS



PROGRAM TRANSYT FINISHED

PRT

PRT File PM Peak : 2011 Flow 1700-1800

1 TRANSYT 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:- "WEST HENDON A5_DOMIN_PM.DAT" at 16:44 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 61
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13827 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD
NO.   TYPE   TIME   NO. OF   TIME EFFECTIVE-GREEN   EQUISAT 0=UNEQUAL FLOW   CRUISE-SPEEDS   OPTIMISE   EXTRA   HILL-   DELAY   STOP
      TYPE   CYCLE  STEPS   PERIOD DISPLACEMENTS   SETTINGS CYCLE SCALE   SCALE   CARD32  0=NONE   COPIES   CLIMB   VALUE   VALUE
      (SEC)  CYCLE  MINS.   (SEC)   (SEC)   0=NO  1=YES  CYCLE  %   %   0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
      75    75    60     2       3       0     1    100  100  0=FULL  2=FULL  OUTPUT  1=FULL  PCU-H  100
2)=   1
      (SEC)  CYCLE  MINS.   (SEC)   (SEC)   3     0     1    100  100  0     0     0     0     1420  260
CARD  CARD
NO.   TYPE
3)=   2     40     41     34     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   2011  2012    0    0    0    0    0    0    0    0    0    0    0    0    0
5)=   7   2030  2031    0    0    0    0    0    0    0    0    0    0    0    0    0
6)=   7   2098  2097    0    0    0    0    0    0    0    0    0    0    0    0    0
7)=   7   3411  3412    0    0    0    0    0    0    0    0    0    0    0    0    0
8)=   7   4012  4011    0    0    0    0    0    0    0    0    0    0    0    0    0
9)=   7   4031  4032    0    0    0    0    0    0    0    0    0    0    0    0    0
10)=  7   4097  4098    0    0    0    0    0    0    0    0    0    0    0    0    0
11)=  7   4199  4198    0    0    0    0    0    0    0    0    0    0    0    0    0
12)=  7   5010  5011    0    0    0    0    0    0    0    0    0    0    0    0    0
13)=  7   6011  6012    0    0    0    0    0    0    0    0    0    0    0    0    0
14)=  7   6020  6021    0    0    0    0    0    0    0    0    0    0    0    0    0
15)=  7   6099  6098    0    0    0    0    0    0    0    0    0    0    0    0    0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD   NODE
NO.   TYPE   NO.
16)=  10   34       7    1    5
17)=  10   40       7   12
18)=  10   41      12   12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD   NODE
NO.   TYPE   NO.
19)=  11   34       8   12   12
20)=  11   40      15    6
21)=  11   41      18   11
    
```

NODE CARDS: STAGE CHANGE TIMES (WORKING)

```

CARD  CARD   NODE   Sg1/Dbl
NO.   TYPE   NO.   Cycled
22)=  12   34     1    40    5    21
23)=  12   40     1    45   22
24)=  12   41     1     0   40
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD   LINK   PRIORITY LINKS   LINK1 GIVEWAY COEFFS.
NO.   TYPE   NO.   NO.   NO.   % FLOW   X100   X100
25)=  30   1040   1030     0     0     22    0    0    0    0    0
26)=  30   2010   2030     0     0     50    0    0    0    0    0
27)=  30   2040   2030   2011     0     22   19    0    0    0    0    0
28)=  30   2041   2030     0     0     22    0    0    0    0    0
29)=  30   4030     0   4010     4     0    50    0    0    0    0    0
30)=  30   6010   6020     0     0     22    0    0    0    0    0    200    0    715    0    0
    
```

LINK CARDS: FIXED DATA

FIRST GREEN SECOND GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)	31	4010	40	1	15	2	0	0	0	0	0	200	0	1949	0	0
57)	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)	31	4030	40	1	5	2	1	0	0	0	0	45	0	1774	0	0
62)	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)	31	4110	41	1	12	2	0	0	0	0	0	56	0	1919	0	0
68)	31	4111	41	1	16	2	0	0	0	0	0	56	0	2040	0	0
69)	31	4120	41	2	11	1	0	0	0	0	0	200	0	1959	0	0
70)	31	4121	41	2	11	1	0	0	0	0	0	200	0	1773	0	0
71)	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)	31	4150	41	2	11	1	0	0	0	0	0	12	0	10000	0	0
74)	31	4151	41	1	12	2	0	0	0	0	0	11	0	10000	0	0
75)	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
78)	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
79)	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
80)	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
81)	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
82)	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
83)	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
85)	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
86)	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
87)	32	1010	1142	0	4010	1073	15	4021	69	15	0	0	0	0	0	0
88)	32	1011	25	0	4011	25	3200	0	0	0	0	0	0	0	0	0
89)	32	1030	1066	0	3430	743	19	3443	323	19	0	0	0	0	0	0
90)	32	1031	25	0	3431	25	3200	0	0	0	0	0	0	0	0	0
91)	32	1040	151	0	0	0	20	0	0	0	0	0	0	0	0	0
92)	32	1099	10	0	1030	10	18	0	0	0	0	0	0	0	0	0
93)	32	2010	66	0	2011	66	3	0	0	0	0	0	0	0	0	0
94)	32	2011	1283	0	4110	884	23	4121	399	18	0	0	0	0	0	0
95)	32	2012	53	0	4111	53	3200	0	0	0	0	0	0	0	0	0
96)	32	2030	1298	0	0	0	18	0	0	0	0	0	0	0	0	0
97)	32	2031	53	0	0	0	3200	0	0	0	0	0	0	0	0	0
98)	32	2040	55	0	0	0	18	0	0	0	0	0	0	0	0	0
99)	32	2041	31	0	0	0	18	0	0	0	0	0	0	0	0	0
100)	32	2097	53	0	2012	53	3200	0	0	0	0	0	0	0	0	0
101)	32	2098	1272	0	2011	1217	18	2040	55	18	0	0	0	0	0	0
102)	32	2099	484	0	2010	66	18	2030	418	18	0	0	0	0	0	0
103)	32	3010	911	0	2030	880	17	2041	31	17	0	0	0	0	0	0
104)	32	3011	53	0	2031	53	3200	0	0	0	0	0	0	0	0	0
105)	32	3410	884	0	1010	884	6	0	0	0	0	0	0	0	0	0
106)	32	3411	258	0	1010	258	6	0	0	0	0	0	0	0	0	0
107)	32	3412	25	0	1011	25	3219	0	0	0	0	0	0	0	0	0
108)	32	3430	743	0	4130	743	11	0	0	0	0	0	0	0	0	0
109)	32	3431	25	0	4131	25	3200	0	0	0	0	0	0	0	0	0
110)	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
111)	32	3442	527	0	5010	527	7	0	0	0	0	0	0	0	0	0
112)	32	3443	323	0	5010	323	19	0	0	0	0	0	0	0	0	0
113)	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
114)	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)	32	3499	785	0	3411	258	18	3442	527	18	0	0	0	0	0	0
116)	32	4010	1073	0	0	0	18	0	0	0	0	0	0	0	0	0
117)	32	4011	25	0	0	0	3200	0	0	0	0	0	0	0	0	0
118)	32	4012	386	0	0	0	18	0	0	0	0	0	0	0	0	0
119)	32	4020	224	0	0	0	20	0	0	0	0	0	0	0	0	0
120)	32	4021	69	0	0	0	18	0	0	0	0	0	0	0	0	0
121)	32	4030	251	0	1030	251	5	0	0	0	0	0	0	0	0	0
122)	32	4031	956	0	1030	805	5	1040	151	4	0	0	0	0	0	0
123)	32	4032	25	0	1031	25	3210	0	0	0	0	0	0	0	0	0
124)	32	4097	1190	0	4020	224	18	4030	10	18	4031	956	18	0	0	0
125)	32	4098	25	0	4032	25	3200	0	0	0	0	0	0	0	0	0
126)	32	4099	627	0	4012	386	18	4030	241	18	0	0	0	0	0	0
127)	32	4110	884	0	7010	884	8	0	0	0	0	0	0	0	0	0
128)	32	4111	53	0	7011	53	3216	0	0	0	0	0	0	0	0	0
129)	32	4120	278	0	0	0	20	0	0	0	0	0	0	0	0	0
130)	32	4121	399	0	0	0	18	0	0	0	0	0	0	0	0	0
131)	32	4130	91													

147)= 32 7011 53 0 3412 25 3200 3440 28 3200 0 0 0 0 0 0

LINK CARDS : FLARE SATURATION FLOW DATA

		..LANE 1..			..LANE 2..			..LANE 3..		
CARD	LINK	SAT.	CAPAC.	SAT.	CAPAC.	SAT.	CAPAC.	SAT.	CAPAC.	
TYPE	NO.	FLOW	VEH.	FLOW	VEH.	FLOW	VEH.	FLOW	VEH.	
148)=	33	4110	2040	4	0	0	0	0	0	
149)=	33	4130	1696	3	0	0	0	0	0	

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
150)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0
151)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0
152)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0
153)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0
154)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0
155)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0
156)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0
157)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0
158)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0

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

75 SECOND CYCLE 75 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
34	3	40	5	21							
40	2	45	22								
41	2	0	40								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY----- UNIFORM OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY (\$/H)	----STOPS---- MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	----QUEUE---- MEAN MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
1010	1056<	2055	51	15.0	1.8	0.0 + 0.5 (7.5)	2 (0.4)	1 (0.0)	7.9					
1011BL	25	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1					
1030	1067	2055	52	19.0	1.8	0.0 + 0.5 (7.7)	2 (0.4)	1 (0.0)	8.0					
1031BL	25	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1					
1040	151	715	31	20.0	5.5	0.0 + 0.2 (3.3)	0 (0.0)	0 (0.0)	3.3					
1099	11	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
2010	63	1000	19	3.0	6.9	0.0 + 0.1 (1.7)	0 (0.0)	0 (0.0)	1.7					
2011	1217<	2115S	60	21.4	2.9	0.3 + 0.7 (13.8)	28 (7.9)	15 (0.0)	25.3					
2012BL	53	2011L	60	29.3	3.6	0.0 + 0.0 (0.8)	56 (0.4)	15 (0.0)	4.7					
2030	1298	3786S	36	18.0	0.7	0.0 + 0.3 (3.8)	1 (0.3)	0 (0.0)	4.1					
2031BL	53	2030L	36	22.5	0.7	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2					
2040	55	600	57	18.0	52.9	0.2 + 0.6 (11.5)	124 (1.4)	2 (0.0)	12.9					
2041	31	715	7	18.0	4.7	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6					
2097BL	53	2098L	16	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0 (0.0)	0.1					
2098	1208<	8000S	16	18.0	0.3	0.0 + 0.1 (1.3)	0 (0.1)	0 (0.0)	1.4					
2099	481	8000	6	18.0	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0 (0.0)	0.5					
3010	911	2075	44	17.0	1.5	0.0 + 0.4 (5.6)	2 (0.4)	0 (0.0)	5.9					
3011BL	53	1945	3	20.8	1.0	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2					
3410	818<	1910	97	6.0	76.4	7.6 + 9.7 (246.5)	137 (20.6)	26 +	267.2		34	48	5	
3411	239<	1993S	30	6.0	26.0	1.5 + 0.2 (24.5)	91 (4.0)	5	28.5		34	48	5	
3412BL	25	3411L	30	35.0	21.1	0.1 + 0.0 (2.1)	85 (0.0)	5	2.1		34	48	5	
3430	743	1972	81	11.0	33.6	4.9 + 2.1 (98.6)	113 (16.0)	18	114.6		34	46	5	
3431BL	25	1915	3	12.9	14.8	0.1 + 0.0 (1.5)	92 (0.3)	0 (0.0)	1.8		34	46	5	
3440BL	28	1665	16	9.0	42.5	0.2 + 0.1 (4.7)	104 (0.4)	1	5.1		34	33	40	
3442	528	1787	92	7.0	57.9	3.6 + 4.9 (120.6)	132 (16.4)	15 +	136.9		34	17	40	
3443	323	1577	64	19.0	31.7	2.0 + 0.9 (40.4)	97 (1.0)	7	41.4		34	17	40	
3450	50	10000	4	10.0	31.0	0.4 + 0.0 (6.1)	90 (0.0)	1	6.1		34	13	21	
3451	50	10000	1	10.0	12.5	0.2 + 0.0 (2.5)	56 (0.0)	1	2.5		34	48	5	
3499	766<	8000	10	18.0	0.2	0.0 + 0.1 (0.8)	0 (0.1)	0 (0.0)	0.8					
4010	1073	1949	109	18.0	186.1	7.2 + 48.3 (787.7)	224 (50.9)	72 +	838.6		40	60	22	
4011BL	25	4012L	38	22.5	9.0	0.0 + 0.0 (0.9)	47 (0.2)	4	1.1		40	50	22	
4012	386	1707S	38	18.0	9.0	0.7 + 0.3 (13.8)	47 (3.9)	4	17.6		40	50	22	
4020	224	1754	53	20.0	33.9	1.5 + 0.6 (30.0)	96 (3.7)	5	33.7		40	28	45	
4021	69	1641	18	18.0	28.2	0.4 + 0.1 (7.7)	84 (1.2)	1	8.9		40	28	45	
4030	252	1774	92	5.0	88.6	2.0 + 4.2 (88.0)	163 (5.8)	9 +	93.9		40	50	23	
4031	957	1907S	80	4.8	12.4	1.3 + 2.0 (46.6)	47 (6.5)	10 +	53.1		40	50	22	
4032BL	25	4031L	80	23.8	10.6	0.0 + 0.1 (1.0)	25 (0.0)	10 (0.2)	17.4		40	50	22	
4097	1192	8000S	15	18.0	0.3	0.0 + 0.1 (1.2)	0 (0.1)	0 (0.0)	1.3					
4098BL	25	4097L	15	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
4099	628	8000	8	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6					
4110	818<	2415f	88	8.0	31.5	3.8 + 3.3 (101.8)	110 (8.4)	20 +	110.2		41	12	40	
4111BL	53	2040	8	31.4	18.3	0.2 + 0.0 (3.8)	83 (0.0)	1	3.8		41	16	40	
4120	278	1959	43	20.0	24.2	1.5 + 0.4 (26.6)	81 (3.9)	5	30.4		41	51	0	
4121	399	1773	68	18.0	30.8	2.4 + 1.0 (48.5)	95 (8.0)	8	56.4		41	51	0	
4130	911	2428f	97	5.0	58.9	5.3 + 9.6 (211.7)	138 (18.0)	28 +	229.7		41	12	40	

75 SECOND CYCLE 75 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY----- UNIFORM OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	COST OF DELAY (\$/H)	----STOPS---- MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	----QUEUE---- MEAN MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
4131BL	53	1696	10	31.8	22.5	0.3 + 0.1 (4.7)	76 (0.0)	1	4.7		41	18	40	
4150	50	10000	2	10.0	17.5	0.2 + 0.0 (3.5)	67 (0.0)	1	3.5		41	51	0	
4151	50	10000	1	10.0	14.9	0.2 + 0.0 (2.9)	62 (0.0)	1	2.9		41	12	40	
4198BL	28	4199L	6	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
4199	446	8000S	6	18.0	0.2	0.0 + 0.0 (0.4)	0 (0.0)	0 (0.0)	0.5					
5010	851	3929S	22	3.0	0.6	0.0 + 0.1 (2.0)	1 (0.1)	0 (0.0)	2.1					
5011BL	28	5010L	22	3.6	0.6	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1					
6010	249	715	43	18.0	5.5	0.0 + 0.4 (5.4)	0 (0.0)	0 (0.0)	5.4					
6011	674	1618S	43	18.0	2.0	0.0 + 0.4 (5.2)	3 (0.4)	0 (0.0)	5.6					
6012BL	28	6011L	43	22.5	2.0	0.0 + 0.0 (0.2)	3 (0.0)	0 (0.0)	0.2					
6020	600	1800S	35	18.0	1.5	0.0 + 0.3 (3.6)	2 (0.3)	0 (0.0)	3.9					
6021BL	28	6020L	35	22.5	1.5	0.0 + 0.0 (0.2)	2 (0.0)	0 (0.0)	0.2					
6098BL	28	6099L	9	64.8	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
6099	674	8000S	9	18.0	0.2	0.0 + 0.0 (0.7)	0 (0.0)	0 (0.0)	0.7					
7010	818<	2055	40	8.0	1.5	0.0 + 0.3 (4.7)	2 (0.2)	0 (0.0)	4.9					
7011BL	53	1915	3	8.0	1.0	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2					

*** 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)	TOTALS
3596.2	238.8	15.1	48.3	93.3	(2010.3) + (181.8)	+ (23.5)	=	2215.6	TOTALS

102.6	6.1	16.8	1.0	0.4	(20.8)	+	(1.5)	+	(19.9)	=	42.2	BUSES
3493.6	232.7	15.0	47.2	92.9	(1989.5)	+	(180.3)	+	(3.6)	=	2173.4	OTHER

ROUTE

	CRUISE	DELAY	STOPS	TOTALS			
	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	205.7	+	162.9	+	83.1	=	451.6

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 61

PROGRAM TRANSYT FINISHED

PRT

PRT File Sat Peak : 2011 Flow 1200-1300

1 TRANSYT 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:- "WEST HENDON A5_DOMIN_SAT.DAT" at 16:44 on 20130312

TRANST 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 66
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13521 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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  MINS.  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
      (SEC)  MINS.  (SEC)  3      0      1      100  100  0  0  0  0  1420  260
2)= 1  66  66  60  2  0  0  0  0  0  0  0  0  0  0  0
CARD  CARD
NO.   TYPE
3)= 2  40  41  34  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  2011  2012  0  0  0  0  0  0  0  0  0  0  0  0  0
5)= 7  2030  2031  0  0  0  0  0  0  0  0  0  0  0  0
6)= 7  2098  2097  0  0  0  0  0  0  0  0  0  0  0  0
7)= 7  3411  3412  0  0  0  0  0  0  0  0  0  0  0  0
8)= 7  4012  4011  0  0  0  0  0  0  0  0  0  0  0  0
9)= 7  4031  4032  0  0  0  0  0  0  0  0  0  0  0  0
10)= 7  4097  4098  0  0  0  0  0  0  0  0  0  0  0  0
11)= 7  4111  4200  0  0  0  0  0  0  0  0  0  0  0  0
12)= 7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0
13)= 7  4198  4198  0  0  0  0  0  0  0  0  0  0  0  0
14)= 7  5010  5011  0  0  0  0  0  0  0  0  0  0  0  0
15)= 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0
16)= 7  6020  6021  0  0  0  0  0  0  0  0  0  0  0  0
17)= 7  6099  6098  0  0  0  0  0  0  0  0  0  0  0  0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
18)= 10  34  7  1  5
19)= 10  40  7  7
20)= 10  41  12  6  12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
21)= 11  34  8  12  12
22)= 11  40  5  6
23)= 11  41  12  0  11
    
```

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
24)= 12  34  1  12  45  58
25)= 12  40  1  26  4
26)= 12  41  1  0  26  43
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY  LINKS  LINK1  LINK2  LINK1  GIVEWAY  COEFFS.
NO.   TYPE  NO.   LINK1  LINK2  ONLY  A1  A2
      (NO.) (NO.)  % FLOW  X100  X100
27)= 30  1040  1030  0  0  22  0  0  0  0  0  0  0  0  0
28)= 30  2010  2030  0  0  50  0  0  0  0  0  0  0  0  0
29)= 30  2040  2030  2011  0  22  19  0  0  0  0  0  0  0  0
30)= 30  2041  2030  0  0  22  0  0  0  0  0  0  0  0  0
31)= 30  4030  0  4010  37  0  50  0  0  0  0  0  0  0  0
32)= 30  6010  6020  0  0  22  0  0  0  0  0  0  0  0  0
    
```


147)=	32	6012	24	0	0	0	3200	0	0	0	0	0	0	0	0	0	0
148)=	32	6020	480	0	0	0	18	0	0	0	0	0	0	0	0	0	0
149)=	32	6021	28	0	0	0	3200	0	0	0	0	0	0	0	0	0	0
150)=	32	6098	24	0	6012	24	3233	0	0	0	0	0	0	0	0	0	0
151)=	32	6099	590	0	6011	590	18	0	0	0	0	0	0	0	0	0	0
152)=	32	7010	932	0	3410	932	8	0	0	0	0	0	0	0	0	0	0
153)=	32	7011	50	0	3412	22	3200	3440	28	3200	0	0	0	0	0	0	0

GRAPH PLOT CARDS

CARD	CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
154)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD	CARD	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE
NO.	TYPE	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT
155)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD	CARD	ROUTE	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NUMBER	DESCRIPTION	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
162)=	41	1	Southbound													
163)=	41	2	Northbound													
CARD	CARD	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO	TYPE	NUMBER	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
164)=	42	1	2030	3010	4130	3430	1030	4031	4097							
165)=	42	2	4010	1010	3410	7010	4110	2011	2098							

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

66 SECOND CYCLE 66 STEPS

INITIAL SETTINGS

- (SECONDS)

NODE	NUMBER	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE
NO	OF STAGES	1	2	3	4	5	6	7	8	9	10						
34	3	12	45	58													
40	2	26	4														
41	3	0	26	43													
LINK	FLOW	SAT	DEGREE	MEAN	PER	MEAN	PER	MEAN	PER	MEAN	PER	MEAN	PER	MEAN	PER	MEAN	PER
NUMBER	INTO	FLOW	OF	TIMES	PCU	TIMES	PCU	TIMES	PCU	TIMES	PCU	TIMES	PCU	TIMES	PCU	TIMES	PCU
	LINK		SAT	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)
1010	1079	2055	52	15.0	1.8	0.0	+ 0.6	(7.8)	3	(0.4)							
1011LBL	22	1915	1	15.2	1.0	0.0	+ 0.0	(0.1)	1	(0.0)							
1030	1047<	2055	51	19.0	1.8	0.0	+ 0.5	(7.4)	3	(0.4)							
1031LBL	22	1915	1	48.4	1.0	0.0	+ 0.0	(0.1)	1	(0.0)							
1040	109	715	22	20.0	4.8	0.0	+ 0.1	(2.1)	0	(0.0)							
1099	8	8000	0	18.0	0.2	0.0	+ 0.0	(0.0)	0	(0.0)							
2010	48	1000	15	3.0	6.7	0.0	+ 0.1	(1.3)	0	(0.0)							
2011	1091<	2115S	54	21.7	1.8	0.0	+ 0.6	(7.9)	2	(0.7)							
2012LBL	50	2011L	54	68.5	1.8	0.0	+ 0.0	(0.4)	3	(0.0)							
2030	1316	3786S	36	18.0	0.7	0.0	+ 0.3	(3.9)	1	(0.3)							
2031LBL	50	2030L	36	22.5	0.7	0.0	+ 0.0	(0.1)	1	(0.0)							
2040	33	600	37	18.0	34.5	0.0	+ 0.3	(4.5)	112	(0.8)							
2041	17	715	4	18.0	4.5	0.0	+ 0.0	(0.3)	0	(0.0)							
2097LBL	50	2098L	14	22.5	0.3	0.0	+ 0.0	(0.1)	0	(0.0)							
2098	1076<	8000S	14	18.0	0.3	0.0	+ 0.1	(1.1)	0	(0.1)							
2099	577	8000	7	18.0	0.2	0.0	+ 0.0	(0.6)	0	(0.0)							
3010	804	2075	39	17.0	1.4	0.0	+ 0.3	(4.5)	2	(0.4)							
3011LBL	50	1945	3	20.8	0.9	0.0	+ 0.0	(0.2)	1	(0.0)							
3410	932	1910	124	6.0	388.0	8.1	+ 92.3	(999.9)	267	(42.5)							
3411	198	1993S	28	6.0	19.8	0.9	+ 0.2	(15.4)	92	(3.1)							
3412LBL	22	3411L	28	36.0	14.3	0.1	+ 0.0	(1.2)	71	(0.0)							
3430	665<	1972	80	11.0	12.6	0.4	+ 1.9	(33.1)	62	(8.6)							
3431LBL	22	1915	3	12.9	2.3	0.0	+ 0.0	(0.2)	4	(0.0)							
3440LBL	28	1665	12	9.0	34.1	0.2	+ 0.1	(3.8)	98	(0.4)							
3442	385	1787	65	7.0	27.1	2.0	+ 0.9	(41.2)	93	(8.4)							
3443	381	1577	73	7.0	31.6	2.1	+ 1.3	(47.6)	101	(9.0)							
3450	50	10000	6	10.0	29.8	0.4	+ 0.0	(5.9)	94	(0.0)							
3451	50	10000	1	10.0	12.9	0.2	+ 0.0	(2.5)	61	(0.0)							
3499	583	8000	7	12.7	0.2	0.0	+ 0.0	(0.6)	0	(0.0)							
4010	1045	1949	88	18.0	23.6	3.2	+ 3.6	(97.2)	96	(21.3)							
4011LBL	22	4012L	21	22.5	8.1	0.0	+ 0.0	(0.7)	45	(0.1)							
4012	191	1707S	21	18.0	8.1	0.3	+ 0.1	(6.1)	45	(1.8)							
4020	242	1754	54	20.0	29.6	1.4	+ 0.6	(28.3)	95	(3.9)							
4021	81	1641	19	18.0	24.4	0.4	+ 0.1	(7.8)	83	(1.4)							
4030	149	1774	66	5.0	43.2	0.8	+ 1.0	(25.4)	120	(2.7)							
4031	996<	1907S	88	4.9	19.4	1.9	+ 3.5	(76.1)	64	(9.6)							
4032LBL	22	4031L	88	5.1	24.2	0.1	+ 0.1	(2.1)	84	(0.3)							
4097	1238<	8000S	16	18.0	0.3	0.0	+ 0.1	(1.3)	0	(0.1)							
4098LBL	22	4097L	16	22.5	0.3	0.0	+ 0.0	(0.0)	0	(0.0)							
4099	340	8000	4	18.0	0.2	0.0	+ 0.0	(0.3)	0	(0.0)							
4110	665<	1919	71	7.0	29.3	4.2	+ 1.2	(76.9)	64	(5.8)							
4111LBL	50	2040S	14	45.4	13.8	0.2	+ 0.0	(2.7)	65	(0.0)							
4120	266	1959	69	20.0	39.4	1.8	+ 1.1	(41.3)	111	(5.0)							
4121	339	1773	97	18.0	100.6	2.5	+ 7.0	(134.6)	182	(13.0)							
4130	532	2056	114	5.0	275.8	4.6	+ 36.2	(578.8)	257	(19.5)							

66 SECOND CYCLE 66 STEPS

LINK	FLOW	SAT	DEGREE	MEAN	PER	MEAN	PER	MEAN	PER	MEAN	PER	MEAN	PER	MEAN	PER	MEAN	PER
NUMBER	INTO	FLOW	OF	TIMES	PCU	TIMES	PCU	TIMES	PCU	TIMES	PCU	TIMES	PCU	TIMES	PCU	TIMES	PCU
	LINK		SAT	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE	CRUISE
	(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)	(SEC)
4131LBL	50	1696S	83	31.8	50.6	0.3	+ 0.4	(10.0)	130	(0.0)							
4132	272	4131L	83	5.0	50.6	1.8	+ 2.0	(54.3)	130	(5.0)							
4150	50	10000	3	10.0	22.6	0.3	+ 0.0	(4.5)	81	(0.0)							
4151	50	10000	1	10.0	9.4	0.1	+ 0.0	(1.9)	52	(0.0)							
4198LBL	28	4199L	5	22.5	0.2	0.0	+ 0.0	(0.0)	0	(0.0)							
4199	340	8000S	5	18.0	0.2	0.0	+ 0.0	(0.3)	0	(0.0)							
4200	87<	4111L	14	7.0	20.1	0.4	+ 0.1	(6.9)	58	(0.7)							
5010	766	3929S	20	3.0	0.6	0.0	+ 0.1	(1.7)	1	(0.1)							
5011LBL	28	5010L	20	3.6	0.6	0.0	+ 0.0	(0.1)	1	(0.0)							

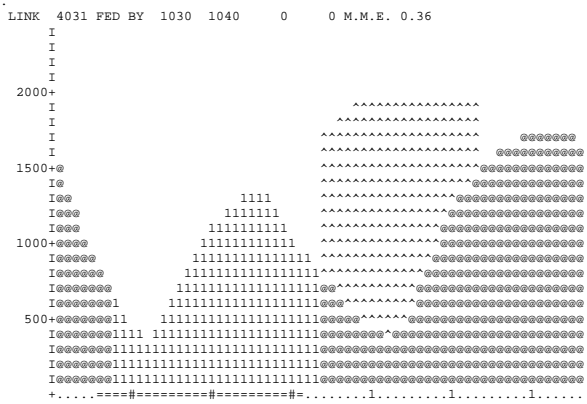
6010	286	715	47	18.0	5.7	0.0	0.4	(6.4)	0	(0.0)	0	6.4
6011	590	1618S	38	18.0	1.8	0.0	0.3	(4.2)	3	(0.3)	0	4.5
6012BL	24	6011L	38	22.5	1.8	0.0	0.0	(0.2)	3	(0.0)	0	0.2
6020	480	1800S	28	18.0	1.4	0.0	0.2	(2.6)	2	(0.2)	0	2.9
6021BL	28	6020L	28	22.5	1.4	0.0	0.0	(0.2)	2	(0.0)	0	0.2
6098BL	24	6099L	8	64.8	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0
6099	590	8000S	8	18.0	0.2	0.0	0.0	(0.6)	0	(0.0)	0	0.6
7010	752<	2055	37	8.0	1.4	0.0	0.3	(4.1)	2	(0.2)	0	4.3
7011BL	50	1915	3	8.0	1.0	0.0	0.0	(0.2)	1	(0.0)	0	0.2
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+ DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	TOTAL PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)			TOTALS	
3358.4	286.8	11.7	38.8	158.2	(2797.6)	+ (166.7)	+ (119.5)	=	3083.9	BUSES		
95.1	6.6	14.3	0.9	0.7	(22.3)	+ (1.0)	+ (119.5)	=	142.7	OTHER		
3263.2	280.2	11.6	38.0	157.5	(2775.4)	+ (165.8)	+ (0.0)	=	2941.1			

1014.8	76.8	13.2	6.9	42.7	(705.1)	+ (38.8)	+ (0.0)	=	743.9	ROUTE 1		
1103.0	143.0	7.7	15.5	98.7	(1621.4)	+ (71.0)	+ (0.0)	=	1692.4	ROUTE 2		

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	191.1	+ 226.6	+ 76.6	= 494.4

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 63

CYCLIC FLOW PROFILE GRAPHS



PROGRAM TRANSYT FINISHED

PRT

PRT File

AM Peak : 2011 Flow + Committed + Full Dev 0800-0900

1 TRANSYT 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:- "WEST HENDON A5_FULL_DEV_AM.DAT" at 16:46 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 5
NUMBER OF LINKS           = 86
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 = 19076 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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  MINS.  (SEC)  (SEC)  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
              (SEC)  MINS.  (SEC)  (SEC)  3  0  1  100  100  1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
              (SEC)  MINS.  (SEC)  (SEC)  3  0  1  100  100  0  2  0  0  1420  260
CARD  CARD
NO.   TYPE
3)= 2  40  41  34  1  5  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  110  111  0  0  0  0  0  0  0  0  0  0  0  0  0
5)= 7  130  131  0  0  0  0  0  0  0  0  0  0  0  0  0
6)= 7  210  211  0  0  0  0  0  0  0  0  0  0  0  0  0
7)= 7  330  331  0  0  0  0  0  0  0  0  0  0  0  0  0
8)= 7  430  431  0  0  0  0  0  0  0  0  0  0  0  0  0
9)= 7  510  511  0  0  0  0  0  0  0  0  0  0  0  0  0
10)= 7  530  531  0  0  0  0  0  0  0  0  0  0  0  0  0
11)= 7  610  611  0  0  0  0  0  0  0  0  0  0  0  0  0
12)= 7  630  631  0  0  0  0  0  0  0  0  0  0  0  0  0
13)= 7  1031  1032  0  0  0  0  0  0  0  0  0  0  0  0  0
14)= 7  2011  2012  0  0  0  0  0  0  0  0  0  0  0  0  0
15)= 7  2030  2031  0  0  0  0  0  0  0  0  0  0  0  0  0
16)= 7  2098  2097  0  0  0  0  0  0  0  0  0  0  0  0  0
17)= 7  3411  3412  0  0  0  0  0  0  0  0  0  0  0  0  0
18)= 7  3430  3431  0  0  0  0  0  0  0  0  0  0  0  0  0
19)= 7  3442  3440  0  0  0  0  0  0  0  0  0  0  0  0  0
20)= 7  4010  4011  0  0  0  0  0  0  0  0  0  0  0  0  0
21)= 7  4031  4032  0  0  0  0  0  0  0  0  0  0  0  0  0
22)= 7  4097  4098  0  0  0  0  0  0  0  0  0  0  0  0  0
23)= 7  4110  4111  0  0  0  0  0  0  0  0  0  0  0  0  0
24)= 7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0
25)= 7  5010  5011  0  0  0  0  0  0  0  0  0  0  0  0  0
26)= 7  5020  5021  0  0  0  0  0  0  0  0  0  0  0  0  0
27)= 7  6020  6021  0  0  0  0  0  0  0  0  0  0  0  0  0
28)= 7  6030  6031  0  0  0  0  0  0  0  0  0  0  0  0  0
29)= 7  6099  6098  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.
30)= 10  1  7  7
31)= 10  5  7  7
32)= 10  34  6  3  5
33)= 10  40  7  0  7  3
34)= 10  41  7  7  5
    
```

```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
35)= 11  1  15  5
36)= 11  5  13  5
37)= 11  34  8  10  9
38)= 11  40  15  5  5  9
39)= 11  41  11  6  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.
    
```

NO.	TYPE	NO.	Cycled
40)=	12	1	29
41)=	12	5	15
42)=	12	34	21
43)=	12	40	25
44)=	12	41	31

LINK CARDS: GIVEWAY DATA															
CARD	CARD	LINK	LINK1	LINK2	LINK1 ONLY	GIVEWAY COEFFS.		LINK	STOP	MAX	DELAY	DISPSN			
						A1	A2						LENGTH	WT.X100	FLOW	WT.X100
45)=	30	220	210	0	0	22	0	0	0	0	0	0			
46)=	30	340	330	0	0	22	0	0	0	0	0	0			
47)=	30	440	430	0	0	22	0	0	0	0	0	0			
48)=	30	620	610	630	50	22	19	0	0	0	0	0			
49)=	30	630	0	610	100	0	35	0	0	0	0	0			
50)=	30	631	0	0	0	0	0	0	0	0	0	0			
51)=	30	1040	1030	0	0	22	0	0	0	0	0	0			
52)=	30	2010	2030	0	0	35	0	0	0	0	0	0			
53)=	30	2040	2030	2011	0	22	19	0	0	0	0	0			
54)=	30	2041	2030	0	0	22	0	0	0	0	0	0			
55)=	30	3410	3430	0	0	50	0	0	0	0	0	0			
56)=	30	4030	4010	0	0	50	0	0	0	0	0	0			
57)=	30	4130	0	4110	96	0	50	0	0	0	0	0			
58)=	30	6010	6020	0	0	22	0	0	0	0	0	0			

LINK CARDS: FIXED DATA																
CARD	CARD	LINK	EXIT	FIRST GREEN				SECOND GREEN				LINK	STOP	SAT	DELAY	DISPSN
				START	LAG	STAGE	END	START	LAG	STAGE	END						LENGTH	WT.X100	FLOW	WT.X100
59)=	31	110	1	1	15	2	0	0	0	0	0	78	0	3940	0	0
60)=	31	111	0	0	0	0	0	0	0	0	0	78	0	0	0	0
61)=	31	130	1	1	15	2	0	0	0	0	0	114	0	4030	0	0
62)=	31	131	0	0	0	0	0	0	0	0	0	114	0	0	0	0
63)=	31	-180	1	2	5	1	0	0	0	0	0	12	0	10000	0	0
64)=	31	210	0	0	0	0	0	0	0	0	0	75	0	3940	0	0
65)=	31	211	0	0	0	0	0	0	0	0	0	75	0	0	0	0
66)=	31	299	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)=	31	330	0	0	0	0	0	0	0	0	0	66	0	4030	0	0
68)=	31	331	0	0	0	0	0	0	0	0	0	66	0	0	0	0
69)=	31	399	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
70)=	31	430	0	0	0	0	0	0	0	0	0	51	0	3960	0	0
71)=	31	431	0	0	0	0	0	0	0	0	0	51	0	0	0	0
72)=	31	510	5	1	13	2	0	0	0	0	0	77	0	3970	0	0
73)=	31	511	0	0	0	0	0	0	0	0	0	77	0	0	0	0
74)=	31	530	5	1	13	2	0	0	0	0	0	61	0	3950	0	0
75)=	31	531	0	0	0	0	0	0	0	0	0	61	0	0	0	0
76)=	31	-580	5	2	5	1	0	0	0	0	0	12	0	10000	0	0
77)=	31	610	0	0	0	0	0	0	0	0	0	67	0	2132	0	0
78)=	31	611	0	0	0	0	0	0	0	0	0	67	0	0	0	0
79)=	31	630	0	0	0	0	0	0	0	0	0	48	0	3995	0	0
80)=	31	631	0	0	0	0	0	0	0	0	0	48	0	0	0	0
81)=	31	699	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
82)=	31	1030	0	0	0	0	0	0	0	0	0	19	0	1833	0	0
83)=	31	1031	0	0	0	0	0	0	0	0	0	19	0	3960	0	0
84)=	31	1032	0	0	0	0	0	0	0	0	0	19	0	0	0	0
85)=	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
86)=	31	2011	0	0	0	0	0	0	0	0	0	57	0	2055	0	0
87)=	31	2012	0	0	0	0	0	0	0	0	0	57	0	0	0	0
88)=	31	2030	0	0	0	0	0	0	0	0	0	200	0	4033	0	0
89)=	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
90)=	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
91)=	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
92)=	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
93)=	31	3410	34	1	7	3	0	0	0	0	0	85	0	1791	0	0
94)=	31	3411	34	1	7	2	0	0	0	0	0	85	0	2055	0	0
95)=	31	3412	0	0	0	0	0	0	0	0	0	85	0	0	0	0
96)=	31	3430	34	1	8	2	3	0	0	0	0	87	0	3704	0	0
97)=	31	3431	0	0	0	0	0	0	0	0	0	87	0	0	0	0
98)=	31	3440	0	0	0	0	0	0	0	0	0	64	0	0	0	0
99)=	31	3442	34	3	7	1	0	0	0	0	0	64	0	3730	0	0
100)=	31	3443	34	2	10	1	0	0	0	0	0	64	0	1641	0	0
101)=	31	3450	34	1	5	2	0	0	0	0	0	6	0	10000	0	0
102)=	31	3451	34	3	9	1	0	0	0	0	0	6	0	10000	0	0
103)=	31	-3460	34	2	8	1	0	0	0	0	0	6	0	10000	0	0
104)=	31	-3461	34	2	8	3	0	0	0	0	0	6	0	10000	0	0
105)=	31	4010	40	1	15	2	0	0	0	0	0	200	0	3804	0	0
106)=	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
107)=	31	4020	40	3	5	4	0	0	0	0	0	200	0	1754	0	0
108)=	31	4030	40	1	15	3	2	0	0	0	0	35	0	1833	0	0
109)=	31	4031	40	1	15	3	0	0	0	0	0	35	0	3960	0	0
110)=	31	4032	0	0	0	0	0	0	0	0	0	35	0	0	0	0
111)=	31	-4080	40	2	5	1	8	0	0	0	0	6	0	10000	0	0
112)=	31	-4081	40	4	9	1	8	0	0	0	0	6	0	10000	0	0
113)=	31	-4082	40	4	5	1	0	0	0	0	0	12	0	10000	0	0
114)=	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
115)=	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
116)=	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
117)=	31	4110	41	1	11	2	0	0	0	0	0	143	0	3922	0	0
118)=	31	4111	0	0	0	0	0	0	0	0	0	143	0	0	0	0
119)=	31	4120	41	2	6	3	0	0	0	0	0	200	0	1657	0	0
120)=	31	4130	41	1	11	2	2	0	0	0	0	62	0	2018	0	0
121)=	31	4131	41	3	5	2	0	0	0	0	0	62	0	1905	0	0
122)=	31	4132	0	0	0	0	0	0	0	0	0	62	0	0	0	0
123)=	31	4150	41	3	5	1	0	0	0	0	0	11	0	10000	0	0
124)=	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
125)=	31	5010	0	0	0	0	0	0	0	0	0	32	0	3910	0	0
126)=	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
127)=	31	5020	0	0	0	0	0	0	0	0	0	64	0	1975	0	0
128)=	31	5021	0	0	0	0	0	0	0	0	0	64	0	0	0	0
129)=	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
130)=	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
131)=	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
132)=	31	6030	0	0	0	0	0	0	0	0	0	32	0	1975	0	0
133)=	31	6031	0	0	0	0	0	0	0	0	0	32	0	0	0	0
134)=	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
135)=	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0

LINK CARDS: FLOW DATA																
CARD	CARD	LINK	TOTAL	UNIFORM	ENTRY 1			ENTRY 2			ENTRY 3			ENTRY 4		
					LINK	NO.	FLOW	LINK	NO.	FLOW	LINK	NO.	FLOW	LINK	NO.	FLOW
136)=	32	110	1082	0	4010	974	8	4020	108	0	0	0	0	0	0	
137)=	32	111	22	0	4011	22	3200	0	0	0	0	0	0	0	0	
138)=	32	130	1295	0	330	1285	12	340	10	18	0	0	0	0	0	
139)=	32	131	22	0	331	22	3200	0	0	0	0	0	0	0	0	
140)=	32	-180	50	0	0	0	10	0	0	0	0	0	0	0	0	
141)=	32	210	1082	0	110	1082	8	0	0	0	0	0	0	0	0	
142)=	32	211	22	0	111	22	3200	0	0	0	0	0	0	0	0	
143)=	32	220	51	0	0	0	18	0	0	0	0	0	0	0	0	
144)=	32	299	37	0	210	37	18	0</								

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE (SEC)	TIMES PCU DELAY (SEC)	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES START END (SECONDS)	
						UNIFORM CRUISE (U+R+O-MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT COST DELAY (\$/H)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			1ST	2ND
110	1082	3940S	41	8.2	1.8	0.2 + 0.3	(7.6)	4	(0.7)	1		8.3	1	44	15
111BL	22	110L	41	8.8	1.1	0.0 + 0.0	(0.1)	1	(0.0)	1		0.1	1	44	15
130	1294	4030S	48	12.0	6.4	1.9 + 0.5	(32.8)	33	(6.8)	11		39.6	1	44	15
131BL	22	130L	48	12.8	1.6	0.0 + 0.0	(0.1)	11	(0.0)	11		0.2	1	44	15
210	1082	3940S	28	8.0	0.6	0.0 + 0.2	(2.7)	1	(0.1)	0	(0.0)*	2.8			
211BL	22	210L	28	8.4	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
220	51	715	11	18.0	5.2	0.0 + 0.1	(1.0)	20	(0.2)	0		1.3			
299	37	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
330	1284	4030S	32	7.5	0.7	0.0 + 0.2	(3.3)	1	(0.1)	0		3.5			
331BL	22	330L	32	7.4	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
340	10	715	2	18.0	4.3	0.0 + 0.0	(0.2)	0	(0.0)	0		0.2			
399	10	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
430	1614	3960S	42	5.3	0.8	0.0 + 0.4	(5.0)	1	(0.1)	0		5.1			
431BL	50	430L	42	5.7	0.8	0.0 + 0.0	(0.2)	1	(0.0)	0		0.2			
440	10	715	3	18.0	5.5	0.0 + 0.0	(0.2)	6	(0.0)	0		0.2			
510	1414	3970S	51	8.1	7.1	2.3 + 0.5	(39.8)	35	(7.9)	13		47.8	5	7	70
511BL	50	510L	51	8.7	8.0	0.1 + 0.0	(1.6)	38	(0.3)	13		1.8	5	7	70
530	1389	3950S	50	6.1	6.4	2.0 + 0.5	(34.9)	42	(1.2)	15		36.0	5	7	70
531BL	50	530L	50	6.9	6.4	0.1 + 0.0	(1.3)	43	(0.3)	15		1.6	5	7	70
610	1414	2132S	69	7.0	7.4	1.9 + 1.1	(41.4)	76	(17.3)	21	+	58.7			
611BL	50	610L	69	7.5	5.0	0.0 + 0.0	(1.0)	60	(0.4)	21	+	1.4			
620	10	658	7	18.0	23.2	0.0 + 0.0	(0.9)	90	(0.2)	0		1.1			
630	1387	3995S	36	5.0	0.7	0.0 + 0.3	(3.9)	0	(0.0)	0		3.9			
631BL	50	630L	36	5.4	0.7	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
699	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
1030	145	1833	8	2.0	1.1	0.0 + 0.0	(0.6)	1	(0.0)	0		0.6			
1031	1150	3960S	30	2.0	0.6	0.0 + 0.2	(2.9)	1	(0.1)	0	(0.0)*	3.1			
1032BL	22	1031L	30	2.1	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
1040	54	715	8	20.0	2.9	0.0 + 0.0	(0.6)	0	(0.0)	0		0.6			
1099	9	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
2010	73	850	25	3.0	8.3	0.0 + 0.2	(2.4)	0	(0.0)	0	(0.0)*	2.4			
2011	1413	2055S	71	6.0	3.2	0.1 + 1.2	(18.1)	14	(3.3)	16	+	21.4			
2012BL	50	2011L	71	6.4	3.1	0.0 + 0.0	(0.6)	7	(0.1)	16	(0.3)*	32.5			
2030	1549	4033S	40	18.0	0.7	0.0 + 0.3	(4.5)	1	(0.3)	0		4.8			
2031BL	50	2030L	40	22.5	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.2			
2040	36	600	59	18.0	83.8	0.1 + 0.7	(11.9)	191	(1.5)	1		13.4			
2041	18	715	5	18.0	5.2	0.0 + 0.0	(0.4)	0	(0.0)	0		0.4			
2097BL	50	2098L	18	22.5	0.3	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
2098	1376	8000S	18	18.0	0.3	0.0 + 0.1	(1.5)	0	(0.1)	0		1.6			
2099	253	8000	3	18.0	0.2	0.0 + 0.0	(0.2)	0	(0.0)	0		0.2			
3410	158	1791	68	9.0	35.8	0.6 + 1.0	(22.3)	102	(2.5)	4		24.8	34	28	0
3411	936	2430Sf	72	9.1	27.6	5.9 + 1.3	(102.0)	75	(10.6)	17	+	112.7	34	28	75
3412BL	22	3411L	72	38.8	28.9	0.1 + 0.0	(2.5)	98	(0.3)	17	+	2.8	34	28	75

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE (SEC)	TIMES PCU DELAY (SEC)	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES START END (SECONDS)	
						UNIFORM CRUISE (U+R+O-MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT COST DELAY (\$/H)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			1ST	2ND
3430	1624	3704S	80	9.1	19.9	7.1 + 1.9	(127.3)	72	(19.0)	31	+	146.3	34	29	78
3431BL	50	3430L	80	9.8	14.7	0.1 + 0.1	(2.9)	60	(0.4)	31	+	3.3	34	29	78
3440BL	28	3442L	83	7.2	51.7	0.3 + 0.1	(5.7)	112	(0.4)	15		6.2	34	7	21
3442	502	3730S	83	7.0	51.7	4.9 + 2.3	(102.3)	112	(8.0)	15		110.4	34	7	21
3443	293	1641	63	7.0	37.7	2.2 + 0.8	(43.5)	96	(4.0)	7		47.5	34	85	21
3450	50	10000	1	10.0	8.7	0.1 + 0.0	(1.7)	43	(0.0)	1		1.7	34	26	75
3451	50	10000	3	10.0	33.6	0.4 + 0.0	(6.6)	86	(0.0)	1		6.6	34	9	21
4010	1163	3804S	86	18.0	34.7	8.4 + 2.8	(159.2)	99	(24.4)	30		183.6	40	40	71
4011BL	22	4010L	86	22.5	34.7	0.2 + 0.1	(3.0)	99	(0.3)	30		3.3	40	40	71
4020	627	2782f	94	18.0	67.7	5.5 + 6.3	(167.4)	130	(17.3)	21		184.7	40	81	13
4030	145	1833	84	4.0	85.0	1.2 + 2.2	(48.6)	148	(2.9)	6		51.5	40	40	78
4031	1204	3960S	74	4.0	19.8	5.3 + 1.4	(93.9)	43	(7.0)	14	+	100.9	40	40	76
4032BL	22	4031L	74	38.2	29.1	0.2 + 0.0	(2.5)	89	(0.0)	14	(0.0)*	3.7	40	40	76
4097	1723	8000S	22	18.0	0.3	0.0 + 0.1	(2.0)	0	(0.1)	0		2.1			
4098BL	22	4097L	22	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
4099	333	8000	4	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0		0.3			
4110	1389	3922S	69	15.7	14.6	4.6 + 1.1	(79.8)	84	(18.8)	30		98.5	41	42	0
4111BL	50	4110L	69	25.0	16.0	0.2 + 0.0	(3.1)	73	(0.5)	30		3.7	41	42	0
4120	382	2332f	90	18.0	69.9	3.6 + 3.8	(105.3)	131	(10.6)	13		115.9	41	6	21
4130	306	2018	73	7.0	50.9	3.0 + 1.3	(61.4)	117	(4.8)	9		66.2	41	42	2
4131	1083	1905S	83	7.0	19.7	3.6 + 2.3	(84.1)	101	(14.8)	29	+	98.8	41	26	0
4132BL	50	4131L	83	7.0	19.8	0.2 + 0.1	(3.9)	104	(0.7)	29	+	4.6	41	26	0
4150	50	10000	7	10.0	41.5	0.5 + 0.0	(8.2)	96	(0.0)	1		8.2	41	26	31
4199	131	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
5010	795	3910S	21	3.0	0.6	0.0 + 0.1	(1.8)	1	(0.1)	0		1.9			
5011BL	28	5010L	21	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
5020	840	1975S	44	9.0	1.6	0.0 + 0.4	(5.4)	2	(0.1)	0		5.5			
5021BL	28	5020L	44	7.2	1.6	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6010	35	715	6	18.0	3.6	0.0 + 0.0	(0.5)	0	(0.0)	0		0.5			
6011	74	1618	5	18.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0		0.4			
6020	760	1800S	44	18.0	1.8	0.0 + 0.4	(5.3)	2	(0.3)	0		5.7			
6021BL	28	6020L	44	22.5	1.8	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6030	840	1975S	44	3.0	1.6	0.0 + 0.4	(5.4)	2	(0.3)	0		5.7			
6031BL	28	6030L	44	3.6	1.6	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6098BL	28	6099L	12	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
6099	914	8000S	12	18.0	0.3	0.0 + 0.1	(0.9)	0	(0.1)	0		1.0			
-180	50	10000	4	10.0	36.7	0.5 + 0.0	(7.2)	90	(0.0)	1		7.2	1	20	29
-580	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	5	75	82
-3460	10	10000	0	10.0	22.1	0.1 + 0.0	(0.9)	70	(0.0)	0		0.9	34	83	21
-3461	10	10000	1	10.0	41.3	0.1 + 0.0	(1.6)	96	(0.0)	0		1.6	34	83	0
-4080	10	10000	0	10.0	10.6	0.0 + 0.0	(0.4)	48	(0.0)	0		0.4	40	76	33
-4081	10	10000	1	10.0	34.6	0.1 + 0.0	(1.4)	88	(0.0)	0		1.4	40	22	33
-4082	10	10000	1	10.0	38.8	0.1 + 0.0	(1.5)	93	(0.0)	0		1.5	40	18	25

*** 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)	TOTALS		
3672.9	205.8	17.8	66.8	37.6	(1482.5)	+	(189.6)	+	(33.1)	= 1705.1	TOTALS
88.4	5.4	16.5	1.4	0.7	(29.7)	+	(3.9)	+	(33.1)	= 66.7	BUSES
3584.5	200.5	17.9	65.3	37.0	(1452.8)	+	(185.7)	+	(0.0)	= 1638.4	OTHER

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NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 86

88 SECOND CYCLE 88 STEPS

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

1	2	29	15		
5	2	82	70		
34	3	21	75	0	
40	4	25	71	76	13
41	3	31	0	21	

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)	
3672.9	205.8	17.8	66.8	37.6	(1482.5)	+ (189.6)	+ (33.1)	= 1705.1	TOTALS
88.4	5.4	16.5	1.4	0.7	(29.7)	+ (3.9)	+ (33.1)	= 66.7	BUSES
3584.5	200.5	17.9	65.3	37.0	(1452.8)	+ (185.7)	+ (0.0)	= 1638.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 554

88 SECOND CYCLE 88 STEPS

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

1	2	29	15		
5	2	82	70		
34	3	21	75	0	
40	4	25	71	76	13
41	3	31	0	21	

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)	
3672.9	205.8	17.8	66.8	37.6	(1482.5)	+ (189.6)	+ (33.1)	= 1705.1	TOTALS
88.4	5.4	16.5	1.4	0.7	(29.7)	+ (3.9)	+ (33.1)	= 66.7	BUSES
3584.5	200.5	17.9	65.3	37.0	(1452.8)	+ (185.7)	+ (0.0)	= 1638.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 565

88 SECOND CYCLE 88 STEPS

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

1	2	29	15		
5	2	82	70		
34	3	21	75	0	
40	4	25	71	76	13
41	3	31	0	21	

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)	
3672.9	205.8	17.8	66.8	37.6	(1482.5)	+ (189.6)	+ (33.1)	= 1705.1	TOTALS
88.4	5.4	16.5	1.4	0.7	(29.7)	+ (3.9)	+ (33.1)	= 66.7	BUSES
3584.5	200.5	17.9	65.3	37.0	(1452.8)	+ (185.7)	+ (0.0)	= 1638.4	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 919

88 SECOND CYCLE 88 STEPS

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

1	2	29	15		
5	2	82	70		
34	3	21	75	0	
40	4	25	71	76	13
41	3	31	0	21	

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)	
3672.9	205.8	17.8	66.8	37.6	(1482.5)	+ (189.6)	+ (33.1)	= 1705.1	TOTALS
88.4	5.4	16.5	1.4	0.7	(29.7)	+ (3.9)	+ (33.1)	= 66.7	BUSES
3584.5	200.5	17.9	65.3	37.0	(1452.8)	+ (185.7)	+ (0.0)	= 1638.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 631

88 SECOND CYCLE 88 STEPS

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

1	2	29	15		
5	2	82	70		
34	3	21	75	0	
40	4	25	71	76	13
41	3	31	0	21	

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)	
3672.9	205.8	17.8	66.8	37.6	(1482.5)	+ (189.6)	+ (33.1)	= 1705.1	TOTALS

88.4 5.4 16.5 1.4 0.7 (29.7) + (3.9) + (33.1) = 66.7 BUSES
 3584.5 200.5 17.9 65.3 37.0 (1452.8) + (185.7) + (0.0) = 1638.4 OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 668

88 SECOND CYCLE 88 STEPS

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

1	2	29	15														
5	2	82	70														
34	3	21	75	0													
40	4	25	71	76	13												
41	3	31	0	21													

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)	
3672.9	205.8	17.8	66.8	37.6	(1482.5) + (189.6)	+ (33.1)	=	1705.1	TOTALS
88.4	5.4	16.5	1.4	0.7	(29.7) + (3.9)	+ (33.1)	=	66.7	BUSES
3584.5	200.5	17.9	65.3	37.0	(1452.8) + (185.7)	+ (0.0)	=	1638.4	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 626

88 SECOND CYCLE 88 STEPS

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

1	2	29	15														
5	2	82	70														
34	3	21	75	0													
40	4	25	71	76	13												
41	3	31	0	21													

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)	
3672.9	205.8	17.8	66.8	37.6	(1482.5) + (189.6)	+ (33.1)	=	1705.1	TOTALS
88.4	5.4	16.5	1.4	0.7	(29.7) + (3.9)	+ (33.1)	=	66.7	BUSES
3584.5	200.5	17.9	65.3	37.0	(1452.8) + (185.7)	+ (0.0)	=	1638.4	OTHER

NO. OF ENTRIES TO SUBPT = 23
 NO. OF LINKS RECALCULATED= 1287

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							
1	2	29	15															
5	2	82	70															
34	3	21	75	0														
40	4	25	71	76	13													
41	3	31	0	21														

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN OF SAT	TIMES PER CRUISE	PCU	-----DELAY-----	UNIFORM DELAY	RANDOM+OVERSAT DELAY	COST OF DELAY	----STOPS----	MEAN STOPS	COST OF STOPS	----QUEUE----	MEAN MAX.	AVERAGE EXCESS	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES END	START	END
		(PCU/H)	(PCU/H)	(%)	(SEC)		(U+R+O=MEAN Q)	(PCU-H/H)	(\$/H)	(\$/H)	/PCU (%)	STOPS	(\$/H)	(PCU)	(PCU)	OF () VALUES			1ST	2ND		
110	1082	3940S	41	8.2	1.8		0.2 + 0.3 (7.6)				4 (0.7)			1			8.3	1	44	15		
111BL	22	110L	41	8.8	1.1		0.0 + 0.0 (0.1)				1 (0.0)			1			0.1	1	44	15		
130	1294	4030S	48	12.0	6.4		1.9 + 0.5 (32.8)				33 (6.8)			11			39.6	1	44	15		
131BL	22	130L	48	12.8	1.6		0.0 + 0.0 (0.1)				11 (0.0)			11			0.2	1	44	15		
210	1082	3940S	28	8.0	0.6		0.0 + 0.2 (2.7)				1 (0.1)			0 (0.0)*			2.8					
211BL	22	210L	28	8.4	0.6		0.0 + 0.0 (0.1)				1 (0.0)			0			0.1					
220	51	715	11	18.0	5.2		0.0 + 0.1 (1.0)				20 (0.2)			0			1.3					
299	37	8000	0	18.0	0.2		0.0 + 0.0 (0.0)				0 (0.0)			0			0.0					
330	1284	4030S	32	7.5	0.7		0.0 + 0.2 (3.3)				1 (0.1)			0			3.5					
331BL	22	330L	32	7.4	0.7		0.0 + 0.0 (0.1)				1 (0.0)			0			0.1					
340	10	715	2	18.0	4.3		0.0 + 0.0 (0.2)				0 (0.0)			0			0.2					
399	10	8000	0	18.0	0.2		0.0 + 0.0 (0.0)				0 (0.0)			0			0.0					
430	1614	3960S	42	5.3	0.8		0.0 + 0.4 (5.0)				1 (0.1)			0			5.1					
431BL	50	430L	42	5.7	0.8		0.0 + 0.0 (0.2)				1 (0.0)			0			0.2					
440	10	715	3	18.0	5.5		0.0 + 0.0 (0.2)				6 (0.0)			0			0.2					
510	1414	3970S	51	8.1	7.1		2.3 + 0.5 (39.8)				35 (7.9)			13			47.8	5	7	70		
511BL	50	510L	51	8.7	8.0		0.1 + 0.0 (1.6)				38 (0.3)			13			1.8	5	7	70		
530	1389	3950S	50	6.1	6.4		2.0 + 0.5 (34.9)				42 (1.2)			15			36.0	5	7	70		
531BL	50	530L	50	6.9	6.4		0.1 + 0.0 (1.3)				43 (0.3)			15			1.6	5	7	70		
610	1414	2132S	69	7.0	7.4		1.9 + 1.1 (41.4)				76 (17.3)			21			58.7					
611BL	50	610L	69	7.5	5.0		0.0 + 0.0 (1.0)				60 (0.4)			21	+		1.4					
620	10	658	7	18.0	23.2		0.0 + 0.0 (0.9)				90 (0.2)			0			1.1					
630	1387	3995S	36	5.0	0.7		0.0 + 0.3 (3.9)				0 (0.0)			0			3.9					
631BL	50	630L	36	5.4	0.7		0.0 + 0.0 (0.1)				0 (0.0)			0			0.1					
699	11	8000	0	18.0	0.2		0.0 + 0.0 (0.0)				0 (0.0)			0			0.0					
1030	145	1833	8	2.0	1.1		0.0 + 0.0 (0.6)				1 (0.0)			0			0.6					
1031	1150	3960S	30	2.0	0.6		0.0 + 0.2 (2.9)				1 (0.1)			0 (0.0)*			3.1					
1032BL	22	1031L	30	2.1	0.6		0.0 + 0.0 (0.1)				1 (0.0)			0			0.1					
1040	54	715	8	20.0	2.9		0.0 + 0.0 (0.6)				0 (0.0)			0			0.6					
1099	9	8000	0	18.0	0.2		0.0 + 0.0 (0.0)				0 (0.0)			0			0.0					
2010	73	850	25	3.0	8.3		0.0 + 0.2 (2.4)				0 (0.0)			0 (0.0)*			2.4					
2011	1413	2055S	71	6.0	3.2		0.1 + 1.2 (18.1)				14 (3.3)			16	+		21.4					
2012BL	50	2011L	71	6.4	3.1		0.0 + 0.0 (0.6)				7 (0.1)			16 (0.3)*			32.5					
2030	1549	4033S	40	18.0	0.7		0.0 + 0.3 (4.5)				1 (0.3)			0			4.8					
2031BL	50	2030L	40	22.5	0.7		0.0 + 0.0 (0.1)				1 (0.0)			0			0.2					
2040	36	600	59	18.0	83.8		0.1 + 0.7 (11.9)				191 (1.5)			1			13.4					
2041	18	715	5	18.0	5.2		0.0 + 0.0 (0.4)				0 (0.0)			0			0.4					
2097BL	50	2098L	18	22.5	0.3		0.0 + 0.0 (0.1)				0 (0.0)			0			0.1					
2098	1376	8000S	18	18.0	0.3		0.0 + 0.1 (1.5)				0 (0.1)			0			1.6					
2099	253	8000	3	18.0	0.2		0.0 + 0.0 (0.2)				0 (0.0)			0			0.2					
3410	158	1791	68	9.0	35.8		0.6 + 1.0 (22.3)				102 (2.5)			4			24.8	34	28	0		
3411	936	2430Sf	72	9.1	27.6		5.9 + 1.3 (102.0)				75 (10.6)			17	+		112.7	34	28	75		
3412BL	22	3411L	72	38.8	28.9		0.1 + 0.0 (2.5)				98 (0.3)			17	+		2.8	34	28	75		

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE (SEC)	TIMES PCU DELAY (SEC)	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES	
						UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT COST DELAY (\$/H)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			START 1ST (SECONDS)	START 2ND (SECONDS)
3430	1624	3704S	80	9.1	19.9	7.1 + 1.9	(127.3)	72	(19.0)	31	+	146.3	34	29	78
3431BL	50	3430L	80	9.8	14.7	0.1 + 0.1	(2.9)	60	(0.4)	31	+	3.3	34	29	78
3440BL	28	3442L	83	7.2	51.7	0.3 + 0.1	(5.7)	112	(0.4)	15		6.2	34	7	21
3442	502	3730S	83	7.0	51.7	4.9 + 2.3	(102.3)	112	(8.0)	15		110.4	34	7	21
3443	293	1641	63	7.0	37.7	2.2 + 0.8	(43.5)	96	(4.0)	7		47.5	34	85	21
3450	50	10000	1	10.0	8.7	0.1 + 0.0	(1.7)	43	(0.0)	1		1.7	34	26	75
3451	50	10000	3	10.0	33.6	0.4 + 0.0	(6.6)	86	(0.0)	1		6.6	34	9	21
4010	1163	3804S	86	18.0	34.7	8.4 + 2.8	(159.2)	99	(24.4)	30		183.6	40	40	71
4011BL	22	4010L	86	22.5	34.7	0.2 + 0.1	(3.0)	99	(0.3)	30		3.3	40	40	71
4020	627	2782F	94	18.0	67.7	5.5 + 6.3	(167.4)	130	(17.3)	21		184.7	40	81	13
4030	145	1833	84	4.0	85.0	1.2 + 2.2	(48.6)	148	(2.9)	6		51.5	40	40	78
4031	1204	3960S	74	4.0	19.8	5.3 + 1.4	(93.9)	43	(7.0)	14	+	100.9	40	40	76
4032BL	22	4031L	74	38.2	29.1	0.2 + 0.0	(2.5)	89	(0.0)	14	(0.0)*	3.7	40	40	76
4097	1723	8000S	22	18.0	0.3	0.0 + 0.1	(2.0)	0	(0.1)	0		2.1			
4098BL	22	4097L	22	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
4099	333	8000	4	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0		0.3			
4110	1389	3922S	69	15.7	14.6	4.6 + 1.1	(79.8)	84	(18.8)	30		98.5	41	42	0
4111BL	50	4110L	69	25.0	16.0	0.2 + 0.0	(3.1)	73	(0.5)	30		3.7	41	42	0
4120	382	2332F	90	18.0	69.9	3.6 + 3.8	(105.3)	131	(10.6)	13		115.9	41	6	21
4130	306	2018	73	7.0	50.9	3.0 + 1.3	(61.4)	117	(4.8)	9		66.2	41	42	2
4131	1083	1905S	83	7.0	19.7	3.6 + 2.3	(84.1)	101	(14.8)	29	+	98.8	41	26	0
4132BL	50	4131L	83	7.0	19.8	0.2 + 0.1	(3.9)	104	(0.7)	29	+	4.6	41	26	0
4150	50	10000	7	10.0	41.5	0.5 + 0.0	(8.2)	96	(0.0)	1		8.2	41	26	31
4199	131	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
5010	795	3910S	21	3.0	0.6	0.0 + 0.1	(1.8)	1	(0.1)	0		1.9			
5011BL	28	5010L	21	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
5020	840	1975S	44	9.0	1.6	0.0 + 0.4	(5.4)	2	(0.1)	0		5.5			
5021BL	28	5020L	44	7.2	1.6	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6010	35	715	6	18.0	3.6	0.0 + 0.0	(0.5)	0	(0.0)	0		0.5			
6011	74	1618	5	18.0	1.2	0.0 + 0.0	(0.3)	1	(0.0)	0		0.4			
6020	760	1800S	44	18.0	1.8	0.0 + 0.4	(5.3)	2	(0.3)	0		5.7			
6021BL	28	6020L	44	22.5	1.8	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6030	840	1975S	44	3.0	1.6	0.0 + 0.4	(5.4)	2	(0.3)	0		5.7			
6031BL	28	6030L	44	3.6	1.6	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6098BL	28	6099L	12	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
6099	914	8000S	12	18.0	0.3	0.0 + 0.1	(0.9)	0	(0.1)	0		1.0			
-180	50	10000	4	10.0	36.7	0.5 + 0.0	(7.2)	90	(0.0)	1		7.2	1	20	29
-580	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	5	75	82
-3460	10	10000	0	10.0	22.1	0.1 + 0.0	(0.9)	70	(0.0)	0		0.9	34	83	21
-3461	10	10000	1	10.0	41.3	0.1 + 0.0	(1.6)	96	(0.0)	0		1.6	34	83	0
-4080	10	10000	0	10.0	10.6	0.0 + 0.0	(0.4)	48	(0.0)	0		0.4	40	76	33
-4081	10	10000	1	10.0	34.6	0.1 + 0.0	(1.4)	88	(0.0)	0		1.4	40	22	33
-4082	10	10000	1	10.0	38.8	0.1 + 0.0	(1.5)	93	(0.0)	0		1.5	40	18	25

*** 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)	
3672.9	205.8	17.8	66.8	37.6	(1482.5)	+ (189.6)	+ (33.1)	= 1705.1	TOTALS
88.4	5.4	16.5	1.4	0.7	(29.7)	+ (3.9)	+ (33.1)	= 66.7	BUSES
3584.5	200.5	17.9	65.3	37.0	(1452.8)	+ (185.7)	+ (0.0)	= 1638.4	OTHER
									ROUTE
944.7	47.7	19.8	17.3	5.6	(324.5)	+ (32.3)	+ (0.0)	= 356.9	1
649.6	26.9	24.2	5.2	3.6	(124.4)	+ (24.7)	+ (0.0)	= 149.1	2

88 SECOND CYCLE 88 STEPS

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	216.4	+	121.8	+	86.9	=	425.1
NO. OF ENTRIES TO SUBPT =	11						
NO. OF LINKS RECALCULATED=	655						
PROGRAM TRANSYT FINISHED							

PRT

PRT File

PM Peak : 2011 Flow + Committed + Full Dev 1700-1800

1 TRANSYT 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:- "WEST HENDON A5_FULL_DEV_PM.DAT" at 16:45 on 20130312

TRANSYT 12.0

West Hendon Broadway Proposed Model PM

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES = 5
NUMBER OF LINKS = 86
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 = 19076 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

CARD CARD

NO. TYPE
(1)= TITLE:- West Hendon Broadway Proposed Model PM
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=0/SET FINAL OUTPUT P PER P PER
2)= 1 88 88 60 2 3 0 1 100 100 0 2 0 0 1420 260
CARD CARD LIST OF NODES TO BE OPTIMISED
NO. TYPE 3)= 2 40 41 34 1 5 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)= 7 110 111 0 0 0 0 0 0 0 0 0 0 0 0 0
5)= 7 130 131 0 0 0 0 0 0 0 0 0 0 0 0 0
6)= 7 210 211 0 0 0 0 0 0 0 0 0 0 0 0 0
7)= 7 330 331 0 0 0 0 0 0 0 0 0 0 0 0 0
8)= 7 430 431 0 0 0 0 0 0 0 0 0 0 0 0 0
9)= 7 510 511 0 0 0 0 0 0 0 0 0 0 0 0 0
10)= 7 530 531 0 0 0 0 0 0 0 0 0 0 0 0 0
11)= 7 610 611 0 0 0 0 0 0 0 0 0 0 0 0 0
12)= 7 630 631 0 0 0 0 0 0 0 0 0 0 0 0 0
13)= 7 1031 1032 0 0 0 0 0 0 0 0 0 0 0 0 0
14)= 7 2011 2012 0 0 0 0 0 0 0 0 0 0 0 0 0
15)= 7 2030 2031 0 0 0 0 0 0 0 0 0 0 0 0 0
16)= 7 2098 2097 0 0 0 0 0 0 0 0 0 0 0 0 0
17)= 7 3411 3412 0 0 0 0 0 0 0 0 0 0 0 0 0
18)= 7 3430 3431 0 0 0 0 0 0 0 0 0 0 0 0 0
19)= 7 3442 3440 0 0 0 0 0 0 0 0 0 0 0 0 0
20)= 7 4010 4011 0 0 0 0 0 0 0 0 0 0 0 0 0
21)= 7 4031 4032 0 0 0 0 0 0 0 0 0 0 0 0 0
22)= 7 4097 4098 0 0 0 0 0 0 0 0 0 0 0 0 0
23)= 7 4110 4111 0 0 0 0 0 0 0 0 0 0 0 0 0
24)= 7 4131 4132 0 0 0 0 0 0 0 0 0 0 0 0 0
25)= 7 5010 5011 0 0 0 0 0 0 0 0 0 0 0 0 0
26)= 7 5020 5021 0 0 0 0 0 0 0 0 0 0 0 0 0
27)= 7 6020 6021 0 0 0 0 0 0 0 0 0 0 0 0 0
28)= 7 6030 6031 0 0 0 0 0 0 0 0 0 0 0 0 0
29)= 7 6099 6098 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.
30)= 10 1 7 7
31)= 10 5 7 7
32)= 10 34 7 3 5
33)= 10 40 7 0 7 3
34)= 10 41 7 7 5

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD CARD NODE S1 S2 S3 S4 S5 S6 S7 S8 S9 S10
NO. TYPE NO.
35)= 11 1 15 5
36)= 11 5 13 5
37)= 11 34 8 10 9
38)= 11 40 15 5 5 9
39)= 11 41 10 6 5

NODE CARDS: STAGE CHANGE TIMES (WORKING)
CARD CARD NODE Sg1/Db1 S1 S2 S3 S4 S5 S6 S7 S8 S9 S10

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	UNIFORM CRUISE	RANDOM+OVERSAT (Q)	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 1ST	TIMES END 2ND
40	4	70	35	45	58										
41	3	46	23	36											
110	1178	3940S	43	8.1	1.8	0.2 + 0.4	(8.5)	7	(1.5)	2	9.9	1	74	47	
111BL	22	110L	43	8.8	1.2	0.0 + 0.0	(0.1)	1	(0.0)	2	0.1	1	74	47	
130	1084	4030S	39	12.1	3.3	0.7 + 0.3	(14.0)	17	(3.0)	5	17.0	1	74	47	
131BL	22	130L	39	12.8	3.3	0.0 + 0.0	(0.3)	12	(0.0)	5	0.3	1	74	47	
210	1178	3940S	30	8.0	0.7	0.0 + 0.2	(3.1)	1	(0.1)	0	(0.0)*				
211BL	22	210L	30	8.4	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1				
220	24	715	5	18.0	4.2	0.0 + 0.0	(0.4)	0	(0.0)	0	0.4				
299	52	8000	1	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0				
330	1074	4030S	27	7.5	0.6	0.0 + 0.2	(2.6)	1	(0.1)	0	2.7				
331BL	22	330L	27	7.4	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1				
340	10	715	2	18.0	3.9	0.0 + 0.0	(0.2)	0	(0.0)	0	0.2				
399	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0				
430	1199	3960S	32	5.2	0.7	0.0 + 0.2	(3.1)	1	(0.1)	0	3.2				
431BL	50	430L	32	5.7	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1				
440	10	715	2	18.0	4.2	0.0 + 0.0	(0.2)	0	(0.0)	0	0.2				
510	1396	3970S	50	8.1	2.5	0.5 + 0.5	(13.6)	9	(2.1)	3	15.7	5	55	30	
511BL	50	510L	50	8.7	1.4	0.0 + 0.0	(0.3)	2	(0.0)	3	0.3	5	55	30	
530	1238	3950S	45	6.1	6.0	1.7 + 0.4	(29.3)	40	(1.0)	13	30.3	5	55	30	
531BL	50	530L	45	6.9	6.0	0.1 + 0.0	(1.2)	40	(0.3)	13	1.5	5	55	30	
610	1396	2132S	68	7.0	3.6	0.4 + 1.0	(19.8)	36	(8.1)	12	28.0				
611BL	50	610L	68	7.5	3.2	0.0 + 0.0	(0.6)	25	(0.2)	12	0.8				
620	10	658	6	18.0	16.9	0.0 + 0.0	(0.7)	89	(0.2)	0	0.9				
630	1235	3995S	32	5.1	0.7	0.0 + 0.2	(3.2)	0	(0.0)	0	3.2				
631BL	50	630L	32	5.4	0.7	0.0 + 0.0	(0.1)	0	(0.0)	0	0.1				
633	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0				
1030	243	1833	13	2.0	1.1	0.0 + 0.1	(1.1)	1	(0.1)	0	(0.0)*				
1031	841	3960S	22	2.0	0.6	0.0 + 0.1	(1.9)	1	(0.1)	0	(0.0)*				
1032BL	22	1031L	22	2.1	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1				
1040	200	715	30	20.0	3.9	0.0 + 0.2	(3.1)	0	(0.0)	0	3.1				
1099	52	8000	1	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0				
2010	70	850	18	3.0	5.8	0.0 + 0.1	(1.6)	0	(0.0)	0	(0.0)*				
2011	1394	2055S	70	6.0	3.0	0.0 + 1.1	(16.5)	7	(1.6)	7	(0.0)*				
2012BL	50	2011L	70	6.4	3.0	0.0 + 0.0	(0.6)	6	(0.0)	7	(0.0)*				
2030	1300	4033S	33	18.0	0.7	0.0 + 0.2	(3.4)	1	(0.2)	0	3.6				
2031BL	50	2030L	33	22.5	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1				
2040	55	600	72	18.0	98.8	0.4 + 1.1	(21.4)	149	(1.7)	2	23.2				
2041	31	715	7	18.0	4.7	0.0 + 0.0	(0.6)	0	(0.0)	0	0.6				
2097BL	50	2098L	18	22.5	0.3	0.0 + 0.0	(0.1)	0	(0.0)	0	0.1				
2098	1380	8000S	18	18.0	0.3	0.0 + 0.1	(1.5)	0	(0.1)	0	1.6				
2099	166	8000	2	18.0	0.2	0.0 + 0.0	(0.2)	0	(0.0)	0	0.2				
3410	191	1791	46	9.0	12.1	0.2 + 0.4	(9.1)	48	(1.4)	2	10.5	34	82	54	
3411	957	2430Sf	74	9.1	21.2	4.3 + 1.4	(79.9)	56	(8.2)	13	88.1	34	82	41	
3412BL	22	3411L	74	38.8	26.8	0.1 + 0.0	(2.3)	92	(0.3)	13	2.6	34	82	41	

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	UNIFORM CRUISE	RANDOM+OVERSAT (Q)	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 1ST	TIMES END 2ND
3430	1209	3704S	64	9.1	14.2	3.9 + 0.8	(67.7)	73	(14.2)	24	81.9	34	83	41	
3431BL	50	3430L	64	9.8	11.8	0.1 + 0.0	(2.3)	71	(0.5)	24	2.8	34	83	41	
3440BL	28	3442L	79	7.2	48.1	0.3 + 0.1	(5.3)	108	(0.4)	14	5.7	34	61	75	
3442	474	3730S	79	7.0	48.0	4.6 + 1.7	(89.7)	108	(7.3)	14	97.0	34	61	75	
3443	280	1641	60	7.0	36.9	2.1 + 0.7	(40.7)	94	(3.8)	7	44.5	34	51	75	
3450	50	10000	1	10.0	8.7	0.1 + 0.0	(1.7)	43	(0.0)	1	1.7	34	80	41	
3451	50	10000	3	10.0	33.6	0.4 + 0.0	(6.6)	86	(0.0)	1	6.6	34	63	75	
4010	1512	3804S	91	18.0	34.0	9.6 + 4.7	(202.9)	102	(32.6)	40	235.4	40	85	35	
4011BL	22	4010L	91	22.5	34.0	0.1 + 0.1	(3.0)	102	(0.3)	40	3.3	40	85	35	
4020	302	3395f	87	18.0	74.1	3.3 + 3.0	(88.3)	132	(8.5)	10	96.8	40	50	58	
4030	243	1833	92	4.0	84.7	1.7 + 4.1	(81.2)	152	(4.9)	10	86.1	40	85	47	
4031	989	3960S	46	4.0	8.2	1.9 + 0.4	(32.1)	44	(5.8)	12	37.9	40	85	45	
4032BL	22	4031L	46	38.2	18.3	0.1 + 0.0	(1.6)	73	(0.0)	12	(0.0)*				
4097	1219	8000S	16	18.0	0.3	0.0 + 0.1	(1.3)	0	(0.1)	0	1.4				
4098BL	22	4097L	16	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0				
4099	648	8000	8	18.0	0.2	0.0 + 0.0	(0.5)	0	(0.0)	0	0.7				
4110	1431	3922S	59	15.7	7.6	2.3 + 0.7	(43.2)	38	(8.7)	14	51.8	41	56	23	
4111BL	50	4110L	59	25.0	10.1	0.1 + 0.0	(2.0)	41	(0.3)	14	2.3	41	56	23	
4120	203	3007f	74	18.0	63.2	2.2 + 1.4	(50.6)	120	(5.2)	6	55.8	41	29	36	
4130	153	2018	88	7.0	76.7	0.5 + 2.8	(46.3)	149	(3.0)	5	49.4	41	56	25	
4131	1084	1905S	74	7.0	9.0	1.4 + 1.3	(38.5)	67	(9.8)	18	48.3	41	41	23	
4132BL	50	4131L	74	7.0	8.5	0.1 + 0.1	(1.7)	62	(0.4)	18	2.1	41	41	23	
4150	50	10000	7	10.0	41.5	0.5 + 0.0	(8.2)	96	(0.0)	1	8.2	41	41	46	
4199	277	8000	3	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0	0.3				
5010	754	3910S	20	3.0	0.6	0.0 + 0.1	(1.7)	1	(0.1)	0	1.8				
5011BL	28	5010L	20	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1				
5020	607	1975S	32	9.0	1.3	0.0 + 0.2	(3.2)	2	(0.1)	0	3.3				
5021BL	28	5020L	32	7.2	1.3	0.0 + 0.0	(0.1)	2	(0.0)	0	0.2				
6010	97	715	17	18.0	3.9	0.0 + 0.1	(1.5)	0	(0.0)	0	1.5				
6011	144	1618	9	18.0	1.2	0.0 + 0.0	(0.7)	1	(0.0)	0	0.7				
6020	657	1800S	38	18.0	1.6	0.0 + 0.3	(4.2)	2	(0.3)	0	4.4				
6021BL	28	6020L	38	22.5	1.6	0.0 + 0.0	(0.2)	2	(0.0)	0	0.2				
6030	607	1975S	32	3.0	1.3	0.0 + 0.2	(3.2)	2	(0.2)	0	3.4				
6031BL	28	6030L	32	3.6	1.3	0.0 + 0.0	(0.1)	2	(0.0)	0	0.2				
6098BL	28	6099L	10	22.5	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0				
6099	751	8000S	10	18.0	0.2	0.0 + 0.1	(0.7)	0	(0.0)	0	0.8				
-180	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1	7.7	1	52	59	
-580	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1	7.7	5	35	42	
-3460	10	10000	0	10.0	20.0	0.1 + 0.0	(0.8)	66	(0.0)	0	0.8	34	46	75	
-3461	10	10000	1	10.0	41.3	0.1 + 0.0	(1.6)	96	(0.0)	0	1.6	34	49	54	
-4080	10	10000	0	10.0	14.3	0.0 + 0.0	(0.6)	56	(0.0)	0	0.6	40	40	78	
-4081	10	10000	1	10.0	34.6	0.1 + 0.0	(1.4)	88	(0.0)	0	1.4	40	67	78	
-4082	10	10000	1	10.0	38.8	0.1 + 0.0	(1.5)	93	(0.0)	0	1.5	40	63	70	

*** 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)	TOTALS
3446.6	170.9	20.2	43.8	32.0	(1076.7)	+ (136.9)	+ (0.0)	= 1213.6	TOTALS
88.4	4.9	18.2	1.0	0.5	(22.4)	+ (2.9)	+ (0.0)	= 25.3	BUSES
3358.2	166.0	20.2	42.8	31.5	(1054.2)	+ (134.0)	+ (0.0)	= 1188.3	OTHER

88 SECOND CYCLE 88 STEPS

CRUISE	DELAY	STOPS	TOTALS
LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR

FUEL CONSUMPTION PREDICTIONS 202.6 + 88.9 + 62.9 = 354.5

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 86

88 SECOND CYCLE 88 STEPS

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

1	2	59	47		
5	2	42	30		
34	3	75	41	54	
40	4	70	35	45	58
41	3	46	23	36	

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)	
3446.6	170.9	20.2	43.8	32.0	(1076.7)	+ (136.9)	+ (0.0)	= 1213.6	TOTALS
88.4	4.9	18.2	1.0	0.5	(22.4)	+ (2.9)	+ (0.0)	= 25.3	BUSES
3358.2	166.0	20.2	42.8	31.5	(1054.2)	+ (134.0)	+ (0.0)	= 1188.3	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 558

88 SECOND CYCLE 88 STEPS

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

1	2	59	47		
5	2	42	30		
34	3	75	41	54	
40	4	70	35	45	58
41	3	46	23	36	

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)	
3446.6	170.9	20.2	43.8	32.0	(1076.7)	+ (136.9)	+ (0.0)	= 1213.6	TOTALS
88.4	4.9	18.2	1.0	0.5	(22.4)	+ (2.9)	+ (0.0)	= 25.3	BUSES
3358.2	166.0	20.2	42.8	31.5	(1054.2)	+ (134.0)	+ (0.0)	= 1188.3	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 570

88 SECOND CYCLE 88 STEPS

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

1	2	59	47		
5	2	42	30		
34	3	75	41	54	
40	4	70	35	45	58
41	3	46	23	36	

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)	
3446.6	170.9	20.2	43.8	32.0	(1076.7)	+ (136.9)	+ (0.0)	= 1213.6	TOTALS
88.4	4.9	18.2	1.0	0.5	(22.4)	+ (2.9)	+ (0.0)	= 25.3	BUSES
3358.2	166.0	20.2	42.8	31.5	(1054.2)	+ (134.0)	+ (0.0)	= 1188.3	OTHER

NO. OF ENTRIES TO SUBPT = 21
NO. OF LINKS RECALCULATED= 824

88 SECOND CYCLE 88 STEPS

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

1	2	59	47		
5	2	42	30		
34	3	75	41	54	
40	4	70	35	45	58
41	3	46	23	36	

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)	
3446.6	170.9	20.2	43.8	32.0	(1076.7)	+ (136.9)	+ (0.0)	= 1213.6	TOTALS
88.4	4.9	18.2	1.0	0.5	(22.4)	+ (2.9)	+ (0.0)	= 25.3	BUSES
3358.2	166.0	20.2	42.8	31.5	(1054.2)	+ (134.0)	+ (0.0)	= 1188.3	OTHER

NO. OF ENTRIES TO SUBPT = 11
NO. OF LINKS RECALCULATED= 613

88 SECOND CYCLE 88 STEPS

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

1	2	59	47		
5	2	42	30		
34	3	75	41	54	
40	4	70	35	45	58
41	3	46	23	36	

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)	
3446.6	170.9	20.2	43.8	32.0	(1076.7)	+ (136.9)	+ (0.0)	= 1213.6	TOTALS
88.4	4.9	18.2	1.0	0.5	(22.4)	+ (2.9)	+ (0.0)	= 25.3	BUSES
3358.2	166.0	20.2	42.8	31.5	(1054.2)	+ (134.0)	+ (0.0)	= 1188.3	OTHER

3446.6	170.9	20.2	43.8	32.0	(1076.7) + (136.9) + (0.0) =	1213.6	TOTALS
88.4	4.9	18.2	1.0	0.5	(22.4) + (2.9) + (0.0) =	25.3	BUSES
3358.2	166.0	20.2	42.8	31.5	(1054.2) + (134.0) + (0.0) =	1188.3	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 660

88 SECOND CYCLE 88 STEPS

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

1	2	59	47		
5	2	42	30		
34	3	75	41	54	
40	4	70	35	45	58
41	3	46	23	36	

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)	
3446.6	170.9	20.2	43.8	32.0	(1076.7) + (136.9) + (0.0) =	1213.6	TOTALS		
88.4	4.9	18.2	1.0	0.5	(22.4) + (2.9) + (0.0) =	25.3	BUSES		
3358.2	166.0	20.2	42.8	31.5	(1054.2) + (134.0) + (0.0) =	1188.3	OTHER		

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 631

88 SECOND CYCLE 88 STEPS

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

1	2	59	47		
5	2	42	30		
34	3	75	41	54	
40	4	70	35	45	58
41	3	46	23	36	

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)	
3446.6	170.9	20.2	43.8	32.0	(1076.7) + (136.9) + (0.0) =	1213.6	TOTALS		
88.4	4.9	18.2	1.0	0.5	(22.4) + (2.9) + (0.0) =	25.3	BUSES		
3358.2	166.0	20.2	42.8	31.5	(1054.2) + (134.0) + (0.0) =	1188.3	OTHER		

NO. OF ENTRIES TO SUBPT = 21
 NO. OF LINKS RECALCULATED= 1180

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
1	2	59	47								
5	2	42	30								
34	3	75	41	54							
40	4	70	35	45	58						
41	3	46	23	36							

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY	-----DELAY-----	UNIFORM DELAY	RANDOM+ OVERSAT (Q)	COST OF DELAY	----STOPS----	MEAN STOPS /PCU	COST OF STOPS	----QUEUE----	PERFORMANCE INDEX	EXIT NODE	GREEN START	TIMES END	START END
		(PCU/H)	(PCU/H)	(%)	(SEC)	(SEC)	(U+R+O-MEAN Q)	(PCU-H/H)	(\$/H)	(%)	(\$/H)	(PCU)	AVERAGE EXCESS (PCU)	OF () VALUES (\$/H)		1ST	2ND	(SECONDS)
110	1178	3940S	43	8.1	1.8	0.2 + 0.4	(8.5)	7	(1.5)	2	9.9	1	74	47				
111BL	22	110L	43	8.8	1.2	0.0 + 0.0	(0.1)	1	(0.0)	2	0.1	1	74	47				
130	1084	4030S	39	12.1	3.3	0.7 + 0.3	(14.0)	17	(3.0)	5	17.0	1	74	47				
131BL	22	130L	39	12.8	3.3	0.0 + 0.0	(0.3)	12	(0.0)	5	0.3	1	74	47				
210	1178	3940S	30	8.0	0.7	0.0 + 0.2	(3.1)	1	(0.1)	0	(0.0)*	3.2						
211BL	22	210L	30	8.4	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1							
220	24	715	5	18.0	4.2	0.0 + 0.0	(0.4)	0	(0.0)	0	0.4							
299	52	8000	1	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0							
330	1074	4030S	27	7.5	0.6	0.0 + 0.2	(2.6)	1	(0.1)	0	2.7							
331BL	22	330L	27	7.4	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1							
340	10	715	2	18.0	3.9	0.0 + 0.0	(0.2)	0	(0.0)	0	0.2							
399	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0							
430	1199	3960S	32	5.2	0.7	0.0 + 0.2	(3.1)	1	(0.1)	0	3.2							
431BL	50	430L	32	5.7	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1							
440	10	715	2	18.0	4.2	0.0 + 0.0	(0.2)	0	(0.0)	0	0.2							
510	1396	3970S	50	8.1	2.5	0.5 + 0.5	(13.6)	9	(2.1)	3	15.7	5	55	30				
511BL	50	510L	50	8.7	1.4	0.0 + 0.0	(0.3)	2	(0.0)	3	0.3	5	55	30				
530	1238	3950S	45	6.1	6.0	1.7 + 0.4	(29.3)	40	(1.0)	13	30.3	5	55	30				
531BL	50	530L	45	6.9	6.0	0.1 + 0.0	(1.2)	40	(0.3)	13	1.5	5	55	30				
610	1396	2132S	68	7.0	3.6	0.4 + 1.0	(19.8)	36	(8.1)	12	28.0							
611BL	50	610L	68	7.5	3.2	0.0 + 0.0	(0.6)	25	(0.2)	12	0.8							
620	10	658	6	18.0	16.9	0.0 + 0.0	(0.7)	89	(0.2)	0	0.9							
630	1235	3995S	32	5.1	0.7	0.0 + 0.2	(3.2)	0	(0.0)	0	3.2							
631BL	50	630L	32	5.4	0.7	0.0 + 0.0	(0.1)	0	(0.0)	0	0.1							
633	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0							
1030	243	1833	13	2.0	1.1	0.0 + 0.1	(1.1)	1	(0.1)	0	(0.0)*	1.1						
1031	841	3960S	22	2.0	0.6	0.0 + 0.1	(1.9)	1	(0.1)	0	(0.0)*	2.0						
1032BL	22	1031L	22	2.1	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1							
1040	200	715	30	20.0	3.9	0.0 + 0.2	(3.1)	0	(0.0)	0	3.1							
1099	52	8000	1	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0							
2010	70	850	18	3.0	5.8	0.0 + 0.1	(1.6)	0	(0.0)	0	(0.0)*	1.6						
2011	1394	2055S	70	6.0	3.0	0.0 + 1.1	(16.5)	7	(1.6)	7	(0.0)*	18.1						
2012BL	50	2011L	70	6.4	3.0	0.0 + 0.0	(0.6)	6	(0.0)	7	(0.0)*	0.6						
2030	1300	4033S	33	18.0	0.7	0.0 + 0.2	(3.4)	1	(0.2)	0	3.6							
2031BL	50	2030L	33	22.5	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1							
2040	55	600	72	18.0	98.8	0.4 + 1.1	(21.4)	149	(1.7)	2	23.2							
2041	31	715	7	18.0	4.7	0.0 + 0.0	(0.6)	0	(0.0)	0	0.6							
2097BL	50	2098L	18	22.5	0.3	0.0 + 0.0	(0.1)	0	(0.0)	0	0.1							
2098	1380	8000S	18	18.0	0.3	0.0 + 0.1	(1.5)	0	(0.1)	0	1.6							
2099	166	8000	2	18.0	0.2	0.0 + 0.0	(0.2)	0	(0.0)	0	0.2							
3410	191	1791	46	9.0	12.1	0.2 + 0.4	(9.1)	48	(1.4)	2	10.5	34	82	54				
3411	957	2430Sf	74	9.1	21.2	4.3 + 1.4	(79.9)	56	(8.2)	13	88.1	34	82	41				
3412BL	22	3411L	74	38.8	26.8	0.1 + 0.0	(2.3)	92	(0.3)	13	2.6	34	82	41				

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN TIMES PER CRUISE		-----DELAY-----			----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES START END	
				PER (SEC)	PCU DELAY (SEC)	UNIFORM (U+R+O=MEAN)	RANDOM+ OVERSAT (Q)	COST OF DELAY (\$/H)	MEAN STOPS /PCU	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			1ST (SECONDS)	2ND (SECONDS)
3430	1209	3704S	64	9.1	14.2	3.9	+ 0.8	(67.7)	73	(14.2)	24		81.9	34	83	41
3431BL	50	3430L	64	9.8	11.8	0.1	+ 0.0	(2.3)	71	(0.5)	24		2.8	34	83	41
3440BL	28	3442L	79	7.2	48.1	0.3	+ 0.1	(5.3)	108	(0.4)	14		5.7	34	61	75
3442	474	3730S	79	7.0	48.0	4.6	+ 1.7	(89.7)	108	(7.3)	14		97.0	34	61	75
3443	280	1641	60	7.0	36.9	2.1	+ 0.7	(40.7)	94	(3.8)	7		44.5	34	51	75
3450	50	10000	1	10.0	8.7	0.1	+ 0.0	(1.7)	43	(0.0)	1		1.7	34	80	41
3451	50	10000	3	10.0	33.6	0.4	+ 0.0	(6.6)	86	(0.0)	1		6.6	34	63	75
4010	1512	3804S	91	18.0	34.0	9.6	+ 4.7	(202.9)	102	(32.6)	40		235.4	40	85	35
4011BL	22	4010L	91	22.5	34.0	0.1	+ 0.1	(3.0)	102	(0.3)	40		3.3	40	85	35
4020	302	3395F	87	18.0	74.1	3.3	+ 3.0	(88.3)	132	(8.5)	10		96.8	40	50	58
4030	243	1833	92	4.0	84.7	1.7	+ 4.1	(81.2)	152	(4.9)	10	+	86.1	40	85	47
4031	989	3960S	46	4.0	8.2	1.9	+ 0.4	(32.1)	44	(5.8)	12		37.9	40	85	45
4032BL	22	4031L	46	38.2	18.3	0.1	+ 0.0	(1.6)	73	(0.0)	12	(0.0)*	1.6	40	85	45
4097	1219	8000S	16	18.0	0.3	0.0	+ 0.1	(1.3)	0	(0.1)	0		1.4			
4098BL	22	4097L	16	22.5	0.3	0.0	+ 0.0	(0.0)	0	(0.0)	0		0.0			
4099	648	8000	8	18.0	0.2	0.0	+ 0.0	(0.6)	0	(0.0)	0		0.7			
4110	1431	3922S	59	15.7	7.6	2.3	+ 0.7	(43.2)	38	(8.7)	14		51.8	41	56	23
4111BL	50	4110L	59	25.0	10.1	0.1	+ 0.0	(2.0)	41	(0.3)	14		2.3	41	56	23
4120	203	3007F	74	18.0	63.2	2.2	+ 1.4	(50.6)	120	(5.2)	6		55.8	41	29	36
4130	153	2018	88	7.0	76.7	0.5	+ 2.8	(46.3)	149	(3.0)	5		49.4	41	56	25
4131	1084	1905S	74	7.0	9.0	1.4	+ 1.3	(38.5)	67	(9.8)	18	+	48.3	41	41	23
4132BL	50	4131L	74	7.0	8.5	0.1	+ 0.1	(1.7)	62	(0.4)	18	+	2.1	41	41	23
4150	50	10000	7	10.0	41.5	0.5	+ 0.0	(8.2)	96	(0.0)	1		8.2	41	41	46
4199	277	8000	3	18.0	0.2	0.0	+ 0.0	(0.3)	0	(0.0)	0		0.3			
5010	754	3910S	20	3.0	0.6	0.0	+ 0.1	(1.7)	1	(0.1)	0		1.8			
5011BL	28	5010L	20	3.6	0.6	0.0	+ 0.0	(0.1)	1	(0.0)	0		0.1			
5020	607	1975S	32	9.0	1.3	0.0	+ 0.2	(3.2)	2	(0.1)	0		3.3			
5021BL	28	5020L	32	7.2	1.3	0.0	+ 0.0	(0.1)	2	(0.0)	0		0.2			
6010	97	715	17	18.0	3.9	0.0	+ 0.1	(1.5)	0	(0.0)	0		1.5			
6011	144	1618	9	18.0	1.2	0.0	+ 0.0	(0.7)	1	(0.0)	0		0.7			
6020	657	1800S	38	18.0	1.6	0.0	+ 0.3	(4.2)	2	(0.3)	0		4.4			
6021BL	28	6020L	38	22.5	1.6	0.0	+ 0.0	(0.2)	2	(0.0)	0		0.2			
6030	607	1975S	32	3.0	1.3	0.0	+ 0.2	(3.2)	2	(0.2)	0		3.4			
6031BL	28	6030L	32	3.6	1.3	0.0	+ 0.0	(0.1)	2	(0.0)	0		0.2			
6098BL	28	6099L	10	22.5	0.2	0.0	+ 0.0	(0.0)	0	(0.0)	0		0.0			
6099	751	8000S	10	18.0	0.2	0.0	+ 0.1	(0.7)	0	(0.0)	0		0.8			
-180	50	10000	6	10.0	38.9	0.5	+ 0.0	(7.7)	93	(0.0)	1		7.7	1	52	59
-580	50	10000	6	10.0	38.9	0.5	+ 0.0	(7.7)	93	(0.0)	1		7.7	5	35	42
-3460	10	10000	0	10.0	20.0	0.1	+ 0.0	(0.8)	66	(0.0)	0		0.8	34	46	75
-3461	10	10000	1	10.0	41.3	0.1	+ 0.0	(1.6)	96	(0.0)	0		1.6	34	49	54
-4080	10	10000	0	10.0	14.3	0.0	+ 0.0	(0.6)	56	(0.0)	0		0.6	40	40	78
-4081	10	10000	1	10.0	34.6	0.1	+ 0.0	(1.4)	88	(0.0)	0		1.4	40	67	78
-4082	10	10000	1	10.0	38.8	0.1	+ 0.0	(1.5)	93	(0.0)	0		1.5	40	63	70

*** 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)	
3446.6	170.9	20.2	43.8	32.0	(1076.7)	+ (136.9)	+ (0.0)	= 1213.6	TOTALS
88.4	4.9	18.2	1.0	0.5	(22.4)	+ (2.9)	+ (0.0)	= 25.3	BUSES
3358.2	166.0	20.2	42.8	31.5	(1054.2)	+ (134.0)	+ (0.0)	= 1188.3	OTHER
									ROUTE
791.3	33.3	23.8	8.8	3.4	(173.4)	+ (31.1)	+ (0.0)	= 204.5	1
665.8	23.7	28.0	2.6	2.6	(73.3)	+ (11.9)	+ (0.0)	= 85.2	2

88 SECOND CYCLE 88 STEPS

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	202.6	+ 88.9	+ 62.9	= 354.5
NO. OF ENTRIES TO SUBPT =	11			
NO. OF LINKS RECALCULATED=	689			

PROGRAM TRANSYT FINISHED

PRT

PRT File Sat Peak : 2011 Flow + Committed + Full Dev

1 T R A N S Y T 1 2

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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Run with file:- "WEST HENDON A5_FULL_DEV_SAT.DAT" at 16:46 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

NUMBER OF NODES = 5
NUMBER OF LINKS = 86
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 = 19076 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

CARD CARD

NO. TYPE
(1)= TITLE:- West Hendon Broadway Base Model

CARD NO.	CARD TYPE	CYCLE TIME (SEC)	NO. OF STEPS PER CYCLE	TIME PERIOD 1-1200 MINS.	EFFECTIVE-GREEN PERIOD (SEC)	DISPLACEMENTS (SEC)	0=NONE	1=EQUAL	2=UNEQUAL	FLOW SCALE 10-200 %	CRUISE-SPEEDS SCALE 50-200 %	OPTIMISE CARD32 0=NONE	EXTRA COPIES 1=0/SET	HILL-CLIMB OUTPUT 1=FULL	DELAY VALUE PCU-H	STOP VALUE P PER
2)	1	88	88	60	2	3	0	1	100	100	0	2	0	0	1420	260

CARD NO. TYPE

3)= 2 40 41 34 1 5 0 0 0 0 0 0 0 0 0 0 0

LINKS HAVING SHARED STOPLINES

CARD NO.	CARD TYPE	FIRST SET	SECOND SET	THIRD SET	FOURTH SET	FIFTH SET	SIXTH SET	SEVENTH SET	EIGHTH SET	NINTH SET	TENTH SET	ELEVENTH SET	TWELFTH SET	THIRTEENTH SET	FOURTEENTH SET	FIFTEENTH SET	SIXTEENTH SET	SEVENTEENTH SET	EIGHTEENTH SET	NINETEENTH SET	TWENTIETH SET	
4)	7	110	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5)	7	130	131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6)	7	210	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7)	7	330	331	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8)	7	430	431	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9)	7	510	511	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10)	7	530	531	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11)	7	610	611	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12)	7	630	631	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13)	7	1031	1032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14)	7	2011	2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15)	7	2030	2031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16)	7	2098	2097	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17)	7	3411	3412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18)	7	3430	3431	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19)	7	3442	3440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20)	7	4010	4011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21)	7	4031	4032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22)	7	4097	4098	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23)	7	4110	4111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24)	7	4131	4132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25)	7	5010	5011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26)	7	5020	5021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27)	7	6020	6021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28)	7	6030	6031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29)	7	6099	6098	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CARD CARD NODE NODE CARDS: MINIMUM STAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
30)	10	1	7	7								
31)	10	5	7	7								
32)	10	34	6	3	5							
33)	10	40	7	0	7	3						
34)	10	41	7	7	5							

CARD CARD NODE NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
35)	11	1	15	5								
36)	11	5	13	5								
37)	11	34	8	10	9							
38)	11	40	15	5	5	9						
39)	11	41	11	6	5							

CARD CARD NODE NODE CARDS: STAGE CHANGE TIMES (WORKING)

CARD NO.	CARD TYPE	NODE NO.	Sg1/Db1	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
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147)=	32	340	10	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
148)=	32	399	10	0	330	10	18	0	0	0	0	0	0	0	0	0	0	0
149)=	32	430	1322	0	4120	86	7	4130	249	5	4131	987	5	0	0	0	0	0
150)=	32	431	50	0	4132	50	3200	0	0	0	0	0	0	0	0	0	0	0
151)=	32	440	10	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
152)=	32	510	1369	0	4110	1308	8	4120	61	10	0	0	0	0	0	0	0	0
153)=	32	511	50	0	4111	50	3200	0	0	0	0	0	0	0	0	0	0	0
154)=	32	530	1296	0	620	10	18	630	1293	6	0	0	0	0	0	0	0	0
155)=	32	531	50	0	631	50	3200	0	0	0	0	0	0	0	0	0	0	0
156)=	32	-580	50	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
157)=	32	610	1369	0	510	1369	7	0	0	0	0	0	0	0	0	0	0	0
158)=	32	611	50	0	511	50	3200	0	0	0	0	0	0	0	0	0	0	0
159)=	32	620	10	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
160)=	32	630	1293	0	2030	1276	5	2041	17	7	0	0	0	0	0	0	0	0
161)=	32	631	50	0	2031	50	3200	0	0	0	0	0	0	0	0	0	0	0
162)=	32	699	10	0	610	10	18	630	10	18	0	0	0	0	0	0	0	0
163)=	32	1030	162	0	130	162	2	0	0	0	0	0	0	0	0	0	0	0
164)=	32	1031	967	0	130	967	2	0	0	0	0	0	0	0	0	0	0	0
165)=	32	1032	22	0	131	22	3200	0	0	0	0	0	0	0	0	0	0	0
166)=	32	1040	200	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0
167)=	32	1099	52	0	1031	52	18	0	0	0	0	0	0	0	0	0	0	0
168)=	32	2010	57	0	2011	57	3	0	0	0	0	0	0	0	0	0	0	0
169)=	32	2011	1367	0	610	1365	6	620	10	8	0	0	0	0	0	0	0	0
170)=	32	2012	50	0	611	50	3200	0	0	0	0	0	0	0	0	0	0	0
171)=	32	2030	1349	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
172)=	32	2031	50	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
173)=	32	2040	33	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
174)=	32	2041	17	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
175)=	32	2097	50	0	2012	50	3200	0	0	0	0	0	0	0	0	0	0	0
176)=	32	2098	1343	0	2011	1310	18	2040	33	18	0	0	0	0	0	0	0	0
177)=	32	2099	130	0	2010	57	18	2030	73	18	0	0	0	0	0	0	0	0
178)=	32	3410	137	0	210	137	9	0	0	0	0	0	0	0	0	0	0	0
179)=	32	3411	1012	0	210	987	9	220	25	11	0	0	0	0	0	0	0	0
180)=	32	3412	22	0	211	22	3220	0	0	0	0	0	0	0	0	0	0	0
181)=	32	3430	1332	0	430	1322	9	440	10	18	0	0	0	0	0	0	0	0
182)=	32	3431	50	0	431	50	3200	0	0	0	0	0	0	0	0	0	0	0
183)=	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0	0	0
184)=	32	3442	372	0	5010	372	7	0	0	0	0	0	0	0	0	0	0	0
185)=	32	3443	322	0	5010	322	7	0	0	0	0	0	0	0	0	0	0	0
186)=	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
187)=	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
188)=	32	-3460	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
189)=	32	-3461	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
190)=	32	4010	1263	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
191)=	32	4011	22	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
192)=	32	4020	336	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
193)=	32	4030	162	0	1030	162	4	0	0	0	0	0	0	0	0	0	0	0
194)=	32	4031	1115	0	1031	915	4	1040	200	4	0	0	0	0	0	0	0	0
195)=	32	4032	22	0	1032	22	3226	0	0	0	0	0	0	0	0	0	0	0
196)=	32	-4080	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
197)=	32	-4081	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
198)=	32	-4082	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
199)=	32	4097	1367	0	4020	252	18	4031	1115	18	0	0	0	0	0	0	0	0
200)=	32	4098	22	0	4032	22	3200	0	0	0	0	0	0	0	0	0	0	0
201)=	32	4099	365	0	4010	203	18	4030	162	18	0	0	0	0	0	0	0	0
202)=	32	4110	1384	0	3411	1012	15	3442	372	17	0	0	0	0	0	0	0	0
203)=	32	4111	50	0	3412	22	3211	3440	28	3200	0	0	0	0	0	0	0	0
204)=	32	4120	147	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
205)=	32	4130	309	0	530	309	7	0	0	0	0	0	0	0	0	0	0	0
206)=	32	4131	987	0	530	987	7	0	0	0	0	0	0	0	0	0	0	0
207)=	32	4132	50	0	531	50	3200	0	0	0	0	0	0	0	0	0	0	0
208)=	32	4150	50	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
209)=	32	4199	136	0	4110	76	18	4130	60	18	0	0	0	0	0	0	0	0
210)=	32	5010	694	0	6010	171	3	6020	523	3	0	0	0	0	0	0	0	0
211)=	32	5011	28	0	6021	28	3200	0	0	0	0	0	0	0	0	0	0	0
212)=	32	5020	672	0	3410	137	9	3430	535	9	0	0	0	0	0	0	0	0
213)=	32	5021	28	0	3431	28	3200	0	0	0	0	0	0	0	0	0	0	0
214)=	32	6010	171	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
215)=	32	6011	19	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
216)=	32	6020	523	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
217)=	32	6021	28	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
218)=	32	6030	672	0	5020	672	3	0	0	0	0	0	0	0	0	0	0	0
219)=	32	6031	28	0	5021	28	3200	0	0	0	0	0	0	0	0	0	0	0
220)=	32	6098	28	0	6031	28	3200	0	0	0	0	0	0	0	0	0	0	0
221)=	32	6099	691	0	6011	19	18	6030	672	18	0	0	0	0	0	0	0	0

LINK CARDS : FLARE SATURATION FLOW DATA

CARD	LINK	. LANE							
		1 .	2 .	3 .					
TYPE	NO.	SAT. FLOW	CAPAC. VEH.	SAT. FLOW	CAPAC. VEH.	SAT. FLOW	CAPAC. VEH.		
222)=	33	3411	1885	5	0	0	0	0	0
223)=	33	4020	1641	6	0	0	0	0	0
224)=	33	4120	1800	3	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	TYPE	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT	LINK NO.	LIMIT QUEUE	QUEUE WEIGHT
226)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0
227)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0
228)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0
229)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD NO.	CARD TYPE	ROUTE NUMBER	ROUTE DESCRIPTION
230)=	41	1	Southbound
231)=	41	2	Northbound

CARD NO.	CARD TYPE	ROUTE NUMBER	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
232)=	42	1	2030	530	4130	3430	1030	4031	4097					
233)=	42	2	210	3410	4110	2011	2098							

*****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
1	2	25	13								
5	2	83	71								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY (SEC)	-----DELAY-----		----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES	
						UNIFORM (U+R+O-MEAN Q)	RANDOM+ OVERSAT DELAY (\$/H)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			START 1ST	END 2ND
110	1145	3940S	42	8.1	1.6	0.2 + 0.4	(7.2)	3	(0.7)	1		7.9	1	40	13
111BL	22	110L	42	8.8	1.1	0.0 + 0.0	(0.1)	1	(0.0)	1		0.1	1	40	13
130	1128	4030S	41	12.1	6.1	1.6 + 0.3	(27.0)	38	(6.9)	11		34.0	1	40	13
131BL	22	130L	41	12.8	3.2	0.0 + 0.0	(0.3)	11	(0.0)	11		0.3	1	40	13
210	1145	3940S	30	8.0	0.6	0.0 + 0.2	(2.9)	1	(0.1)	0	(0.0)*	3.1			
211BL	22	210L	30	8.4	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
220	25	715	5	18.0	4.4	0.0 + 0.0	(0.4)	12	(0.1)	0		0.5			
299	21	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
330	1118	4030S	28	7.6	0.6	0.0 + 0.2	(2.7)	1	(0.1)	0		2.9			
331BL	22	330L	28	7.4	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
340	10	715	2	18.0	4.0	0.0 + 0.0	(0.2)	0	(0.0)	0		0.2			
399	9	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
430	1322	3960S	35	5.1	0.7	0.0 + 0.3	(3.6)	1	(0.1)	0		3.7			
431BL	50	430L	35	5.7	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
440	10	715	2	18.0	4.5	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
510	1370	3970S	49	8.1	6.1	1.8 + 0.5	(32.7)	42	(9.3)	15		42.0	5	8	71
511BL	50	510L	49	8.7	6.3	0.1 + 0.0	(1.2)	35	(0.3)	15		1.5	5	8	71
530	1295	3950S	47	6.1	6.1	1.8 + 0.4	(31.2)	41	(1.1)	14		32.3	5	8	71
531BL	50	530L	47	6.9	6.1	0.1 + 0.0	(1.2)	41	(0.3)	14		1.5	5	8	71
610	1370	2132S	67	7.0	6.8	1.6 + 1.0	(36.9)	76	(16.7)	18	+	53.6			
611BL	50	610L	67	7.5	4.9	0.0 + 0.0	(1.0)	59	(0.4)	18	+	1.4			
620	10	658	6	18.0	20.8	0.0 + 0.0	(0.8)	85	(0.2)	0		1.0			
630	1293	3995S	34	5.0	0.7	0.0 + 0.2	(3.5)	0	(0.0)	0		3.5			
631BL	50	630L	34	5.4	0.7	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
699	11	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
1030	162	1833	9	2.0	1.1	0.0 + 0.0	(0.7)	1	(0.0)	0		0.7			
1031	966	3960S	25	2.0	0.6	0.0 + 0.2	(2.3)	1	(0.1)	0	(0.0)*	2.4			
1032BL	22	1031L	25	2.1	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
1040	200	715	29	20.0	3.8	0.0 + 0.2	(3.0)	0	(0.0)	0		3.0			
1099	52	8000	1	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
2010	57	850	16	3.0	6.0	0.0 + 0.1	(1.3)	0	(0.0)	0	(0.0)*	1.3			
2011	1369	2055S	69	6.0	3.0	0.1 + 1.1	(16.3)	13	(2.9)	14	+	19.2			
2012BL	50	2011L	69	6.4	2.9	0.0 + 0.0	(0.6)	8	(0.1)	14	(0.1)*	10.9			
2030	1349	4033S	35	18.0	0.7	0.0 + 0.3	(3.6)	1	(0.2)	0		3.9			
2031BL	50	2030L	35	22.5	0.7	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
2040	33	600	41	18.0	48.3	0.1 + 0.3	(6.3)	140	(1.0)	1		7.3			
2041	17	715	4	18.0	4.6	0.0 + 0.0	(0.3)	0	(0.0)	0		0.3			
2097BL	50	2098L	17	22.5	0.3	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
2098	1345	8000S	17	18.0	0.3	0.0 + 0.1	(1.4)	0	(0.1)	0		1.5			
2099	130	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
3410	137	1791	56	9.0	33.4	0.6 + 0.6	(18.1)	111	(2.3)	4		20.4	34	39	12
3411	1012	2422Sf	77	9.0	16.2	3.0 + 1.6	(64.7)	71	(11.0)	19	+	75.6	34	39	87
3412BL	22	3411L	77	38.8	28.2	0.1 + 0.0	(2.4)	97	(0.3)	19	+	2.7	34	39	87

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. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES	
						UNIFORM (U+R+O-MEAN Q)	RANDOM+ OVERSAT DELAY (\$/H)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			START 1ST	END 2ND
3430	1332	3704S	64	9.1	4.9	0.9 + 0.9	(25.7)	20	(4.3)	8		29.9	34	40	2
3431BL	50	3430L	64	9.8	3.5	0.0 + 0.0	(0.7)	17	(0.1)	8		0.8	34	40	2
3440BL	28	3442L	67	7.2	44.1	0.3 + 0.1	(4.9)	102	(0.4)	10		5.3	34	19	32
3442	372	3730S	67	7.0	44.1	3.6 + 1.0	(64.7)	102	(5.4)	10		70.1	34	19	32
3443	322	1641	72	7.0	43.0	2.6 + 1.3	(54.6)	103	(4.7)	8		59.4	34	9	32
3450	50	10000	1	10.0	8.3	0.1 + 0.0	(1.6)	42	(0.0)	1		1.6	34	37	87
3451	50	10000	4	10.0	34.6	0.5 + 0.0	(6.8)	88	(0.0)	1		6.8	34	21	32
4010	1263	3804S	71	18.0	21.5	6.4 + 1.2	(107.3)	79	(21.2)	26		128.5	40	34	75
4011BL	22	4010L	71	22.5	21.5	0.1 + 0.0	(1.9)	79	(0.2)	26		2.1	40	34	75
4020	336	3395f	79	18.0	57.0	3.5 + 1.8	(75.5)	116	(8.2)	10		83.7	40	85	7
4030	162	1833	74	4.0	61.0	1.4 + 1.4	(39.0)	126	(2.7)	5		41.7	40	34	82
4031	1114	3960S	54	4.0	13.2	3.5 + 0.6	(57.9)	42	(6.2)	12		64.2	40	34	80
4032BL	22	4031L	54	38.2	18.2	0.1 + 0.0	(1.6)	76	(0.0)	12	(0.0)*	1.6	40	34	80
4097	1366	8000S	17	18.0	0.3	0.0 + 0.1	(1.5)	0	(0.1)	0		1.6			
4098BL	22	4097L	17	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
4099	365	8000	5	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0		0.4			
4110	1384	3922S	58	15.5	7.6	2.2 + 0.7	(41.5)	44	(9.8)	18		51.2	41	42	8
4111BL	50	4110L	58	25.0	9.1	0.1 + 0.0	(1.8)	67	(0.5)	18		2.3	41	42	8
4120	147	3007f	54	18.0	52.1	1.6 + 0.6	(30.2)	108	(3.4)	4		33.6	41	14	21
4130	308	2018	72	7.0	41.0	2.2 + 1.3	(49.8)	106	(4.4)	8		54.2	41	42	10
4131	987	1905S	67	7.0	13.0	2.6 + 1.0	(50.8)	84	(11.1)	22	+	61.9	41	26	8
4132BL	50	4131L	67	7.0	13.2	0.1 + 0.0	(2.6)	87	(0.6)	22	+	3.2	41	26	8
4150	50	10000	7	10.0	41.5	0.5 + 0.0	(8.2)	96	(0.0)	1		8.2	41	26	31
4199	135	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0		0.1			
5010	694	3910S	18	3.0	0.6	0.0 + 0.1	(1.5)	1	(0.1)	0		1.6			
5011BL	28	5010L	18	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
5020	673	1975S	35	9.0	1.4	0.0 + 0.3	(3.7)	2	(0.1)	0		3.8			
5021BL	28	5020L	35	7.2	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6010	171	715	29	18.0	4.3	0.0 + 0.2	(2.9)	0	(0.0)	0		2.9			
6011	19	1618	1	18.0	1.1	0.0 + 0.0	(0.1)	1	(0.0)	0		0.1			
6020	523	1800S	31	18.0	1.4	0.0 + 0.2	(3.0)	2	(0.2)	0		3.2			
6021BL	28	6020L	31	22.5	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6030	673	1975S	35	3.0	1.4	0.0 + 0.3	(3.7)	2	(0.2)	0		4.0			
6031BL	28	6030L	35	3.6	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0		0.2			
6098BL	28	6099L	9	22.5	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0		0.0			
6099	692	8000S	9	18.0	0.2	0.0 + 0.0	(0.7)	0	(0.0)	0		0.7			
-180	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	1	18	25
-580	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1		7.7	5	76	83
-3460	10	10000	0	10.0	22.8	0.1 + 0.0	(0.9)	71	(0.0)	0		0.9	34	7	32
-3461	10	10000	1	10.0	41.3	0.1 + 0.0	(1.6)	96	(0.0)	0		1.6	34	7	12
-4080	10	10000	0	10.0	16.1	0.0 + 0.0	(0.6)	59	(0.0)	0		0.6	40	80	27
-4081	10	10000	1	10.0	34.6	0.1 + 0.0	(1.4)	88	(0.0)	0		1.4	40	16	27
-4082	10	10000	1	10.0	38.8	0.1 + 0.0	(1.5)	93	(0.0)	0		1.5	40	12	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	TOTALS		
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)			
3288.8	155.9	21.1	43.4	21.3	(920.1)	+	(138.4)	+	(10.2)	= 1068.7	TOTALS
88.4	4.8	18.5	1.1	0.5	(21.4)	+	(3.3)	+	(10.2)	= 34.9	BUSES
3200.4	151.2	21.2	42.4	20.9	(898.7)	+	(135.1)	+	(0.0)	= 1033.8	OTHER

88 SECOND CYCLE

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 86

88 SECOND CYCLE 88 STEPS

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

1	2	25	13		
5	2	83	71		
34	3	32	87	12	
40	4	19	75	80	7
41	3	31	8	21	

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)	
3288.8	155.9	21.1	43.4	21.3	(920.1)	+ (138.4)	+ (10.2)	= 1068.7	TOTALS
88.4	4.8	18.5	1.1	0.5	(21.4)	+ (3.3)	+ (10.2)	= 34.9	BUSES
3200.4	151.2	21.2	42.4	20.9	(898.7)	+ (135.1)	+ (0.0)	= 1033.8	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 613

88 SECOND CYCLE 88 STEPS

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

1	2	25	13		
5	2	83	71		
34	3	32	87	12	
40	4	19	75	80	7
41	3	31	8	21	

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)	
3288.8	155.9	21.1	43.4	21.3	(920.1)	+ (138.4)	+ (10.2)	= 1068.7	TOTALS
88.4	4.8	18.5	1.1	0.5	(21.4)	+ (3.3)	+ (10.2)	= 34.9	BUSES
3200.4	151.2	21.2	42.4	20.9	(898.7)	+ (135.1)	+ (0.0)	= 1033.8	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 614

88 SECOND CYCLE 88 STEPS

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

1	2	25	13		
5	2	83	71		
34	3	32	87	12	
40	4	19	75	80	7
41	3	31	8	21	

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)	
3288.8	155.9	21.1	43.4	21.3	(920.1)	+ (138.4)	+ (10.2)	= 1068.7	TOTALS
88.4	4.8	18.5	1.1	0.5	(21.4)	+ (3.3)	+ (10.2)	= 34.9	BUSES
3200.4	151.2	21.2	42.4	20.9	(898.7)	+ (135.1)	+ (0.0)	= 1033.8	OTHER

NO. OF ENTRIES TO SUBPT = 19
 NO. OF LINKS RECALCULATED= 893

88 SECOND CYCLE 88 STEPS

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

1	2	25	13		
5	2	83	71		
34	3	32	87	12	
40	4	19	75	80	7
41	3	31	8	21	

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)	
3288.8	155.9	21.1	43.4	21.3	(920.1)	+ (138.4)	+ (10.2)	= 1068.7	TOTALS
88.4	4.8	18.5	1.1	0.5	(21.4)	+ (3.3)	+ (10.2)	= 34.9	BUSES
3200.4	151.2	21.2	42.4	20.9	(898.7)	+ (135.1)	+ (0.0)	= 1033.8	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 658

88 SECOND CYCLE 88 STEPS

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

1	2	25	13		
5	2	83	71		
34	3	32	87	12	
40	4	19	75	80	7
41	3	31	8	21	

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)	
3288.8	155.9	21.1	43.4	21.3	(920.1)	+ (138.4)	+ (10.2)	= 1068.7	TOTALS

88.4 4.8 18.5 1.1 0.5 (21.4) + (3.3) + (10.2) = 34.9 BUSES
 3200.4 151.2 21.2 42.4 20.9 (898.7) + (135.1) + (0.0) = 1033.8 OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 697

88 SECOND CYCLE 88 STEPS

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

1 2 25 13
 5 2 83 71
 34 3 32 87 12
 40 4 19 75 80 7
 41 3 31 8 21

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)	
3288.8	155.9	21.1	43.4	21.3	(920.1) +	(138.4) +	(10.2)	= 1068.7	TOTALS
88.4	4.8	18.5	1.1	0.5	(21.4) +	(3.3) +	(10.2)	= 34.9	BUSES
3200.4	151.2	21.2	42.4	20.9	(898.7) +	(135.1) +	(0.0)	= 1033.8	OTHER

NO. OF ENTRIES TO SUBPT = 11
 NO. OF LINKS RECALCULATED= 660

88 SECOND CYCLE 88 STEPS

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

1 2 25 13
 5 2 83 71
 34 3 32 87 12
 40 4 19 75 80 7
 41 3 31 8 21

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)	
3288.8	155.9	21.1	43.4	21.3	(920.1) +	(138.4) +	(10.2)	= 1068.7	TOTALS
88.4	4.8	18.5	1.1	0.5	(21.4) +	(3.3) +	(10.2)	= 34.9	BUSES
3200.4	151.2	21.2	42.4	20.9	(898.7) +	(135.1) +	(0.0)	= 1033.8	OTHER

NO. OF ENTRIES TO SUBPT = 19
 NO. OF LINKS RECALCULATED= 1167

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
1	2	25	13								
5	2	83	71								
34	3	32	87	12							
40	4	19	75	80	7						
41	3	31	8	21							

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (PCU/H)	MEAN OF SAT (%)	TIMES PER CRUISE (SEC)	PCU	UNIFORM DELAY (U+R+O=MEAN Q) (SEC)	RANDOM+OVERSAT DELAY (PCU-H/H)	COST OF DELAY (\$/H)	STOPS MEAN (PCU)	COST OF STOPS (\$/H)	QUEUE MAX. (PCU)	AVERAGE EXCESS (PCU)	PERFORMANCE INDEX OF () VALUES (\$/H)	EXIT NODE	GREEN START	TIMES END
110	1145	3940S	42	8.1	1.6	0.2	0.4	(7.2)	3	(0.7)	1	7.9	1	40	13		
111BL	22	110L	42	8.8	1.1	0.0	0.0	(0.1)	1	(0.0)	1	0.1	1	40	13		
130	1128	4030S	41	12.1	6.1	1.6	0.3	(27.0)	38	(6.9)	11	34.0	1	40	13		
131BL	22	130L	41	12.8	3.2	0.0	0.0	(0.3)	11	(0.0)	11	0.3	1	40	13		
210	1145	3940S	30	8.0	0.6	0.0	0.2	(2.9)	1	(0.1)	0	3.1					
211BL	22	210L	30	8.4	0.6	0.0	0.0	(0.1)	1	(0.0)	0	0.1					
220	25	715	5	18.0	4.4	0.0	0.0	(0.4)	12	(0.1)	0	0.5					
299	21	8000	0	18.0	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0					
330	1118	4030S	28	7.6	0.6	0.0	0.2	(2.7)	1	(0.1)	0	2.9					
331BL	22	330L	28	7.4	0.6	0.0	0.0	(0.1)	1	(0.0)	0	0.1					
340	10	715	2	18.0	4.0	0.0	0.0	(0.2)	0	(0.0)	0	0.2					
399	9	8000	0	18.0	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0					
430	1322	3960S	35	5.1	0.7	0.0	0.3	(3.6)	1	(0.1)	0	3.7					
431BL	50	430L	35	5.7	0.7	0.0	0.0	(0.1)	1	(0.0)	0	0.1					
440	10	715	2	18.0	4.5	0.0	0.0	(0.2)	2	(0.0)	0	0.2					
510	1370	3970S	49	8.1	6.1	1.8	0.5	(32.7)	42	(9.3)	15	42.0	5	8	71		
511BL	50	510L	49	8.7	6.3	0.1	0.0	(1.2)	35	(0.3)	15	1.5	5	8	71		
530	1295	3950S	47	6.1	6.1	1.8	0.4	(31.2)	41	(1.1)	14	32.3	5	8	71		
531BL	50	530L	47	6.9	6.1	0.1	0.0	(1.2)	41	(0.3)	14	1.5	5	8	71		
610	1370	2132S	67	7.0	6.8	1.6	1.0	(36.9)	76	(16.7)	18	53.6					
611BL	50	610L	67	7.5	4.9	0.0	0.0	(1.0)	59	(0.4)	18	1.4					
620	10	658	6	18.0	20.8	0.0	0.0	(0.8)	85	(0.2)	0	1.0					
630	1293	3995S	34	5.0	0.7	0.0	0.2	(3.5)	0	(0.0)	0	3.5					
631BL	50	630L	34	5.4	0.7	0.0	0.0	(0.1)	0	(0.0)	0	0.1					
699	11	8000	0	18.0	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0					
1030	162	1833	9	2.0	1.1	0.0	0.0	(0.7)	1	(0.0)	0	0.7					
1031	966	3960S	25	2.0	0.6	0.0	0.2	(2.3)	1	(0.1)	0	2.4					
1032BL	22	1031L	25	2.1	0.6	0.0	0.0	(0.1)	1	(0.0)	0	0.1					
1040	200	715	29	20.0	3.8	0.0	0.2	(3.0)	0	(0.0)	0	3.0					
1099	52	8000	1	18.0	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0					
2010	57	850	16	3.0	6.0	0.0	0.1	(1.3)	0	(0.0)	0	1.3					
2011	1369	2055S	69	6.0	3.0	0.1	1.1	(16.3)	13	(2.9)	14	19.2					
2012BL	50	2011L	69	6.4	2.9	0.0	0.0	(0.6)	8	(0.1)	14	10.9					
2030	1349	4033S	35	18.0	0.7	0.0	0.3	(3.5)	1	(0.2)	0	3.9					
2031BL	50	2030L	35	22.5	0.7	0.0	0.0	(0.1)	1	(0.0)	0	0.1					
2040	33	600	41	18.0	48.3	0.1	0.3	(6.3)	140	(1.0)	1	7.3					
2041	17	715	4	18.0	4.6	0.0	0.0	(0.3)	0	(0.0)	0	0.3					
2097BL	50	2098L	17	22.5	0.3	0.0	0.0	(0.1)	0	(0.0)	0	0.1					
2098	1345	8000S	17	18.0	0.3	0.0	0.1	(1.4)	0	(0.1)	0	1.5					
2099	130	8000	2	18.0	0.2	0.0	0.0	(0.1)	0	(0.0)	0	0.1					
3410	137	1791	56	9.0	33.4	0.6	0.6	(18.1)	111	(2.3)	4	20.4	34	39	12		
3411	1012	2422Sf	77	9.0	16.2	3.0	1.6	(64.7)	71	(11.0)	19	75.6	34	39	87		
3412BL	22	3411L	77	38.8	28.2	0.1	0.0	(2.4)	97	(0.3)	19	2.7	34	39	87		

88 SECOND CYCLE 88 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE (SEC)	TIMES PER PCU DELAY (SEC)	-----DELAY-----			----STOPS----		----QUEUE----		PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN TIMES	
						UNIFORM (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ OVERSAT DELAY (\$/H)	COST OF DELAY (\$/H)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	MEAN MAX. (PCU)	AVERAGE EXCESS (PCU)			START 1ST (SECONDS)	START 2ND (SECONDS)
3430	1332	3704S	64	9.1	4.9	0.9 + 0.9	(25.7)	20	(4.3)	8	29.9	34	40	2		
3431BL	50	3430L	64	9.8	3.5	0.0 + 0.0	(0.7)	17	(0.1)	8	0.8	34	40	2		
3440BL	28	3442L	67	7.2	44.1	0.3 + 0.1	(4.9)	102	(0.4)	10	5.3	34	19	32		
3442	372	3730S	67	7.0	44.1	3.6 + 1.0	(64.7)	102	(5.4)	10	70.1	34	19	32		
3443	322	1641	72	7.0	43.0	2.6 + 1.3	(54.6)	103	(4.7)	8	59.4	34	9	32		
3450	50	10000	1	10.0	8.3	0.1 + 0.0	(1.6)	42	(0.0)	1	1.6	34	37	87		
3451	50	10000	4	10.0	34.6	0.5 + 0.0	(6.8)	88	(0.0)	1	6.8	34	21	32		
4010	1263	3804S	71	18.0	21.5	6.4 + 1.2	(107.3)	79	(21.2)	26	128.5	40	34	75		
4011BL	22	4010L	71	22.5	21.5	0.1 + 0.0	(1.9)	79	(0.2)	26	2.1	40	34	75		
4020	336	3395F	79	18.0	57.0	3.5 + 1.8	(75.5)	116	(8.2)	10	83.7	40	85	7		
4030	162	1833	74	4.0	61.0	1.4 + 1.4	(39.0)	126	(2.7)	5	41.7	40	34	82		
4031	1114	3960S	54	4.0	13.2	3.5 + 0.6	(57.9)	42	(6.2)	12	64.2	40	34	80		
4032BL	22	4031L	54	38.2	18.2	0.1 + 0.0	(1.6)	76	(0.0)	12	(0.0)*	1.6	40	34	80	
4097	1366	8000S	17	18.0	0.3	0.0 + 0.1	(1.5)	0	(0.1)	0	0	0				
4098BL	22	4097L	17	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0	0	0				
4099	365	8000	5	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0	0.4					
4110	1384	3922S	58	15.5	7.6	2.2 + 0.7	(41.5)	44	(9.8)	18	51.2	41	42	8		
4111BL	50	4110L	58	25.0	9.1	0.1 + 0.0	(1.8)	67	(0.5)	18	2.3	41	42	8		
4120	147	3007F	54	18.0	52.1	1.6 + 0.6	(30.2)	108	(3.4)	4	33.6	41	14	21		
4130	308	2018	72	7.0	41.0	2.2 + 1.3	(49.8)	106	(4.4)	8	54.2	41	42	10		
4131	987	1905S	67	7.0	13.0	2.6 + 1.0	(50.8)	84	(11.1)	22	61.9	41	26	8		
4132BL	50	4131L	67	7.0	13.2	0.1 + 0.0	(2.6)	87	(0.6)	22	3.2	41	26	8		
4150	50	10000	7	10.0	41.5	0.5 + 0.0	(8.2)	96	(0.0)	1	8.2	41	26	31		
4199	135	8000	2	18.0	0.2	0.0 + 0.0	(0.1)	0	(0.0)	0	0.1					
5010	694	3910S	18	3.0	0.6	0.0 + 0.1	(1.5)	1	(0.1)	0	1.6					
5011BL	28	5010L	18	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1					
5020	673	1975S	35	9.0	1.4	0.0 + 0.3	(3.7)	2	(0.1)	0	3.8					
5021BL	28	5020L	35	7.2	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0	0.2					
6010	171	715	29	18.0	4.3	0.0 + 0.2	(2.9)	0	(0.0)	0	2.9					
6011	19	1618	1	18.0	1.1	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1					
6020	523	1800S	31	18.0	1.4	0.0 + 0.2	(3.0)	2	(0.2)	0	3.2					
6021BL	28	6020L	31	22.5	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0	0.2					
6030	673	1975S	35	3.0	1.4	0.0 + 0.3	(3.7)	2	(0.2)	0	4.0					
6031BL	28	6030L	35	3.6	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0	0.2					
6038BL	28	6039L	9	22.5	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0					
6099	692	8000S	9	18.0	0.2	0.0 + 0.0	(0.7)	0	(0.0)	0	0.7					
-180	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1	7.7	1	18	25		
-580	50	10000	6	10.0	38.9	0.5 + 0.0	(7.7)	93	(0.0)	1	7.7	5	76	83		
-3460	10	10000	0	10.0	22.8	0.1 + 0.0	(0.9)	71	(0.0)	0	0.9	34	7	32		
-3461	10	10000	1	10.0	41.3	0.1 + 0.0	(1.6)	96	(0.0)	0	1.6	34	7	12		
-4080	10	10000	0	10.0	16.1	0.0 + 0.0	(0.6)	59	(0.0)	0	0.6	40	80	27		
-4081	10	10000	1	10.0	34.6	0.1 + 0.0	(1.4)	88	(0.0)	0	1.4	40	16	27		
-4082	10	10000	1	10.0	38.8	0.1 + 0.0	(1.5)	93	(0.0)	0	1.5	40	12	19		

*** 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)	
3288.8	155.9	21.1	43.4	21.3	(920.1)	+ (138.4)	+ (10.2)	= 1069.7	TOTALS
88.4	4.8	18.5	1.1	0.5	(21.4)	+ (3.3)	+ (10.2)	= 34.9	BUSES
3200.4	151.2	21.2	42.4	20.9	(898.7)	+ (135.1)	+ (0.0)	= 1033.8	OTHER
ROUTE									
799.4	33.1	24.2	8.5	3.5	(170.4)	+ (16.3)	+ (0.0)	= 186.7	1
641.9	23.5	27.3	2.9	2.7	(80.2)	+ (15.2)	+ (0.0)	= 95.3	2

88 SECOND CYCLE 88 STEPS

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	194.3	+ 76.3	+ 63.5	= 334.1
NO. OF ENTRIES TO SUBPT =	11			
NO. OF LINKS RECALCULATED=	698			
PROGRAM TRANSYT FINISHED				

PRT

PRT File AM Peak : 2011 Flow 0800-0900

1 TRANSYT 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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Run with file:- "WEST HENDON A5_INTERIM_AM.DAT" at 16:48 on 20130312

TRANSTY 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 61
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13878 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD
NO.   TYPE   TIME   NO. OF   TIME EFFECTIVE-GREEN   EQUISAT 0=UNEQUAL FLOW   CRUISE-SPEEDS   OPTIMISE   EXTRA   HILL-   DELAY   STOP
      TYPE   CYCLE  STEPS   PERIOD DISPLACEMENTS   SETTINGS CYCLE SCALE   SCALE   CARD32  0=NONE   COPIES   CLIMB   VALUE   VALUE
      (SEC)  CYCLE  MINS.  START  END   0=NO 1=EQUAL 10-200 50-200 0=TIMES 1=0/SET  FINAL  OUTPUT  P PER  P PER
      (SEC)  CYCLE  (SEC)  (SEC)  (SEC) 1=YES CYCLE %   %   1=SPEEDS 2=FULL  OUTPUT 1=FULL  PCU-H 100
2)= 1   75   75   60   2   3   0   1   100   100   0   0   0   0   1420  260
CARD  CARD
NO.   TYPE
3)= 2   40   41   34   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  2011  2012   0   0   0   0   0   0   0   0   0   0   0   0   0
5)= 7  2030  2031   0   0   0   0   0   0   0   0   0   0   0   0   0
6)= 7  2098  2097   0   0   0   0   0   0   0   0   0   0   0   0   0
7)= 7  3411  3412   0   0   0   0   0   0   0   0   0   0   0   0   0
8)= 7  4012  4011   0   0   0   0   0   0   0   0   0   0   0   0   0
9)= 7  4031  4032   0   0   0   0   0   0   0   0   0   0   0   0   0
10)= 7  4097  4098   0   0   0   0   0   0   0   0   0   0   0   0   0
11)= 7  4199  4198   0   0   0   0   0   0   0   0   0   0   0   0   0
12)= 7  5010  5011   0   0   0   0   0   0   0   0   0   0   0   0   0
13)= 7  6011  6012   0   0   0   0   0   0   0   0   0   0   0   0   0
14)= 7  6020  6021   0   0   0   0   0   0   0   0   0   0   0   0   0
15)= 7  6099  6098   0   0   0   0   0   0   0   0   0   0   0   0   0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD   NODE
NO.   TYPE   NO.
16)= 10  34      7   1   5
17)= 10  40      7   7
18)= 10  41     12   3  12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD   NODE
NO.   TYPE   NO.
19)= 11  34      8  12  12
20)= 11  40      5   6
21)= 11  41     18   3  11
    
```

NODE CARDS: STAGE CHANGE TIMES (WORKING)

```

CARD  CARD   NODE   Sg1/Dbl
NO.   TYPE   NO.   Cycled
22)= 12  34      1  12  50  67
23)= 12  40      1  26  67
24)= 12  41      1   0  36  42
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD   LINK   PRIORITY LINKS   LINK1 GIVEWAY COEFFS.
NO.   TYPE   NO.   LINK1 LINK2   ONLY   A1   A2
      (NO.) (NO.)   % FLOW X100   X100
25)= 30  1040  1030   0   0   0   22   0   0   0   0   0
26)= 30  2010  2030   0   0   0   50   0   0   0   0   0
27)= 30  2040  2030  2011  0   0   22  19   0   0   0   0   0
28)= 30  2041  2030   0   0   0   22   0   0   0   0   0
29)= 30  4030   0  4010  37   0   50   0   0   0   0   0   0
30)= 30  6010  6020   0   0   0   22   0   0   0   0   0   0
    
```

LINK CARDS: FIXED DATA
FIRST GREEN SECOND GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)	31	4010	40	1	5	2	0	0	0	0	0	200	0	1949	0	0
57)	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)	31	4030	40	1	5	2	4	0	0	0	0	45	0	1774	0	0
61)	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
62)	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
63)	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
64)	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
65)	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
66)	31	4110	41	1	12	3	0	0	0	0	0	56	0	1919	0	0
67)	31	4111	41	1	16	3	0	0	0	0	0	56	0	2040	0	0
68)	31	4120	41	3	11	1	0	0	0	0	0	200	0	1959	0	0
69)	31	4121	41	3	11	1	0	0	0	0	0	200	0	1773	0	0
70)	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
71)	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
72)	31	4150	41	3	11	1	0	0	0	0	0	12	0	10000	0	0
73)	31	4151	41	1	12	3	0	0	0	0	0	11	0	10000	0	0
74)	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
75)	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
76)	31	-4200	41	2	3	3	0	0	0	0	0	20	0	1800	0	0
77)	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
78)	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
79)	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
80)	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
81)	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
82)	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
83)	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
85)	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
86)	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
87)	32	1010	991	0	4010	886	15	4020	105	15	0	0	0	0	0	0
88)	32	1011	22	0	4011	22	3200	0	0	0	0	0	0	0	0	0
89)	32	1030	1215	0	3430	769	19	3443	446	19	0	0	0	0	0	0
90)	32	1031	22	0	3431	22	3200	0	0	0	0	0	0	0	0	0
91)	32	1040	44	0	0	0	20	0	0	0	0	0	0	0	0	0
92)	32	1099	10	0	1030	20	18	0	0	0	0	0	0	0	0	0
93)	32	2010	65	0	2011	65	3	0	0	0	0	0	0	0	0	0
94)	32	2011	1207	0	4110	825	23	4121	382	18	0	0	0	0	0	0
95)	32	2012	50	0	4111	50	3200	0	0	0	0	0	0	0	0	0
96)	32	2030	1476	0	0	0	18	0	0	0	0	0	0	0	0	0
97)	32	2031	50	0	0	0	3200	0	0	0	0	0	0	0	0	0
98)	32	2040	34	0	0	0	18	0	0	0	0	0	0	0	0	0
99)	32	2041	19	0	0	0	18	0	0	0	0	0	0	0	0	0
100)	32	2097	50	0	2012	50	3200	0	0	0	0	0	0	0	0	0
101)	32	2098	1176	0	2011	1142	18	2040	34	18	0	0	0	0	0	0
102)	32	2099	741	0	2010	65	18	2030	676	18	0	0	0	0	0	0
103)	32	3010	819	0	2030	800	17	2041	19	17	0	0	0	0	0	0
104)	32	3011	50	0	2031	50	3200	0	0	0	0	0	0	0	0	0
105)	32	3410	825	0	1010	825	6	0	0	0	0	0	0	0	0	0
106)	32	3411	167	0	1010	167	6	0	0	0	0	0	0	0	0	0
107)	32	3412	22	0	1011	22	3220	0	0	0	0	0	0	0	0	0
108)	32	3430	769	0	4130	769	11	0	0	0	0	0	0	0	0	0
109)	32	3431	22	0	4131	22	3200	0	0	0	0	0	0	0	0	0
110)	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
111)	32	3442	402	0	5010	402	7	0	0	0	0	0	0	0	0	0
112)	32	3443	446	0	5010	446	7	0	0	0	0	0	0	0	0	0
113)	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
114)	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)	32	3499	569	0	3411	167	18	3442	402	10	0	0	0	0	0	0
116)	32	4010	886	0	0	0	18	0	0	0	0	0	0	0	0	0
117)	32	4011	22	0	0	0	3200	0	0	0	0	0	0	0	0	0
118)	32	4012	158	0	0	0	18	0	0	0	0	0	0	0	0	0
119)	32	4020	598	0	0	0	20	0	0	0	0	0	0	0	0	0
120)	32	4030	217	0	1030	217	5	0	0	0	0	0	0	0	0	0
121)	32	4031	1022	0	1030	978	5	1040	44	4	0	0	0	0	0	0
122)	32	4032	22	0	1031	22	3226	0	0	0	0	0	0	0	0	0
123)	32	4097	1593	0	4020	493	18	4030	78	18	4031	1022	18	0	0	0
124)	32	4098	22	0	4032	22	3200	0	0	0	0	0	0	0	0	0
125)	32	4099	297	0	4012	158	18	4030	139	18	0	0	0	0	0	0
126)	32	4110	825	0	7010	825	7	0	0	0	0	0	0	0	0	0
127)	32	4111	50	0	7011	50	3211	0	0	0	0	0	0	0	0	0
128)	32	4120	333	0	0	0	20	0	0	0	0	0	0	0	0	0
129)	32	4121	382	0	0	0	18	0	0	0	0	0	0	0	0	0
130)	32	4130	819	0	3010	819	5	0	0	0	0	0	0	0	0	0
131)	32	4131	50													

147)= 32 7011 50 0 3412 22 3200 3440 28 3200 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.
148)=	33	4020	1641	6	0	0	0	0
149)=	33	4110	2040	4	0	0	0	0
150)=	33	4130	1696	3	0	0	0	0

GRAPH PLOT CARDS

CARD	CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
151)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD	CARD	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE
NO.	TYPE	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT
152)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0
153)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0	0	0	0
154)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0
155)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD	CARD	ROUTE	ROUTE
NO.	TYPE	NUMBER	DESCRIPTION
161)=	41	1	Southbound
162)=	41	2	Northbound

CARD	CARD	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO	TYPE	NUMBER	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
163)=	42	1	2030	3010	4130	3430	1030	4031	4097						
164)=	42	2	4010	1010	3410	7010	4110	2011	2098						

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

75 SECOND CYCLE 75 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
34	3	12	50	67							
40	2	26	67								
41	3	0	36	42							

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM RANDOM+ COST	MEAN COST	MAX. AVERAGE	INDEX.	NODE	START	START
	LINK	(PCU/H)	SAT	CRUISE	DELAY	(U+R+O-MEAN Q) DELAY	/PCU STOPS	EXCESS	OF () VALUES		1ST	2ND
		(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(PCU)	(\$/H)		(SECONDS)	(SECONDS)
1010	991	2055	48	15.0	1.7	0.0 + 0.5 (6.6)	2 (0.3)	0 (0.0)*	6.9			
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1			
1030	1215	2055	59	19.0	2.1	0.0 + 0.7 (10.2)	3 (0.5)	1 (0.0)*	10.7			
1031BL	22	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1			
1040	44	715	10	20.0	4.5	0.0 + 0.1 (0.8)	0 (0.0)	0 (0.0)	0.8			
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0			
2010	63	1000	27	3.0	10.4	0.0 + 0.2 (2.6)	0 (0.0)	0 (0.0)*	2.6			
2011	1171<	2115S	58	21.4	2.4	0.1 + 0.7 (10.9)	17 (4.5)	10 (0.0)*	15.4			
2012BL	50	2011L	58	29.3	2.6	0.0 + 0.0 (0.5)	28 (0.2)	10 (0.0)*	0.7			
2030	1476	3786S	40	18.0	0.8	0.0 + 0.3 (4.6)	1 (0.3)	0 (0.0)	5.0			
2031BL	50	2030L	40	22.5	0.8	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2			
2040	34	600	48	18.0	58.4	0.1 + 0.4 (7.8)	131 (0.9)	1 (0.0)	8.8			
2041	19	715	5	18.0	5.0	0.0 + 0.0 (0.4)	0 (0.0)	0 (0.0)	0.4			
2097BL	50	2098L	15	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0 (0.0)	0.1			
2098	1142<	8000S	15	18.0	0.3	0.0 + 0.1 (1.2)	0 (0.1)	0 (0.0)	1.3			
2099	739	8000	9	18.0	0.2	0.0 + 0.1 (0.7)	0 (0.1)	0 (0.0)	0.8			
3010	819	2075	39	17.0	1.4	0.0 + 0.3 (4.6)	2 (0.3)	0 (0.0)	5.0			
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2			
3410	825	1910	104	6.0	148.6	8.4 + 25.7 (483.6)	201 (28.3)	43 +	511.9	34	20	50
3411	167	1993S	23	6.0	26.4	1.1 + 0.1 (17.4)	95 (2.7)	4	20.1	34	20	50
3412BL	22	3411L	23	36.0	18.1	0.1 + 0.0 (1.6)	81 (0.0)	4	1.6	34	20	50
3430	768	1972	89	11.0	19.5	0.6 + 3.6 (59.0)	77 (11.2)	18	70.3	34	18	50
3431BL	22	1915	3	12.9	2.4	0.0 + 0.0 (0.2)	3 (0.0)	0 (0.0)*	0.2	34	18	50
3440BL	28	1665	14	9.0	40.0	0.2 + 0.1 (4.4)	101 (0.4)	1	4.8	34	4	12
3442	402	1787	65	7.0	28.9	2.3 + 0.9 (45.8)	91 (8.6)	8	54.5	34	62	12
3443	447	1577	82	7.0	39.5	2.8 + 2.1 (69.7)	109 (11.4)	11	81.1	34	62	12
3450	50	10000	4	10.0	30.0	0.4 + 0.0 (5.9)	88 (0.0)	1	5.9	34	58	67
3451	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	34	20	50
3499	569	8000	7	12.3	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0 (0.0)	0.6			
4010	886	1949	92	18.0	38.6	4.3 + 5.2 (135.0)	114 (21.4)	22	156.4	40	31	67
4011BL	22	4012L	21	22.5	13.5	0.1 + 0.0 (1.2)	57 (0.2)	2	1.4	40	31	67
4012	158	1707S	21	18.0	13.5	0.5 + 0.1 (8.4)	57 (1.9)	2	10.3	40	31	67
4020	598	2498f	62	20.0	22.0	2.8 + 0.8 (51.9)	78 (7.9)	10	59.8	40	73	26
4030	216	1774	131	5.0	504.7	2.7 + 27.6 (430.0)	266 (8.2)	33 +	438.2	40	31	71
4031	1021	1907S	111	5.0	210.3	5.1 + 54.5 (847.1)	233 (34.0)	79 +	881.1	40	31	67
4032BL	22	4031L	111	39.8	218.5	0.2 + 1.2 (19.0)	239 (0.0)	79 (59.0)*	5918.4	40	31	67
4097	1472<	8000S	19	18.0	0.3	0.0 + 0.1 (1.6)	0 (0.1)	0 (0.0)	1.7			
4098BL	21	4097L	19	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0			
4099	263<	8000	3	18.0	0.2	0.0 + 0.0 (0.2)	0 (0.0)	0 (0.0)	0.3			
4110	789<	2383f	80	7.0	38.8	6.5 + 2.0 (120.6)	85 (7.7)	15 +	128.3	41	12	42
4111BL	50	2040	7	26.4	21.9	0.3 + 0.0 (4.3)	60 (0.0)	1	4.3	41	16	42
4120	333	1959	55	20.0	28.4	2.0 + 0.6 (37.3)	89 (5.1)	6	42.4	41	53	0
4121	382	1773	70	18.0	34.0	2.4 + 1.2 (51.2)	99 (8.0)	8	59.2	41	53	0
4130	819	2488f	99	5.0	75.8	5.3 + 12.0 (244.9)	154 (18.0)	29 +	263.0	41	12	36
4131BL	50	1696	12	31.8	26.3	0.3 + 0.1 (5.2)	82 (0.0)	1	5.2	41	18	36

75 SECOND CYCLE 75 STEPS

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM RANDOM+ COST	MEAN COST	MAX. AVERAGE	INDEX.	NODE	START	START
	LINK	(PCU/H)	SAT	CRUISE	DELAY	(U+R+O-MEAN Q) DELAY	/PCU STOPS	EXCESS	OF () VALUES		1ST	2ND
		(PCU/H)	(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(PCU)	(\$/H)		(SECONDS)	(SECONDS)
4150	50	10000	2	10.0	19.0	0.3 + 0.0 (3.7)	70 (0.0)	1	3.7	41	53	0
4151	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	41	12	42
4198BL	28	4199L	5	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0			
4199	384	8000S	5	18.0	0.2	0.0 + 0.0 (0.4)	0 (0.0)	0 (0.0)	0.4			
5010	849	3929S	22	3.0	0.6	0.0 + 0.1 (2.0)	1 (0.1)	0 (0.0)	2.1			

5011BL	28	5010L	22	3.6	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0	0.1			
6010	162	715	29	18.0	4.5	0.0 +	0.2	(2.9)	0	(0.0)	0	2.9			
6011	771	1618S	49	18.0	2.2	0.0 +	0.5	(6.7)	3	(0.5)	0	7.2			
6012BL	28	6011L	49	22.5	2.2	0.0 +	0.0	(0.2)	3	(0.0)	0	0.3			
6020	685	1800S	40	18.0	1.7	0.0 +	0.3	(4.5)	2	(0.3)	0	4.8			
6021BL	28	6020L	40	22.5	1.7	0.0 +	0.0	(0.2)	2	(0.0)	0	0.2			
6098BL	28	6099L	10	64.8	0.2	0.0 +	0.0	(0.0)	0	(0.0)	0	0.0			
6099	771	8000S	10	18.0	0.2	0.0 +	0.1	(0.8)	0	(0.1)	0	0.8			
7010	789<	2055	38	8.0	1.4	0.0 +	0.3	(4.4)	2	(0.2)	0	4.6			
7011BL	50	1915	3	8.0	1.0	0.0 +	0.0	(0.2)	1	(0.0)	0	0.2			
-4200	10	1800	10	10.0	55.0	0.1 +	0.1	(2.2)	120	(0.0)	0	2.2	41	39	42

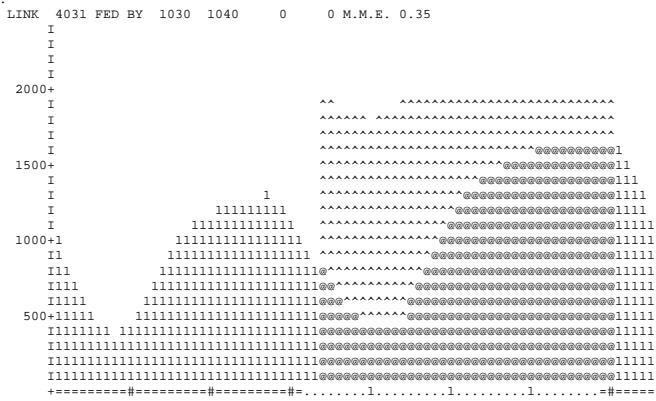
*** f - average saturation flow for flared link ***

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)	
3564.7	286.5	12.4	49.2	143.0	(2729.0) +	(184.0) +	(5899.4)	=	8812.4
96.7	7.0	13.7	1.1	1.5	(37.7) +	(0.9) +	(5899.4)	=	5938.0
3468.0	279.5	12.4	48.1	141.5	(2691.4) +	(183.0) +	(0.0)	=	2874.4

*****				CRUISE	DELAY	STOPS	TOTALS	*****				
				LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR					
FUEL CONSUMPTION PREDICTIONS				202.8	+	221.2	+	84.0	=	508.1		

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 61

CYCLIC FLOW PROFILE GRAPHS



PROGRAM TRANSYT FINISHED

PRT

PRT File PM Peak : 2011 Flow 1700-1800

1 TRANSYT 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:- "WEST HENDON A5_INTERIM_PM.DAT" at 16:48 on 20130312

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 60
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13677 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD
NO.   TYPE   TIME   NO. OF   TIME EFFECTIVE-GREEN   EQUISAT 0=UNEQUAL FLOW   CRUISE-SPEEDS   OPTIMISE   EXTRA   HILL-   DELAY   STOP
      CYCLE  STEPS  PERIOD DISPLACEMENTS  SETTINGS CYCLE SCALE   SCALE   CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  MINS.  (SEC)  (SEC)  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
      2)= 1  75    75    60    2    3    0    1    100    100    0    0    0    0    1420  260
CARD  CARD
NO.   TYPE
3)= 2  40    41    34    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  2011  2012    0    0    0    0    0    0    0    0    0    0    0    0    0
5)= 7  2030  2031    0    0    0    0    0    0    0    0    0    0    0    0    0
6)= 7  2098  2097    0    0    0    0    0    0    0    0    0    0    0    0    0
7)= 7  3411  3412    0    0    0    0    0    0    0    0    0    0    0    0    0
8)= 7  4012  4011    0    0    0    0    0    0    0    0    0    0    0    0    0
9)= 7  4031  4032    0    0    0    0    0    0    0    0    0    0    0    0    0
10)= 7  4097  4098    0    0    0    0    0    0    0    0    0    0    0    0    0
11)= 7  4199  4198    0    0    0    0    0    0    0    0    0    0    0    0    0
12)= 7  5010  5011    0    0    0    0    0    0    0    0    0    0    0    0    0
13)= 7  6011  6012    0    0    0    0    0    0    0    0    0    0    0    0    0
14)= 7  6020  6021    0    0    0    0    0    0    0    0    0    0    0    0    0
15)= 7  6099  6098    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.
16)= 10  34      7     1     5
17)= 10  40      7     7
18)= 10  41     12    12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE      S1    S2    S3    S4    S5    S6    S7    S8    S9    S10
NO.   TYPE  NO.
19)= 11  34      8     12    12
20)= 11  40     15     6
21)= 11  41     18     11
    
```

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
22)= 12  34      1    40     5    21
23)= 12  40      1    45     22
24)= 12  41      1     0    40
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY COEFFS.  LINK  STOP  MAX  DELAY  DISPSN
NO.   TYPE  NO.   LINK1  LINK2  ONLY  A1  A2  LENGTH WT.X100  FLOW WT.X100  FLOW WT.X100  X100
25)= 30  1040  1030  0    0    0    22  0    0    0    0    0    200  0    715  0    0
26)= 30  2010  2030  0    0    0    50  0    0    0    0    0    31  0    1000  0    0
27)= 30  2040  2030  2011  0    0    22  19  0    0    0    0    200  0    600  0    0
28)= 30  2041  2030  0    0    0    22  0    0    0    0    0    200  0    715  0    0
29)= 30  4030  0    4010  4    0    50  0    0    0    0    0    45  0    1000  0    0
30)= 30  6010  6020  0    0    0    22  0    0    0    0    0    200  0    715  0    0
    
```

LINK CARDS: FIXED DATA

FIRST GREEN SECOND GREEN

LINK CARDS : FLARE SATURATION FLOW DATA

CARD TYPE	LINK NO.	..LANE 1..		..LANE 2..		..LANE 3..	
		SAT. FLOW	CAPAC. VEH.	SAT. FLOW	CAPAC. VEH.	SAT. FLOW	CAPAC. VEH.
146)=	33	4020	1641	6	0	0	0
147)=	33	4110	2040	4	0	0	0
148)=	33	4130	1696	3	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LIMIT QUEUE	LINK NO.	LIMIT QUEUE	LINK NO.	LIMIT QUEUE	LINK NO.	LIMIT QUEUE	LINK NO.	LIMIT QUEUE
149)=	38	1010	12 9999	0	0	0	0	0	0	0	0
150)=	38	1011	12 9999	0	0	0	0	0	0	0	0
151)=	38	1030	10 9999	0	0	0	0	0	0	0	0
152)=	38	1031	10 9999	0	0	0	0	0	0	0	0
153)=	38	2010	4 9999	0	0	0	0	0	0	0	0
154)=	38	2011	14 9999	0	0	0	0	0	0	0	0
155)=	38	2012	14 9999	0	0	0	0	0	0	0	0
156)=	38	3431	7 9999	0	0	0	0	0	0	0	0
157)=	38	4032	8 9999	0	0	0	0	0	0	0	0

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

75 SECOND CYCLE 75 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
34	3	40	5	21							
40	2	45	22								
41	2	0	40								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER PCU DELAY (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) (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END	TIMES START END (SECONDS)
1010	1057<	2055	51	15.0	1.8	0.0 + 0.5	(7.5)	2	(0.4)	1	(0.0)*	7.9			
1011LBL	25	1915	1	15.2	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0	(0.0)*	0.1			
1030	1046	2055	51	19.0	1.8	0.0 + 0.5	(7.3)	2	(0.4)	1	(0.0)*	7.7			
1031LBL	25	1915	1	19.1	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0	(0.0)*	0.1			
1040	151	715	31	20.0	5.4	0.0 + 0.2	(3.2)	0	(0.0)	0	(0.0)	3.2			
1099	10	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	(0.0)	0.0			
2010	63	1000	18	3.0	6.4	0.0 + 0.1	(1.6)	0	(0.0)	0	(0.0)*	1.6			
2011	1215<	2115S	60	21.5	2.9	0.3 + 0.7	(14.0)	29	(8.2)	16	(0.1)*	28.9			
2012LBL	53	2011L	60	29.3	3.6	0.0 + 0.0	(0.8)	57	(0.4)	16	(0.1)*	7.9			
2030	1253	3786S	34	18.0	0.7	0.0 + 0.3	(3.6)	1	(0.3)	0	(0.0)	3.8			
2031LBL	53	2030L	34	22.5	0.7	0.0 + 0.0	(0.2)	1	(0.0)	0	(0.0)	0.2			
2040	55	600	53	18.0	47.7	0.2 + 0.6	(10.4)	115	(1.3)	1	(0.0)	11.7			
2041	31	715	7	18.0	4.5	0.0 + 0.0	(0.6)	0	(0.0)	0	(0.0)	0.6			
2097LBL	53	2098L	16	22.5	0.3	0.0 + 0.0	(0.1)	0	(0.0)	0	(0.0)	0.1			
2098	1207<	8000S	16	18.0	0.3	0.0 + 0.1	(1.3)	0	(0.1)	0	(0.0)	1.4			
2099	482	8000	6	18.0	0.2	0.0 + 0.0	(0.5)	0	(0.0)	0	(0.0)	0.5			
3010	865	2075	42	17.0	1.5	0.0 + 0.4	(5.1)	2	(0.4)	0	(0.0)	5.4			
3011LBL	53	1945	3	20.8	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0	(0.0)	0.2			
3410	843<	1910	100	6.0	99.4	8.0 + 15.2	(330.4)	161	(24.3)	33	+	354.7	34	48	5
3411	213	1993S	27	6.0	25.5	1.3 + 0.2	(21.4)	93	(3.6)	5	+	24.9	34	48	5
3412LBL	25	3411L	27	35.0	20.5	0.1 + 0.0	(2.0)	83	(0.0)	5	+	2.0	34	48	5
3430	742	1972	81	11.0	34.3	5.0 + 2.0	(100.3)	113	(16.0)	18	+	116.3	34	46	5
3431LBL	25	1915	3	12.9	14.8	0.1 + 0.0	(1.5)	92	(0.3)	0	(0.0)*	1.8	34	46	5
3440LBL	28	1665	16	9.0	42.5	0.2 + 0.1	(4.7)	104	(0.4)	1	+	5.1	34	33	40
3442	463	1787	81	7.0	39.3	3.0 + 2.0	(71.7)	108	(11.7)	11	+	83.4	34	17	40
3443	303	1577	60	19.0	30.4	1.8 + 0.7	(36.3)	94	(0.9)	6	+	37.2	34	17	40
3450	50	10000	4	10.0	31.0	0.4 + 0.0	(6.1)	90	(0.0)	1	+	6.1	34	13	21
3451	50	10000	1	10.0	12.5	0.2 + 0.0	(2.5)	56	(0.0)	1	+	2.5	34	48	5
3499	676	8000	8	18.0	0.2	0.0 + 0.0	(0.7)	0	(0.0)	0	(0.0)	0.7			
4010	1038	1949	105	18.0	136.7	6.3 + 33.1	(559.5)	201	(44.2)	55	+	603.7	40	60	22
4011LBL	25	4012L	38	22.5	9.0	0.0 + 0.0	(0.9)	47	(0.2)	4	+	1.1	40	50	22
4012	386	1707S	38	18.0	9.0	0.7 + 0.3	(13.8)	47	(3.9)	4	+	17.6	40	50	22
4020	293	2954f	41	20.0	28.0	1.9 + 0.4	(32.4)	86	(4.3)	5	+	36.7	40	28	45
4030	251	1774	92	5.0	87.8	2.1 + 4.1	(86.9)	162	(5.8)	8	+	92.7	40	50	23
4031	935	1907S	79	4.8	11.6	1.3 + 1.8	(42.9)	45	(6.1)	9	+	49.0	40	50	22
4032LBL	25	4031L	79	23.8	10.0	0.0 + 0.0	(1.0)	24	(0.0)	9	(0.1)*	10.4	40	50	22
4097	1169	8000S	15	18.0	0.3	0.0 + 0.1	(1.2)	0	(0.1)	0	(0.0)	1.3			
4098LBL	25	4097L	15	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0	(0.0)	0.0			
4099	627	8000	8	18.0	0.2	0.0 + 0.0	(0.6)	0	(0.0)	0	(0.0)	0.6			
4110	840<	2415f	90	8.0	34.6	3.9 + 4.1	(114.5)	116	(8.9)	22	+	123.5	41	12	40
4111LBL	53	2040	8	31.4	18.4	0.2 + 0.0	(3.8)	84	(0.0)	1	+	3.9	41	16	40
4120	249	1959	38	20.0	23.6	1.3 + 0.3	(23.1)	80	(3.4)	4	+	26.5	41	51	0
4121	375	1773	63	18.0	29.4	2.2 + 0.9	(43.5)	92	(7.3)	7	+	50.8	41	51	0
4130	865	2428f	92	5.0	41.5	4.8 + 5.1	(141.5)	116	(14.4)	22	+	155.9	41	12	40
4131LBL	53	1696	10	31.8	22.5	0.3 + 0.1	(4.7)	76	(0.0)	1	+	4.7	41	18	40

75 SECOND CYCLE 75 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER PCU DELAY (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) (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END	TIMES START END (SECONDS)
4150	50	10000	2	10.0	17.5	0.2 + 0.0	(3.5)	67	(0.0)	1	(0.0)	3.5	41	51	0
4151	50	10000	1	10.0	14.9	0.2 + 0.0	(2.9)	62	(0.0)	1	(0.0)	2.9	41	12	40
4198LBL	28	4199L	5	22.5	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	(0.0)	0.0			
4199	374	8000S	5	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0	(0.0)	0.4			
5010	766	3929S	20	3.0	0.6	0.0 + 0.1	(1.7)	1	(0.1)	0	(0.0)	1.9			
5011LBL	28	5010L	20	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0	(0.0)	0.1			
6010	186	715	32	18.0	4.5	0.0 + 0.2	(3.3)	0	(0.0)	0	(0.0)	3.3			
6011	664	1618S	43	18.0	1.9	0.0 + 0.4	(5.1)	3	(0.4)	0	(0.0)	5.4			
6012LBL	28	6011L	43	22.5	1.9	0.0 + 0.0	(0.2)	3	(0.0)	0	(0.0)	0.2			
6020	580	1800S	34	18.0	1.5	0.0 + 0.2	(3.5)	2	(0.2)	0	(0.0)	3.7			
6021LBL	28	6020L	34	22.5	1.5	0.0 + 0.0	(0.2)	2	(0.0)	0	(0.0)	0.2			
6098LBL	28	6099L	9	64.8	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	(0.0)	0.0			
6099	664	8000S	9	18.0	0.2	0.0 + 0.0	(0.6)	0	(0.0)	0	(0.0)	0.7			
7010	840<	2055	41	8.0	1.5	0.0 + 0.3	(4.9)	2	(0.2)	0	(0.0)	5.1			
7011LBL	53	1915	3	8.0	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0	(0.0)	0.2			

*** 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)	TOTALS BUSES OTHER			
3468.9	215.9	16.1	46.2	75.7	(1730.8)	+	(168.3)	+	(22.8)	=	1922.0	TOTALS
102.6	6.1	16.9	1.0	0.4	(20.7)	+	(1.5)	+	(16.1)	=	38.3	BUSES
3366.3	209.8	16.0	45.2	75.2	(1710.2)	+	(166.9)	+	(6.7)	=	1883.7	OTHER

ROUTE

 CRUISE DELAY STOPS TOTALS
 LITRES PER HOUR LITRES PER HOUR LITRES PER HOUR LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS 198.5 + 140.2 + 76.9 = 415.7
NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 60
PROGRAM TRANSYT FINISHED

PRT

PRT File Sat Peak : 2011 Flow 1200-1300

1 TRANSYT 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:- "WEST HENDON A5_INTERIM_SAT.DAT" at 16:47 on 20130312

TRANST 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 62
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 66
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13380 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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  MINS.  START  END  0=NO  1=EQUAL  10-200  50-200  0=TIMES  1=0/SET  FINAL  OUTPUT  P PER  P PER
          (SEC)  MINS.  (SEC)  (SEC)  3  0  1  100  100  0  0  0  0  1420  260
2)= 1 66 66 60 2 3 0 1 100 100 0 0 0 0 0 0
CARD  CARD
NO.   TYPE
3)= 2 40 41 34 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 2011 2012 0 0 0 0 0 0 0 0 0 0 0 0 0
5)= 7 2030 2031 0 0 0 0 0 0 0 0 0 0 0 0 0
6)= 7 2098 2097 0 0 0 0 0 0 0 0 0 0 0 0 0
7)= 7 3411 3412 0 0 0 0 0 0 0 0 0 0 0 0 0
8)= 7 4012 4011 0 0 0 0 0 0 0 0 0 0 0 0 0
9)= 7 4031 4032 0 0 0 0 0 0 0 0 0 0 0 0 0
10)= 7 4097 4098 0 0 0 0 0 0 0 0 0 0 0 0 0
11)= 7 4111 4200 0 0 0 0 0 0 0 0 0 0 0 0 0
12)= 7 4131 4132 0 0 0 0 0 0 0 0 0 0 0 0 0
13)= 7 4198 4198 0 0 0 0 0 0 0 0 0 0 0 0 0
14)= 7 5010 5011 0 0 0 0 0 0 0 0 0 0 0 0 0
15)= 7 6011 6012 0 0 0 0 0 0 0 0 0 0 0 0 0
16)= 7 6020 6021 0 0 0 0 0 0 0 0 0 0 0 0 0
17)= 7 6099 6098 0 0 0 0 0 0 0 0 0 0 0 0 0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
18)= 10 34 7 1 5
19)= 10 40 7 7
20)= 10 41 12 6 12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
21)= 11 34 8 12 12
22)= 11 40 5 6
23)= 11 41 12 0 11
    
```

NODE CARDS: STAGE CHANGE TIMES (WORKING)

```

CARD  CARD  NODE  Sgl/Dbl
NO.   TYPE  NO.  Cycled
24)= 12 34 1 12 45 58
25)= 12 40 1 26 4
26)= 12 41 1 0 26 43
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY COEFFS.
NO.   TYPE  NO.   LINK1 LINK2  ONLY  A1  A2
          % FLOW  X100  X100
27)= 30 1040 1030 0 0 22 0 0 0 0 0 0 0 0 0
28)= 30 2010 2030 0 0 50 0 0 0 0 0 0 0 0 0
29)= 30 2040 2030 2011 0 22 19 0 0 0 0 0 0 0 0 0
30)= 30 2041 2030 0 0 22 0 0 0 0 0 0 0 0 0
31)= 30 4030 0 4010 37 0 50 0 0 0 0 0 0 0 0 0
32)= 30 6010 6020 0 0 22 0 0 0 0 0 0 0 0 0
    
```


147)=	32	6021	28	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
148)=	32	6098	24	0	6012	24	3233	0	0	0	0	0	0	0	0	0	0	0
149)=	32	6099	575	0	6011	575	18	0	0	0	0	0	0	0	0	0	0	0
150)=	32	7010	932	0	3410	932	8	0	0	0	0	0	0	0	0	0	0	0
151)=	32	7011	50	0	3412	22	3200	3440	28	3200	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.
152)=	33	4020	1641	6	0	0	0

GRAPH PLOT CARDS

CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.
153)=	35	4031	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
154)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	
155)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	
156)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	
157)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	
158)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	
159)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	
160)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	

USER-DEFINED ROUTES

CARD	ROUTE	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NUMBER	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
161)=	41	1	Southbound												
162)=	41	2	Northbound												
163)=	42	1	2030	3010	4130	3430	1030	4031	4097						
164)=	42	2	4010	1010	3410	7010	4110	2011	2098						

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

66 SECOND CYCLE 66 STEPS

INITIAL SETTINGS
- (SECONDS)

NODE	NUMBER	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE
NO	OF STAGES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
34	3	12	45	58														
40	2	26	4															
41	3	0	26	43														

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM RANDOM+ COST	MEAN COST	MAX. AVERAGE	INDEX.	NODE	START	START
	LINK	(PCU/H)	(%)	CRUISE	DELAY	(U+R+O-MEAN Q) DELAY	/PCU STOPS	(PCU) EXCESS	OF () VALUES		1ST	2ND
				(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)		(SECONDS)	(SECONDS)
1010	1101	2055	54	15.0	1.9	0.0 + 0.6 (8.2)	3 (0.4)	1 (0.0)*	8.6			
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0	0.1			
1030	1024<	2055	50	19.0	1.7	0.0 + 0.5 (7.0)	2 (0.4)	0 (0.0)*	7.4			
1031BL	22	1915	1	48.4	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1			
1040	109	715	22	20.0	4.7	0.0 + 0.1 (2.0)	0 (0.0)	0	2.0			
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0			
2010	47	1000	14	3.0	6.4	0.0 + 0.1 (1.2)	0 (0.0)	0 (0.0)*	1.2			
2011	1068<	2115S	53	21.7	1.8	0.0 + 0.5 (7.6)	2 (0.6)	1	8.2			
2012BL	50	2011L	53	68.5	1.8	0.0 + 0.0 (0.4)	3 (0.0)	1 (0.0)*	0.4			
2030	1293	3786S	35	18.0	0.7	0.0 + 0.3 (3.8)	1 (0.3)	0	4.1			
2031BL	50	2030L	35	22.5	0.7	0.0 + 0.0 (0.1)	1 (0.0)	0	0.2			
2040	33	600	34	18.0	30.2	0.0 + 0.3 (3.9)	101 (0.7)	0	4.6			
2041	17	715	4	18.0	4.5	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3			
2097BL	50	2098L	14	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0	0.1			
2098	1054<	8000S	14	18.0	0.3	0.0 + 0.1 (1.1)	0 (0.1)	0	1.2			
2099	577	8000	7	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0	0.6			
3010	780	2075	38	17.0	1.4	0.0 + 0.3 (4.3)	2 (0.3)	0	4.6			
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0 (0.2)	1 (0.0)	0	0.2			
3410	931	1910	124	6.0	387.0	8.2 + 91.9 (999.9)	267 (42.5)	110	1463.7	34	20	45
3411	174	1993S	25	6.0	19.5	0.8 + 0.1 (13.4)	91 (2.7)	3	16.1	34	20	45
3412BL	22	3411L	25	36.0	13.9	0.1 + 0.0 (1.2)	69 (0.0)	3	1.2	34	20	45
3430	666<	1972	80	11.0	12.7	0.4 + 1.9 (33.5)	63 (8.8)	13	42.3	34	18	45
3431BL	22	1915	3	12.9	2.3	0.0 + 0.0 (0.2)	4 (0.0)	0 (0.0)*	0.2	34	18	45
3440BL	28	1665	12	9.0	34.1	0.2 + 0.1 (3.8)	98 (0.4)	1	4.2	34	4	12
3442	346	1787	58	7.0	25.4	1.8 + 0.7 (34.7)	89 (7.2)	6	41.9	34	57	12
3443	358	1577	68	7.0	29.5	1.9 + 1.1 (41.7)	97 (8.1)	7	49.8	34	57	12
3450	50	10000	6	10.0	29.8	0.4 + 0.0 (5.9)	94 (0.0)	1	5.9	34	53	58
3451	50	10000	1	10.0	12.9	0.2 + 0.0 (2.5)	61 (0.0)	1	2.5	34	20	45
3499	520	8000	7	12.7	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0	0.5			
4010	1020	1949	86	18.0	21.5	3.0 + 3.0 (86.5)	92 (19.8)	18	106.3	40	31	4
4011BL	22	4012L	21	22.5	8.1	0.0 + 0.0 (0.7)	45 (0.1)	2	0.8	40	31	4
4012	191	1707S	21	18.0	8.1	0.3 + 0.1 (6.1)	45 (1.8)	2	7.9	40	31	4
4020	323	3024f	41	20.0	24.1	1.8 + 0.4 (30.6)	85 (4.7)	5	35.3	40	10	26
4030	149	1774	62	5.0	38.0	0.8 + 0.8 (22.3)	115 (2.6)	3	25.0	40	31	8
4031	973<	1907S	86	4.9	17.4	1.8 + 2.9 (66.8)	58 (8.5)	12	75.3	40	31	4
4032BL	22	4031L	86	5.1	22.1	0.1 + 0.1 (1.9)	79 (0.2)	12 (0.7)*	74.1	40	31	4
4097	1215<	8000S	15	18.0	0.3	0.0 + 0.1 (1.3)	0 (0.1)	0	1.4			
4098BL	22	4097L	15	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0			
4099	340	8000	4	18.0	0.2	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3			
4110	665<	1919	71	7.0	29.3	4.2 + 1.2 (76.9)	64 (5.8)	10	82.7	41	12	43
4111BL	50	2040S	14	45.4	13.8	0.2 + 0.0 (2.7)	65 (0.0)	2	2.8	41	12	43
4120	227	1959	59	20.0	35.3	1.5 + 0.7 (31.6)	104 (4.0)	4	35.6	41	54	0
4121	316	1773	90	18.0	69.9	2.3 + 3.9 (87.1)	151 (10.1)	9	97.2	41	54	0
4130	532	2056	114	5.0	274.8	4.6 + 36.0 (576.7)	256 (19.5)	46	596.1	41	12	26
4131BL	50	1696S	78	31.8	44.1	0.3 + 0.3 (8.7)	120 (0.0)	7	8.7	41	12	26

66 SECOND CYCLE 66 STEPS

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM RANDOM+ COST	MEAN COST	MAX. AVERAGE	INDEX.	NODE	START	START
	LINK	(PCU/H)	(%)	CRUISE	DELAY	(U+R+O-MEAN Q) DELAY	/PCU STOPS	(PCU) EXCESS	OF () VALUES		1ST	2ND
				(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)		(SECONDS)	(SECONDS)
4132	250	4131L	78	5.0	44.0	1.7 + 1.4 (43.4)	121 (4.3)	7	47.7	41	12	26
4150	50	10000	3	10.0	22.6	0.3 + 0.0 (4.5)	81 (0.0)	1	4.5	41	54	0
4151	50	10000	1	10.0	9.4	0.1 + 0.0 (1.9)	52 (0.0)	0	1.9	41	12	43
4198BL	28	4199L	4	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0			
4199	278	8000S	4	18.0	0.2	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3			

4200	87<	4111L	14	7.0	20.1	0.4 +	0.1 (	6.9)	58 (	0.7)	2		7.6	41	12	43
5010	704	3929S	19	3.0	0.6	0.0 +	0.1 (	1.6)	1 (	0.1)	0		1.7			
5011BL	28	5010L	19	3.6	0.6	0.0 +	0.0 (	0.1)	1 (	0.0)	0		0.1			
6010	239	715	39	18.0	4.9	0.0 +	0.3 (	4.6)	0 (	0.0)	0		4.6			
6011	575	1618S	37	18.0	1.8	0.0 +	0.3 (	4.0)	3 (	0.3)	0		4.3			
6012BL	24	6011L	37	22.5	1.8	0.0 +	0.0 (	0.2)	3 (	0.0)	0		0.2			
6020	466	1800S	27	18.0	1.4	0.0 +	0.2 (	2.5)	2 (	0.2)	0		2.7			
6021BL	28	6020L	27	22.5	1.4	0.0 +	0.0 (	0.2)	2 (	0.0)	0		0.2			
6098BL	24	6099L	7	64.8	0.2	0.0 +	0.0 (	0.0)	0 (	0.0)	0		0.0			
6099	575	8000S	7	18.0	0.2	0.0 +	0.0 (	0.6)	0 (	0.0)	0		0.6			
7010	752<	2055	37	8.0	1.4	0.0 +	0.3 (	4.1)	2 (	0.2)	0		4.3			
7011BL	50	1915	3	8.0	1.0	0.0 +	0.0 (	0.2)	1 (	0.0)	0		0.2			

*** 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)	
3261.8	275.9	11.8	37.3	151.1	(2674.6) +	(156.1) +	(71.9) =	2902.6	TOTALS
95.1	6.5	14.6	0.9	0.6	(20.8) +	(0.9) +	(71.9) =	93.6	BUSES
3166.6	269.3	11.8	36.4	150.5	(2653.8) +	(155.2) +	(0.0) =	2809.0	OTHER

995.6	75.4	13.2	6.8	42.0	(693.3) +	(37.9) +	(0.0) =	731.2	ROUTE 1
1090.5	141.6	7.7	15.4	97.7	(1605.6) +	(69.5) +	(0.0) =	1675.1	ROUTE 2

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	185.8	216.7	71.8	474.3

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 62

CYCLIC FLOW PROFILE GRAPHS

```
LINK 4031 FED BY 1030 1040 0 0 M.M.E. 0.38
I
I
I
I
I
2000+
I
I
I
I
I
1500+@
I@
I@@
I@@@
I@@@
1000+@@@
I@@@@
I@@@@
I@@@@@
I@@@@@
I@@@@@
500+@@@@@
I@@@@@
I@@@@@
I@@@@@
I@@@@@
I@@@@@
+.....===#=====#####.....1.....1.....1.....
```

PROGRAM TRANSYT FINISHED



TRANSYT Model Outputs

As Reported in Section 7 of Transport Assessment

PRT

PRT File

AM Peak : 2011 Flow 0800-0900 + committed + 385 units

1 TRANSYT 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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program advice and maintenance, contact:

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Nine Mile Ride Email: softwarebureau@trl.co.uk
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:- "WEST HENDON A5_DETAILED_AM_OPT_V3.DAT" at 09:44 on 20130313

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 62
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 40
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 11508 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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 0=NO 1=EQUAL  SCALE  SCALE  CARD32 0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  PER  1-1200  START  END  0=YES 1=CYCLE  %  %  50-200 0=TIMES 1=O/SET  FINAL  OUTPUT  P PER  P PER
      80    40    60    (SEC)  (SEC)  3  0  1  100  100  0  2  0  0  1420  260
CARD  CARD
NO.   TYPE
3)= 2  40  41  34  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  2011  2012  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5)= 7  2030  2031  0  0  0  0  0  0  0  0  0  0  0  0  0
6)= 7  2098  2097  0  0  0  0  0  0  0  0  0  0  0  0  0
7)= 7  3411  3412  0  0  0  0  0  0  0  0  0  0  0  0  0
8)= 7  4012  4011  0  0  0  0  0  0  0  0  0  0  0  0  0
9)= 7  4031  4032  0  0  0  0  0  0  0  0  0  0  0  0  0
10)= 7  4097  4098  0  0  0  0  0  0  0  0  0  0  0  0  0
11)= 7  4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0
12)= 7  5010  5011  0  0  0  0  0  0  0  0  0  0  0  0  0
13)= 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0
14)= 7  6020  6021  0  0  0  0  0  0  0  0  0  0  0  0  0
15)= 7  6099  6098  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.
16)= 10  34  7  1  5
17)= 10  40  7  7
18)= 10  41  12  3  12
                                NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)
CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
19)= 11  34  8  12  12
20)= 11  40  5  6  6
21)= 11  41  18  3  11
                                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
22)= 12  34  1  14  60  73
23)= 12  40  1  20  72
24)= 12  41  1  0  44  50
                                LINK CARDS: GIVEWAY DATA
CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY COEFFS.  LINK  STOP  MAX  DELAY  DISFSN
NO.   TYPE  NO.  LINK1  LINK2  ONLY  A1  A2  LENGTH  WT. X100  FLOW  WT. X100  WT. X100
25)= 30  1040  1030  0  0  0  22  0  0  0  0  0  0  0  0  0
26)= 30  2010  2030  0  0  0  50  0  0  0  0  0  0  0  0  0
27)= 30  2040  2030  2011  0  0  22  19  0  0  0  0  0  0  0  0
28)= 30  2041  2030  0  0  0  22  0  0  0  0  0  0  0  0  0
29)= 30  4030  0  4010  48  0  50  0  0  0  0  0  0  0  0  0
30)= 30  6010  6020  0  0  0  22  0  0  0  0  0  0  0  0  0
                                LINK CARDS: FIXED DATA
FIRST GREEN  SECOND GREEN
    
```

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)=	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)=	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)=	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)=	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)=	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)=	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)=	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)=	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)=	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)=	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)=	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)=	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)=	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)=	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)=	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)=	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)=	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)=	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)=	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)=	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)=	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)=	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)=	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)=	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)=	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)=	31	4010	40	1	5	2	0	0	0	0	0	200	0	1949	0	0
57)=	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)=	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)=	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)=	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)=	31	4030	40	1	5	2	4	0	0	0	0	45	0	1774	0	0
62)=	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)=	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)=	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)=	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)=	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)=	31	4110	41	1	12	3	0	0	0	0	0	56	0	1919	0	0
68)=	31	4111	41	1	16	3	0	0	0	0	0	56	0	2040	0	0
69)=	31	4120	41	3	11	1	0	0	0	0	0	200	0	1959	0	0
70)=	31	4121	41	3	11	0	0	0	0	0	0	200	0	1773	0	0
71)=	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)=	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)=	31	4150	41	3	11	1	0	0	0	0	0	12	0	10000	0	0
74)=	31	4151	41	1	12	3	0	0	0	0	0	11	0	10000	0	0
75)=	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)=	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)=	31	-4200	41	2	3	3	0	0	0	0	0	20	0	1800	0	0
78)=	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
79)=	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
80)=	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
81)=	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
82)=	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
83)=	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)=	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
85)=	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
86)=	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
87)=	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
88)=	32	1010	967	0	4010	880	15	4021	87	15	0	0	0	0	0	0
89)=	32	1011	22	0	4011	22	3200	0	0	0	0	0	0	0	0	0
90)=	32	1030	1191	0	3430	769	19	3443	422	19	0	0	0	0	0	0
91)=	32	1031	22	0	3431	22	3200	0	0	0	0	0	0	0	0	0
92)=	32	1040	44	0	0	0	20	0	0	0	0	0	0	0	0	0
93)=	32	1099	10	0	1030	20	18	0	0	0	0	0	0	0	0	0
94)=	32	2010	65	0	2011	65	3	0	0	0	0	0	0	0	0	0
95)=	32	2011	1191	0	4110	825	23	4121	366	18	0	0	0	0	0	0
96)=	32	2012	50	0	4111	50	3200	0	0	0	0	0	0	0	0	0
97)=	32	2030	1472	0	0	0	18	0	0	0	0	0	0	0	0	0
98)=	32	2031	50	0	0	0	3200	0	0	0	0	0	0	0	0	0
99)=	32	2040	34	0	0	0	18	0	0	0	0	0	0	0	0	0
100)=	32	2041	19	0	0	0	18	0	0	0	0	0	0	0	0	0
101)=	32	2097	50	0	2012	50	3200	0	0	0	0	0	0	0	0	0
102)=	32	2098	1161	0	2011	1127	18	2040	34	18	0	0	0	0	0	0
103)=	32	2099	741	0	2010	65	18	2030	676	18	0	0	0	0	0	0
104)=	32	3010	815	0	2030	796	17	2041	19	17	0	0	0	0	0	0
105)=	32	3011	50	0	2031	50	3200	0	0	0	0	0	0	0	0	0
106)=	32	3410	825	0	1010	825	6	0	0	0	0	0	0	0	0	0
107)=	32	3411	160	0	1010	160	6	0	0	0	0	0	0	0	0	0
108)=	32	3412	22	0	1011	22	3220	0	0	0	0	0	0	0	0	0
109)=	32	3430	769	0	4130	769	11	0	0	0	0	0	0	0	0	0
110)=	32	3431	22	0	4131	22	3200	0	0	0	0	0	0	0	0	0
111)=	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
112)=	32	3442	398	0	5010	398	7	0	0	0	0	0	0	0	0	0
113)=	32	3443	422	0	5010	422	7	0	0	0	0	0	0	0	0	0
114)=	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)=	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
116)=	32	3499	558	0	3411	160	18	3442	398	10	0	0	0	0	0	0
117)=	32	4010	880	0	0	0	18	0	0	0	0	0	0	0	0	0
118)=	32	4011	22	0	0	0	3200	0	0	0	0	0	0	0	0	0
119)=	32	4012	158	0	0	0	18	0	0	0	0	0	0	0	0	0
120)=	32	4020	493	0	0	0	20	0	0	0	0	0	0	0	0	0
121)=	32	4021	87	0	0	0	18	0	0	0	0	0	0	0	0	0
122)=	32	4030	267	0	1030	267	5	0	0	0	0	0	0	0	0	0
123)=	32	4031	948	0	1030	904	5	1040	44	4	0	0	0	0	0	0
124)=	32	4032	22	0	1031	22	3226	0	0	0	0	0	0	0	0	0
125)=	32	4097	1569	0	4020	493	18	4030	128	18	4031	948	18	0	0	0
126)=	32	4098	22	0	4032	22	3200	0	0	0	0	0	0	0	0	0
127)=	32	4099	297	0	4012	158	18	4030	139	18	0	0	0	0	0	0
128)=	32	4110	825	0	7010	825	7	0	0	0	0	0	0	0	0	0
129)=	32	4111	50	0	7011	50	3211	0	0	0	0	0	0	0	0	0
130)=	32	4120	294	0	0	0</										

4199	340	8000S	5	18.0	0.2	0.0	0.0	(0.3)	0	(0.0)	0	0.3
5010	819	3929S	22	3.0	0.6	0.0	0.0	(1.9)	1	(0.1)	0	2.0
5011BL	28	5010L	22	3.6	0.6	0.0	0.0	(0.1)	1	(0.0)	0	0.1
6010	134	715	24	18.0	4.2	0.0	0.0	(2.2)	0	(0.0)	0	2.2
6011	756	1618S	48	18.0	2.2	0.0	0.5	(6.4)	3	(0.4)	0	6.9
6012BL	28	6011L	48	22.5	2.2	0.0	0.0	(0.2)	3	(0.0)	0	0.2
6020	685	1800S	40	18.0	1.7	0.0	0.0	(4.5)	2	(0.3)	0	4.8
6021BL	28	6020L	40	22.5	1.7	0.0	0.0	(0.2)	2	(0.0)	0	0.2
6098BL	28	6099L	10	64.8	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0
6099	756	8000S	10	18.0	0.2	0.0	0.0	(0.7)	0	(0.0)	0	0.8
7010	826	2055	40	8.0	1.5	0.0	0.0	(4.8)	2	(0.2)	0	5.0
7011BL	50	1915	3	8.0	1.0	0.0	0.0	(0.2)	1	(0.0)	0	0.2
-4200	10	1800	11	10.0	58.6	0.1	0.1	(2.3)	120	(0.0)	0	2.3

*** 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-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
3500.8	171.1	20.5	39.1	39.3	(1113.7)	(127.0)	(79.7)	1320.4	TOTALS
96.7	5.7	17.0	0.9	0.4	(18.3)	(0.7)	(79.7)	98.7	BUSES
3404.1	165.4	20.6	38.2	39.0	(1095.4)	(126.3)	(0.0)	1221.7	OTHER

CRUISE		DELAY		STOPS		TOTALS	
LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	199.1	+	90.4	+	58.1	=	347.6

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 62

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12
- (SECONDS)

34	3	14	60	73
40	2	20	72	
41	3	0	44	50

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-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
3500.8	171.0	20.5	39.1	39.2	(1112.2)	(126.9)	(79.7)	1318.7	TOTALS
96.7	5.7	17.0	0.9	0.4	(18.3)	(0.7)	(79.7)	98.7	BUSES
3404.1	165.3	20.6	38.2	38.9	(1093.9)	(126.2)	(0.0)	1220.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 233

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32
- (SECONDS)

34	3	14	60	73
40	2	20	72	
41	3	0	44	50

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-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
3500.8	171.0	20.5	39.1	39.2	(1112.2)	(126.9)	(79.7)	1318.7	TOTALS
96.7	5.7	17.0	0.9	0.4	(18.3)	(0.7)	(79.7)	98.7	BUSES
3404.1	165.3	20.6	38.2	38.9	(1093.9)	(126.2)	(0.0)	1220.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 232

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1
- (SECONDS)

34	3	14	60	73
40	2	20	72	
41	3	0	44	50

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-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
3500.8	171.0	20.5	39.1	39.2	(1112.2)	(126.9)	(79.7)	1318.7	TOTALS
96.7	5.7	17.0	0.9	0.4	(18.3)	(0.7)	(79.7)	98.7	BUSES
3404.1	165.3	20.6	38.2	38.9	(1093.9)	(126.2)	(0.0)	1220.0	OTHER

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 370

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1 12
- (SECONDS)

34	3	14	60	73
40	2	20	72	
41	3	0	44	50

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-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)	
3500.8	171.0	20.5	39.1	39.2	(1112.2)	(126.9)	(79.7)	1318.7	TOTALS
96.7	5.7	17.0	0.9	0.4	(18.3)	(0.7)	(79.7)	98.7	BUSES
3404.1	165.3	20.6	38.2	38.9	(1093.9)	(126.2)	(0.0)	1220.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
 NO. OF LINKS RECALCULATED= 256

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1 12 32
 - (SECONDS)

34	3	14	60	73
40	2	20	72	
41	3	0	44	50

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
3500.8	171.0	20.5	39.1	39.2	(1112.2)	(126.9)	(79.7)	1318.7	TOTALS
96.7	5.7	17.0	0.9	0.4	(18.3)	(0.7)	(79.7)	98.7	BUSES
3404.1	165.3	20.6	38.2	38.9	(1093.9)	(126.2)	(0.0)	1220.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
 NO. OF LINKS RECALCULATED= 260

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1 12 32 1
 - (SECONDS)

34	3	14	60	73
40	2	20	72	
41	3	0	44	50

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
3500.8	171.0	20.5	39.1	39.2	(1112.2)	(126.9)	(79.7)	1318.7	TOTALS
96.7	5.7	17.0	0.9	0.4	(18.3)	(0.7)	(79.7)	98.7	BUSES
3404.1	165.3	20.6	38.2	38.9	(1093.9)	(126.2)	(0.0)	1220.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
 NO. OF LINKS RECALCULATED= 256

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1 12 32 1 -1
 - (SECONDS)

34	3	14	60	73
40	2	20	72	
41	3	0	44	50

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
3500.8	171.0	20.5	39.1	39.2	(1112.2)	(126.9)	(79.7)	1318.7	TOTALS
96.7	5.7	17.0	0.9	0.4	(18.3)	(0.7)	(79.7)	98.7	BUSES
3404.1	165.3	20.6	38.2	38.9	(1093.9)	(126.2)	(0.0)	1220.0	OTHER

NO. OF ENTRIES TO SUBPT = 13
 NO. OF LINKS RECALCULATED= 429

80 SECOND CYCLE 40 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 12 32 -1 12 32 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
34	3	14	60	73							
40	2	20	72								
41	3	0	44	50							

LINK NUMBER	FLOW INTO LINK (PCU/H)	SAT FLOW (PCU/H)	DEGREE OF SAT (%)	MEAN PER CRUISE (SEC)	TIMES PER CRUISE (SEC)	-----DELAY----- (PCU-H/H)	UNIFORM DELAY (U+R+O=MEAN Q)	RANDOM+ OVERSAT DELAY	COST OF DELAY (\$/H)	----STOPS---- (PCU)	MEAN STOPS /PCU (%)	COST OF STOPS (\$/H)	----QUEUE---- (PCU)	MEAN AVERAGE EXCESS OF (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START END (SECONDS)	TIMES START 1ST 2ND END
1010	967	2055	47	15.0	1.7	0.0 + 0.4	(6.3)	2	(0.3)	0	(0.0)*	6.6	0	(0.0)*	0.1			
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0	(0.1)	1	(0.0)	0	(0.0)*	0.1						
1030	1191	2055	58	19.0	2.1	0.0 + 0.7	(9.8)	3	(0.4)	1	(0.0)*	10.2						
1031BL	22	1915	1	19.1	0.9	0.0 + 0.0	(0.1)	1	(0.0)	0	(0.0)*	0.1						
1040	44	715	10	20.0	4.4	0.0 + 0.1	(0.8)	0	(0.0)	0	(0.0)	0.8						
1099	10	8000	0	18.0	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	(0.0)	0.0						
2010	64	1000	26	3.0	9.6	0.0 + 0.2	(2.4)	0	(0.0)	0	(0.0)*	2.4						
2011	1192	2115S	59	21.5	2.2	0.1 + 0.7	(10.5)	8	(2.2)	8	(0.0)*	12.6						
2012BL	50	2011L	59	29.3	2.3	0.0 + 0.0	(0.5)	11	(0.1)	8	(0.0)*	0.5						
2030	1472	3786S	40	18.0	0.8	0.0 + 0.3	(4.6)	1	(0.3)	0	(0.0)	4.9						
2031BL	50	2030L	40	22.5	0.8	0.0 + 0.0	(0.2)	1	(0.0)	0	(0.0)	0.2						
2040	34	600	49	18.0	54.4	0.1 + 0.5	(7.3)	180	(1.3)	1	(0.0)	8.6						
2041	19	715	5	18.0	5.0	0.0 + 0.0	(0.4)	0	(0.0)	0	(0.0)	0.4						
2097BL	50	2098L	15	22.5	0.3	0.0 + 0.0	(0.1)	0	(0.0)	0	(0.0)	0.1						
2098	1161	8000S	15	18.0	0.3	0.0 + 0.1	(1.2)	0	(0.1)	0	(0.1)	1.3						
2099	741	8000	9	18.0	0.2	0.0 + 0.1	(0.7)	0	(0.0)	0	(0.0)	0.8						
3010	814	2075	39	17.0	1.4	0.0 + 0.3	(4.6)	2	(0.3)	0	(0.0)	4.9						
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0	(0.2)	1	(0.0)	0	(0.0)	0.2						
3410	826	1910	89	6.0	37.3	4.9 + 3.7	(121.6)	83	(11.8)	16	+	133.4	34			22	60	
3411	161	1993S	19	6.0	18.3	0.7 + 0.1	(11.6)	63	(1.7)	3		13.3	34			22	60	
3412BL	22	3411L	19	36.0	19.4	0.1 + 0.0	(1.7)	75	(0.0)	3		1.7	34			22	60	
3430	768	1972	76	11.0	9.1	0.4 + 1.6	(27.5)	56	(8.2)	16		35.7	34			20	60	
3431BL	22	1915	2	12.9	2.0	0.0 + 0.0	(0.2)	3	(0.0)	0	(0.0)*	0.2	34			20	60	
3440BL	28	1665	13	9.0	40.9	0.2 + 0.1	(4.5)	100	(0.4)	1		4.9	34			5	14	
3442	398	1787	77	7.0	41.3	2.9 + 1.7	(64.8)	106	(9.9)	10		74.7	34			72	14	
3443	423	1577	93	7.0	71.5	3.3 + 5.1	(119.3)	142	(14.0)	14	+	133.3	34			72	14	
3450	50	10000	7	10.0	37.7	0.5 + 0.0	(7.4)	96	(0.0)	1		7.5	34			68	73	
3451	50	10000	1	10.0	11.4	0.2 + 0.0	(2.2)	52	(0.0)	1		2.3	34			22	60	
3499	559	8000	7	12.3	0.2	0.0 + 0.0	(0.5)	0	(0.0)	0		0.6						
4010	880	1949	75	18.0	17.8	2.9 + 1.5	(61.9)	75	(14.1)	15		75.9	40			25	72	
4011BL	22	4012L	18	22.5	9.3	0.0 + 0.0	(0.8)	45	(0.1)	2		0.9	40			25	72	
4012	158	1707S	18	18.0	9.3	0.3 + 0.1	(5.8)	45	(1.5)	2		7.3	40			25	72	

PROGRAM TRANSYT FINISHED

PRT

PRT File

PM Peak : 2011 Flow 1700-1800 + committed + 385 units

1 TRANSYT 12

Traffic Network Study Tool

Analysis Program Release 7 (July 2010)
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Run with file:- "WEST HENDON A5_DETAILED_PM_OPT_V3.DAT" at 09:46 on 20130313

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 61
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 40
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 11342 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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 0=NO 1=EQUAL  SCALE  SCALE  CARD32 0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  PER  1-1200  START  END  0=YES 1=CYCLE  %  %  50-200 0=TIMES 1=O/SET  FINAL  OUTPUT  P PER  P PER
      80    40    60  (SEC)  (SEC) 3 0 1 100 100 0 2 0 0 1420 260
CARD  CARD
NO.   TYPE
3)= 2 40 41 34 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 2011 2012 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5)= 7 2030 2031 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6)= 7 2098 2097 0 0 0 0 0 0 0 0 0 0 0 0 0 0
7)= 7 3411 3412 0 0 0 0 0 0 0 0 0 0 0 0 0 0
8)= 7 4012 4011 0 0 0 0 0 0 0 0 0 0 0 0 0 0
9)= 7 4031 4032 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10)= 7 4097 4098 0 0 0 0 0 0 0 0 0 0 0 0 0 0
11)= 7 4199 4198 0 0 0 0 0 0 0 0 0 0 0 0 0 0
12)= 7 5010 5011 0 0 0 0 0 0 0 0 0 0 0 0 0 0
13)= 7 6011 6012 0 0 0 0 0 0 0 0 0 0 0 0 0 0
14)= 7 6020 6021 0 0 0 0 0 0 0 0 0 0 0 0 0 0
15)= 7 6099 6098 0 0 0 0 0 0 0 0 0 0 0 0 0 0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
16)= 10 34 7 1 5
17)= 10 40 7 12
18)= 10 41 12 12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
19)= 11 34 8 12 12
20)= 11 40 15 6
21)= 11 41 18 11
    
```

NODE CARDS: STAGE CHANGE TIMES (WORKING)

```

CARD  CARD  NODE  Sg1/Db1
NO.   TYPE  NO.  Cycled
22)= 12 34 1 39 6 19
23)= 12 40 1 30 12
24)= 12 41 1 25 75
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY COEFFS.
NO.   TYPE  NO.   LINK1 LINK2  ONLY  A1  A2
      0  % FLOW  X100  X100
25)= 30 1040 1030 0 0 22 0 0 0 0 0 0 0 0 0 0 0
26)= 30 2010 2030 0 0 50 0 0 0 0 0 0 0 0 0 0 0
27)= 30 2040 2030 2011 0 22 19 0 0 0 0 0 0 0 0 0 0
28)= 30 2041 2030 0 0 22 0 0 0 0 0 0 0 0 0 0 0
29)= 30 4030 0 4010 4 0 50 0 0 0 0 0 0 0 0 0 0
30)= 30 6010 6020 0 0 22 0 0 0 0 0 0 0 0 0 0 0
    
```

LINK CARDS: FIXED DATA

```

FIRST GREEN SECOND GREEN
    
```

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)=	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)=	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)=	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)=	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)=	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)=	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)=	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)=	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)=	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)=	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)=	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)=	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)=	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)=	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)=	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)=	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)=	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)=	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)=	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)=	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)=	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)=	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)=	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)=	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)=	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)=	31	4010	40	1	15	2	0	0	0	0	0	200	0	1949	0	0
57)=	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)=	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)=	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)=	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)=	31	4030	40	1	5	2	1	0	0	0	0	45	0	1774	0	0
62)=	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)=	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)=	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)=	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)=	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)=	31	4110	41	1	12	2	0	0	0	0	0	56	0	1919	0	0
68)=	31	4111	41	1	16	2	0	0	0	0	0	56	0	2040	0	0
69)=	31	4120	41	2	11	1	0	0	0	0	0	200	0	1959	0	0
70)=	31	4121	41	2	11	0	0	0	0	0	0	200	0	1773	0	0
71)=	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)=	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)=	31	4150	41	2	11	1	0	0	0	0	0	12	0	10000	0	0
74)=	31	4151	41	1	12	2	0	0	0	0	0	11	0	10000	0	0
75)=	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)=	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)=	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
78)=	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
79)=	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
80)=	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
81)=	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
82)=	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
83)=	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)=	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
85)=	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
86)=	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
87)=	32	1010	1093	0	4010	1024	15	4021	69	15	0	0	0	0	0	0
88)=	32	1011	25	0	4011	25	3200	0	0	0	0	0	0	0	0	0
89)=	32	1030	1040	0	3430	743	19	3443	297	19	0	0	0	0	0	0
90)=	32	1031	25	0	3431	25	3200	0	0	0	0	0	0	0	0	0
91)=	32	1040	171	0	0	0	20	0	0	0	0	0	0	0	0	0
92)=	32	1099	10	0	1030	10	18	0	0	0	0	0	0	0	0	0
93)=	32	2010	66	0	2011	66	3	0	0	0	0	0	0	0	0	0
94)=	32	2011	1249	0	4110	884	23	4121	365	18	0	0	0	0	0	0
95)=	32	2012	53	0	4111	53	3200	0	0	0	0	0	0	0	0	0
96)=	32	2030	1236	0	0	0	18	0	0	0	0	0	0	0	0	0
97)=	32	2031	53	0	0	0	3200	0	0	0	0	0	0	0	0	0
98)=	32	2040	55	0	0	0	18	0	0	0	0	0	0	0	0	0
99)=	32	2041	31	0	0	0	18	0	0	0	0	0	0	0	0	0
100)=	32	2097	53	0	2012	53	3200	0	0	0	0	0	0	0	0	0
101)=	32	2098	1238	0	2011	1183	18	2040	55	18	0	0	0	0	0	0
102)=	32	2099	484	0	2010	66	18	2030	418	18	0	0	0	0	0	0
103)=	32	3010	849	0	2030	818	17	2041	31	17	0	0	0	0	0	0
104)=	32	3011	53	0	2031	53	3200	0	0	0	0	0	0	0	0	0
105)=	32	3410	884	0	1010	884	6	0	0	0	0	0	0	0	0	0
106)=	32	3411	209	0	1010	209	6	0	0	0	0	0	0	0	0	0
107)=	32	3412	25	0	1011	25	3219	0	0	0	0	0	0	0	0	0
108)=	32	3430	743	0	4130	743	11	0	0	0	0	0	0	0	0	0
109)=	32	3431	25	0	4131	25	3200	0	0	0	0	0	0	0	0	0
110)=	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
111)=	32	3442	437	0	5010	437	7	0	0	0	0	0	0	0	0	0
112)=	32	3443	297	0	5010	297	19	0	0	0	0	0	0	0	0	0
113)=	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
114)=	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)=	32	3499	646	0	3411	209	18	3442	437	18	0	0	0	0	0	0
116)=	32	4010	1024	0	0	0	18	0	0	0	0	0	0	0	0	0
117)=	32	4011	25	0	0	0	3200	0	0	0	0	0	0	0	0	0
118)=	32	4012	386	0	0	0	18	0	0	0	0	0	0	0	0	0
119)=	32	4020	224	0	0	0	20	0	0	0	0	0	0	0	0	0
120)=	32	4021	69	0	0	0	18	0	0	0	0	0	0	0	0	0
121)=	32	4030	241	0	1030	241	5	0	0	0	0	0	0	0	0	0
122)=	32	4031	960	0	1030	789	5	1040	171	4	0	0	0	0	0	0
123)=	32	4032	25	0	1031	25	3210	0	0	0	0	0	0	0	0	0
124)=	32	4097	1184	0	4020	224	18	4030	10	18	4031	960	18	0	0	0
125)=	32	4098	25	0	4032	25	3200	0	0	0	0	0	0	0	0	0
126)=	32	4099	627	0	4012	386	18	4030	241	18	0	0	0	0	0	0
127)=	32	4110	884	0	7010	884	8	0	0	0	0	0	0	0	0	0
128)=	32	4111	53	0	7011	53	3216	0	0	0	0	0	0	0	0	0
129)=	32	4120	237	0	0	0	20	0	0	0	0	0	0	0	0	0
130)=	32	4121	365	0	0											

147)= 32 7011 53 0 3412 25 3200 3440 28 3200 0 0 0 0 0 0

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 148) and 149)

LINK DATA: QUEUE CONSTRAINTS

Table with columns: CARD NO., LINK TYPE, LINK NO., LIMIT QUEUE, QUEUE WEIGHT, LINK NO., LIMIT QUEUE, QUEUE WEIGHT, LINK NO., LIMIT QUEUE, QUEUE WEIGHT, LINK NO., LIMIT QUEUE, QUEUE WEIGHT. Rows 150) through 158)

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

80 SECOND CYCLE 40 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 34, 40, 41

Main performance table with columns: LINK NUMBER, FLOW INTO LINK, SAT FLOW, DEGREE OF SAT, MEAN PER CRUISE, TIMES DELAY, DELAY (SEC), UNIFORM OVERSAT, RANDOM+ OF DELAY, COST OF DELAY, MEAN STOPS, COST OF STOPS, QUEUE MAX, AVERAGE EXCESS, PERFORMANCE INDEX, SUM OF VALUES, EXIT NODE, GREEN START, TIMES END, START 1ST, START 2ND. Rows 1010 through 4130

80 SECOND CYCLE 40 STEPS

Main performance table with columns: LINK NUMBER, FLOW INTO LINK, SAT FLOW, DEGREE OF SAT, MEAN PER CRUISE, TIMES DELAY, DELAY (SEC), UNIFORM OVERSAT, RANDOM+ OF DELAY, COST OF DELAY, MEAN STOPS, COST OF STOPS, QUEUE MAX, AVERAGE EXCESS, PERFORMANCE INDEX, SUM OF VALUES, EXIT NODE, GREEN START, TIMES END, START 1ST, START 2ND. Rows 4131BL through 7011BL

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

Summary table with columns: TOTAL DISTANCE TRAVELLED, TOTAL TIME SPENT, MEAN JOURNEY SPEED, TOTAL UNIFORM DELAY, TOTAL RANDOM+ DELAY, TOTAL COST OF DELAY, TOTAL COST OF STOPS, PENALTY FOR EXCESS QUEUES, TOTAL PERFORMANCE INDEX. Row 3427.0

102.6	5.8	17.6	0.8	0.4	(17.2)	+	(0.8)	+	(6.6)	=	24.5	BUSES
3324.5	154.5	21.5	35.6	30.7	(941.6)	+	(107.4)	+	(0.0)	=	1049.0	OTHER

	CRUISE LITRES PER HOUR	+	DELAY LITRES PER HOUR	+	STOPS LITRES PER HOUR	=	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	196.1		77.7		49.5		323.3

NO. OF ENTRIES TO SUBPT = 1
NO. OF LINKS RECALCULATED= 61

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12
- (SECONDS)

34	3	39	6	19
40	2	30	12	
41	2	25	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)				
3427.0	160.2	21.4	36.4	30.9	(956.1)	+	(107.8)	+	(6.6)	=	1070.5	TOTALS
102.6	5.8	17.6	0.8	0.4	(17.2)	+	(0.8)	+	(6.6)	=	24.5	BUSES
3324.5	154.4	21.5	35.6	30.6	(939.0)	+	(107.0)	+	(0.0)	=	1046.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 225

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32
- (SECONDS)

34	3	39	6	19
40	2	30	12	
41	2	25	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)				
3427.0	160.2	21.4	36.4	30.9	(956.1)	+	(107.8)	+	(6.6)	=	1070.5	TOTALS
102.6	5.8	17.6	0.8	0.4	(17.2)	+	(0.8)	+	(6.6)	=	24.5	BUSES
3324.5	154.4	21.5	35.6	30.6	(939.0)	+	(107.0)	+	(0.0)	=	1046.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 229

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1
- (SECONDS)

34	3	39	6	19
40	2	30	12	
41	2	25	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)				
3427.0	160.2	21.4	36.4	30.9	(956.1)	+	(107.8)	+	(6.6)	=	1070.5	TOTALS
102.6	5.8	17.6	0.8	0.4	(17.2)	+	(0.8)	+	(6.6)	=	24.5	BUSES
3324.5	154.4	21.5	35.6	30.6	(939.0)	+	(107.0)	+	(0.0)	=	1046.0	OTHER

NO. OF ENTRIES TO SUBPT = 13
NO. OF LINKS RECALCULATED= 404

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1 12
- (SECONDS)

34	3	39	6	19
40	2	30	12	
41	2	25	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)				
3427.0	160.2	21.4	36.4	30.9	(956.1)	+	(107.8)	+	(6.6)	=	1070.5	TOTALS
102.6	5.8	17.6	0.8	0.4	(17.2)	+	(0.8)	+	(6.6)	=	24.5	BUSES
3324.5	154.4	21.5	35.6	30.6	(939.0)	+	(107.0)	+	(0.0)	=	1046.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 251

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1 12 32
- (SECONDS)

34	3	39	6	19
40	2	30	12	
41	2	25	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)				
3427.0	160.2	21.4	36.4	30.9	(956.1)	+	(107.8)	+	(6.6)	=	1070.5	TOTALS
102.6	5.8	17.6	0.8	0.4	(17.2)	+	(0.8)	+	(6.6)	=	24.5	BUSES
3324.5	154.4	21.5	35.6	30.6	(939.0)	+	(107.0)	+	(0.0)	=	1046.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 256

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1 12 32 1
- (SECONDS)

34 3 39 6 19
40 2 30 12
41 2 25 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)	
3427.0	160.2	21.4	36.4	30.9	(956.1) + (107.8)	+ (6.6)	=	1070.5	TOTALS
102.6	5.8	17.6	0.8	0.4	(17.2) + (0.8)	+ (6.6)	=	24.5	BUSES
3324.5	154.4	21.5	35.6	30.6	(939.0) + (107.0)	+ (0.0)	=	1046.0	OTHER

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 253

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1 12 32 1 -1
- (SECONDS)

34 3 39 6 19
40 2 30 12
41 2 25 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)	
3427.0	160.2	21.4	36.4	30.9	(956.1) + (107.8)	+ (6.6)	=	1070.5	TOTALS
102.6	5.8	17.6	0.8	0.4	(17.2) + (0.8)	+ (6.6)	=	24.5	BUSES
3324.5	154.4	21.5	35.6	30.6	(939.0) + (107.0)	+ (0.0)	=	1046.0	OTHER

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

80 SECOND CYCLE 40 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 12 32 -1 12 32 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
34	3	39	6	19							
40	2	30	12								
41	2	25	75								

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER PCU DELAY (SEC)	-----DELAY----- UNIFORM OVERSAT COST (U+R+O=MEAN Q) (PCU-H/H) (\$/H)	----STOPS---- MEAN COST OF STOPS (%/PCU) (\$/H)	----QUEUE---- MEAN AVERAGE EXCESS OF (PCU) (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
1010	1093	2055	53	15.0	1.9	0.0 + 0.6 (8.1)	2 (0.4)	1 (0.0)*	8.4			
1011BL	25	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1			
1030	1041	2055	51	19.0	1.8	0.0 + 0.5 (7.3)	2 (0.3)	1 (0.0)*	7.6			
1031BL	25	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1			
1040	171	715	35	20.0	5.7	0.0 + 0.3 (3.8)	0 (0.0)	0 (0.0)	3.8			
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0			
2010	65	1000	18	3.0	6.0	0.0 + 0.1 (1.5)	0 (0.0)	0 (0.0)*	1.5			
2011	1248	2115S	62	21.5	2.5	0.1 + 0.8 (12.1)	11 (3.0)	9 (0.0)*	15.2			
2012BL	53	2011L	62	29.3	2.6	0.0 + 0.0 (0.6)	17 (0.1)	9 (0.0)*	0.7			
2030	1236	3786S	34	18.0	0.7	0.0 + 0.2 (3.5)	1 (0.2)	0 (0.0)	3.7			
2031BL	53	2030L	34	22.5	0.7	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2			
2040	55	600	57	18.0	47.4	0.1 + 0.6 (10.3)	141 (1.6)	1 (0.0)	11.9			
2041	31	715	7	18.0	4.5	0.0 + 0.0 (0.5)	0 (0.0)	0 (0.0)	0.5			
2097BL	53	2098L	16	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0 (0.0)	0.1			
2098	1238	8000S	16	18.0	0.3	0.0 + 0.1 (1.3)	0 (0.1)	0 (0.0)	1.4			
2099	483	8000	6	18.0	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0 (0.0)	0.5			
3010	849	2075	41	17.0	1.5	0.0 + 0.3 (4.9)	2 (0.3)	0 (0.0)	5.2			
3011BL	53	1945	3	20.8	1.0	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2			
3410	883	1910	92	6.0	41.2	4.7 + 5.4 (143.4)	87 (13.1)	19 (0.0)*	156.5	34	47	6
3411	210	1993S	24	6.0	17.3	0.9 + 0.1 (14.3)	57 (2.0)	3 (0.0)	16.3	34	47	6
3412BL	25	3411L	24	35.0	15.4	0.1 + 0.0 (1.5)	61 (0.0)	3 (0.0)	1.5	34	47	6
3430	744	1972	72	11.0	7.4	0.3 + 1.3 (21.6)	31 (4.4)	11 (0.0)*	26.0	34	45	6
3431BL	25	1915	2	12.9	2.5	0.0 + 0.0 (0.2)	4 (0.0)	0 (0.0)*	0.3	34	45	6
3440BL	28	1665	15	9.0	43.1	0.2 + 0.1 (4.8)	102 (0.4)	1 (0.0)	5.2	34	31	39
3442	437	1787	89	7.0	57.0	3.4 + 3.5 (98.3)	126 (12.9)	13 (0.0)	111.2	34	18	39
3443	298	1577	69	19.0	38.9	2.1 + 1.1 (45.7)	103 (1.0)	7 (0.0)	46.7	34	18	39
3450	50	10000	7	10.0	37.7	0.5 + 0.0 (7.4)	96 (0.0)	1 (0.0)	7.5	34	14	19
3451	50	10000	1	10.0	10.4	0.1 + 0.0 (2.0)	49 (0.0)	1 (0.0)	2.0	34	47	6
3499	647	8000	8	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.7			
4010	1024	1949	88	18.0	25.3	3.8 + 3.4 (102.3)	93 (20.1)	22 (0.0)*	122.3	40	45	12
4011BL	25	4012L	33	22.5	6.1	0.0 + 0.0 (0.6)	35 (0.1)	3 (0.0)	0.7	40	35	12
4012	386	1707S	33	18.0	6.1	0.4 + 0.2 (9.4)	35 (2.8)	3 (0.0)	12.2	40	35	12
4020	224	1754	79	20.0	60.1	2.0 + 1.7 (53.1)	124 (4.8)	6 (0.0)	57.9	40	18	30
4021	69	1641	26	18.0	38.5	0.6 + 0.2 (10.5)	96 (1.4)	1 (0.0)	11.9	40	18	30
4030	242	1774	72	5.0	39.0	1.4 + 1.3 (37.3)	116 (4.0)	5 (0.0)	41.2	40	35	13
4031	960	1907S	71	4.8	9.1	1.2 + 1.2 (34.3)	39 (5.3)	9 (0.0)*	39.6	40	35	12
4032BL	25	4031L	71	23.8	14.3	0.1 + 0.0 (1.4)	70 (0.0)	9 (0.1)*	8.0	40	35	12
4097	1185	8000S	15	18.0	0.3	0.0 + 0.1 (1.2)	0 (0.1)	0 (0.0)	1.3			
4098BL	25	4097L	15	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0			
4099	628	8000	8	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6			
4110	883	2288f	79	8.0	30.2	5.5 + 1.8 (105.1)	75 (5.7)	15 (0.0)*	110.8	41	37	75
4111BL	53	2040	6	31.4	15.3	0.2 + 0.0 (3.2)	50 (0.0)	1 (0.0)	3.2	41	41	75
4120	237	1959	48	20.0	32.7	1.7 + 0.5 (30.6)	91 (3.7)	5 (0.0)	34.3	41	6	25
4121	365	1773	82	18.0	50.1	2.9 + 2.2 (72.2)	116 (9.0)	10 (0.0)	81.1	41	6	25
4130	849	2332f	75	5.0	20.7	3.4 + 1.5 (69.3)	80 (9.6)	16 (0.0)*	79.0	41	37	75

80 SECOND CYCLE 40 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PER PCU DELAY (SEC)	-----DELAY----- UNIFORM OVERSAT COST (U+R+O=MEAN Q) (PCU-H/H) (\$/H)	----STOPS---- MEAN COST OF STOPS (%/PCU) (\$/H)	----QUEUE---- MEAN AVERAGE EXCESS OF (PCU) (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START 2ND (SECONDS)
-------------	----------------	----------	---------------	-----------------	---------------------------	--	---	--	--	-----------	---------------------------	---------------------------

4131BL	53	1696	8	31.8	17.0	0.2 +	0.0	(3.6)	63	(0.0)	1	3.6	41	43	75
4150	50	10000	2	10.0	24.0	0.3 +	0.0	(4.7)	76	(0.0)	1	4.7	41	6	25
4151	50	10000	1	10.0	10.9	0.1 +	0.0	(2.1)	50	(0.0)	1	2.1	41	37	75
4198BL	28	4199L	5	22.5	0.2	0.0 +	0.0	(0.0)	0	(0.0)	0	0.0			
4199	342	8000S	5	18.0	0.2	0.0 +	0.0	(0.3)	0	(0.0)	0	0.3			
5010	733	3929S	19	3.0	0.6	0.0 +	0.1	(1.6)	1	(0.1)	0	1.7			
5011BL	28	5010L	19	3.6	0.6	0.0 +	0.0	(0.1)	1	(0.0)	0	0.1			
6010	161	715	28	18.0	4.3	0.0 +	0.2	(2.7)	0	(0.0)	0	2.7			
6011	659	1618S	42	18.0	1.9	0.0 +	0.4	(5.0)	2	(0.3)	0	5.4			
6012BL	28	6011L	42	22.5	1.9	0.0 +	0.0	(0.2)	2	(0.0)	0	0.2			
6020	572	1800S	33	18.0	1.5	0.0 +	0.2	(3.4)	2	(0.2)	0	3.6			
6021BL	28	6020L	33	22.5	1.5	0.0 +	0.0	(0.2)	2	(0.0)	0	0.2			
6098BL	28	6099L	9	64.8	0.2	0.0 +	0.0	(0.0)	0	(0.0)	0	0.0			
6099	659	8000S	9	18.0	0.2	0.0 +	0.0	(0.6)	0	(0.0)	0	0.7			
7010	883	2055	43	8.0	1.5	0.0 +	0.4	(5.3)	2	(0.2)	0	5.6			
7011BL	53	1915	3	8.0	1.0	0.0 +	0.0	(0.2)	1	(0.0)	0	0.2			

*** 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)		
3427.0	160.2	21.4	36.4	30.9	(956.1)	+ (107.8)	+ (6.6)	=	1070.5	TOTALS
102.6	5.8	17.6	0.8	0.4	(17.2)	+ (0.8)	+ (6.6)	=	24.5	BUSES
3324.5	154.4	21.5	35.6	30.6	(939.0)	+ (107.0)	+ (0.0)	=	1046.0	OTHER

ROUTE

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	196.1	+ 77.5	+ 49.4	= 323.0

NO. OF ENTRIES TO SUBPT = 7
NO. OF LINKS RECALCULATED= 256

PROGRAM TRANSYT FINISHED

PRT

PRT File Sat Peak : 2011 Flow 1200-1300

1 TRANSYT 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:- "WEST HENDON A5_DETAILED_SAT_OPT_V3.DAT" at 09:49 on 20130313

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 40
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 11623 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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
2)= 1      80      40      60      2      3      0      1      100      100      0      2      0      0      1420      260
CARD  CARD  NO.   TYPE
3)= 2      40      41      34      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  2011  2012  0  0  0  0  0  0  0  0  0  0  0  0  0  0
5)= 7  2030  2031  0  0  0  0  0  0  0  0  0  0  0  0  0  0
6)= 7  2098  2097  0  0  0  0  0  0  0  0  0  0  0  0  0  0
7)= 7  3411  3412  0  0  0  0  0  0  0  0  0  0  0  0  0  0
8)= 7  4012  4011  0  0  0  0  0  0  0  0  0  0  0  0  0  0
9)= 7  4031  4032  0  0  0  0  0  0  0  0  0  0  0  0  0  0
10)= 7  4097  4098  0  0  0  0  0  0  0  0  0  0  0  0  0  0
11)= 7  4111  4200  0  0  0  0  0  0  0  0  0  0  0  0  0  0
12)= 7  4131  4132  0  0  0  0  0  0  0  0  0  0  0  0  0  0
13)= 7  4199  4198  0  0  0  0  0  0  0  0  0  0  0  0  0  0
14)= 7  5010  5011  0  0  0  0  0  0  0  0  0  0  0  0  0  0
15)= 7  6011  6012  0  0  0  0  0  0  0  0  0  0  0  0  0  0
16)= 7  6020  6021  0  0  0  0  0  0  0  0  0  0  0  0  0  0
17)= 7  6099  6098  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.
18)= 10  34      7  1  5
19)= 10  40      7  7
20)= 10  41     12  6  12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
21)= 11  34      8  12  12
22)= 11  40      5  6
23)= 11  41     12  0  11
    
```

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
24)= 12  34      1  12  61  74
25)= 12  40      1  12  73
26)= 12  41      1  78  45  51
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY  LINK1  LINK2  LINK1  GIVEWAY  COEFFS.
NO.   TYPE  NO.   LINK1  LINK2  ONLY  X100  X100
27)= 30  1040  1030  0  0  0  22  0  0  0  0  0  0  0  0  0  0  0
28)= 30  2010  2030  0  0  0  50  0  0  0  0  0  0  0  0  0  0  0
29)= 30  2040  2030  2011  0  0  22  19  0  0  0  0  0  0  0  0  0  0
30)= 30  2041  2030  0  0  0  22  0  0  0  0  0  0  0  0  0  0  0
31)= 30  4030  0  4010  37  0  50  0  0  0  0  0  0  0  0  0  0  0
32)= 30  6010  6020  0  0  0  22  0  0  0  0  0  0  0  0  0  0  0
    
```


6010	220	715	36	18.0	4.6	0.0	+	0.3	(4.0)	0	(0.0)	0		4.0		
6011	569	1618S	37	18.0	1.8	0.0	+	0.3	(3.9)	2	(0.3)	0		4.2		
6012BL	24	6011L	37	22.5	1.8	0.0	+	0.0	(0.2)	2	(0.0)	0		0.2		
6020	460	1800S	27	18.0	1.4	0.0	+	0.2	(2.5)	2	(0.2)	0		2.7		
6021BL	28	6020L	27	22.5	1.4	0.0	+	0.0	(0.2)	2	(0.0)	0		0.2		
6098BL	24	6099L	7	64.8	0.2	0.0	+	0.0	(0.0)	0	(0.0)	0		0.0		
6099	569	8000S	7	18.0	0.2	0.0	+	0.0	(0.5)	0	(0.0)	0		0.6		
7010	933	2055	45	8.0	1.6	0.0	+	0.4	(5.9)	2	(0.2)	0		6.1		
7011BL	50	1915	3	8.0	1.0	0.0	+	0.0	(0.2)	1	(0.0)	0		0.2		
TOTAL		TOTAL		MEAN		TOTAL		TOTAL		TOTAL		TOTAL		PENALTY		TOTAL
DISTANCE		TIME		JOURNEY		UNIFORM		RANDOM+		COST		COST		FOR		PERFORMANCE
TRAVELLED		SPENT		SPEED		DELAY		OVERSAT		OF		OF		EXCESS		INDEX
(PCU-KM/H)		(PCU-H/H)		(KM/H)		(PCU-H/H)		(PCU-H/H)		DELAY		DELAYS		STOPS		QUEUES
										(\$/H)		(\$/H)		(\$/H)		(\$/H)
3219.7		144.9		22.2		30.6		27.9		(830.2)		(98.8)		(2.6)		= 931.6
95.1		6.2		15.3		0.8		0.4		(16.5)		(0.8)		(2.6)		= 20.0
3124.5		138.7		22.5		29.8		27.5		(813.6)		(98.0)		(0.0)		= 911.6

	CRUISE	DELAY	STOPS	TOTALS
	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	183.4	+ 67.3	+ 45.7	= 296.4

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 63

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12
 - (SECONDS)

34	3	12	61	74
40	2	12	73	
41	3	78	45	51

TOTAL	TOTAL	MEAN	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	PENALTY	TOTAL
DISTANCE	TIME	JOURNEY	UNIFORM	RANDOM+	COST	COST	OF	FOR	PERFORMANCE
TRAVELLED	SPENT	SPEED	DELAY	OVERSAT	OF	OF	OF	EXCESS	INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	DELAY	DELAYS	STOPS	QUEUES	(\$/H)
					(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
3219.7	144.9	22.2	30.6	27.9	(829.8)	(98.8)	(2.6)	=	931.2
95.1	6.2	15.3	0.8	0.4	(16.5)	(0.8)	(2.6)	=	20.0
3124.5	138.6	22.5	29.8	27.5	(813.3)	(97.9)	(0.0)	=	911.2

NO. OF ENTRIES TO SUBPT = 7
 NO. OF LINKS RECALCULATED= 236

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32
 - (SECONDS)

34	3	12	61	74
40	2	12	73	
41	3	78	45	51

TOTAL	TOTAL	MEAN	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	PENALTY	TOTAL
DISTANCE	TIME	JOURNEY	UNIFORM	RANDOM+	COST	COST	OF	FOR	PERFORMANCE
TRAVELLED	SPENT	SPEED	DELAY	OVERSAT	OF	OF	OF	EXCESS	INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	DELAY	DELAYS	STOPS	QUEUES	(\$/H)
					(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
3219.7	144.9	22.2	30.6	27.9	(829.8)	(98.8)	(2.6)	=	931.2
95.1	6.2	15.3	0.8	0.4	(16.5)	(0.8)	(2.6)	=	20.0
3124.5	138.6	22.5	29.8	27.5	(813.3)	(97.9)	(0.0)	=	911.2

NO. OF ENTRIES TO SUBPT = 7
 NO. OF LINKS RECALCULATED= 236

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1
 - (SECONDS)

34	3	12	61	74
40	2	12	73	
41	3	78	45	51

TOTAL	TOTAL	MEAN	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	PENALTY	TOTAL
DISTANCE	TIME	JOURNEY	UNIFORM	RANDOM+	COST	COST	OF	FOR	PERFORMANCE
TRAVELLED	SPENT	SPEED	DELAY	OVERSAT	OF	OF	OF	EXCESS	INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	DELAY	DELAYS	STOPS	QUEUES	(\$/H)
					(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
3219.7	144.9	22.2	30.6	27.9	(829.8)	(98.8)	(2.6)	=	931.2
95.1	6.2	15.3	0.8	0.4	(16.5)	(0.8)	(2.6)	=	20.0
3124.5	138.6	22.5	29.8	27.5	(813.3)	(97.9)	(0.0)	=	911.2

NO. OF ENTRIES TO SUBPT = 13
 NO. OF LINKS RECALCULATED= 385

80 SECOND CYCLE 40 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 12 32 -1 12
 - (SECONDS)

34	3	12	61	74
40	2	12	73	
41	3	78	45	51

TOTAL	TOTAL	MEAN	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	PENALTY	TOTAL
DISTANCE	TIME	JOURNEY	UNIFORM	RANDOM+	COST	COST	OF	FOR	PERFORMANCE
TRAVELLED	SPENT	SPEED	DELAY	OVERSAT	OF	OF	OF	EXCESS	INDEX
(PCU-KM/H)	(PCU-H/H)	(KM/H)	(PCU-H/H)	(PCU-H/H)	DELAY	DELAYS	STOPS	QUEUES	(\$/H)
					(\$/H)	(\$/H)	(\$/H)	(\$/H)	(\$/H)
3219.7	144.9	22.2	30.6	27.9	(829.8)	(98.8)	(2.6)	=	931.2
95.1	6.2	15.3	0.8	0.4	(16.5)	(0.8)	(2.6)	=	20.0
3124.5	138.6	22.5	29.8	27.5	(813.3)	(97.9)	(0.0)	=	911.2

NO. OF ENTRIES TO SUBPT = 7
 NO. OF LINKS RECALCULATED= 263

80 SECOND CYCLE 40 STEPS

4097	1259	8000S	16	18.0	0.3	0.0 + 0.1	(1.3)	0	(0.1)	0	1.4					
4098BL	22	4097L	16	22.5	0.3	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0					
4099	335	8000	4	18.0	0.2	0.0 + 0.0	(0.3)	0	(0.0)	0	0.3					
4110	825	1919	82	7.0	30.7	4.8 + 2.2	(100.0)	71	(6.4)	13	106.4	41	10	51		
4111BL	50	2040S	15	45.4	14.5	0.2 + 0.0	(2.9)	56	(0.0)	2	2.9	41	10	51		
4120	212	1959	51	20.0	36.6	1.6 + 0.5	(30.6)	96	(3.5)	5	34.1	41	62	78		
4121	308	1773	82	18.0	54.7	2.6 + 2.1	(66.5)	120	(7.9)	9	74.3	41	62	78		
4130	530	2056	57	5.0	20.9	2.4 + 0.7	(43.6)	76	(5.8)	9	49.4	41	10	45		

80 SECOND CYCLE 40 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES PCU DELAY (SEC)	UNIFORM DELAY (PCU-H/H)	RANDOM+ OVERSAT OF MEAN Q	COST OF DELAY (\$/H)	STOPS OF STOPS /PCU (%)	STOPS OF STOPS (\$/H)	QUEUE MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM OF () VALUES (\$/H)	EXIT NODE	GREEN START 1ST (SECONDS)	TIMES START END 2ND (SECONDS)	
4131BL	50	1696S	38	31.8	18.5	0.2 + 0.1	(3.6)	70	(0.0)	5	3.7	41	10	45		
4132	243	4131L	38	5.0	18.4	1.0 + 0.3	(17.7)	70	(2.4)	5	20.1	41	10	45		
4150	50	10000	2	10.0	26.5	0.4 + 0.0	(5.2)	80	(0.0)	1	5.2	41	62	78		
4151	50	10000	1	10.0	9.8	0.1 + 0.0	(1.9)	48	(0.0)	1	1.9	41	10	51		
4198BL	28	4199L	4	22.5	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0					
4199	254	8000S	4	18.0	0.2	0.0 + 0.0	(0.2)	0	(0.0)	0	0.2					
4200	108	4111L	15	7.0	18.1	0.5 + 0.1	(7.7)	62	(0.7)	2	8.5	41	10	51		
5010	680	3929S	18	3.0	0.6	0.0 + 0.1	(1.5)	1	(0.1)	0	1.6					
5011BL	28	5010L	18	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1					
6010	220	715	36	18.0	4.6	0.0 + 0.3	(4.0)	0	(0.0)	0	4.0					
6011	569	1618S	37	18.0	1.8	0.0 + 0.3	(3.9)	2	(0.3)	0	4.2					
6012BL	24	6011L	37	22.5	1.8	0.0 + 0.0	(0.2)	2	(0.0)	0	0.2					
6020	460	1800S	27	18.0	1.4	0.0 + 0.2	(2.5)	2	(0.2)	0	2.7					
6021BL	28	6020L	27	22.5	1.4	0.0 + 0.0	(0.2)	2	(0.0)	0	0.2					
6098BL	24	6099L	7	64.8	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0					
6099	569	8000S	7	18.0	0.2	0.0 + 0.0	(0.5)	0	(0.0)	0	0.6					
7010	933	2055	45	8.0	1.6	0.0 + 0.4	(5.9)	2	(0.2)	0	6.1					
7011BL	50	1915	3	8.0	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2					
TOTAL																
DISTANCE TRAVELLED	TOTAL TIME SPENT	MEAN JOURNEY SPEED	TOTAL UNIFORM DELAY	TOTAL RANDOM+ OVERSAT DELAY	TOTAL COST OF DELAY	TOTAL COST OF STOPS	TOTAL 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)								
3219.7	144.9	22.2	30.6	27.9	(829.8)	+	(98.8)	+	(2.6)	=	931.2	TOTALS				
95.1	6.2	15.3	0.8	0.4	(16.5)	+	(0.8)	+	(2.6)	=	20.0	BUSES				
3124.5	138.6	22.5	29.8	27.5	(813.3)	+	(97.9)	+	(0.0)	=	911.2	OTHER				

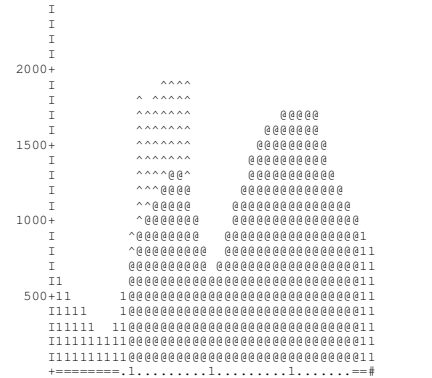
988.4	34.4	28.7	3.5	4.5	(113.7)	+	(18.3)	+	(0.0)	=	131.9	ROUTE				
1083.6	49.8	21.7	10.3	11.1	(304.1)	+	(33.8)	+	(0.0)	=	337.9	1				

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	183.4	+	67.3	+	45.7	=	296.3

NO. OF ENTRIES TO SUBPT = 7
 NO. OF LINKS RECALCULATED= 267

CYCLIC FLOW PROFILE GRAPHS

LINK 4031 FED BY 1030 1040 0 0 M.M.E. 0.37



PROGRAM TRANSYT FINISHED

PRT

PRT File AM Peak : 2011 Flow 0800-0900

1 TRANSYT 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:- "WEST HENDON A5_DETAILED_AM_V3.DAT" at 09:46 on 20130313

TRANST 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 62
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 14028 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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)  75    75    MINS.  (SEC)  (SEC)  1=YES  CYCLE  %      %      1=SPEEDS  2=FULL  OUTPUT  1=FULL  PCU-H  100
CARD  CARD  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE
      (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)
2)= 1 75 75 60 2 3 0 1 100 100 0 0 0 0 1420 260
CARD  CARD  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE
      (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)  (SEC)
3)= 2 40 41 34 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  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE  NO.   TYPE
4)= 7 2011 2012 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5)= 7 2030 2031 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6)= 7 2098 2097 0 0 0 0 0 0 0 0 0 0 0 0 0 0
7)= 7 3411 3412 0 0 0 0 0 0 0 0 0 0 0 0 0 0
8)= 7 4012 4011 0 0 0 0 0 0 0 0 0 0 0 0 0 0
9)= 7 4031 4032 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10)= 7 4097 4098 0 0 0 0 0 0 0 0 0 0 0 0 0 0
11)= 7 4199 4198 0 0 0 0 0 0 0 0 0 0 0 0 0 0
12)= 7 5010 5011 0 0 0 0 0 0 0 0 0 0 0 0 0 0
13)= 7 6011 6012 0 0 0 0 0 0 0 0 0 0 0 0 0 0
14)= 7 6020 6021 0 0 0 0 0 0 0 0 0 0 0 0 0 0
15)= 7 6099 6098 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.   NO.  NO.  NO.  NO.  NO.  NO.  NO.  NO.  NO.  NO.
16)= 10 34 7 1 5
17)= 10 40 7 7
18)= 10 41 12 3 12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.   NO.  NO.  NO.  NO.  NO.  NO.  NO.  NO.  NO.  NO.
19)= 11 34 8 12 12
20)= 11 40 5 6
21)= 11 41 18 3 11
    
```

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  NO.  NO.  NO.  NO.  NO.  NO.  NO.  NO.  NO.  NO.
22)= 12 34 1 12 50 67
23)= 12 40 1 26 67
24)= 12 41 1 0 36 42
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY COEFFS.  LINK  STOP  MAX  DELAY  DISFSN
NO.   TYPE  NO.   NO.   NO.  % FLOW  X100  X100  LENGTH WT. X100  FLOW WT. X100  WT. X100  X100
25)= 30 1040 1030 0 0 22 0 0 0 0 0 0 0 0
26)= 30 2010 2030 0 0 50 0 0 0 0 0 0 0 0
27)= 30 2040 2030 2011 0 22 19 0 0 0 0 0 0 0
28)= 30 2041 2030 0 0 22 0 0 0 0 0 0 0 0
29)= 30 4030 0 4010 37 0 50 0 0 0 0 0 0 0
30)= 30 6010 6020 0 0 22 0 0 0 0 0 0 0 0
    
```

LINK CARDS: FIXED DATA

FIRST GREEN SECOND GREEN

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START STAGE	LAG	END STAGE	LAG	START STAGE	LAG	END STAGE	LAG	LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
31)=	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)=	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)=	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)=	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)=	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)=	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)=	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)=	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)=	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)=	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)=	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)=	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)=	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)=	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)=	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)=	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)=	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)=	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)=	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)=	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)=	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)=	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)=	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)=	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)=	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)=	31	4010	40	1	5	2	0	0	0	0	0	200	0	1949	0	0
57)=	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)=	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)=	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)=	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)=	31	4030	40	1	5	2	4	0	0	0	0	45	0	1774	0	0
62)=	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)=	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)=	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)=	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)=	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)=	31	4110	41	1	12	3	0	0	0	0	0	56	0	1919	0	0
68)=	31	4111	41	1	16	3	0	0	0	0	0	56	0	2040	0	0
69)=	31	4120	41	3	11	1	0	0	0	0	0	200	0	1959	0	0
70)=	31	4121	41	3	11	0	0	0	0	0	0	200	0	1773	0	0
71)=	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)=	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)=	31	4150	41	3	11	1	0	0	0	0	0	12	0	10000	0	0
74)=	31	4151	41	1	12	3	0	0	0	0	0	11	0	10000	0	0
75)=	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)=	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)=	31	-4200	41	2	3	3	0	0	0	0	0	20	0	1800	0	0
78)=	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
79)=	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
80)=	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
81)=	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
82)=	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
83)=	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)=	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
85)=	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
86)=	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
87)=	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
88)=	32	1010	814	0	4010	727	15	4021	87	15	0	0	0	0	0	0
89)=	32	1011	22	0	4011	22	3200	0	0	0	0	0	0	0	0	0
90)=	32	1030	1006	0	3430	622	19	3443	384	19	0	0	0	0	0	0
91)=	32	1031	22	0	3431	22	3200	0	0	0	0	0	0	0	0	0
92)=	32	1040	44	0	0	0	20	0	0	0	0	0	0	0	0	0
93)=	32	1099	10	0	1030	20	18	0	0	0	0	0	0	0	0	0
94)=	32	2010	65	0	2011	65	3	0	0	0	0	0	0	0	0	0
95)=	32	2011	1017	0	4110	672	23	4121	345	18	0	0	0	0	0	0
96)=	32	2012	50	0	4111	50	3200	0	0	0	0	0	0	0	0	0
97)=	32	2030	1319	0	0	0	18	0	0	0	0	0	0	0	0	0
98)=	32	2031	50	0	0	0	3200	0	0	0	0	0	0	0	0	0
99)=	32	2040	34	0	0	0	18	0	0	0	0	0	0	0	0	0
100)=	32	2041	19	0	0	0	18	0	0	0	0	0	0	0	0	0
101)=	32	2097	50	0	2012	50	3200	0	0	0	0	0	0	0	0	0
102)=	32	2098	986	0	2011	952	18	2040	34	18	0	0	0	0	0	0
103)=	32	2099	741	0	2010	65	18	2030	676	18	0	0	0	0	0	0
104)=	32	3010	662	0	2030	643	17	2041	19	17	0	0	0	0	0	0
105)=	32	3011	50	0	2031	50	3200	0	0	0	0	0	0	0	0	0
106)=	32	3410	672	0	1010	672	6	0	0	0	0	0	0	0	0	0
107)=	32	3411	142	0	1010	142	6	0	0	0	0	0	0	0	0	0
108)=	32	3412	22	0	1011	22	3220	0	0	0	0	0	0	0	0	0
109)=	32	3430	622	0	4130	622	11	0	0	0	0	0	0	0	0	0
110)=	32	3431	22	0	4131	22	3200	0	0	0	0	0	0	0	0	0
111)=	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	0
112)=	32	3442	383	0	5010	383	7	0	0	0	0	0	0	0	0	0
113)=	32	3443	384	0	5010	384	7	0	0	0	0	0	0	0	0	0
114)=	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	0
115)=	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	0
116)=	32	3499	525	0	3411	142	18	3442	383	10	0	0	0	0	0	0
117)=	32	4010	727	0	0	0	18	0	0	0	0	0	0	0	0	0
118)=	32	4011	22	0	0	0	3200	0	0	0	0	0	0	0	0	0
119)=	32	4012	154	0	0	0	18	0	0	0	0	0	0	0	0	0
120)=	32	4020	479	0	0	0	20	0	0	0	0	0	0	0	0	0
121)=	32	4021	87	0	0	0	18	0	0	0	0	0	0	0	0	0
122)=	32	4030	211	0	1030	211	5	0	0	0	0	0	0	0	0	0
123)=	32	4031	819	0	1030	775	5	1040	44	4	0	0	0	0	0	0
124)=	32	4032	22	0	1031	22	3226	0	0	0	0	0	0	0	0	0
125)=	32	4097	1376	0	4020	479	18	4030	78	18	4031	819	18	0	0	0
126)=	32	4098	22	0	4032	22	3200	0	0	0	0	0	0	0	0	0
127)=	32	4099	287	0	4012	154	18	4030	133	18	0	0	0	0	0	0
128)=	32	4110	672	0	7010	672	7	0	0	0	0	0	0	0	0	0
129)=	32	4111	50	0	7011	50	3211	0	0	0	0	0	0	0	0	0
130)=	32	4120	229	0	0	0										

147)= 32 6099 731 0 6011 731 18 0 0 0 0 0 0 0 0 0 0 0 0
 148)= 32 7010 672 0 3410 672 8 0 0 0 0 0 0 0 0 0 0 0 0
 149)= 32 7011 50 0 3412 22 3200 3440 28 3200 0 0 0 0 0 0 0 0

LINK CARDS : FLARE SATURATION FLOW DATA

CARD NO.	LINK NO.	SAT. FLOW	FLARE CAPAC. VEH.	SAT. FLOW	FLARE CAPAC. VEH.	SAT. FLOW	FLARE CAPAC. VEH.
150)=	33	4110	2040	4	0	0	0
151)=	33	4130	1696	3	0	0	0

GRAPH PLOT CARDS

CARD NO.	CARD TYPE	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
152)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LINK DATA: QUEUE CONSTRAINTS

CARD NO.	CARD TYPE	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
153)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154)=	38	1011	12	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2011	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD NO.	CARD TYPE	ROUTE NUMBER	ROUTE DESCRIPTION
162)=	41	1	Southbound
163)=	41	2	Northbound

CARD NO.	CARD TYPE	ROUTE NUMBER	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.	LINK NO.
164)=	42	1	2030	3010	4130	3430	1030	4031	4097								
165)=	42	2	4010	1010	3410	7010	4110	2011	2098								

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

75 SECOND CYCLE 75 STEPS

INITIAL SETTINGS - (SECONDS)

NODE NO.	OF STAGES	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STAGE 7	STAGE 8	STAGE 9	STAGE 10
34	3	12	50	67							
40	2	26	67								
41	3	0	36	42							

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES DELAY	-----DELAY----- UNIFORM OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ COST OF DELAY (\$/H)	----STOPS---- MEAN STOPS /PCU (%)	-----STOP----- COST OF STOPS (\$/H)	----QUEUE---- MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM (\$/H)	EXIT NODE	GREEN START END	TIMES START END
1010	814	2055	40	15.0	1.4	0.0 + 0.3 (4.7)	2 (0.2)	0 (0.0)*	4.9					
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1					
1030	1007	2055	49	19.0	1.7	0.0 + 0.5 (6.8)	2 (0.3)	0 (0.0)*	7.1					
1031BL	22	1915	1	19.1	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1					
1040	44	715	9	20.0	4.0	0.0 + 0.0 (0.7)	0 (0.0)	0	0.7					
1099	10	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0					
2010	65	1000	21	3.0	7.2	0.0 + 0.1 (1.8)	0 (0.0)	0 (0.0)*	1.8					
2011	1017	2115S	50	21.3	1.9	0.1 + 0.5 (7.7)	12 (2.6)	7 (0.0)*	10.3					
2012BL	50	2011L	50	29.3	2.1	0.0 + 0.0 (0.4)	21 (0.1)	7 (0.0)*	0.6					
2030	1319	3786S	36	18.0	0.7	0.0 + 0.3 (3.9)	1 (0.3)	0	4.2					
2031BL	50	2030L	36	22.5	0.7	0.0 + 0.0 (0.1)	1 (0.0)	0	0.2					
2040	34	609	30	18.0	24.5	0.0 + 0.2 (3.3)	84 (0.6)	0	3.9					
2041	19	715	5	18.0	4.6	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3					
2097BL	50	2098L	13	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0	0.1					
2098	986	8000S	13	18.0	0.3	0.0 + 0.1 (1.0)	0 (0.1)	0	1.1					
2099	740	8000	9	18.0	0.2	0.0 + 0.1 (0.7)	0 (0.1)	0	0.8					
3010	663	2075	32	17.0	1.3	0.0 + 0.2 (3.3)	2 (0.2)	0	3.6					
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0 (0.2)	1 (0.0)	0	0.2					
3410	672	1910	85	6.0	49.5	6.5 + 2.7 (131.2)	116 (13.3)	16 +	144.5	34	20	50		
3411	142	1993S	20	6.0	27.9	1.0 + 0.1 (15.6)	96 (2.3)	3	17.9	34	20	50		
3412BL	22	3411L	20	36.0	17.7	0.1 + 0.0 (1.5)	79 (0.0)	3	1.5	34	20	50		
3430	623	1972	72	11.0	9.1	0.3 + 1.3 (22.3)	55 (6.5)	12	28.8	34	18	50		
3431BL	22	1915	3	12.9	2.4	0.0 + 0.0 (0.2)	3 (0.0)	0 (0.0)*	0.2	34	18	50		
3440BL	28	1665	14	9.0	40.0	0.2 + 0.1 (4.4)	101 (0.4)	1	4.8	34	4	12		
3442	384	1787	62	7.0	27.9	2.2 + 0.8 (42.3)	90 (8.0)	7	50.3	34	62	12		
3443	384	1577	70	7.0	32.0	2.3 + 1.2 (48.5)	96 (8.7)	8	57.1	34	62	12		
3450	50	10000	4	10.0	30.0	0.4 + 0.0 (5.9)	88 (0.0)	1	5.9	34	58	67		
3451	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	34	20	50		
3499	525	8000	7	12.2	0.2	0.0 + 0.0 (0.5)	0 (0.0)	0	0.5					
4010	727	1949	76	18.0	22.9	3.1 + 1.5 (65.8)	86 (13.3)	14	79.1	40	31	67		
4011BL	22	4012L	21	22.5	13.4	0.1 + 0.0 (1.2)	57 (0.2)	2	1.3	40	31	67		
4012	154	1707S	21	18.0	13.4	0.5 + 0.1 (8.2)	57 (1.9)	2	10.0	40	31	67		
4020	479	1754	71	20.0	28.3	2.6 + 1.2 (53.5)	93 (7.6)	10	61.1	40	73	26		
4021	87	1641	14	18.0	18.2	0.4 + 0.1 (6.2)	66 (1.2)	1	7.5	40	73	26		
4030	211	1774	79	5.0	50.5	1.2 + 1.8 (42.0)	130 (3.9)	6	46.0	40	31	71		
4031	819	1907S	89	4.9	28.0	2.6 + 3.8 (90.4)	80 (9.4)	16 +	99.8	40	31	67		
4032BL	22	4031L	89	39.8	39.1	0.1 + 0.1 (3.4)	111 (0.0)	16 (1.9)*	193.6	40	31	67		
4097	1376	8000S	17	18.0	0.3	0.0 + 0.1 (1.5)	0 (0.1)	0	1.6					
4098BL	22	4097L	17	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0					
4099	287	8000	4	18.0	0.2	0.0 + 0.0 (0.3)	0 (0.0)	0	0.3					
4110	672	2383F	68	7.0	34.2	5.3 + 1.1 (90.8)	81 (6.0)	11 +	96.7	41	12	42		
4111BL	50	2040	7	26.4	21.9	0.3 + 0.0 (4.3)	60 (0.0)	1	4.3	41	16	42		
4120	229	1959	38	20.0	25.3	1.3 + 0.3 (22.8)	82 (3.2)	4	26.0	41	53	0		
4121	345	1773	63	18.0	31.4	2.1 + 0.9 (42.7)	94 (6.9)	7	49.6	41	53	0		
4130	663	2488F	80	5.0	31.5	3.9 + 1.9 (82.4)	98 (9.3)	14 +	91.7	41	12	36		

75 SECOND CYCLE 75 STEPS

LINK NUMBER	FLOW INTO LINK	SAT FLOW	DEGREE OF SAT	MEAN PER CRUISE	TIMES DELAY	-----DELAY----- UNIFORM OVERSAT (U+R+O=MEAN Q) (PCU-H/H)	RANDOM+ COST OF DELAY (\$/H)	----STOPS---- MEAN STOPS /PCU (%)	-----STOP----- COST OF STOPS (\$/H)	----QUEUE---- MAX. AVERAGE EXCESS (PCU)	PERFORMANCE INDEX. WEIGHTED SUM (\$/H)	EXIT NODE	GREEN START END	TIMES START END
4131BL	50	1696	12	31.8	26.3	0.3 + 0.1 (5.2)	82 (0.0)	1	5.2	41	18	36		
4150	50	10000	2	10.0	19.0	0.3 + 0.0 (3.7)	70 (0.0)	1	3.7	41	53	0		
4151	50	10000	1	10.0	13.6	0.2 + 0.0 (2.7)	59 (0.0)	1	2.7	41	12	42		
4198BL	28	4199L	4	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0	0.0					

4199	269	8000S	4	18.0	0.2	0.0 + 0.0	(0.2)	0	(0.0)	0	0.3
5010	767	3929S	20	3.0	0.6	0.0 + 0.1	(1.7)	1	(0.1)	0	1.9
5011BL	28	5010L	20	3.6	0.6	0.0 + 0.0	(0.1)	1	(0.0)	0	0.1
6010	94	715	17	18.0	3.9	0.0 + 0.1	(1.4)	0	(0.0)	0	1.4
6011	731	1618S	47	18.0	2.1	0.0 + 0.4	(6.0)	3	(0.4)	0	6.5
6012BL	28	6011L	47	22.5	2.1	0.0 + 0.0	(0.2)	3	(0.0)	0	0.2
6020	673	1800S	39	18.0	1.6	0.0 + 0.3	(4.3)	2	(0.3)	0	4.7
6021BL	28	6020L	39	22.5	1.6	0.0 + 0.0	(0.2)	2	(0.0)	0	0.2
6098BL	28	6099L	9	64.8	0.2	0.0 + 0.0	(0.0)	0	(0.0)	0	0.0
6099	731	8000S	9	18.0	0.2	0.0 + 0.1	(0.7)	0	(0.1)	0	0.8
7010	672	2055	33	8.0	1.3	0.0 + 0.2	(3.5)	2	(0.2)	0	3.6
7011BL	50	1915	3	8.0	1.0	0.0 + 0.0	(0.2)	1	(0.0)	0	0.2
-4200	10	1800	10	10.0	55.0	0.1 + 0.1	(2.2)	120	(0.0)	0	2.2

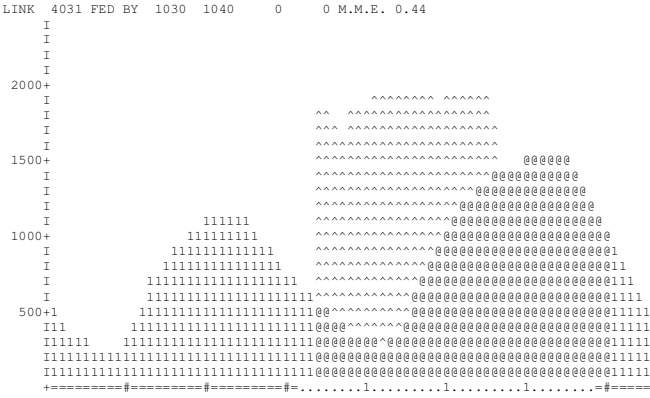
*** f - average saturation flow for flared link ***

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)	TOTALS
3108.7	142.5	21.8	37.3	23.0	(856.2) + (108.1)	+ (190.2)	=	1154.5	BUSES
96.7	5.9	16.3	1.1	0.4	(21.9) + (0.9)	+ (190.2)	=	213.0	OTHER
3011.9	136.6	22.0	36.2	22.6	(834.2) + (107.2)	+ (0.0)	=	941.5	

FUEL CONSUMPTION PREDICTIONS	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
	176.7	+ 69.6	+ 49.5	= 295.8

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 62

CYCLIC FLOW PROFILE GRAPHS



PROGRAM TRANSYT FINISHED

PRT

PRT File

PM Peak : 2011 Flow 1700-1800 + committed + 385 units

1 TRANST 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:- "WEST HENDON A5_DETAILED_PM_V3.DAT" at 09:48 on 20130313

TRANST 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 61
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 0
NUMBER OF STEPS IN CYCLE  = 75
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13827 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
CARD  CARD  CYCLE  NO. OF  TIME EFFECTIVE-GREEN  EQUISAT 0=UNEQUAL FLOW  CRUISE-SPEEDS  OPTIMISE  EXTRA  HILL-  DELAY  STOP
NO.   TYPE  TIME  PERIOD  DISPLACEMENTS  SETTINGS  CYCLE  SCALE  SCALE  CARD32  0=NONE  COPIES  CLIMB  VALUE  VALUE
      (SEC)  CYCLE  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
2)= 1 75 75 60 2 3 0 1 100 100 0 0 0 0 1420 260
CARD  CARD
NO.   TYPE
3)= 2 40 41 34 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 2011 2012 0 0 0 0 0 0 0 0 0 0 0 0 0
5)= 7 2030 2031 0 0 0 0 0 0 0 0 0 0 0 0 0
6)= 7 2098 2097 0 0 0 0 0 0 0 0 0 0 0 0 0
7)= 7 3411 3412 0 0 0 0 0 0 0 0 0 0 0 0 0
8)= 7 4012 4011 0 0 0 0 0 0 0 0 0 0 0 0 0
9)= 7 4031 4032 0 0 0 0 0 0 0 0 0 0 0 0 0
10)= 7 4097 4098 0 0 0 0 0 0 0 0 0 0 0 0 0
11)= 7 4199 4198 0 0 0 0 0 0 0 0 0 0 0 0 0
12)= 7 5010 5011 0 0 0 0 0 0 0 0 0 0 0 0 0
13)= 7 6011 6012 0 0 0 0 0 0 0 0 0 0 0 0 0
14)= 7 6020 6021 0 0 0 0 0 0 0 0 0 0 0 0 0
15)= 7 6099 6098 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.
16)= 10 34 7 1 5
17)= 10 40 7 12
18)= 10 41 12 12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE  S1  S2  S3  S4  S5  S6  S7  S8  S9  S10
NO.   TYPE  NO.
19)= 11 34 8 12 12
20)= 11 40 15 6
21)= 11 41 18 11
    
```

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
22)= 12 34 1 40 5 21
23)= 12 40 1 45 22
24)= 12 41 1 0 40
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY COEFFS.  LINK  STOP  MAX  DELAY  DISFSN
NO.   TYPE  NO.   LINK1  LINK2  ONLY  A1  A2  LENGTH  WT. X100  FLOW  WT. X100  WT. X100
25)= 30 1040 1030 0 0 0 22 0 0 0 0 0 715 0 0
26)= 30 2010 2030 0 0 0 50 0 0 0 0 0 31 0 1000 0 0
27)= 30 2040 2030 2011 0 0 22 19 0 0 0 0 200 0 600 0 0
28)= 30 2041 2030 0 0 0 22 0 0 0 0 0 200 0 715 0 0
29)= 30 4030 0 4010 4 0 50 0 0 0 0 0 45 0 1000 0 0
30)= 30 6010 6020 0 0 0 22 0 0 0 0 0 200 0 715 0 0
    
```

LINK CARDS: FIXED DATA

```

FIRST GREEN SECOND GREEN
    
```

CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	START		END		START		END		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPNS X100
				STAGE	LAG	STAGE	LAG	STAGE	LAG	STAGE	LAG					
31)=	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
32)=	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
33)=	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
34)=	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
35)=	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
36)=	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
37)=	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
38)=	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
39)=	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
40)=	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
41)=	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
42)=	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
43)=	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
44)=	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
45)=	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
46)=	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
47)=	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
48)=	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
49)=	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
50)=	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
51)=	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
52)=	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
53)=	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
54)=	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
55)=	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
56)=	31	4010	40	1	15	2	0	0	0	0	0	200	0	1949	0	0
57)=	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
58)=	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
59)=	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
60)=	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
61)=	31	4030	40	1	5	2	1	0	0	0	0	45	0	1774	0	0
62)=	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
63)=	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
64)=	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
65)=	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
66)=	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)=	31	4110	41	1	12	2	0	0	0	0	0	56	0	1919	0	0
68)=	31	4111	41	1	16	2	0	0	0	0	0	56	0	2040	0	0
69)=	31	4120	41	2	11	1	0	0	0	0	0	200	0	1959	0	0
70)=	31	4121	41	2	11	0	0	0	0	0	0	200	0	1773	0	0
71)=	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
72)=	31	4131	41	1	18	2	0	0	0	0	0	45	0	1696	0	0
73)=	31	4150	41	2	11	1	0	0	0	0	0	12	0	10000	0	0
74)=	31	4151	41	1	12	2	0	0	0	0	0	11	0	10000	0	0
75)=	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
76)=	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
77)=	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
78)=	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
79)=	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
80)=	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
81)=	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
82)=	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
83)=	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
84)=	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
85)=	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
86)=	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
87)=	32	1010	1093	0	4010	1024	15	4021	69	15	0	0
88)=	32	1011	25	0	4011	25	3200	0	0	0	0	0
89)=	32	1030	1040	0	3430	743	19	3443	297	19	0	0
90)=	32	1031	25	0	3431	25	3200	0	0	0	0	0
91)=	32	1040	171	0	0	0	20	0	0	0	0	0
92)=	32	1099	10	0	1030	10	18	0	0	0	0	0
93)=	32	2010	66	0	2011	66	3	0	0	0	0	0
94)=	32	2011	1249	0	4110	884	23	4121	365	18	0	0
95)=	32	2012	53	0	4111	53	3200	0	0	0	0	0
96)=	32	2030	1236	0	0	0	18	0	0	0	0	0
97)=	32	2031	53	0	0	0	3200	0	0	0	0	0
98)=	32	2040	55	0	0	0	18	0	0	0	0	0
99)=	32	2041	31	0	0	0	18	0	0	0	0	0
100)=	32	2097	53	0	2012	53	3200	0	0	0	0	0
101)=	32	2098	1238	0	2011	1183	18	2040	55	18	0	0
102)=	32	2099	484	0	2010	66	18	2030	418	18	0	0
103)=	32	3010	849	0	2030	818	17	2041	31	17	0	0
104)=	32	3011	53	0	2031	53	3200	0	0	0	0	0
105)=	32	3410	884	0	1010	884	6	0	0	0	0	0
106)=	32	3411	209	0	1010	209	6	0	0	0	0	0
107)=	32	3412	25	0	1011	25	3219	0	0	0	0	0
108)=	32	3430	743	0	4130	743	11	0	0	0	0	0
109)=	32	3431	25	0	4131	25	3200	0	0	0	0	0
110)=	32	3440	28	0	5011	28	3200	0	0	0	0	0
111)=	32	3442	437	0	5010	437	7	0	0	0	0	0
112)=	32	3443	297	0	5010	297	19	0	0	0	0	0
113)=	32	3450	50	0	0	0	10	0	0	0	0	0
114)=	32	3451	50	0	0	0	10	0	0	0	0	0
115)=	32	3499	646	0	3411	209	18	3442	437	18	0	0
116)=	32	4010	1024	0	0	0	18	0	0	0	0	0
117)=	32	4011	25	0	0	0	3200	0	0	0	0	0
118)=	32	4012	386	0	0	0	18	0	0	0	0	0
119)=	32	4020	224	0	0	0	20	0	0	0	0	0
120)=	32	4021	69	0	0	0	18	0	0	0	0	0
121)=	32	4030	241	0	1030	241	5	0	0	0	0	0
122)=	32	4031	960	0	1030	789	5	1040	171	4	0	0
123)=	32	4032	25	0	1031	25	3210	0	0	0	0	0
124)=	32	4097	1184	0	4020	224	18	4030	10	18	4031	960
125)=	32	4098	25	0	4032	25	3200	0	0	0	0	0
126)=	32	4099	627	0	4012	386	18	4030	241	18	0	0
127)=	32	4110	884	0	7010	884	8	0	0	0	0	0
128)=	32	4111	53	0	7011	53	3216	0	0	0	0	0
129)=	32	4120	237	0	0	0	20	0	0	0	0	0
130)=	32	4121	365	0	0	0	18	0	0	0	0	0
131)=	32	4130	849	0	3010	849	5	0	0	0	0	0
132)=	32	4131	53	0	3011	53	3218	0	0	0	0	0
133)=	32	4150	50	0	0	0	10	0	0	0	0	0
134)=	32	4151	50	0	0	0	10	0	0	0	0	0
135)=	32	4198	28	0	4131	28	3200	0	0	0	0	0
136)=	32	4199	343	0	4120	237	18	4130	106	18	0	0
137)=	32	5010	733	0	6010	161	3	6020	572	3	0	0
138)=	32	5011	28	0	6021	28	3200	0	0	0	0	0
139)=	32	6010	161	0	0	0	18	0	0	0	0	0
140)=	32	6011	659	0	0	0	18	0	0	0	0	

147)= 32 7011 53 0 3412 25 3200 3440 28 3200 0 0 0 0 0 0

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 148) and 149)

LINK DATA: QUEUE CONSTRAINTS

Table with columns: CARD NO., CARD TYPE, LINK NO., LIMIT QUEUE, QUEUE WEIGHT, LINK NO., LIMIT QUEUE, QUEUE WEIGHT, LINK NO., LIMIT QUEUE, QUEUE WEIGHT, LINK NO., LIMIT QUEUE, QUEUE WEIGHT. Rows 150) to 158)

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

75 SECOND CYCLE 75 STEPS

INITIAL SETTINGS - (SECONDS)

Table with columns: NODE NO OF STAGES, STAGE 1, STAGE 2, STAGE 3, STAGE 4, STAGE 5, STAGE 6, STAGE 7, STAGE 8, STAGE 9, STAGE 10. Rows 34, 40, 41

Main performance table with columns: LINK NUMBER, FLOW INTO LINK, SAT FLOW, DEGREE OF SAT, MEAN PER CRUISE, TIMES DELAY, DELAY (SEC), UNIFORM OVERSAT, RANDOM+ OF DELAY, COST OF DELAY, MEAN STOPS, COST OF STOPS, QUEUE MAX, AVERAGE EXCESS, PERFORMANCE INDEX, WEIGHTED SUM OF VALUES, EXIT NODE, GREEN START, TIMES END, START 1ST, START 2ND. Rows 1010 to 4130

75 SECOND CYCLE 75 STEPS

Table with columns: LINK NUMBER, FLOW INTO LINK, SAT FLOW, DEGREE OF SAT, MEAN PER CRUISE, TIMES DELAY, DELAY (SEC), UNIFORM OVERSAT, RANDOM+ OF DELAY, COST OF DELAY, MEAN STOPS, COST OF STOPS, QUEUE MAX, AVERAGE EXCESS, PERFORMANCE INDEX, WEIGHTED SUM OF VALUES, EXIT NODE, GREEN START, TIMES END, START 1ST, START 2ND. Rows 4131BL to 7011BL

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

Summary table with columns: TOTAL DISTANCE TRAVELLED, TOTAL TIME SPENT, MEAN JOURNEY SPEED, TOTAL UNIFORM DELAY, TOTAL RANDOM+ DELAY, TOTAL COST OF DELAY, TOTAL COST OF STOPS, PENALTY FOR EXCESS QUEUES, TOTAL PERFORMANCE INDEX. Row 3427.0

102.6	6.1	16.9	1.0	0.4	(20.7)	+	(1.5)	+	(22.3)	=	44.5	BUSES
3324.5	203.8	16.3	44.7	70.9	(1641.1)	+	(163.2)	+	(6.6)	=	1810.8	OTHER

ROUTE

	CRUISE	DELAY	STOPS	TOTALS			
	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR	LITRES PER HOUR			
FUEL CONSUMPTION PREDICTIONS	196.1	+	134.6	+	75.2	=	406.0

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 61

PROGRAM TRANSYT FINISHED

PRT

PRT File Sat Peak : 2011 Flow 1200-1300

1 TRANSYT 12

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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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:- "WEST HENDON A5_DETAILED_SAT_V3.DAT" at 09:49 on 20130313

TRANSYT 12.0

West Hendon Broadway Base Model

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :

```

NUMBER OF NODES           = 3
NUMBER OF LINKS           = 63
NUMBER OF OPTIMISED NODES = 3
MAXIMUM NUMBER OF GRAPHIC PLOTS = 8
NUMBER OF STEPS IN CYCLE  = 66
MAXIMUM NUMBER OF SHARED STOPLINES = 2
MAXIMUM NUMBER OF TIMING POINTS = 3
MAXIMUM LINKS AT ANY NODE = 9
    
```

CORE REQUESTED = 13521 WORDS
CORE AVAILABLE = 72000 WORDS

DATA INPUT :-

```

CARD  CARD
NO.   TYPE
( 1)= TITLE:- West Hendon Broadway Base Model
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
2)= 1 66 66 60 2 3 0 1 100 100 0 0 0 0 1420 260
CARD  CARD
NO.   TYPE
3)= 2 40 41 34 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 2011 2012 0 0 0 0 0 0 0 0 0 0 0 0 0
5)= 7 2030 2031 0 0 0 0 0 0 0 0 0 0 0 0 0
6)= 7 2098 2097 0 0 0 0 0 0 0 0 0 0 0 0 0
7)= 7 3411 3412 0 0 0 0 0 0 0 0 0 0 0 0 0
8)= 7 4012 4011 0 0 0 0 0 0 0 0 0 0 0 0 0
9)= 7 4031 4032 0 0 0 0 0 0 0 0 0 0 0 0 0
10)= 7 4097 4098 0 0 0 0 0 0 0 0 0 0 0 0 0
11)= 7 4111 4200 0 0 0 0 0 0 0 0 0 0 0 0 0
12)= 7 4131 4132 0 0 0 0 0 0 0 0 0 0 0 0 0
13)= 7 4199 4198 0 0 0 0 0 0 0 0 0 0 0 0 0
14)= 7 5010 5011 0 0 0 0 0 0 0 0 0 0 0 0 0
15)= 7 6011 6012 0 0 0 0 0 0 0 0 0 0 0 0 0
16)= 7 6020 6021 0 0 0 0 0 0 0 0 0 0 0 0 0
17)= 7 6099 6098 0 0 0 0 0 0 0 0 0 0 0 0 0
    
```

NODE CARDS: MINIMUM STAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
18)= 10 34 7 1 5
19)= 10 40 7 7
20)= 10 41 12 6 12
    
```

NODE CARDS: PRECEDING INTERSTAGE TIMES (WORKING)

```

CARD  CARD  NODE
NO.   TYPE  NO.
21)= 11 34 8 12 12
22)= 11 40 5 6
23)= 11 41 12 0 11
    
```

NODE CARDS: STAGE CHANGE TIMES (WORKING)

```

CARD  CARD  NODE  Sg1/Db1
NO.   TYPE  NO.  Cycled
24)= 12 34 1 12 45 58
25)= 12 40 1 26 4
26)= 12 41 1 0 26 43
    
```

LINK CARDS: GIVEWAY DATA

```

CARD  CARD  LINK  PRIORITY LINKS  LINK1 GIVEWAY  LINK  STOP  MAX  DELAY  DISPSN
NO.   TYPE  NO.  LINK1  LINK2  ONLY  COEFFS.  LENGTH WT. X100  FLOW WT. X100  WT. X100  X100
27)= 30 1040 1030 0 0 0 22 0 0 0 0 0 200 0 715 0 0
28)= 30 2010 2030 0 0 0 50 0 0 0 0 0 31 0 1000 0 0
29)= 30 2040 2030 2011 0 0 22 19 0 0 0 0 200 0 600 0 0
30)= 30 2041 2030 0 0 0 22 0 0 0 0 0 200 0 715 0 0
31)= 30 4030 0 4010 37 0 50 0 0 0 0 0 45 0 1000 0 0
32)= 30 6010 6020 0 0 0 22 0 0 0 0 0 200 0 715 0 0
    
```


LINK CARDS: FIXED DATA																
CARD NO.	CARD TYPE	LINK NO.	EXIT NODE	FIRST GREEN		SECOND GREEN		FIRST GREEN		SECOND GREEN		LINK LENGTH	STOP WT.X100	SAT FLOW	DELAY WT.X100	DISPSN X100
				START STAGE	END LAG	START STAGE	END LAG	START STAGE	END LAG	START STAGE	END LAG					
33)=	31	1010	0	0	0	0	0	0	0	0	0	135	0	2055	0	0
34)=	31	1011	0	0	0	0	0	0	0	0	0	135	0	1915	0	0
35)=	31	1030	0	0	0	0	0	0	0	0	0	170	0	2055	0	0
36)=	31	1031	0	0	0	0	0	0	0	0	0	170	0	1915	0	0
37)=	31	1099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
38)=	31	2011	0	0	0	0	0	0	0	0	0	260	0	2115	0	0
39)=	31	2012	0	0	0	0	0	0	0	0	0	260	0	0	0	0
40)=	31	2030	0	0	0	0	0	0	0	0	0	200	0	3786	0	0
41)=	31	2031	0	0	0	0	0	0	0	0	0	200	0	0	0	0
42)=	31	2097	0	0	0	0	0	0	0	0	0	200	0	0	0	0
43)=	31	2098	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
44)=	31	2099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
45)=	31	3010	0	0	0	0	0	0	0	0	0	185	0	2075	0	0
46)=	31	3011	0	0	0	0	0	0	0	0	0	185	0	1945	0	0
47)=	31	3410	34	1	8	2	0	0	0	0	0	60	0	1910	0	0
48)=	31	3411	34	1	8	2	0	0	0	0	0	60	0	1993	0	0
49)=	31	3412	0	0	0	0	0	0	0	0	0	60	0	0	0	0
50)=	31	3430	34	1	6	2	0	0	0	0	0	115	0	1972	0	0
51)=	31	3431	34	1	6	2	0	0	0	0	0	115	0	1915	0	0
52)=	31	3440	34	3	12	1	0	0	0	0	0	80	0	1665	0	0
53)=	31	3442	34	2	12	1	0	0	0	0	0	80	0	1787	0	0
54)=	31	3443	34	2	12	1	0	0	0	0	0	80	0	1577	0	0
55)=	31	3450	34	2	8	3	0	0	0	0	0	12	0	10000	0	0
56)=	31	3451	34	1	8	2	0	0	0	0	0	12	0	10000	0	0
57)=	31	3499	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
58)=	31	4010	40	1	5	2	0	0	0	0	0	200	0	1949	0	0
59)=	31	4011	0	0	0	0	0	0	0	0	0	200	0	0	0	0
60)=	31	4012	40	1	5	2	0	0	0	0	0	200	0	1707	0	0
61)=	31	4020	40	2	6	1	0	0	0	0	0	200	0	1754	0	0
62)=	31	4021	40	2	6	1	0	0	0	0	0	200	0	1641	0	0
63)=	31	4030	40	1	5	2	4	0	0	0	0	45	0	1774	0	0
64)=	31	4031	40	1	5	2	0	0	0	0	0	45	0	1907	0	0
65)=	31	4032	0	0	0	0	0	0	0	0	0	45	0	0	0	0
66)=	31	4097	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
67)=	31	4098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
68)=	31	4099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
69)=	31	4110	41	1	12	3	0	0	0	0	0	56	0	1919	0	0
70)=	31	4111	41	1	12	3	0	0	0	0	0	56	0	2040	0	0
71)=	31	4120	41	3	11	1	0	0	0	0	0	200	0	1959	0	0
72)=	31	4121	41	3	11	1	0	0	0	0	0	200	0	1773	0	0
73)=	31	4130	41	1	12	2	0	0	0	0	0	45	0	2056	0	0
74)=	31	4131	41	1	12	2	0	0	0	0	0	45	0	1696	0	0
75)=	31	4132	0	0	0	0	0	0	0	0	0	45	0	0	0	0
76)=	31	4150	41	3	11	1	0	0	0	0	0	12	0	10000	0	0
77)=	31	4151	41	1	12	3	0	0	0	0	0	11	0	10000	0	0
78)=	31	4198	0	0	0	0	0	0	0	0	0	200	0	0	0	0
79)=	31	4199	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
80)=	31	4200	0	0	0	0	0	0	0	0	0	56	0	0	0	0
81)=	31	5010	0	0	0	0	0	0	0	0	0	32	0	3929	0	0
82)=	31	5011	0	0	0	0	0	0	0	0	0	32	0	0	0	0
83)=	31	6011	0	0	0	0	0	0	0	0	0	200	0	1618	0	0
84)=	31	6012	0	0	0	0	0	0	0	0	0	200	0	0	0	0
85)=	31	6020	0	0	0	0	0	0	0	0	0	200	0	1800	0	0
86)=	31	6021	0	0	0	0	0	0	0	0	0	200	0	0	0	0
87)=	31	6098	0	0	0	0	0	0	0	0	0	200	0	0	0	0
88)=	31	6099	0	0	0	0	0	0	0	0	0	200	0	8000	0	0
89)=	31	7010	0	0	0	0	0	0	0	0	0	71	0	2055	0	0
90)=	31	7011	0	0	0	0	0	0	0	0	0	71	0	1915	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
91)=	32	1010	873	0	4010	803	15	4021	70	15	0	0	0	0	0	
92)=	32	1011	22	0	4011	22	3200	0	0	0	0	0	0	0	0	
93)=	32	1030	897	0	3430	566	19	3443	331	19	0	0	0	0	0	
94)=	32	1031	22	0	3431	22	3220	0	0	0	0	0	0	0	0	
95)=	32	1040	109	0	0	0	20	0	0	0	0	0	0	0	0	
96)=	32	1099	10	0	1030	10	18	0	0	0	0	0	0	0	0	
97)=	32	2010	55	0	2011	55	3	0	0	0	0	0	0	0	0	
98)=	32	2011	1027	0	4110	623	23	4121	295	18	4200	109	23	0	0	
99)=	32	2012	50	0	4111	50	3230	0	0	0	0	0	0	0	0	
100)=	32	2030	1108	0	0	0	18	0	0	0	0	0	0	0	0	
101)=	32	2031	50	0	0	0	3200	0	0	0	0	0	0	0	0	
102)=	32	2040	33	0	0	0	18	0	0	0	0	0	0	0	0	
103)=	32	2041	17	0	0	0	18	0	0	0	0	0	0	0	0	
104)=	32	2097	50	0	2012	50	3200	0	0	0	0	0	0	0	0	
105)=	32	2098	997	0	2011	972	18	2040	33	18	0	0	0	0	0	
106)=	32	2099	585	0	2010	55	18	2030	530	18	0	0	0	0	0	
107)=	32	3010	595	0	2030	578	17	2041	17	17	0	0	0	0	0	
108)=	32	3011	50	0	2031	50	3200	0	0	0	0	0	0	0	0	
109)=	32	3410	732	0	1010	732	6	0	0	0	0	0	0	0	0	
110)=	32	3411	141	0	1010	141	6	0	0	0	0	0	0	0	0	
111)=	32	3412	22	0	1011	22	3220	0	0	0	0	0	0	0	0	
112)=	32	3430	566	0	4130	368	11	4132	198	11	0	0	0	0	0	
113)=	32	3431	22	0	4131	22	3200	0	0	0	0	0	0	0	0	
114)=	32	3440	28	0	5011	28	3200	0	0	0	0	0	0	0	0	
115)=	32	3442	312	0	5010	312	7	0	0	0	0	0	0	0	0	
116)=	32	3443	331	0	5010	331	7	0	0	0	0	0	0	0	0	
117)=	32	3450	50	0	0	0	10	0	0	0	0	0	0	0	0	
118)=	32	3451	50	0	0	0	10	0	0	0	0	0	0	0	0	
119)=	32	3499	453	0	3411	141	18	3442	312	10	0	0	0	0	0	
120)=	32	4010	803	0	0	0	18	0	0	0	0	0	0	0	0	
121)=	32	4011	22	0	0	0	3200	0	0	0	0	0	0	0	0	
122)=	32	4012	186	0	0	0	18	0	0	0	0	0	0	0	0	
123)=	32	4020	235	0	0	0	20	0	0	0	0	0	0	0	0	
124)=	32	4021	70	0	0	0	18	0	0	0	0	0	0	0	0	
125)=	32	4030	148	0	1030	148	5	0	0	0	0	0	0	0	0	
126)=	32	4031	848	0	1030	739	5	1040	109	4	0	0	0	0	0	
127)=	32	4032	22	0	1031	22	3200	0	0	0	0	0	0	0	0	
128)=	32	4097	1083	0	4020	235	18	4031	848	18	0	0	0	0	0	
129)=	32	4098	22	0	4032	22	3200	0	0	0	0	0	0	0	0	
130)=	32	4099	334	0	4012	186	18	4030	148	18	0	0	0	0	0	
131)=	32	4110	623	0	7010	623	7	0	0	0	0	0	0	0	0	
132)=	32	4111	50	0	7011	50	3230	0	0	0	0	0	0	0	0	
133)=	32	4120	181	0	0	0	20	0	0	0	0	0	0	0	0	

147)=	32	6012	24	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
148)=	32	6020	449	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0
149)=	32	6021	28	0	0	0	3200	0	0	0	0	0	0	0	0	0	0	0
150)=	32	6098	24	0	6012	24	3233	0	0	0	0	0	0	0	0	0	0	0
151)=	32	6099	552	0	6011	552	18	0	0	0	0	0	0	0	0	0	0	0
152)=	32	7010	732	0	3410	732	8	0	0	0	0	0	0	0	0	0	0	0
153)=	32	7011	50	0	3412	22	3200	3440	28	3200	0	0	0	0	0	0	0	0

GRAPH PLOT CARDS

CARD	CARD	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
154)=	35	4031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CARD	CARD	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE	LINK	LIMIT	QUEUE
NO.	TYPE	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT	NO.	QUEUE	WEIGHT
155)=	38	1010	12	9999	0	0	0	0	0	0	0	0	0	0	0	0
156)=	38	1030	10	9999	0	0	0	0	0	0	0	0	0	0	0	0
157)=	38	1031	10	9999	0	0	0	0	0	0	0	0	0	0	0	0
158)=	38	2010	4	9999	0	0	0	0	0	0	0	0	0	0	0	0
159)=	38	2012	14	9999	0	0	0	0	0	0	0	0	0	0	0	0
160)=	38	3431	7	9999	0	0	0	0	0	0	0	0	0	0	0	0
161)=	38	4032	8	9999	0	0	0	0	0	0	0	0	0	0	0	0

USER-DEFINED ROUTES

CARD	CARD	ROUTE	ROUTE	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK	LINK
NO.	TYPE	NUMBER	DESCRIPTION	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
162)=	41	1	Southbound															
163)=	41	2	Northbound															
164)=	42	1	2030	3010	4130	3430	1030	4031	4097									
165)=	42	2	4010	1010	3410	7010	4110	2011	2098									

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

66 SECOND CYCLE 66 STEPS

INITIAL SETTINGS

- (SECONDS)

NODE	NUMBER	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE
NO	OF STAGES	1	2	3	4	5	6	7	8	9	10							
34	3	12	45	58														
40	2	26	4															
41	3	0	26	43														

LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES	TIMES	TIMES
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM RANDOM+ COST	MEAN COST	MEAN AVERAGE	INDEX.	NODE	START	START	START	END
	LINK	(PCU/H)	SAT	CRUISE	DELAY	(U+R+O-MEAN Q) DELAY	/PCU STOPS	(PCU) EXCESS	OF () VALUES		1ST	2ND	END	END
			(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)		(SECONDS)	(SECONDS)	(SECONDS)	(SECONDS)
1010	873	2055	42	15.0	1.5	0.0 + 0.4 (5.2)	2 (0.3)	0 (0.0)*	5.5					
1011BL	22	1915	1	15.2	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1					
1030	897	2055	44	19.0	1.6	0.0 + 0.4 (5.5)	2 (0.3)	0 (0.0)*	5.8					
1031BL	22	1915	1	48.4	1.0	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)*	0.1					
1040	109	715	21	20.0	4.4	0.0 + 0.1 (1.9)	0 (0.0)	0 (0.0)	1.9					
1099	11	8000	0	18.0	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
2010	55	1000	13	3.0	5.0	0.0 + 0.1 (1.1)	0 (0.0)	0 (0.0)*	1.1					
2011	1026	2115S	51	21.6	1.7	0.0 + 0.5 (7.0)	3 (0.6)	1 (0.0)	7.6					
2012BL	50	2011L	51	68.5	1.7	0.0 + 0.0 (0.3)	3 (0.0)	1 (0.0)*	0.4					
2030	1108	3786S	31	18.0	0.7	0.0 + 0.2 (3.0)	1 (0.2)	0 (0.0)	3.2					
2031BL	50	2030L	31	22.5	0.7	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1					
2040	33	600	23	18.0	17.0	0.0 + 0.2 (2.2)	33 (0.2)	0 (0.0)	2.4					
2041	17	715	4	18.0	4.1	0.0 + 0.0 (0.3)	0 (0.0)	0 (0.0)	0.3					
2097BL	50	2098L	13	22.5	0.3	0.0 + 0.0 (0.1)	0 (0.0)	0 (0.0)	0.1					
2098	996	8000S	13	18.0	0.3	0.0 + 0.1 (1.0)	0 (0.1)	0 (0.0)	1.1					
2099	585	8000	7	18.0	0.2	0.0 + 0.0 (0.6)	0 (0.0)	0 (0.0)	0.6					
3010	595	2075	29	17.0	1.2	0.0 + 0.2 (2.9)	2 (0.2)	0 (0.0)	3.1					
3011BL	50	1945	3	20.8	0.9	0.0 + 0.0 (0.2)	1 (0.0)	0 (0.0)	0.2					
3410	732	1910	97	6.0	72.5	5.5 + 9.3 (209.3)	158 (19.7)	23 (0.0)	229.0	34	20	45		
3411	141	1993S	21	6.0	20.7	0.7 + 0.1 (11.5)	89 (2.2)	3 (0.0)	13.7	34	20	45		
3412BL	22	3411L	21	36.0	13.6	0.1 + 0.0 (1.2)	67 (0.0)	3 (0.0)	1.2	34	20	45		
3430	566	1972	68	11.0	8.4	0.3 + 1.0 (18.7)	57 (6.2)	10 (0.0)	24.9	34	18	45		
3431BL	22	1915	3	12.9	2.3	0.0 + 0.0 (0.2)	4 (0.0)	0 (0.0)*	0.2	34	18	45		
3440BL	28	1665	12	9.0	34.1	0.2 + 0.1 (3.8)	98 (0.4)	1 (0.0)	4.2	34	4	12		
3442	313	1787	52	7.0	24.1	1.5 + 0.5 (29.7)	86 (6.3)	5 (0.0)	36.0	34	57	12		
3443	331	1577	63	7.0	27.7	1.7 + 0.8 (36.1)	93 (7.2)	6 (0.0)	43.4	34	57	12		
3450	50	10000	6	10.0	29.8	0.4 + 0.0 (5.9)	94 (0.0)	1 (0.0)	5.9	34	53	58		
3451	50	10000	1	10.0	12.9	0.2 + 0.0 (2.5)	61 (0.0)	1 (0.0)	2.5	34	20	45		
3499	454	8000	6	12.5	0.2	0.0 + 0.0 (0.4)	0 (0.0)	0 (0.0)	0.5					
4010	803	1949	68	18.0	13.4	1.9 + 1.1 (42.6)	69 (11.7)	11 (0.0)	54.3	40	31	4		
4011BL	22	4012L	20	22.5	8.0	0.0 + 0.0 (0.7)	45 (0.1)	2 (0.0)	0.8	40	31	4		
4012	186	1707S	20	18.0	8.0	0.3 + 0.1 (5.9)	45 (1.8)	2 (0.0)	7.6	40	31	4		
4020	235	1754	52	20.0	29.3	1.4 + 0.5 (27.1)	95 (3.8)	4 (0.0)	30.9	40	10	26		
4021	70	1641	17	18.0	24.1	0.4 + 0.1 (6.7)	82 (1.2)	1 (0.0)	7.9	40	10	26		
4030	147	1774	39	5.0	18.8	0.5 + 0.3 (10.9)	75 (1.6)	2 (0.0)	12.5	40	31	8		
4031	848	1907S	75	4.9	12.4	1.4 + 1.5 (41.4)	52 (6.2)	9 (0.0)	47.6	40	31	4		
4032BL	22	4031L	75	5.1	16.9	0.1 + 0.0 (1.5)	70 (0.2)	9 (0.0)*	3.9	40	31	4		
4097	1083	8000S	14	18.0	0.3	0.0 + 0.1 (1.1)	0 (0.1)	0 (0.0)	1.2					
4098BL	22	4097L	14	22.5	0.3	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
4099	333	8000	4	18.0	0.2	0.0 + 0.0 (0.3)	0 (0.0)	0 (0.0)	0.3					
4110	623	1919	67	7.0	28.0	3.8 + 1.0 (68.7)	77 (5.3)	9 (0.0)	74.0	41	12	43		
4111BL	50	2040S	16	45.4	14.3	0.2 + 0.0 (2.8)	66 (0.0)	2 (0.0)	2.8	41	12	43		
4120	181	1959	47	20.0	32.2	1.2 + 0.4 (23.0)	98 (3.0)	3 (0.0)	26.0	41	54	0		
4121	295	1773	84	18.0	55.9	2.1 + 2.5 (65.1)	134 (8.4)	8 (0.0)	73.5	41	54	0		
4130	368	2056	79	5.0	41.4	2.5 + 1.8 (60.2)	116 (6.1)	8 (0.0)	66.2	41	12	26		

66 SECOND CYCLE 66 STEPS

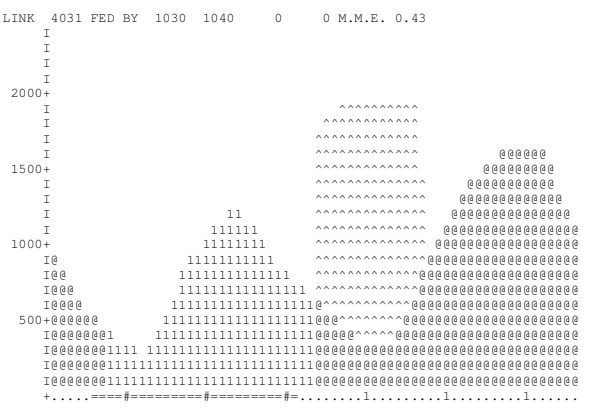
LINK	FLOW	SAT	DEGREE	MEAN	TIMES	-----DELAY-----	-----STOPS-----	-----QUEUE-----	PERFORMANCE	EXIT	GREEN	TIMES	TIMES	TIMES
NUMBER	INTO	FLOW	OF	PER	PCU	UNIFORM RANDOM+ COST	MEAN COST	MEAN AVERAGE	INDEX.	NODE	START	START	START	END
	LINK	(PCU/H)	SAT	CRUISE	DELAY	(U+R+O-MEAN Q) DELAY	/PCU STOPS	(PCU) EXCESS	OF () VALUES		1ST	2ND	END	END
			(%)	(SEC)	(SEC)	(PCU-H/H)	(\$/H)	(\$/H)	(\$/H)		(SECONDS)	(SECONDS)	(SECONDS)	(SECONDS)
4131BL	50	1696S	72	31.8	39.8	0.3 + 0.2 (7.8)	114 (0.0)	6 (0.0)	7.9	41	12	26		
4132	227	4131L	72	5.0	39.9	1.5 + 1.0 (35.7)	114 (3.7)	6 (0.0)	39.4	41	12	26		
4150	50	10000	3	10.0	22.6	0.3 + 0.0 (4.5)	81 (0.0)	1 (0.0)	4.5	41	54	0		
4151	50	10000	1	10.0	9.4	0.1 + 0.0 (1.9)	52 (0.0)	0 (0.0)	1.9	41	12	43		
4198BL	28	4199L	3	22.5	0.2	0.0 + 0.0 (0.0)	0 (0.0)	0 (0.0)	0.0					
4199	210	8000S	3	18.0	0.2	0.0 + 0.0 (0.2)	0 (0.0)	0 (0.0)	0.2					
4200	108	4111L	16	7.0	20.3	0.5 + 0.1 (8.7)	71 (0.9)	2 (0.0)	9.5	41	12	43		
5010	643	3929S	17	3.0	0.6	0.0 + 0.1 (1.4)	1 (0.1)	0 (0.0)	1.5					
5011BL	28	5010L	17	3.6	0.6	0.0 + 0.0 (0.1)	1 (0.0)	0 (0.0)	0.1					

6010	194	715	32	18.0	4.3	0.0	0.2	(3.3)	0	(0.0)	0	3.3	
6011	552	1618S	36	18.0	1.7	0.0	0.3	(3.8)	3	(0.3)	0	4.1	
6012BL	24	6011L	36	22.5	1.7	0.0	0.0	(0.2)	3	(0.0)	0	0.2	
6020	449	1800S	26	18.0	1.4	0.0	0.2	(2.4)	2	(0.2)	0	2.6	
6021BL	28	6020L	26	22.5	1.4	0.0	0.0	(0.2)	2	(0.0)	0	0.2	
6098BL	24	6099L	7	64.8	0.2	0.0	0.0	(0.0)	0	(0.0)	0	0.0	
6099	552	8000S	7	18.0	0.2	0.0	0.0	(0.5)	0	(0.0)	0	0.6	
7010	732	2055	36	8.0	1.4	0.0	0.3	(3.9)	2	(0.2)	0	4.1	
7011BL	50	1915	3	8.0	1.0	0.0	0.0	(0.2)	1	(0.0)	0	0.2	
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+ DELAY (PCU-H/H)	TOTAL COST OF DELAY (\$/H)	TOTAL COST OF STOPS (\$/H)	TOTAL PENALTY FOR EXCESS QUEUES (\$/H)	TOTAL PERFORMANCE INDEX (\$/H)					
2791.9	130.3	21.4	29.0	26.2	(783.5)	+ (99.1)	+ (2.2)	=	884.9	TOTALS			
95.1	6.4	14.8	0.9	0.5	(19.5)	+ (0.9)	+ (2.2)	=	22.6	BUSES			
2696.7	123.8	21.8	28.2	25.7	(764.0)	+ (98.2)	+ (0.0)	=	862.3	OTHER			

820.6	31.2	26.3	4.2	5.2	(132.7)	+ (19.3)	+ (0.0)	=	152.1	ROUTE			
875.7	46.6	18.8	11.2	12.6	(337.8)	+ (37.8)	+ (0.0)	=	375.6	1			
										2			

	CRUISE LITRES PER HOUR	DELAY LITRES PER HOUR	STOPS LITRES PER HOUR	TOTALS LITRES PER HOUR
FUEL CONSUMPTION PREDICTIONS	159.0	+ 63.5	+ 45.8	= 268.3

NO. OF ENTRIES TO SUBPT = 1
 NO. OF LINKS RECALCULATED= 63
 CYCLIC FLOW PROFILE GRAPHS



PROGRAM TRANSYT FINISHED

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