

_____ T R A N S Y T 1 2 _____

Traffic Network Study Tool
Analysis Program Release 3 (March 2004)
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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:- "062028-2008 DO SOMETHING PM.DAT" at 15:05 on 11/04/07

TRANSYT 12.0

62028-2008 Do Something PM

PARAMETERS CONTROLLING DIMENSIONS OF PROBLEM :
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|                                    |   |     |
|------------------------------------|---|-----|
| NUMBER OF NODES                    | = | 2   |
| NUMBER OF LINKS                    | = | 9   |
| NUMBER OF OPTIMISED NODES          | = | 2   |
| MAXIMUM NUMBER OF GRAPHIC PLOTS    | = | 0   |
| NUMBER OF STEPS IN CYCLE           | = | 120 |
| MAXIMUM NUMBER OF SHARED STOPLINES | = | 0   |
| MAXIMUM NUMBER OF TIMING POINTS    | = | 3   |
| MAXIMUM LINKS AT ANY NODE          | = | 4   |

CORE REQUESTED = 6639 WORDS  
CORE AVAILABLE = 72000 WORDS



120 SECOND CYCLE 120 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 | PERFORMANCE INDEX          |   | EXIT NODE                          | GR ST |                                 |  |
|---------------------------------------|------------------------|-----------------------------|-------------------|---------------------------|-----------------------|----------------------------------------|---------|----------------------------------------|---------|---------------------------------|----------|----------------------------|---|------------------------------------|-------|---------------------------------|--|
| 1                                     | 2                      | 0                           | 108               |                           |                       |                                        |         |                                        |         |                                 |          | 3.1                        | 1 | 113                                |       |                                 |  |
| 2                                     | 3                      | 0                           | 29                | 64                        |                       |                                        |         |                                        |         |                                 |          | 16.8                       | 1 | 113                                |       |                                 |  |
| LINK NUMBER                           | FLOW INTO LINK (PCU/H) | SAT FLOW (PCU/H)            | DEGREE OF SAT (%) | MEAN PER CRUISE (SEC)     | TIMES PCU DELAY (SEC) | UNIFORM DELAY (U+R+0=MEAN Q) (PCU-H/H) |         | RANDOM+ OVERSAT OF DELAY (\$/H)        |         | STOPS MEAN COST OF STOPS (\$/H) |          | QUEUE AVERAGE EXCESS (PCU) |   | WEI GHTED SUM OF ( ) VALUES (\$/H) |       |                                 |  |
| 11                                    | 10                     | 1752                        | 9                 | 7.7                       | 70.1                  | 0.1                                    | 0.0     | ( 2.7)                                 | 105     | ( 0.4)                          | 0        | 3.1                        | 1 | 113                                |       |                                 |  |
| 12                                    | 49                     | 1874                        | 39                | 7.7                       | 77.8                  | 0.7                                    | 0.3     | ( 14.9)                                | 112     | ( 1.9)                          | 2        | 16.8                       | 1 | 113                                |       |                                 |  |
| 13                                    | 435                    | 2015                        | 25                | 7.7                       | 3.2                   | 0.2                                    | 0.2     | ( 4.7)                                 | 15      | ( 2.2)                          | 3        | 6.9                        | 1 | 5                                  |       |                                 |  |
| 14                                    | 687                    | 2015                        | 39                | 4.8                       | 3.8                   | 0.3                                    | 0.3     | ( 9.0)                                 | 18      | ( 4.2)                          | 5        | 13.2                       | 1 | 5                                  |       |                                 |  |
| 21                                    | 736                    | 1922                        | 88                | 7.7                       | 49.6                  | 6.4                                    | 3.7     | (142.6)                                | 102     | ( 26.1)                         | 26       | 168.7                      | 2 | 69                                 |       |                                 |  |
| 23                                    | 79                     | 1965                        | 6                 | 4.8                       | 6.6                   | 0.1                                    | 0.0     | ( 1.9)                                 | 28      | ( 0.8)                          | 1        | 2.7                        | 2 | 34                                 |       |                                 |  |
| 24                                    | 413                    | 1787                        | 89                | 4.8                       | 77.7                  | 4.9                                    | 3.9     | (125.7)                                | 120     | ( 17.2)                         | 17       | 142.9                      | 2 | 34                                 |       |                                 |  |
| 25                                    | 317                    | 1752                        | 87                | 7.7                       | 81.6                  | 4.0                                    | 3.1     | (101.5)                                | 121     | ( 13.3)                         | 13       | 114.8                      | 2 | 5                                  |       |                                 |  |
| 26                                    | 115                    | 750                         | 16                | 7.7                       | 3.4                   | 0.0                                    | 0.1     | ( 1.3)                                 | 0       | ( 0.0)                          | 0        | 1.3                        |   |                                    |       |                                 |  |
| TOTAL DI STANCE TRAVELLED (PCU- KM/H) |                        | TOTAL TIME SPENT (PCU- H/H) |                   | MEAN JOURNEY SPEED (KM/H) |                       | TOTAL UNI FORM 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 I NDEX (\$/H) |  |
| 236.9                                 |                        | 33.2                        |                   | 7.1                       |                       | 16.8                                   |         | 11.7                                   |         | ( 404.4) + ( 66.1)              |          | + ( 0.0)                   |   | = 470.5                            |       | TOTALS                          |  |

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| CRUISE LI TRES PER HOUR |  | DELAY LI TRES PER HOUR |  | STOPS LI TRES PER HOUR |  | TOTALS LI TRES PER HOUR |  |
|-------------------------|--|------------------------|--|------------------------|--|-------------------------|--|
| 12.7                    |  | + 32.7                 |  | + 30.1                 |  | = 75.6                  |  |

NO. OF ENTRIES TO SUBPT = 1  
NO. OF LINKS RECALCULATED= 9

120 SECOND CYCLE 120 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 18  
- (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 | PERFORMANCE INDEX |   | EXIT NODE | GR ST  |
|---------------------------------------|-----------------------------|--------------------------------|---------------------------------|----------------------------------------|----------------------------|----------------------------|---------|----------------------------------|---------|---------------------------------|----------|-------------------|---|-----------|--------|
| 1                                     | 2                           | 0                              | 108                             |                                        |                            |                            |         |                                  |         |                                 |          | 3.1               | 1 | 113       |        |
| 2                                     | 3                           | 0                              | 29                              | 64                                     |                            |                            |         |                                  |         |                                 |          | 16.8              | 1 | 113       |        |
| TOTAL DI STANCE TRAVELLED (PCU- KM/H) | TOTAL TIME SPENT (PCU- H/H) | MEAN JOURNEY SPEED (KM/H)      | TOTAL UNI FORM 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 I NDEX (\$/H) |          |                   |   |           |        |
| 236.9                                 | 33.2                        | 7.1                            | 16.8                            | 11.7                                   | ( 404.4)                   | + ( 66.1)                  |         | + ( 0.0)                         |         | = 470.5                         |          |                   |   |           | TOTALS |
| NO. OF ENTRIES TO SUBPT = 41          |                             | NO. OF LINKS RECALCULATED= 193 |                                 |                                        |                            |                            |         |                                  |         |                                 |          |                   |   |           |        |

120 SECOND CYCLE 120 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 18 48  
- (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 | PERFORMANCE INDEX |   | EXIT NODE | GR ST  |
|---------------------------------------|-----------------------------|-------------------------------|---------------------------------|----------------------------------------|----------------------------|----------------------------|---------|----------------------------------|---------|---------------------------------|----------|-------------------|---|-----------|--------|
| 1                                     | 2                           | 0                             | 108                             |                                        |                            |                            |         |                                  |         |                                 |          | 3.1               | 1 | 113       |        |
| 2                                     | 3                           | 0                             | 29                              | 64                                     |                            |                            |         |                                  |         |                                 |          | 16.8              | 1 | 113       |        |
| TOTAL DI STANCE TRAVELLED (PCU- KM/H) | TOTAL TIME SPENT (PCU- H/H) | MEAN JOURNEY SPEED (KM/H)     | TOTAL UNI FORM 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 I NDEX (\$/H) |          |                   |   |           |        |
| 236.9                                 | 33.2                        | 7.1                           | 16.8                            | 11.7                                   | ( 404.4)                   | + ( 66.1)                  |         | + ( 0.0)                         |         | = 470.5                         |          |                   |   |           | TOTALS |
| NO. OF ENTRIES TO SUBPT = 11          |                             | NO. OF LINKS RECALCULATED= 58 |                                 |                                        |                            |                            |         |                                  |         |                                 |          |                   |   |           |        |

120 SECOND CYCLE 120 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 18 48 -1  
- (SECONDS)

1 2 0 108  
2 3 0 29 65

| 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)                  |        |
| 236.9                    | 33.1             | 7.2                | 16.9                | 11.5                       | ( 403.1)            | ( 66.2)             | ( 0.0)                    | = 469.3                 | TOTALS |

NO. OF ENTRIES TO SUBPT = 10  
NO. OF LINKS RECALCULATED= 56

120 SECOND CYCLE 120 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 18 48 -1 18  
- (SECONDS)

1 2 0 108  
2 3 0 29 65

| 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)                  |        |
| 236.9                    | 33.1             | 7.2                | 16.9                | 11.5                       | ( 403.1)            | ( 66.2)             | ( 0.0)                    | = 469.3                 | TOTALS |

NO. OF ENTRIES TO SUBPT = 41  
NO. OF LINKS RECALCULATED= 193

120 SECOND CYCLE 120 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 18 48 -1 18 48  
- (SECONDS)

1 2 0 108  
2 3 0 29 65

| 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)                  |        |
| 236.9                    | 33.1             | 7.2                | 16.9                | 11.5                       | ( 403.1)            | ( 66.2)             | ( 0.0)                    | = 469.3                 | TOTALS |

NO. OF ENTRIES TO SUBPT = 11  
NO. OF LINKS RECALCULATED= 58

120 SECOND CYCLE 120 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 18 48 -1 18 48 1  
- (SECONDS)

1 2 0 108  
2 3 0 29 65

| 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)                  |        |
| 236.9                    | 33.1             | 7.2                | 16.9                | 11.5                       | ( 403.1)            | ( 66.2)             | ( 0.0)                    | = 469.3                 | TOTALS |

NO. OF ENTRIES TO SUBPT = 241  
NO. OF LINKS RECALCULATED= 1093

120 SECOND CYCLE 120 STEPS

INTERMEDIATE SETTINGS - INCREMENTS SO FAR :- 18 48 -1 18 48 1 -1  
 - (SECONDS)

| 1                             | 2                | 0                  | 108                 |                            | 65                  |                     |                           |                         |        |  |  |  |  |  |  |
|-------------------------------|------------------|--------------------|---------------------|----------------------------|---------------------|---------------------|---------------------------|-------------------------|--------|--|--|--|--|--|--|
| 2                             | 3                | 0                  | 29                  |                            |                     |                     |                           |                         |        |  |  |  |  |  |  |
| 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)                  |        |  |  |  |  |  |  |
| 236.9                         | 33.1             | 7.2                | 16.9                | 11.5                       | ( 403.1)            | + ( 66.2)           | + ( 0.0)                  | = 469.3                 | TOTALS |  |  |  |  |  |  |
| NO. OF ENTRIES TO SUBPT = 9   |                  |                    |                     |                            |                     |                     |                           |                         |        |  |  |  |  |  |  |
| NO. OF LINKS RECALCULATED= 51 |                  |                    |                     |                            |                     |                     |                           |                         |        |  |  |  |  |  |  |

120 SECOND CYCLE 120 STEPS

FINAL SETTINGS OBTAINED WITH INCREMENTS :- 18 48 -1 18 48 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  |                |  | PERFORMANCE INDEX          | EXIT NODE | GR ST |
|--------------------------|------------------|--------------------|---------------------|----------------------------|---------------------|---------------------|---------------------------|-------------------------|-----------------|---------------|-----------|----------------|--|----------------------------|-----------|-------|
| 1                        | 2                | 0                  | 108                 |                            | 65                  |                     |                           |                         |                 |               |           |                |  | WEIGHTED SUM OF ( ) VALUES |           | 1     |
| 2                        | 3                | 0                  | 29                  |                            |                     |                     |                           |                         |                 |               |           |                |  | (\$/H)                     |           |       |
| LINK NUMBER              | FLOW INTO LINK   | SAT FLOW           | DEGREE OF SAT       | MEAN PER CRUISE            | TIMES PCU DELAY     | -----DELAY-----     |                           | ----STOPS----           |                 | ----QUEUE---- |           |                |  | INDEX                      |           |       |
|                          | (PCU/H)          | (PCU/H)            | (%)                 | (SEC)                      | (SEC)               | UNI FORM DELAY      | RANDOM+OVERSAT DELAY      | COST OF DELAY           | MEAN STOPS /PCU | COST OF STOPS | MEAN MAX. | AVERAGE EXCESS |  |                            |           |       |
|                          |                  |                    |                     |                            |                     | (U+R+O=MEAN Q)      | (PCU-H/H)                 | (\$/H)                  | (%)             | (\$/H)        | (PCU)     | (PCU)          |  |                            |           |       |
| 11                       | 10               | 1752               | 9                   | 7.7                        | 70.1                | 0.1 + 0.0           | ( 2.7)                    | 105                     | ( 0.4)          | 0             |           |                |  | 3.1                        | 1         | 113   |
| 12                       | 49               | 1874               | 39                  | 7.7                        | 77.8                | 0.7 + 0.3           | ( 14.9)                   | 112                     | ( 1.9)          | 2             |           |                |  | 16.8                       | 1         | 113   |
| 13                       | 435              | 2015               | 25                  | 7.7                        | 3.2                 | 0.2 + 0.2           | ( 4.7)                    | 15                      | ( 2.2)          | 3             |           |                |  | 6.9                        | 1         | 5     |
| 14                       | 687              | 2015               | 39                  | 4.8                        | 3.8                 | 0.3 + 0.3           | ( 9.0)                    | 18                      | ( 4.2)          | 5             |           |                |  | 13.2                       | 1         | 5     |
| 21                       | 736              | 1922               | 90                  | 7.7                        | 53.8                | 6.6 + 4.3           | (154.7)                   | 106                     | ( 27.1)         | 27            | +         |                |  | 181.8                      | 2         | 70    |
| 23                       | 79               | 1965               | 6                   | 4.8                        | 6.6                 | 0.1 + 0.0           | ( 1.9)                    | 28                      | ( 0.8)          | 1             |           |                |  | 2.7                        | 2         | 34    |
| 24                       | 413              | 1787               | 87                  | 4.8                        | 69.5                | 4.8 + 3.1           | (112.4)                   | 113                     | ( 16.3)         | 16            | +         |                |  | 128.7                      | 2         | 34    |
| 25                       | 317              | 1752               | 87                  | 7.7                        | 81.6                | 4.0 + 3.1           | (101.5)                   | 121                     | ( 13.3)         | 13            |           |                |  | 114.8                      | 2         | 5     |
| 26                       | 115              | 750                | 16                  | 7.7                        | 3.4                 | 0.0 + 0.1           | ( 1.3)                    | 0                       | ( 0.0)          | 0             |           |                |  | 1.3                        |           |       |
| 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)                  |                 |               |           |                |  |                            |           |       |
| 236.9                    | 33.1             | 7.2                | 16.9                | 11.5                       | ( 403.1)            | + ( 66.2)           | + ( 0.0)                  | = 469.3                 | TOTALS          |               |           |                |  |                            |           |       |

ROUTE

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|                              | CRUISE LITRES PER HOUR | + | DELAY LITRES PER HOUR | + | STOPS LITRES PER HOUR | = | TOTALS LITRES PER HOUR |
|------------------------------|------------------------|---|-----------------------|---|-----------------------|---|------------------------|
| FUEL CONSUMPTION PREDICTIONS | 12.7                   |   | 32.6                  |   | 30.1                  |   | 75.5                   |

NO. OF ENTRIES TO SUBPT = 241  
 NO. OF LINKS RECALCULATED= 1093

PROGRAM TRANSYT FINISHED

===== end of file =====