

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

TAXIS

Calculation factor: **100 sqm**

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
07:30 - 08:00	4	4211	0.006	4	4211	0.006	4	4211	0.012
08:00 - 08:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
08:30 - 09:00	4	4211	0.006	4	4211	0.006	4	4211	0.012
09:00 - 09:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
09:30 - 10:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
10:00 - 10:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
10:30 - 11:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
11:00 - 11:30	4	4211	0.006	4	4211	0.000	4	4211	0.006
11:30 - 12:00	4	4211	0.006	4	4211	0.006	4	4211	0.012
12:00 - 12:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
12:30 - 13:00	4	4211	0.000	4	4211	0.006	4	4211	0.006
13:00 - 13:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
13:30 - 14:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
14:00 - 14:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
14:30 - 15:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
15:00 - 15:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
15:30 - 16:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:00 - 16:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:30 - 17:00	4	4211	0.006	4	4211	0.006	4	4211	0.012
17:00 - 17:30	4	4211	0.012	4	4211	0.012	4	4211	0.024
17:30 - 18:00	4	4211	0.006	4	4211	0.006	4	4211	0.012
18:00 - 18:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
18:30 - 19:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.078			0.078			0.156

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
07:30 - 08:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
08:00 - 08:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
08:30 - 09:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
09:00 - 09:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
09:30 - 10:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
10:00 - 10:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
10:30 - 11:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
11:00 - 11:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
11:30 - 12:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
12:00 - 12:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
12:30 - 13:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
13:00 - 13:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
13:30 - 14:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
14:00 - 14:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
14:30 - 15:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
15:00 - 15:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
15:30 - 16:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:00 - 16:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:30 - 17:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
17:00 - 17:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
17:30 - 18:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
18:00 - 18:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
18:30 - 19:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.006			0.006			0.012

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
07:30 - 08:00	4	4211	0.012	4	4211	0.006	4	4211	0.018
08:00 - 08:30	4	4211	0.018	4	4211	0.000	4	4211	0.018
08:30 - 09:00	4	4211	0.018	4	4211	0.000	4	4211	0.018
09:00 - 09:30	4	4211	0.012	4	4211	0.000	4	4211	0.012
09:30 - 10:00	4	4211	0.012	4	4211	0.006	4	4211	0.018
10:00 - 10:30	4	4211	0.006	4	4211	0.000	4	4211	0.006
10:30 - 11:00	4	4211	0.006	4	4211	0.000	4	4211	0.006
11:00 - 11:30	4	4211	0.012	4	4211	0.000	4	4211	0.012
11:30 - 12:00	4	4211	0.018	4	4211	0.018	4	4211	0.036
12:00 - 12:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
12:30 - 13:00	4	4211	0.006	4	4211	0.012	4	4211	0.018
13:00 - 13:30	4	4211	0.024	4	4211	0.000	4	4211	0.024
13:30 - 14:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
14:00 - 14:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
14:30 - 15:00	4	4211	0.000	4	4211	0.006	4	4211	0.006
15:00 - 15:30	4	4211	0.000	4	4211	0.012	4	4211	0.012
15:30 - 16:00	4	4211	0.018	4	4211	0.012	4	4211	0.030
16:00 - 16:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
16:30 - 17:00	4	4211	0.000	4	4211	0.018	4	4211	0.018
17:00 - 17:30	4	4211	0.000	4	4211	0.012	4	4211	0.012
17:30 - 18:00	4	4211	0.000	4	4211	0.024	4	4211	0.024
18:00 - 18:30	4	4211	0.000	4	4211	0.006	4	4211	0.006
18:30 - 19:00	4	4211	0.000	4	4211	0.006	4	4211	0.006
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.174			0.150			0.324

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
07:30 - 08:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
08:00 - 08:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
08:30 - 09:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
09:00 - 09:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
09:30 - 10:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
10:00 - 10:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
10:30 - 11:00	4	4211	0.006	4	4211	0.000	4	4211	0.006
11:00 - 11:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
11:30 - 12:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
12:00 - 12:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
12:30 - 13:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
13:00 - 13:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
13:30 - 14:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
14:00 - 14:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
14:30 - 15:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
15:00 - 15:30	4	4211	0.000	4	4211	0.006	4	4211	0.006
15:30 - 16:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:00 - 16:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:30 - 17:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
17:00 - 17:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
17:30 - 18:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
18:00 - 18:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
18:30 - 19:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.006			0.006			0.012

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
07:30 - 08:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
08:00 - 08:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
08:30 - 09:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
09:00 - 09:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
09:30 - 10:00	4	4211	0.006	4	4211	0.006	4	4211	0.012
10:00 - 10:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
10:30 - 11:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
11:00 - 11:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
11:30 - 12:00	4	4211	0.012	4	4211	0.012	4	4211	0.024
12:00 - 12:30	4	4211	0.012	4	4211	0.006	4	4211	0.018
12:30 - 13:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
13:00 - 13:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
13:30 - 14:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
14:00 - 14:30	4	4211	0.012	4	4211	0.012	4	4211	0.024
14:30 - 15:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
15:00 - 15:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
15:30 - 16:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:00 - 16:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:30 - 17:00	4	4211	0.012	4	4211	0.012	4	4211	0.024
17:00 - 17:30	4	4211	0.006	4	4211	0.006	4	4211	0.012
17:30 - 18:00	4	4211	0.000	4	4211	0.006	4	4211	0.006
18:00 - 18:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
18:30 - 19:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.072			0.072			0.144

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

MOTOR CYCLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
07:30 - 08:00	4	4211	0.006	4	4211	0.000	4	4211	0.006
08:00 - 08:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
08:30 - 09:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
09:00 - 09:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
09:30 - 10:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
10:00 - 10:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
10:30 - 11:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
11:00 - 11:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
11:30 - 12:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
12:00 - 12:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
12:30 - 13:00	4	4211	0.012	4	4211	0.006	4	4211	0.018
13:00 - 13:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
13:30 - 14:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
14:00 - 14:30	4	4211	0.000	4	4211	0.006	4	4211	0.006
14:30 - 15:00	4	4211	0.000	4	4211	0.006	4	4211	0.006
15:00 - 15:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
15:30 - 16:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:00 - 16:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
16:30 - 17:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
17:00 - 17:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
17:30 - 18:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
18:00 - 18:30	4	4211	0.000	4	4211	0.000	4	4211	0.000
18:30 - 19:00	4	4211	0.000	4	4211	0.000	4	4211	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.018			0.018			0.036

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
 Category : A - HOTELS

TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	GR GREENWICH	1 days
05	EAST MIDLANDS	
	NT NOTTINGHAMSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
09	NORTH	
	TW TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of bedrooms
 Actual Range: 24 to 151 (units:)
 Range Selected by User: 4 to 483 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 26/11/20

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Town Centre	2
Edge of Town Centre	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Built-Up Zone	3
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C1 4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000 3 days
50,001 to 100,000 1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

500,001 or More 4 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0 4 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 4 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 3 days
4 Good 1 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

<p>1 GM-06-A-08 IBIS PORTLAND STREET MANCHESTER</p> <p>Town Centre Built-Up Zone Total Number of bedrooms: 127 <i>Survey date: MONDAY</i> 26/09/16</p>	<p>GREATER MANCHESTER</p> <p><i>Survey Type: MANUAL</i></p>
<p>2 GR-06-A-03 NOVOTEL GREENWICH HIGH ROAD GREENWICH</p> <p>Edge of Town Centre No Sub Category Total Number of bedrooms: 151 <i>Survey date: FRIDAY</i> 22/11/13</p>	<p>GREENWICH</p> <p><i>Survey Type: MANUAL</i></p>
<p>3 NT-06-A-02 PREMIER INN LONDON ROAD NOTTINGHAM</p> <p>Edge of Town Centre Built-Up Zone Total Number of bedrooms: 87 <i>Survey date: MONDAY</i> 24/06/13</p>	<p>NOTTINGHAMSHIRE</p> <p><i>Survey Type: MANUAL</i></p>
<p>4 TW-06-A-03 HOTEL SANDHILL NEWCASTLE UPON TYNE QUAYSIDE Town Centre Built-Up Zone Total Number of bedrooms: 24 <i>Survey date: TUESDAY</i> 14/06/16</p>	<p>TYNE & WEAR</p> <p><i>Survey Type: MANUAL</i></p>

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

TOTAL VEHICLES

Calculation factor: 1 BEDRMS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	97	0.023	4	97	0.069	4	97	0.092
08:00 - 09:00	4	97	0.087	4	97	0.159	4	97	0.246
09:00 - 10:00	4	97	0.082	4	97	0.105	4	97	0.187
10:00 - 11:00	4	97	0.062	4	97	0.087	4	97	0.149
11:00 - 12:00	4	97	0.062	4	97	0.082	4	97	0.144
12:00 - 13:00	4	97	0.031	4	97	0.023	4	97	0.054
13:00 - 14:00	4	97	0.039	4	97	0.028	4	97	0.067
14:00 - 15:00	4	97	0.021	4	97	0.031	4	97	0.052
15:00 - 16:00	4	97	0.039	4	97	0.036	4	97	0.075
16:00 - 17:00	4	97	0.046	4	97	0.036	4	97	0.082
17:00 - 18:00	4	97	0.069	4	97	0.041	4	97	0.110
18:00 - 19:00	4	97	0.059	4	97	0.041	4	97	0.100
19:00 - 20:00	4	97	0.075	4	97	0.033	4	97	0.108
20:00 - 21:00	4	97	0.026	4	97	0.018	4	97	0.044
21:00 - 22:00	4	97	0.021	4	97	0.013	4	97	0.034
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.742			0.802			1.544

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	24 - 151 (units:)
Survey date range:	01/01/13 - 26/11/20
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

TAXIS

Calculation factor: 1 BEDRMS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	97	0.005	4	97	0.005	4	97	0.010
08:00 - 09:00	4	97	0.005	4	97	0.005	4	97	0.010
09:00 - 10:00	4	97	0.008	4	97	0.008	4	97	0.016
10:00 - 11:00	4	97	0.005	4	97	0.005	4	97	0.010
11:00 - 12:00	4	97	0.008	4	97	0.008	4	97	0.016
12:00 - 13:00	4	97	0.000	4	97	0.000	4	97	0.000
13:00 - 14:00	4	97	0.008	4	97	0.008	4	97	0.016
14:00 - 15:00	4	97	0.003	4	97	0.003	4	97	0.006
15:00 - 16:00	4	97	0.003	4	97	0.003	4	97	0.006
16:00 - 17:00	4	97	0.003	4	97	0.003	4	97	0.006
17:00 - 18:00	4	97	0.010	4	97	0.010	4	97	0.020
18:00 - 19:00	4	97	0.010	4	97	0.010	4	97	0.020
19:00 - 20:00	4	97	0.015	4	97	0.015	4	97	0.030
20:00 - 21:00	4	97	0.005	4	97	0.005	4	97	0.010
21:00 - 22:00	4	97	0.008	4	97	0.008	4	97	0.016
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.096			0.096			0.192

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

OGVS

Calculation factor: 1 BEDRMS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	97	0.003	4	97	0.003	4	97	0.006
08:00 - 09:00	4	97	0.005	4	97	0.005	4	97	0.010
09:00 - 10:00	4	97	0.005	4	97	0.005	4	97	0.010
10:00 - 11:00	4	97	0.000	4	97	0.000	4	97	0.000
11:00 - 12:00	4	97	0.000	4	97	0.000	4	97	0.000
12:00 - 13:00	4	97	0.005	4	97	0.005	4	97	0.010
13:00 - 14:00	4	97	0.000	4	97	0.000	4	97	0.000
14:00 - 15:00	4	97	0.000	4	97	0.000	4	97	0.000
15:00 - 16:00	4	97	0.000	4	97	0.000	4	97	0.000
16:00 - 17:00	4	97	0.000	4	97	0.000	4	97	0.000
17:00 - 18:00	4	97	0.000	4	97	0.000	4	97	0.000
18:00 - 19:00	4	97	0.000	4	97	0.000	4	97	0.000
19:00 - 20:00	4	97	0.000	4	97	0.000	4	97	0.000
20:00 - 21:00	4	97	0.000	4	97	0.000	4	97	0.000
21:00 - 22:00	4	97	0.000	4	97	0.000	4	97	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.018			0.036

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

CYCLISTS

Calculation factor: 1 BEDRMS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	97	0.008	4	97	0.000	4	97	0.008
08:00 - 09:00	4	97	0.003	4	97	0.000	4	97	0.003
09:00 - 10:00	4	97	0.000	4	97	0.000	4	97	0.000
10:00 - 11:00	4	97	0.000	4	97	0.003	4	97	0.003
11:00 - 12:00	4	97	0.000	4	97	0.000	4	97	0.000
12:00 - 13:00	4	97	0.000	4	97	0.000	4	97	0.000
13:00 - 14:00	4	97	0.003	4	97	0.003	4	97	0.006
14:00 - 15:00	4	97	0.000	4	97	0.000	4	97	0.000
15:00 - 16:00	4	97	0.000	4	97	0.000	4	97	0.000
16:00 - 17:00	4	97	0.000	4	97	0.000	4	97	0.000
17:00 - 18:00	4	97	0.000	4	97	0.003	4	97	0.003
18:00 - 19:00	4	97	0.005	4	97	0.003	4	97	0.008
19:00 - 20:00	4	97	0.000	4	97	0.000	4	97	0.000
20:00 - 21:00	4	97	0.000	4	97	0.000	4	97	0.000
21:00 - 22:00	4	97	0.000	4	97	0.000	4	97	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.012			0.031

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

CARS

Calculation factor: **1 BEDRMS**

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	97	0.013	4	97	0.033	4	97	0.046
08:00 - 09:00	4	97	0.072	4	97	0.111	4	97	0.183
09:00 - 10:00	4	97	0.046	4	97	0.077	4	97	0.123
10:00 - 11:00	4	97	0.044	4	97	0.075	4	97	0.119
11:00 - 12:00	4	97	0.036	4	97	0.046	4	97	0.082
12:00 - 13:00	4	97	0.018	4	97	0.013	4	97	0.031
13:00 - 14:00	4	97	0.021	4	97	0.008	4	97	0.029
14:00 - 15:00	4	97	0.010	4	97	0.013	4	97	0.023
15:00 - 16:00	4	97	0.013	4	97	0.023	4	97	0.036
16:00 - 17:00	4	97	0.028	4	97	0.021	4	97	0.049
17:00 - 18:00	4	97	0.046	4	97	0.018	4	97	0.064
18:00 - 19:00	4	97	0.028	4	97	0.010	4	97	0.038
19:00 - 20:00	4	97	0.021	4	97	0.026	4	97	0.047
20:00 - 21:00	4	97	0.013	4	97	0.008	4	97	0.021
21:00 - 22:00	4	97	0.008	4	97	0.000	4	97	0.008
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.417			0.482			0.899

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

LGVS

Calculation factor: 1 BEDRMS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	97	0.003	4	97	0.005	4	97	0.008
08:00 - 09:00	4	97	0.003	4	97	0.008	4	97	0.011
09:00 - 10:00	4	97	0.015	4	97	0.010	4	97	0.025
10:00 - 11:00	4	97	0.013	4	97	0.010	4	97	0.023
11:00 - 12:00	4	97	0.010	4	97	0.015	4	97	0.025
12:00 - 13:00	4	97	0.008	4	97	0.003	4	97	0.011
13:00 - 14:00	4	97	0.000	4	97	0.008	4	97	0.008
14:00 - 15:00	4	97	0.000	4	97	0.000	4	97	0.000
15:00 - 16:00	4	97	0.005	4	97	0.005	4	97	0.010
16:00 - 17:00	4	97	0.003	4	97	0.003	4	97	0.006
17:00 - 18:00	4	97	0.003	4	97	0.000	4	97	0.003
18:00 - 19:00	4	97	0.003	4	97	0.000	4	97	0.003
19:00 - 20:00	4	97	0.000	4	97	0.000	4	97	0.000
20:00 - 21:00	4	97	0.000	4	97	0.000	4	97	0.000
21:00 - 22:00	4	97	0.000	4	97	0.000	4	97	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.066			0.067			0.133

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

APPENDIX 11B
TRANSYT DATA

TRANSYT 16
Version: 16.0.1.8473 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: H087 Commercial TRANSYT Model Existing Config 20220316.t16
 Path: J:\H_JOBS\Job-H087\B_Documents\C_Civil\A_CS Reports\TrafficModelling\H087 Commercial Modelling
 Report generation date: 16/03/2022 16:21:51

- «A1 - : D1 - 2022 Baseline, AM :
- »Summary
- »T-Junctions
- »Local OD Matrix - Local Matrix: 2
- »Local OD Matrix - Local Matrix: 1
- »Local OD Matrix - Local Matrix: 3
- »Signal Timings
- »Final Prediction Table

Summary of network performance

AM					
Set ID	PI (E per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated	
2022 Baseline					
Network	D1	239.31	15.14	84% (TS 1C/1)	0 (0%)

File summary

File description

File title	Heuston South Quarter Commercial
Location	Dublin 8
Site number	
UTCRegion	
Driving side	Left
Date	16/03/2022
Version	Existing Layout
Status	
Identifier	
Client	
Jobnumber	
Enumerator	GF
Description	

Model and Results

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

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	l/100km	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

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

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

A1 - D1 - 2022 Baseline, AM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	T-Junction Geometry	T-Junction 3a	T-Junction 3a: TRANSYT using double the user-specified Total Carriageway Width.

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	16/03/2022 16:21:45	16/03/2022 16:21:48	3.02	07:30	100	239.31	15.14	84.23	1C/1	0	0	1C/1	3Ax/1	1C/1	✓

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
					✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2022 Baseline	AM				07:30		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aA	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2Bx/1	2Bx/1	Two-Way	2C/1	2C/2	2Cx/1	✓
3a			✓	TrafficStream	Entry Only		3Bx1/1		Entry Only		3A3/1		Exit Only			3Bx2/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.60	8.60	0.00	2.50	150.00
3a	4.00	4.00	0.00	2.20	0.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	2.40	2.40	64.00	43.00
3a	4.00	2.20	20.00	35.00

T-Junction Slope Intercept

T-Junction	BIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	612	0.08	0.21	488	0.08	0.20	0.13	0.28	682	0.23	0.23
3a	711	0.10	0.25	461	0.08	0.19	0.12	0.28	574	0.20	0.20

Local OD Matrix - Local Matrix: 2

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
2		✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	30	144
	2-2	30	0	13
	2-3	51	39	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
2	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C/1, 2C/2	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
2	2		2-3	2-1	2C/1, 2Ax/1	Normal	51
	3		2-1	2-2	2A/1, 2Bx/1	Normal	30
	4		2-1	2-3	2A/1, 2Cx/1	Normal	144
	5		2-2	2-3	2B/1, 2Cx/1	Normal	13
	6		2-2	2-1	2B/1, 2Ax/1	Normal	30
	7		2-3	2-2	2C/2, 2Bx/1	Normal	39

Local OD Matrix - Local Matrix: 1

Local Matrix Options

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

Normal Input Flows (PCU/hr)

		To		
		1-1	1-2	1-3
From	1-1	0	89	819
	1-2	91	0	66
	1-3	1122	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/2, 1A/1	1Ax/1	#FFFF00
	1-2		1B/1, 1B/2	1Bx/1	#00FFFF
	1-3		1C/1	1Cx/1	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-1	1C/1, 1Ax/1	Normal	1122
	2		1-1	1-3	1A/2, 1Cx/1	Normal	410
	3		1-1	1-3	1A/1, 1Cx/1	Normal	410
	4		1-1	1-2	1A/1, 1Bx/1	Normal	89
	6		1-2	1-3	1B/1, 1Cx/1	Normal	66
	7		1-2	1-1	1B/2, 1Ax/1	Normal	91

Local OD Matrix - Local Matrix: 3

Local Matrix Options

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

Normal Input Flows (PCU/hr)

		To		
		3-1	3-2	3-3
From	3-1	0	8	873
	3-2	0	0	26
	3-3	1119	79	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
3	3-1		3A2/2, 3A2/1	3Ax/1	#008000
	3-2		3B/1	3Bx2/1	#FFA500
	3-3		3C/1, 3C/2	3Cx/1	#A52A2A

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		3-2	3-3	3B/1, 3Cx/1	Normal	26
	2		3-3	3-2	3C/2, 3Bx1/1, 3Bx2/1	Normal	79
	4		3-3	3-1	3C/1, 3Ax/1	Normal	1119
	5		3-1	3-3	3A2/2, 3A1/1, 3Cx/1	Normal	437
	6		3-1	3-3	3A2/1, 3A1/1, 3Cx/1	Normal	437
	7		3-1	3-2	3A2/1, 3A4/1, 3A3/1, 3Bx2/1	Normal	8

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			3	NetworkDefault	100	36

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		5	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown
	H		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A, B, E	1	1	100
	2	A, B, H	1	1	100
	3	B, E, G	1	1	100
	4	B, G, H	1	1	100
	5	C, D, F	1	1	100
	6	C, E, F	1	1	100
	7	C, F, H	1	1	100
	8	E, F, G	1	1	100
	9	F, G, H	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 4, 5	26, 54, 92	39	
	2	(untitled)	Single	1, 5, 4	26, 56, 87	37	
	3	(untitled)	Single	1, 5, 9	59, 70, 78	36	
	4	(untitled)	Single	1, 9, 5	26, 54, 92	39	
	5	(untitled)	Single	2, 3, 5	24, 56, 92	44	
	6	(untitled)	Single	2, 5, 3	24, 56, 87	41	
	7	(untitled)	Single	2, 5, 8	25, 58, 87	41	
	8	(untitled)	Single	2, 8, 5	24, 56, 92	44	
	9	(untitled)	Single	1, 2, 3, 5	17, 37, 62, 92	49	
	10	(untitled)	Single	1, 2, 4, 5	19, 39, 61, 92	42	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H
From	A			5	5		5	5	
	B			5	5		5		
	C	5	5					5	
	D	5	5			5		5	5
	E				5				5
	F	8	8						
	G	13			13	13			
	H				8	8			

Banned Stage transitions for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

Interstage Matrix for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1	0	5	5	5	5	5	5	5	5
	2	8	0	8	5	8	8	5	8	5
	3	13	13	0	5	13	13	13	5	5
	4	13	13	8	0	13	13	13	8	5
	5	8	8	8	8	0	5	5	5	5
	6	8	8	8	8	5	0	5	5	5
	7	8	8	8	8	8	8	0	8	5
	8	13	13	8	8	13	13	13	0	5
	9	13	13	8	8	13	13	13	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E	91	59	68	1	5
	2	✓	5	C,D,F	64	70	6	1	5
	3	✓	9	F,G,H	75	78	3	1	3

Resultant Phase Green Periods

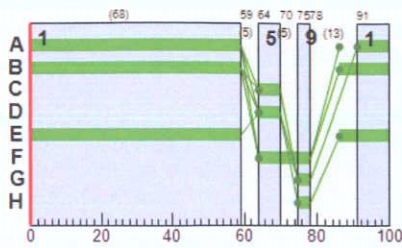
Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	91	59	68
	B	1	✓	86	59	73
	C	1	✓	64	70	6
	D	1	✓	64	70	6
	E	1	✓	86	59	73
	F	1	✓	64	78	14
	G	1	✓	75	78	3
	H	1	✓	75	78	3

Traffic Stream Green Times

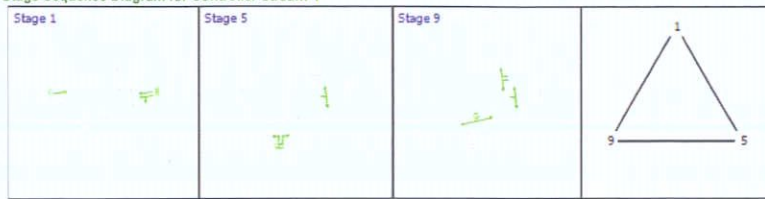
--	--	--	--	--	--	--

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	91	59	68
1A	2	1	1	B	86	59	73
1B	1	1	1	C	64	70	6
1B	2	1	1	D	64	70	6
1C	1	1	1	E	86	59	73

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Controller Stream 3

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
3			1	NetworkDefault	100	42

Controller Stream 3 - Properties

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

Controller Stream 3 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Offsets And Green Splits	<input checked="" type="checkbox"/>	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
3	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		3	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
3	1	A, C, G	1	1	100
	2	A, F, G	1	1	100
	3	B, C, E	1	1	100
	4	B, E, F	1	1	100
	5	C, D, E	1	1	100
	6	C, E, G	1	1	100
	7	D, E, F	1	1	100
	8	E, F, G	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
3	1	(untitled)	Single	1, 3, 7	38, 57, 65	42	
	2	(untitled)	Single	1, 4, 5	23, 60, 90	43	
	3	(untitled)	Single	1, 4, 7	24, 62, 90	39	
	4	(untitled)	Single	1, 5, 4	24, 62, 90	42	
	5	(untitled)	Single	1, 7, 3	23, 60, 90	43	
	6	(untitled)	Single	1, 7, 4	24, 62, 90	39	
	7	(untitled)	Single	2, 3, 5	24, 62, 90	39	
	8	(untitled)	Single	2, 3, 7	24, 62, 90	40	
	9	(untitled)	Single	2, 4, 5	23, 60, 90	47	
	10	(untitled)	Single	2, 5, 3	24, 62, 90	39	

Intergreen Matrix for Controller Stream 3

		To						
		A	B	C	D	E	F	G
From	A		5		5	5		
	B	5						5
	C						5	
	D	5						5
	E	10						
	F			8				
	G	14	14					

Banned Stage transitions for Controller Stream 3

--	--

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

Interstage Matrix for Controller Stream 3

		To							
		1	2	3	4	5	6	7	8
From	1	0	5	14	14	14	5	14	5
	2	8	0	14	14	14	8	14	5
	3	10	10	0	5	0	5	5	5
	4	10	10	8	0	8	8	0	5
	5	10	10	0	5	0	5	5	5
	6	10	10	14	14	14	0	14	5
	7	10	10	8	0	8	8	0	5
	8	10	10	14	14	14	8	14	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A,C,G	75	38	63	1	5
	2	✓	3	B,C,E	52	57	5	1	5
	3	✓	7	D,E,F	62	65	3	1	3

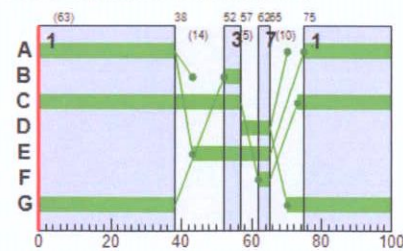
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
3	A	1	✓	75	38	63
	B	1	✓	52	57	5
	C	1	✓	73	57	84
	D	1	✓	57	65	8
	E	1	✓	43	65	22
	F	1	✓	62	65	3
	G	1	✓	70	38	68

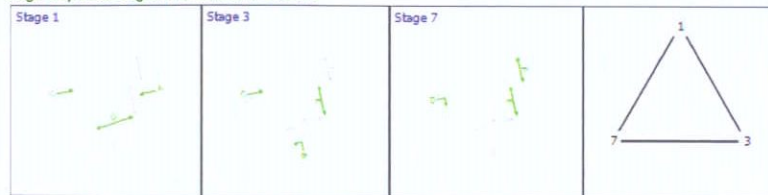
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
3B	1	3	3	B	52	57	5
3C	1	3	3	C	73	57	84
3C	2	3	3	D	57	65	8
3A1	1	3	3	A	75	38	63

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
07:30-08:30	(ALL)	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES		WEIGHTS		PENALTIES		P.I.
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)	
1A	1	S/L	1	1	A	499	1800	68	0.00	40	124	11.09	7.62	41.44	5.96	4.43	100	100	0.00	17.59
	2	S	1	1	B	410	1800	73	0.00	31	192	8.45	4.98	32.10	3.83	3.03	100	100	0.00	9.71
1Ax	1					1213	Unrestricted	100	8.00	0	Unrestricted	8.67	0.00	0.00	0.00	100	100	0.00	0.00	0.00
1B	1	L	1	1	C	86	1800	6	0.00	52	72	86.33	80.23	109.55	2.04	1.99	100	100	0.00	16.59
	2	R	1	1	D	91	1800	6	0.00	72	25	85.76	79.63	127.15	3.31	3.21	100	100	0.00	30.03
1Bx	1		8			89	1800	100	31.00	5	1720	7.33	0.05	0.00	0.00	100	100	0.00	0.02	

1C	1	S/R	1	1	E	1122	1800	73	0.00	84	7	31.83	13.31	43.77	15.26	10.21	100	100	0.00	65.06
1Cx	1		7			886	3600	100	9.00	25	266	9.57	0.16	0.00	0.04		100	100	0.00	0.57
2A	1	S/L	2			174	9999	100	0.00	2	5072	2.19	0.00	0.00	0.00		100	100	0.00	0.00
2Ax	1					81	Unrestricted	100	30.00	0	Unrestricted	3.83	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2			43	474	100	100.00	9	892	2.75	0.57	0.00	0.01		100	100	0.00	0.10
2Bx	1					69	Unrestricted	100	31.00	0	Unrestricted	3.08	0.00	0.00	0.00		100	100	0.00	0.00
2C	1	S	2			51	1800	100	81.00	3	3076	4.97	0.03	0.00	0.00		100	100	0.00	0.01
	2	R	2			39	642	100	84.00	6	1381	5.25	0.27	0.00	0.00		100	100	0.00	0.04
2Cx	1		8			157	1800	100	0.00	9	932	3.02	0.10	0.00	0.00		100	100	0.00	0.06
3Ax	1		7			1119	1800	100	5.00	62	45	12.55	1.64	0.00	0.51		100	100	0.00	7.23
3B	1	L	3	3	B	26	3600	5	5.00	12	648	48.32	45.79	93.95	0.69	0.69	100	100	0.00	5.00
3C	1	S	3	3	C	1119 <	1800	84	0.00	73	23	11.99	6.15	38.38	13.11 +	5.65	100	100	0.00	32.53
	2	R	3	3	D	79	1800	8	0.00	49	85	59.56	53.72	103.82	2.31	2.23	100	100	0.00	17.77
3Cx	1					900	Unrestricted	100	19.00	0	Unrestricted	9.26	0.00	0.00	0.00		100	100	0.00	0.00
3A1	1	S	3	3	A	874 <	3600	63	0.00	38	137	10.88	9.01	43.82	11.14 +	8.68	100	100	0.00	35.87
3Bx1	1		4			79	1800	100	90.00	4	1951	4.68	0.05	0.00	0.00		100	100	0.00	0.01
	1		6			445	1800	100	28.00	25	264	18.65	0.33	0.00	0.04		100	100	0.00	0.58
3A2	2		6			437	1800	100	29.00	24	271	18.67	0.32	0.00	0.04		100	100	0.00	0.55
3Bx2	1					87	Unrestricted	100	88.00	0	Unrestricted	2.65	0.00	0.00	0.00		100	100	0.00	0.00
3A3	1	L	4			8	691	100	100.00	1	7663	1.10	0.03	0.00	0.00		100	100	0.00	0.00
3A4	1		5			8	1800	100	100.00	0	20127	2.33	0.00	0.00	0.00		100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	769.39	40.79	18.86	9.63	5.52	215.03	24.28	0.00	239.31
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	769.39	40.79	18.86	9.63	5.52	215.03	24.28	0.00	239.31

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 16
Version: 16.0.1.8473 © Copyright TRL Limited, 2019
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Filename: H087 Commercial TRANSYT Model Existing Config 20220316.t16
 Path: J:\H_JOBS\Job-H087\B_Documents\C_Civil\A_CS Reports\TrafficModelling\H087 Commercial Modelling
 Report generation date: 16/03/2022 16:28:03

- «A1 - : D2 - 2022 Baseline, PM :
- »Summary
 - »T-Junctions
 - »Local OD Matrix - Local Matrix: 2
 - »Local OD Matrix - Local Matrix: 1
 - »Local OD Matrix - Local Matrix: 3
 - »Signal Timings
 - »Final Prediction Table

Summary of network performance

PM					
Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated	
2022 Baseline					
Network	D2	360.23	22.94	74% (TS 1B/1)	0 (0%)

File summary

File description

File title	Heuston South Quarter Commercial
Location	Dublin 8
Site number	
UTCRRegion	
Driving side	Left
Date	16/03/2022
Version	Existing Layout
Status	
Identifier	
Client	
Jobnumber	
Enumerator	GF
Description	

Model and Results

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

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	l/100km	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

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

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

A1 - D2 - 2022 Baseline, PM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	T-Junction Geometry	T-Junction 3a	T-Junction 3a: TRANSYT using double the user-specified Total Carriageway Width.

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	16/03/2022 16:27:53	16/03/2022 16:27:56	3.01	16:30	100	360.23	22.94	74.27	1B/1	0	0	1B/1	3A2/1	1B/1	✓

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
					✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2022 Baseline	PM				16:30		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C/1	2C/2	2Cx/1	✓
3a			✓	TrafficStream	Entry Only			3Bx1/1	Entry Only				Exit Only			3Bx2/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.60	8.60	0.00	2.50	150.00
3a	4.00	4.00	0.00	2.20	0.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	2.40	2.40	64.00	43.00
3a	4.00	2.20	20.00	35.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	612	0.08	0.21	488	0.08	0.20	0.13	0.28	682	0.23	0.23
3a	711	0.10	0.25	461	0.08	0.19	0.12	0.28	574	0.20	0.20

Local OD Matrix - Local Matrix: 2

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
2		✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	31	372
	2-2	27	0	24
	2-3	43	20	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
2	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C/1, 2C/2	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
2	2		2-3	2-1	2C/1, 2Ax/1	Normal	43
	3		2-1	2-2	2A/1, 2Bx/1	Normal	31
	4		2-1	2-3	2A/1, 2Cx/1	Normal	372
	5		2-2	2-3	2B/1, 2Cx/1	Normal	24
	6		2-2	2-1	2B/1, 2Ax/1	Normal	27
	7		2-3	2-2	2C/2, 2Bx/1	Normal	20

Local OD Matrix - Local Matrix: 1

Local Matrix Options

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

Normal Input Flows (PCU/hr)

		To		
		1-1	1-2	1-3
From	1-1	0	63	1378
	1-2	141	0	254
	1-3	700	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/2, 1A/1	1Ax/1	#FFFF00
	1-2		1B/1, 1B/2	1Bx/1	#00FFFF
	1-3		1C/1	1Cx/1	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-1	1C/1, 1Ax/1	Normal	700
	2		1-1	1-3	1A/2, 1Cx/1	Normal	688
	3		1-1	1-3	1A/1, 1Cx/1	Normal	688
	4		1-1	1-2	1A/1, 1Bx/1	Normal	63
	6		1-2	1-3	1B/1, 1Cx/1	Normal	254
	7		1-2	1-1	1B/2, 1Ax/1	Normal	141

Local OD Matrix - Local Matrix: 3

Local Matrix Options

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

Normal Input Flows (PCU/hr)

		To		
		3-1	3-2	3-3
From	3-1	0	11	1658
	3-2	0	0	89
	3-3	698	24	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
3	3-1		3A2/2, 3A2/1	3Ax/1	#008000
	3-2		3B/1	3Bx2/1	#FFA500
	3-3		3C/1, 3C/2	3Cx/1	#A52A2A

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		3-2	3-3	3B/1, 3Cx/1	Normal	89
	2		3-3	3-2	3C/2, 3Bx1/1, 3Bx2/1	Normal	24
	4		3-3	3-1	3C/1, 3Ax/1	Normal	698
	5		3-1	3-3	3A2/2, 3A1/1, 3Cx/1	Normal	828
	6		3-1	3-3	3A2/1, 3A1/1, 3Cx/1	Normal	828
	7		3-1	3-2	3A2/1, 3A4/1, 3A3/1, 3Bx2/1	Normal	11

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			3	NetworkDefault	100	36

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		5	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown
	H		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A, B, E	1	1	100
	2	A, B, H	1	1	100
	3	B, E, G	1	1	100
	4	B, G, H	1	1	100
	5	C, D, F	1	1	100
	6	C, E, F	1	1	100
	7	C, F, H	1	1	100
	8	E, F, G	1	1	100
	9	F, G, H	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 4, 5	26, 54, 92	39	
	2	(untitled)	Single	1, 5, 4	26, 56, 87	37	
	3	(untitled)	Single	1, 5, 9	12, 35, 43	36	
	4	(untitled)	Single	1, 9, 5	26, 54, 92	39	
	5	(untitled)	Single	2, 3, 5	24, 56, 92	44	
	6	(untitled)	Single	2, 5, 3	24, 56, 87	41	
	7	(untitled)	Single	2, 5, 8	25, 58, 87	41	
	8	(untitled)	Single	2, 8, 5	24, 56, 92	44	
	9	(untitled)	Single	1, 2, 3, 5	17, 37, 62, 92	49	
	10	(untitled)	Single	1, 2, 4, 5	19, 39, 61, 92	42	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H
From	A			5	5		5	5	
	B			5	5			5	
	C	5	5						5
	D	5	5			5		5	5
	E				5				5
	F	8	8						
	G	13		13	13				
	H				8	8			

Banned Stage transitions for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

Interstage Matrix for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1	0	5	5	5	5	5	5	5	5
	2	8	0	8	8	8	8	8	5	8
	3	13	13	0	5	13	13	13	5	5
	4	13	13	8	0	13	13	13	8	5
	5	8	8	8	8	0	5	5	5	5
	6	8	8	8	8	5	0	5	5	5
	7	8	8	8	8	8	8	0	8	5
	8	13	13	8	8	13	13	13	0	5
	9	13	13	8	8	13	13	13	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E	56	12	56	1	5
	2	✓	5	C,D,F	17	35	18	1	5
	3	✓	9	F,G,H	40	43	3	1	3

Resultant Phase Green Periods

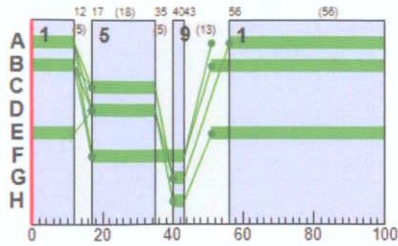
Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	56	12	56
	B	1	✓	51	12	61
	C	1	✓	17	35	18
	D	1	✓	17	35	18
	E	1	✓	51	12	61
	F	1	✓	17	43	26
	G	1	✓	40	43	3
	H	1	✓	40	43	3

Traffic Stream Green Times

--	--	--	--	--	--	--

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	56	12	56
1A	2	1	1	B	51	12	61
1B	1	1	1	C	17	35	18
1B	2	1	1	D	17	35	18
1C	1	1	1	E	51	12	61

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Controller Stream 3

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
3			1	NetworkDefault	100	42

Controller Stream 3 - Properties

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

Controller Stream 3 - Optimisation

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

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
3	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		3	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
3	1	A, C, G	1	1	100
	2	A, F, G	1	1	100
	3	B, C, E	1	1	100
	4	B, E, F	1	1	100
	5	C, D, E	1	1	100
	6	C, E, G	1	1	100
	7	D, E, F	1	1	100
	8	E, F, G	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
3	1	(untitled)	Single	1, 3, 7	19, 38, 46	42	
	2	(untitled)	Single	1, 4, 5	23, 60, 90	43	
	3	(untitled)	Single	1, 4, 7	24, 62, 90	39	
	4	(untitled)	Single	1, 5, 4	24, 62, 90	42	
	5	(untitled)	Single	1, 7, 3	23, 60, 90	43	
	6	(untitled)	Single	1, 7, 4	24, 62, 90	39	
	7	(untitled)	Single	2, 3, 5	24, 62, 90	39	
	8	(untitled)	Single	2, 3, 7	24, 62, 90	40	
	9	(untitled)	Single	2, 4, 5	23, 60, 90	47	
	10	(untitled)	Single	2, 5, 3	24, 62, 90	39	

Intergreen Matrix for Controller Stream 3

		To						
		A	B	C	D	E	F	G
From	A	5			5	5		
	B	5						5
	C						5	
	D	5						5
	E	10						
	F			8				
	G	14		14				

Banned Stage transitions for Controller Stream 3

--

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

Interstage Matrix for Controller Stream 3

		To							
		1	2	3	4	5	6	7	8
From	1	0	5	14	14	14	5	14	5
	2	8	0	14	14	14	8	14	5
	3	10	10	0	5	0	5	5	5
	4	10	10	8	0	8	8	0	5
	5	10	10	0	5	0	5	5	5
	6	10	10	14	14	14	0	14	5
	7	10	10	8	0	8	8	0	5
	8	10	10	14	14	14	8	14	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A,C,G	56	19	63	1	5
	2	✓	3	B,C,E	33	38	5	1	5
	3	✓	7	D,E,F	43	46	3	1	3

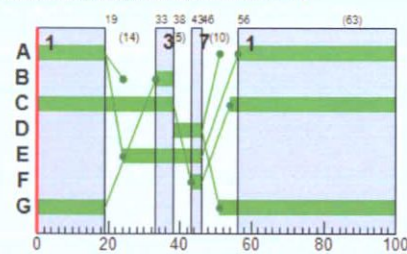
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
3	A	1	✓	56	19	63
	B	1	✓	33	38	5
	C	1	✓	54	38	84
	D	1	✓	38	46	8
	E	1	✓	24	46	22
	F	1	✓	43	46	3
	G	1	✓	51	19	68

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
3B	1	3	3	B	33	38	5
3C	1	3	3	C	54	38	84
3C	2	3	3	D	38	46	8
3A1	1	3	3	A	56	19	63

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
16:30-17:30	(ALL)	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS			PERFORMANCE			PER PCU		QUEUES		WEIGHTS		Penalties (£ per hr)	P.I.	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)			Stop weighting multiplier (%)
1A	1	S/L	1	1	A	751 <	1800	56	0.00	73	23	24.06	20.60	75.60	16.22 +	9.96	100	100	0.00	68.13
	2	S	1	1	B	688 <	1800	61	0.00	62	46	17.73	14.27	61.41	12.15 +	7.76	100	100	0.00	44.02
1Ax	1					841	Unrestricted	100	13.00	0	Unrestricted	8.67	0.00	0.00	0.00	100	100	0.00	0.00	
1B	1	L	1	1	C	254	1800	18	0.00	74	21	58.91	52.81	106.59	7.66	6.75	100	100	0.00	56.30

		2	R	1	1	D	141	1800	18	0.00	41	118	45.40	39.27	89.46	3.55	3.32	100	100	0.00	23.42	
1Bx	1			8			63	1800	100	44.00	4	2471	7.32	0.04	0.00	0.00			100	100	0.00	0.01
1C	1	S/R	1	1		E	700	1800	61	0.00	63	43	33.02	14.50	59.16	11.68	7.95		100	100	0.00	45.23
1Cx	1			7			1630	3600	100	9.00	45	99	9.82	0.41	0.00	0.19			100	100	0.00	2.66
2A	1	S/L	2				403	9999	100	0.00	4	2133	2.19	0.01	0.00	0.00			100	100	0.00	0.01
2Ax	1						70	Unrestricted	100	44.00	0	Unrestricted	3.83	0.00	0.00	0.00			100	100	0.00	0.00
2B	1	L/R	2				51	453	100	100.00	11	699	2.94	0.76	0.00	0.01			100	100	0.00	0.15
2Bx	1						51	Unrestricted	100	69.00	0	Unrestricted	3.08	0.00	0.00	0.00			100	100	0.00	0.00
2C	1	S	2				43	1800	100	68.00	2	3667	4.97	0.02	0.00	0.00			100	100	0.00	0.00
	2	R	2				20	588	100	100.00	3	2546	5.14	0.16	0.00	0.00			100	100	0.00	0.01
2Cx	1			8			396	1800	100	0.00	22	309	3.21	0.28	0.00	0.03			100	100	0.00	0.44
3Ax	1			7			698	1800	100	7.00	39	132	11.54	0.63	0.00	0.12			100	100	0.00	1.74
3B	1	L	3	3		B	89	3600	5	0.00	41	118	53.66	51.14	100.52	2.52	2.47		100	100	0.00	19.07
3C	1	S	3	3		C	698	1800	84	0.00	46	97	8.67	2.83	22.79	4.84	3.10		100	100	0.00	9.77
	2	R	3	3		D	24	1800	8	7.00	15	508	49.80	43.96	92.74	0.63	0.62		100	100	0.00	4.44
3Cx	1						1745	Unrestricted	100	13.00	0	Unrestricted	9.26	0.00	0.00	0.00			100	100	0.00	0.00
3A1	1	S	3	3		A	1656 <	3600	63	0.00	72	25	12.68	10.82	40.88	18.94 +	15.09		100	100	0.00	79.14
3Bx1	1			4			24	1800	100	94.00	1	6650	4.64	0.01	0.00	0.00			100	100	0.00	0.00
	1			6			839	1800	100	46.00	47	93	19.19	0.87	0.00	0.20			100	100	0.00	2.89
3A2	2			6			828	1800	100	46.00	46	96	19.20	0.85	0.00	0.20			100	100	0.00	2.78
3Bx2	1						35	Unrestricted	100	92.00	0	Unrestricted	2.65	0.00	0.00	0.00			100	100	0.00	0.00
3A3	1	L	4				11	705	100	100.00	2	5665	1.11	0.04	0.00	0.00			100	100	0.00	0.00
3A4	1			5			11	1800	100	100.00	1	14627	2.33	0.01	0.00	0.00			100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	903.77	53.07	17.03	17.75	5.19	325.76	34.47	0.00	360.23
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	903.77	53.07	17.03	17.75	5.19	325.76	34.47	0.00	360.23

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 16
Version: 16.0.1.8473 © Copyright TRL Limited, 2019
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Filename: H087 Commercial TRANSYT Model Existing Config 20220427.t16
 Path: J:\H_JOBS\Job-H087\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling\H087 Commercial Modelling
 Report generation date: 27/04/2022 16:28:02

«A1 - : D3 - 2026 Do Nothing, AM :

- »Summary
- »T-Junctions
- »Local OD Matrix - Local Matrix: 2
- »Local OD Matrix - Local Matrix: 1
- »Local OD Matrix - Local Matrix: 3
- »Signal Timings
- »Final Prediction Table

Summary of network performance

AM					
Set ID	Pf (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated	
2026 Do Nothing					
Network	D3	316.28	19.99	90% (TS 1C/1)	0 (0%)

File summary

File description

File title	Heuston South Quarter Commercial
Location	Dublin 8
Site number	
UTCRegion	
Driving side	Left
Date	27/04/2022
Version	Existing Layout
Status	
Identifier	
Client	
Jobnumber	
Enumerator	GF
Description	

Model and Results

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

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	l/100km	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

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

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

A1 - D3 - 2026 Do Nothing, AM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	T-Junction Geometry	T-Junction 3a	T-Junction 3a: TRANSYT using double the user-specified Total Carriageway Width

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	27/04/2022 16:27:56	27/04/2022 16:27:58	2.74	07:30	100	316.28	19.99	89.79	1C/1	0	0	1C/1	3Ax/1	1C/1	✓

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
					✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Do Nothing	AM				07:30		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C/1	2C/2	2Cx/1	✓
3a			✓	TrafficStream	Entry Only			3Bx1/1	Entry Only			3A3/1	Exit Only			3Bx2/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.60	8.60	0.00	2.50	150.00
3a	4.00	4.00	0.00	2.20	0.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	2.40	2.40	64.00	43.00
3a	4.00	2.20	20.00	35.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	612	0.08	0.21	488	0.08	0.20	0.13	0.28	682	0.23	0.23
3a	711	0.10	0.25	461	0.08	0.19	0.12	0.28	574	0.20	0.20

Local OD Matrix - Local Matrix: 2

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
2		✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	34	155
	2-2	48	0	21
	2-3	57	45	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
2	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C/1, 2C/2	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
2	2		2-3	2-1	2C/1, 2Ax/1	Normal	57
	3		2-1	2-2	2A/1, 2Bx/1	Normal	34
	4		2-1	2-3	2A/1, 2Cx/1	Normal	155
	5		2-2	2-3	2B/1, 2Cx/1	Normal	21
	6		2-2	2-1	2B/1, 2Ax/1	Normal	48
	7		2-3	2-2	2C/2, 2Bx/1	Normal	45

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Path Equalisation			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	1.25				

Normal Input Flows (PCU/hr)

		To		
		1-1	1-2	1-3
From	1-1	0	101	874
	1-2	105	0	70
	1-3	1196	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/2, 1A/1	1Ax/1	#FFFF00
	1-2		1B/1, 1B/2	1Bx/1	#00FFFF
	1-3		1C/1	1Cx/1	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-1	1C/1, 1Ax/1	Normal	1196
	2		1-1	1-3	1A/2, 1Cx/1	Normal	437
	3		1-1	1-3	1A/1, 1Cx/1	Normal	437
	4		1-1	1-2	1A/1, 1Bx/1	Normal	101
	6		1-2	1-3	1B/1, 1Cx/1	Normal	70
	7		1-2	1-1	1B/2, 1Ax/1	Normal	105

Local OD Matrix - Local Matrix: 3

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
3		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Path Equalisation			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	1.25				

Normal Input Flows (PCU/hr)

		To		
		3-1	3-2	3-3
From	3-1	0	9	931
	3-2	0	0	42
	3-3	1194	90	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
3	3-1		3A2/2, 3A2/1	3Ax/1	#008000
	3-2		3B/1	3Bx2/1	#FFA500
	3-3		3C/1, 3C/2	3Cx/1	#A52A2A

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		3-2	3-3	3B/1, 3Cx/1	Normal	42
	2		3-3	3-2	3C/2, 3Bx1/1, 3Bx2/1	Normal	90
	4		3-3	3-1	3C/1, 3Ax/1	Normal	1194
	5		3-1	3-3	3A2/2, 3A1/1, 3Cx/1	Normal	466
	6		3-1	3-3	3A2/1, 3A1/1, 3Cx/1	Normal	466
	7		3-1	3-2	3A2/1, 3A4/1, 3A3/1, 3Bx2/1	Normal	9

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			3	NetworkDefault	100	36

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Offsets And Green Splits	<input checked="" type="checkbox"/>	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		5	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown
	H		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A, B, E	1	1	100
	2	A, B, H	1	1	100
	3	B, E, G	1	1	100
	4	B, G, H	1	1	100
	5	C, D, F	1	1	100
	6	C, E, F	1	1	100
	7	C, F, H	1	1	100
	8	E, F, G	1	1	100
	9	F, G, H	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 4, 5	26, 54, 92	39	
	2	(untitled)	Single	1, 5, 4	26, 56, 87	37	
	3	(untitled)	Single	1, 5, 9	4, 15, 23	36	
	4	(untitled)	Single	1, 9, 5	26, 54, 92	39	
	5	(untitled)	Single	2, 3, 5	24, 56, 92	44	
	6	(untitled)	Single	2, 5, 3	24, 56, 87	41	
	7	(untitled)	Single	2, 5, 8	25, 58, 87	41	
	8	(untitled)	Single	2, 8, 5	24, 56, 92	44	
	9	(untitled)	Single	1, 2, 3, 5	17, 37, 62, 92	49	
	10	(untitled)	Single	1, 2, 4, 5	19, 39, 61, 92	42	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H
From	A			5	5		5	5	
	B			5	5		5		
	C	5	5					5	
	D	5	5			5		5	5
	E				5				5
	F	8	8						
	G	13	13	13					
	H				8	8			

Banned Stage transitions for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

Interstage Matrix for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1	0	5	5	5	5	5	5	5	5
	2	8	0	8	5	8	8	5	8	5
	3	13	13	0	5	13	13	13	5	5
	4	13	13	8	0	13	13	13	8	5
	5	8	8	8	8	0	5	5	5	5
	6	8	8	8	8	5	0	5	5	5
	7	8	8	8	8	8	8	0	8	5
	8	13	13	8	8	13	13	13	0	5
	9	13	13	8	8	13	13	13	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E	36	4	68	1	5
	2	✓	5	C,D,F	9	15	6	1	5
	3	✓	9	F,G,H	20	23	3	1	3

Resultant Phase Green Periods

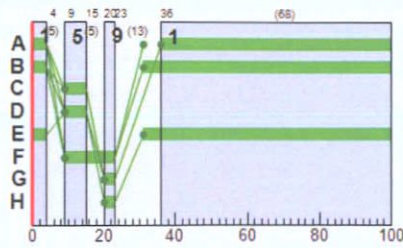
Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	36	4	68
	B	1	✓	31	4	73
	C	1	✓	9	15	6
	D	1	✓	9	15	6
	E	1	✓	31	4	73
	F	1	✓	9	23	14
	G	1	✓	20	23	3
	H	1	✓	20	23	3

Traffic Stream Green Times

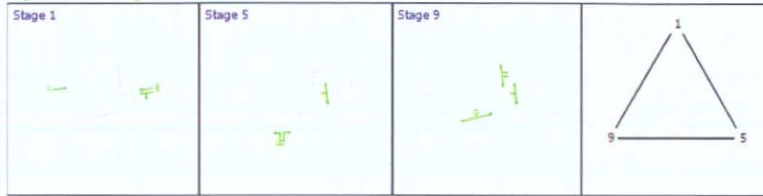
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Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	36	4	68
1A	2	1	1	B	31	4	73
1B	1	1	1	C	9	15	6
1B	2	1	1	D	9	15	6
1C	1	1	1	E	31	4	73

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Controller Stream 3

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
3			1	NetworkDefault	100	42

Controller Stream 3 - Properties

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

Controller Stream 3 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Offsets And Green Splits	<input checked="" type="checkbox"/>	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
3	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		3	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
3	1	A, C, G	1	1	100
	2	A, F, G	1	1	100
	3	B, C, E	1	1	100
	4	B, E, F	1	1	100
	5	C, D, E	1	1	100
	6	C, E, G	1	1	100
	7	D, E, F	1	1	100
	8	E, F, G	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
3	1	(untitled)	Single	1, 3, 7	78, 97, 5	42	
	2	(untitled)	Single	1, 4, 5	23, 60, 90	43	
	3	(untitled)	Single	1, 4, 7	24, 62, 90	39	
	4	(untitled)	Single	1, 5, 4	24, 62, 90	42	
	5	(untitled)	Single	1, 7, 3	23, 60, 90	43	
	6	(untitled)	Single	1, 7, 4	24, 62, 90	39	
	7	(untitled)	Single	2, 3, 5	24, 62, 90	39	
	8	(untitled)	Single	2, 3, 7	24, 62, 90	40	
	9	(untitled)	Single	2, 4, 5	23, 60, 90	47	
	10	(untitled)	Single	2, 5, 3	24, 62, 90	39	

Intergreen Matrix for Controller Stream 3

		To						
		A	B	C	D	E	F	G
From	A	5		5	5			
	B	5						5
	C						5	
	D	5						5
	E	10						
	F			8				
	G	14	14					

Banned Stage transitions for Controller Stream 3

From	To

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

Interstage Matrix for Controller Stream 3

		To							
		1	2	3	4	5	6	7	8
From	1	0	5	14	14	14	5	14	5
	2	8	0	14	14	8	14	5	
	3	10	10	0	5	0	5	5	5
	4	10	10	8	0	8	8	0	5
	5	10	10	0	5	0	5	5	5
	6	10	10	14	14	14	0	14	5
	7	10	10	8	0	8	8	0	5
	8	10	10	14	14	14	8	14	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A,C,G	15	78	63	1	5
	2	✓	3	B,C,E	92	97	5	1	5
	3	✓	7	D,E,F	2	5	3	1	3

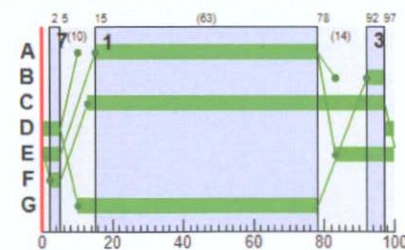
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
3	A	1	✓	15	78	63
	B	1	✓	92	97	5
	C	1	✓	13	97	84
	D	1	✓	97	5	8
	E	1	✓	83	5	22
	F	1	✓	2	5	3
	G	1	✓	10	78	68

Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
3B	1	3	3	B	92	97	5
3C	1	3	3	C	13	97	84
3C	2	3	3	D	97	5	8
3A1	1	3	3	A	15	78	63

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
07:30-08:30	(ALL)	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	PERFORMANCE				PER PCU		QUEUES		WEIGHTS		PENALTIES	P.I.			
						Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)			Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)
1A	1	S/L	1	1	A	538	1800	68	0.00	43	108	11.43	7.96	42.92	6.74	4.80	100	100	0.00	19.79
	2	S	1	1	B	437	1800	73	0.00	33	174	8.59	5.13	32.91	4.21	3.24	100	100	0.00	10.64
1Ax	1					1301	Unrestricted	100	7.00	0	Unrestricted	8.67	0.00	0.00	0.00	100	100	0.00	0.00	
1B	1	L	1	1	C	70	1800	6	0.00	56	62	68.43	62.32	111.40	2.20	2.14	100	100	0.00	18.19
	2	R	1	1	D	105	1800	6	0.00	83	8	109.75	103.62	146.93	4.54	4.39	100	100	0.00	44.85
1Bx	1		8			101	1800	100	30.00	6	1504	7.34	0.06	0.00	0.00	100	100	0.00	0.02	

1C	1	S/R	1	1	E	1196 <	1800	73	0.00	90	0	36.42	17.90	72.97	28.76 +	11.60	100	100	0.00	95.38
1Cx	1		7			944	3600	100	9.00	26	243	9.59	0.18	0.00	0.05		100	100	0.00	0.66
2A	1	S/L	2			189	9999	100	0.00	2	4661	2.19	0.00	0.00	0.00		100	100	0.00	0.00
2Ax	1					105	Unrestricted	100	25.00	0	Unrestricted	3.83	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2			69	470	100	0.00	15	512	3.17	0.99	0.00	0.02		100	100	0.00	0.27
2Bx	1					79	Unrestricted	100	30.00	0	Unrestricted	3.08	0.00	0.00	0.00		100	100	0.00	0.00
2C	1	S	2			57	1800	100	77.00	3	2742	4.97	0.03	0.00	0.00		100	100	0.00	0.01
	2	R	2			45	638	100	82.00	7	1176	5.30	0.32	0.00	0.00		100	100	0.00	0.06
2Cx	1		8			176	1800	100	0.00	10	820	3.03	0.11	0.00	0.01		100	100	0.00	0.08
3Ax	1		7			1194	1800	100	5.00	66	36	12.87	1.96	0.00	0.65		100	100	0.00	9.24
3B	1	L	3	3	B	42	3600	5	4.00	19	363	49.28	46.75	95.81	1.13	1.12	100	100	0.00	8.25
3C	1	S	3	3	C	1194 <	1800	84	0.00	78	15	13.31	7.47	43.64	15.96 +	6.34	100	100	0.00	41.72
	2	R	3	3	D	90	1800	8	0.00	56	62	62.99	57.15	106.92	2.71	2.61	100	100	0.00	21.50
3Cx	1					973	Unrestricted	100	16.00	0	Unrestricted	9.26	0.00	0.00	0.00		100	100	0.00	0.00
3A1	1	S	3	3	A	931 <	3600	63	0.00	40	123	12.38	10.52	48.72	13.16 +	10.04	100	100	0.00	44.31
3Bx1	1		4			90	1800	100	89.00	5	1700	4.68	0.05	0.00	0.00		100	100	0.00	0.02
3A2	1		6			475	1800	100	35.00	26	241	18.68	0.36	0.00	0.05		100	100	0.00	0.67
	2		6			466	1800	100	35.00	26	248	18.70	0.35	0.00	0.05		100	100	0.00	0.64
3Bx2	1					99	Unrestricted	100	88.00	0	Unrestricted	2.65	0.00	0.00	0.00		100	100	0.00	0.00
3A3	1	L	4			9	688	100	100.00	1	6780	1.10	0.03	0.00	0.00		100	100	0.00	0.00
3A4	1		5			9	1800	100	100.00	0	17900	2.33	0.01	0.00	0.00		100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean Journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	825.44	47.50	17.38	11.33	8.65	283.79	32.49	0.00	316.28
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	825.44	47.50	17.38	11.33	8.65	283.79	32.49	0.00	316.28

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 16
Version: 16.0.1.8473 © Copyright TRL Limited, 2019
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Filename: H087 Commercial TRANSYT Model Existing Config 20220427.t16
 Path: J:\H_JOBS\Job-H087\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling\H087 Commercial Modelling
 Report generation date: 27/04/2022 16:28:37

- «A1 - : D4 - 2026 Do Nothing, PM :
- »Summary
 - »T-Junctions
 - »Local OD Matrix - Local Matrix: 2
 - »Local OD Matrix - Local Matrix: 1
 - »Local OD Matrix - Local Matrix: 3
 - »Signal Timings
 - »Final Prediction Table

Summary of network performance

PM					
Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated	
2026 Do Nothing					
Network	D4	433.06	27.38	80% (TS 1B/1)	0 (0%)

File summary

File description

File title	Heuston South Quarter Commercial
Location	Dublin 8
Site number	
UTCRegion	
Driving side	Left
Date	27/04/2022
Version	Existing Layout
Status	
Identifier	
Client	
Jobnumber	
Enumerator	GF
Description	

Model and Results

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

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	l/100km	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

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

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

A1 - D4 - 2026 Do Nothing, PM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	T-Junction Geometry	T-Junction 3a	T-Junction 3a: TRANSYT using double the user-specified Total Carriageway Width.

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	27/04/2022 16:28:28	27/04/2022 16:28:31	3.13	16:30	100	433.06	27.38	80.12	1B/1	0	0	1B/1	3A2/1	1B/1	✓

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
					✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2026 Do Nothing	PM				16:30		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C/1	2C/2	2Cx/1	✓
3a			✓	TrafficStream	Entry Only			3Bx1/1	Entry Only			3A3/1	Exit Only			3Bx2/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.60	8.60	0.00	2.50	150.00
3a	4.00	4.00	0.00	2.20	0.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	2.40	2.40	64.00	43.00
3a	4.00	2.20	20.00	35.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	612	0.08	0.21	488	0.08	0.20	0.13	0.28	682	0.23	0.23
3a	711	0.10	0.25	461	0.08	0.19	0.12	0.28	574	0.20	0.20

Local OD Matrix - Local Matrix: 2

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
2		✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	52	400
	2-2	36	0	31
	2-3	48	33	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
2	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C/1, 2C/2	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
2	2		2-3	2-1	2C/1, 2Ax/1	Normal	48
	3		2-1	2-2	2A/1, 2Bx/1	Normal	52
	4		2-1	2-3	2A/1, 2Cx/1	Normal	400
	5		2-2	2-3	2B/1, 2Cx/1	Normal	31
	6		2-2	2-1	2B/1, 2Ax/1	Normal	36
	7		2-3	2-2	2C/2, 2Bx/1	Normal	33

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Path Equalisation			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	1.25				

Normal Input Flows (PCU/hr)

From	To		
	1-1	1-2	1-3
1-1	0	81	1475
1-2	158	0	274
1-3	747	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/2, 1A/1	1Ax/1	#FFFFFF00
	1-2		1B/1, 1B/2	1Bx/1	#00FFFF
	1-3		1C/1	1Cx/1	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-1	1C/1, 1Ax/1	Normal	747
	2		1-1	1-3	1A/2, 1Cx/1	Normal	738
	3		1-1	1-3	1A/1, 1Cx/1	Normal	738
	4		1-1	1-2	1A/1, 1Bx/1	Normal	81
	6		1-2	1-3	1B/1, 1Cx/1	Normal	274
	7		1-2	1-1	1B/2, 1Ax/1	Normal	158

Local OD Matrix - Local Matrix: 3

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
3		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Path Equalisation			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	1.25				

Normal Input Flows (PCU/hr)

From	To		
	3-1	3-2	3-3
3-1	0	19	1769
3-2	0	0	119
3-3	744	39	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
3	3-1		3A2/2, 3A2/1	3Ax/1	#008000
	3-2		3B/1	3Bx2/1	#FFA500
	3-3		3C/1, 3C/2	3Cx/1	#A52A2A

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		3-2	3-3	3B/1, 3Cx/1	Normal	119
	2		3-3	3-2	3C/2, 3Bx1/1, 3Bx2/1	Normal	39
	4		3-3	3-1	3C/1, 3Ax/1	Normal	744
	5		3-1	3-3	3A2/2, 3A1/1, 3Cx/1	Normal	885
	6		3-1	3-3	3A2/1, 3A1/1, 3Cx/1	Normal	885
	7		3-1	3-2	3A2/1, 3A4/1, 3A3/1, 3Bx2/1	Normal	19

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			3	NetworkDefault	100	36

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Offsets And Green Splits	<input checked="" type="checkbox"/>	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		5	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown
	H		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A, B, E	1	1	100
	2	A, B, H	1	1	100
	3	B, E, G	1	1	100
	4	B, G, H	1	1	100
	5	C, D, F	1	1	100
	6	C, E, F	1	1	100
	7	C, F, H	1	1	100
	8	E, F, G	1	1	100
	9	F, G, H	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 4, 5	26, 54, 92	39	
	2	(untitled)	Single	1, 5, 4	26, 56, 87	37	
	3	(untitled)	Single	1, 5, 9	47, 70, 78	36	
	4	(untitled)	Single	1, 9, 5	26, 54, 92	39	
	5	(untitled)	Single	2, 3, 5	24, 56, 92	44	
	6	(untitled)	Single	2, 5, 3	24, 56, 87	41	
	7	(untitled)	Single	2, 5, 8	25, 58, 87	41	
	8	(untitled)	Single	2, 8, 5	24, 56, 92	44	
	9	(untitled)	Single	1, 2, 3, 5	17, 37, 62, 92	49	
	10	(untitled)	Single	1, 2, 4, 5	19, 39, 61, 92	42	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H
From	A			5	5		5	5	
	B			5	5		5		
	C	5	5					5	
	D	5	5			5		5	5
	E				5				5
	F	8	8						
	G	13		13	13				
	H				8	8			

Banned Stage transitions for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

Interstage Matrix for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1	0	5	5	5	5	5	5	5	5
	2	8	0	8	5	8	8	5	8	5
	3	13	13	0	5	13	13	13	5	5
	4	13	13	8	0	13	13	13	8	5
	5	8	8	8	8	0	5	5	5	5
	6	8	8	8	8	5	0	5	5	5
	7	8	8	8	8	8	8	0	8	5
	8	13	13	8	8	13	13	13	0	5
	9	13	13	8	8	13	13	13	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E	91	47	56	1	5
	2	✓	5	C,D,F	52	70	18	1	5
	3	✓	9	F,G,H	75	78	3	1	3

Resultant Phase Green Periods

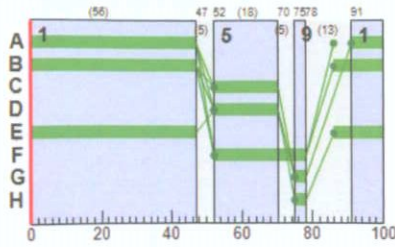
Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	91	47	56
	B	1	✓	86	47	61
	C	1	✓	52	70	18
	D	1	✓	52	70	18
	E	1	✓	86	47	61
	F	1	✓	52	78	26
	G	1	✓	75	78	3
	H	1	✓	75	78	3

Traffic Stream Green Times

--	--	--	--	--	--	--

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	91	47	56
1A	2	1	1	B	86	47	61
1B	1	1	1	C	52	70	18
1B	2	1	1	D	52	70	18
1C	1	1	1	E	86	47	61

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Controller Stream 3

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
3			1	NetworkDefault	100	42

Controller Stream 3 - Properties

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

Controller Stream 3 - Optimisation

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

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
3	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		3	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
3	1	A, C, G	1	1	100
	2	A, F, G	1	1	100
	3	B, C, E	1	1	100
	4	B, E, F	1	1	100
	5	C, D, E	1	1	100
	6	C, E, G	1	1	100
	7	D, E, F	1	1	100
	8	E, F, G	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
3	1	(untitled)	Single	1, 3, 7	78, 97, 5	42	
	2	(untitled)	Single	1, 4, 5	23, 60, 90	43	
	3	(untitled)	Single	1, 4, 7	24, 62, 90	39	
	4	(untitled)	Single	1, 5, 4	24, 62, 90	42	
	5	(untitled)	Single	1, 7, 3	23, 60, 90	43	
	6	(untitled)	Single	1, 7, 4	24, 62, 90	39	
	7	(untitled)	Single	2, 3, 5	24, 62, 90	39	
	8	(untitled)	Single	2, 3, 7	24, 62, 90	40	
	9	(untitled)	Single	2, 4, 5	23, 60, 90	47	
	10	(untitled)	Single	2, 5, 3	24, 62, 90	39	

Intergreen Matrix for Controller Stream 3

		To						
		A	B	C	D	E	F	G
From	A		5		5	5		
	B	5						5
	C						5	
	D	5						5
	E	10						
	F			8				
	G	14	14					

Banned Stage transitions for Controller Stream 3

--	--

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

Interstage Matrix for Controller Stream 3

		To							
		1	2	3	4	5	6	7	8
From	1	0	5	14	14	14	5	14	5
	2	8	0	14	14	14	8	14	5
	3	10	10	0	5	0	5	5	5
	4	10	10	8	0	8	8	0	5
	5	10	10	0	5	0	5	5	5
	6	10	10	14	14	14	0	14	5
	7	10	10	8	0	8	8	0	5
	8	10	10	14	14	14	8	14	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A,C,G	15	78	63	1	5
	2	✓	3	B,C,E	92	97	5	1	5
	3	✓	7	D,E,F	2	5	3	1	3

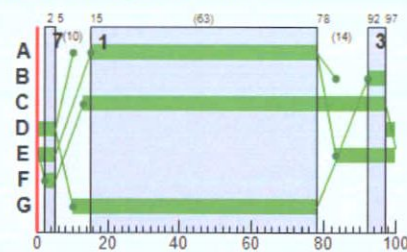
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
3	A	1	✓	15	78	63
	B	1	✓	92	97	5
	C	1	✓	13	97	84
	D	1	✓	97	5	8
	E	1	✓	83	5	22
	F	1	✓	2	5	3
	G	1	✓	10	78	68

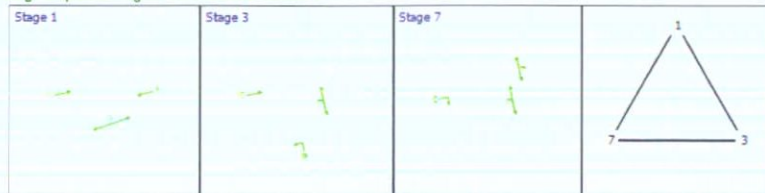
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
3B	1	3	3	B	92	97	5
3C	1	3	3	C	13	97	84
3C	2	3	3	D	97	5	8
3A1	1	3	3	A	15	78	63

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
16:30-17:30	(ALL)	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE				PER PCU		QUEUES		WEIGHTS		PENALTIES	P.I.	
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)			Stop weighting multiplier (%)
1A	1	S/L	1	1	A	819 <	1800	56	0.00	80	13	27.22	23.75	82.48	19.29 +	11.33	100	100	0.00	85.20
	2	S	1	1	B	738 <	1800	61	0.00	66	36	18.83	15.37	64.68	13.78 +	8.43	100	100	0.00	50.72
1Ax	1					905	Unrestricted	100	12.00	0	Unrestricted	8.67	0.00	0.00	0.00		100	100	0.00	0.00
1B	1	L	1	1	C	274	1800	18	0.00	80	12	64.66	58.56	112.53	8.74	7.68	100	100	0.00	67.18

	2	R	1	1	D	158	1800	18	0.00	46	95	46.59	40.46	91.25	4.06	3.75	100	100	0.00	27.02
1Bx	1		8			81	1800	100	44.00	5	1900	7.33	0.05	0.00	0.00		100	100	0.00	0.02
1C	1	S/R	1	1	E	747	1800	61	0.00	67	34	39.06	20.53	79.36	16.90	10.26	100	100	0.00	67.93
1Cx	1		7			1750	3600	100	8.00	49	85	9.88	0.47	0.00	0.23		100	100	0.00	3.26
2A	1	S/L	2			452	9999	100	0.00	5	1891	2.19	0.01	0.00	0.00		100	100	0.00	0.02
2Ax	1					84	Unrestricted	100	41.00	0	Unrestricted	3.83	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2			67	441	100	0.00	15	493	3.28	1.09	0.00	0.02		100	100	0.00	0.29
2Bx	1					85	Unrestricted	100	38.00	0	Unrestricted	3.08	0.00	0.00	0.00		100	100	0.00	0.00
2C	1	S	2			48	1800	100	61.00	3	3275	4.97	0.03	0.00	0.00		100	100	0.00	0.01
	2	R	2			33	576	100	68.00	6	1472	5.26	0.28	0.00	0.00		100	100	0.00	0.04
2Cx	1		8			431	1800	100	0.00	24	276	3.24	0.31	0.00	0.04		100	100	0.00	0.54
3Ax	1		7			744	1800	100	7.00	41	118	11.61	0.70	0.00	0.15		100	100	0.00	2.07
3B	1	L	3	3	B	119	3600	5	0.00	55	63	58.28	55.76	105.58	3.54	3.44	100	100	0.00	27.75
3C	1	S	3	3	C	744	1800	84	0.00	49	85	8.87	3.03	23.85	5.40	3.33	100	100	0.00	11.12
	2	R	3	3	D	39	1800	8	6.00	24	274	51.67	45.83	94.67	1.05	1.02	100	100	0.00	7.51
3Cx	1					1889	Unrestricted	100	13.00	0	Unrestricted	9.26	0.00	0.00	0.00		100	100	0.00	0.00
3A1	1	S	3	3	A	1770 <	3600	63	0.00	77	17	10.90	9.03	55.85	34.43 +	10.60	100	100	0.00	75.48
3Bx1	1		4			39	1800	100	91.00	2	4054	4.65	0.02	0.00	0.00		100	100	0.00	0.00
	1		6			904	1800	100	58.00	50	79	19.33	1.01	0.00	0.25		100	100	0.00	3.59
3A2	2		6			865	1800	100	58.00	49	83	19.31	0.97	0.00	0.24		100	100	0.00	3.37
3Bx2	1					58	Unrestricted	100	91.00	0	Unrestricted	2.65	0.00	0.00	0.00		100	100	0.00	0.00
3A3	1	L	4			19	701	100	100.00	3	3218	1.14	0.07	0.00	0.00		100	100	0.00	0.01
3A4	1		5			19	1800	100	100.00	1	8421	2.34	0.01	0.00	0.00		100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	976.17	59.92	16.29	20.02	7.36	388.84	44.22	0.00	433.06
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	976.17	59.92	16.29	20.02	7.36	388.84	44.22	0.00	433.06

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 16
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Filename: H087 Commercial TRANSYT Model Existing Config 20220427.116
 Path: J:\H_JOBS\Job-H087\B_Documents\C_Civil\A_CS Reports\TrafficModelling\H087 Commercial Modelling
 Report generation date: 27/04/2022 16:31:44

- «A1 - : D7 - 2031 Do Nothing, AM :
- »Summary
 - »T-Junctions
 - »Local OD Matrix - Local Matrix: 2
 - »Local OD Matrix - Local Matrix: 1
 - »Local OD Matrix - Local Matrix: 3
 - »Signal Timings
 - »Final Prediction Table

Summary of network performance

AM					
Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated	
2031 Do Nothing					
Network	D7	436.25	28.23	96% (TS 1C/1)	1 (3%)

File summary

File description	
File title	Heuston South Quarter Commercial
Location	Dublin 8
Site number	
UTCRegion	
Driving side	Left
Date	27/04/2022
Version	Existing Layout
Status	
Identifier	
Client	
Jobnumber	
Enumerator	GF
Description	

Model and Results

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

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	l/100km	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

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

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

A1 - D7 - 2031 Do Nothing, AM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	T-Junction Geometry	T-Junction 3a	T-Junction 3a: TRANSYT using double the user-specified Total Carriageway Width.

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (E per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	27/04/2022 16:31:37	27/04/2022 16:31:40	3.54	07:30	100	436.25	28.23	96.25	1C/1	1	3	1C/1	3Ax/1	1C/1	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
					✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2031 Do Nothing	AM				07:30		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2Bx/1	2Bx/1	Two-Way	2C/1	2C/1	2Cx/1	✓
3a			✓	TrafficStream	Entry Only		3Bx1/1		Entry Only		3A3/1		Exit Only			3Bx2/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.60	8.60	0.00	2.50	150.00
3a	4.00	4.00	0.00	2.20	0.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	2.40	2.40	64.00	43.00
3a	4.00	2.20	20.00	35.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	612	0.08	0.21	488	0.08	0.20	0.13	0.28	682	0.23	0.23
3a	711	0.10	0.25	461	0.08	0.19	0.12	0.28	574	0.20	0.20

Local OD Matrix - Local Matrix: 2

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
2		✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	37	166
	2-2	51	0	22
	2-3	61	48	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
2	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C/1, 2C/2	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
2	2		2-3	2-1	2C/1, 2Ax/1	Normal	61
	3		2-1	2-2	2A/1, 2Bx/1	Normal	37
	4		2-1	2-3	2A/1, 2Cx/1	Normal	166
	5		2-2	2-3	2B/1, 2Cx/1	Normal	22
	6		2-2	2-1	2B/1, 2Ax/1	Normal	51
	7		2-3	2-2	2C/2, 2Bx/1	Normal	48

Local OD Matrix - Local Matrix: 1

Local Matrix Options

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

Normal Input Flows (PCU/hr)

		To		
		1-1	1-2	1-3
From	1-1	0	108	937
	1-2	112	0	75
	1-3	1282	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/2, 1A/1	1Ax/1	#FFFF00
	1-2		1B/1, 1B/2	1Bx/1	#00FFFF
	1-3		1C/1	1Cx/1	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-1	1C/1, 1Ax/1	Normal	1282
	2		1-1	1-3	1A/2, 1Cx/1	Normal	469
	3		1-1	1-3	1A/1, 1Cx/1	Normal	469
	4		1-1	1-2	1A/1, 1Bx/1	Normal	108
	6		1-2	1-3	1B/1, 1Cx/1	Normal	75
	7		1-2	1-1	1B/2, 1Ax/1	Normal	112

Local OD Matrix - Local Matrix: 3

Local Matrix Options

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

Normal Input Flows (PCU/hr)

		To		
		3-1	3-2	3-3
From	3-1	0	10	998
	3-2	0	0	44
	3-3	1279	96	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
3	3-1		3A2/2, 3A2/1	3Ax/1	#008000
	3-2		3B/1	3Bx2/1	#FFA500
	3-3		3C/1, 3C/2	3Cx/1	#A52A2A

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		3-2	3-3	3B/1, 3Cx/1	Normal	44
	2		3-3	3-2	3C/2, 3Bx1/1, 3Bx2/1	Normal	96
	4		3-3	3-1	3C/1, 3Ax/1	Normal	1279
	5		3-1	3-3	3A2/2, 3A1/1, 3Cx/1	Normal	499
	6		3-1	3-3	3A2/1, 3A1/1, 3Cx/1	Normal	499
	7		3-1	3-2	3A2/1, 3A4/1, 3A3/1, 3Bx2/1	Normal	10

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			3	NetworkDefault	100	36

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		5	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown
	H		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A, B, E	1	1	100
	2	A, B, H	1	1	100
	3	B, E, G	1	1	100
	4	B, G, H	1	1	100
	5	C, D, F	1	1	100
	6	C, E, F	1	1	100
	7	C, F, H	1	1	100
	8	E, F, G	1	1	100
	9	F, G, H	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 4, 5	26, 54, 92	39	
	2	(untitled)	Single	1, 5, 4	26, 56, 87	37	
	3	(untitled)	Single	1, 5, 9	89, 0, 8	36	
	4	(untitled)	Single	1, 9, 5	26, 54, 92	39	
	5	(untitled)	Single	2, 3, 5	24, 56, 92	44	
	6	(untitled)	Single	2, 5, 3	24, 56, 87	41	
	7	(untitled)	Single	2, 5, 8	25, 58, 87	41	
	8	(untitled)	Single	2, 8, 5	24, 56, 92	44	
	9	(untitled)	Single	1, 2, 3, 5	17, 37, 62, 92	49	
	10	(untitled)	Single	1, 2, 4, 5	19, 39, 61, 92	42	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H
From	A			5	5		5	5	
	B			5	5		5		
	C	5	5					5	
	D	5	5			5		5	5
	E				5				5
	F	8	8						
	G	13		13	13				
	H				8	8			

Banned Stage transitions for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

Interstage Matrix for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1	0	5	5	5	5	5	5	5	5
	2	8	0	8	5	8	8	5	8	5
	3	13	13	0	5	13	13	13	5	5
	4	13	13	8	0	13	13	13	8	5
	5	8	8	8	8	0	5	5	5	5
	6	8	8	8	8	5	0	5	5	5
	7	8	8	8	8	8	8	0	8	5
	8	13	13	8	8	13	13	13	0	5
	9	13	13	8	8	13	13	13	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E	21	89	68	1	5
	2	✓	5	C,D,F	94	0	6	1	5
	3	✓	9	F,G,H	5	8	3	1	3

Resultant Phase Green Periods

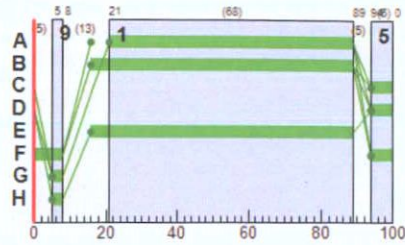
Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	21	89	68
	B	1	✓	16	89	73
	C	1	✓	94	0	6
	D	1	✓	94	0	6
	E	1	✓	16	89	73
	F	1	✓	94	8	14
	G	1	✓	5	8	3
	H	1	✓	5	8	3

Traffic Stream Green Times

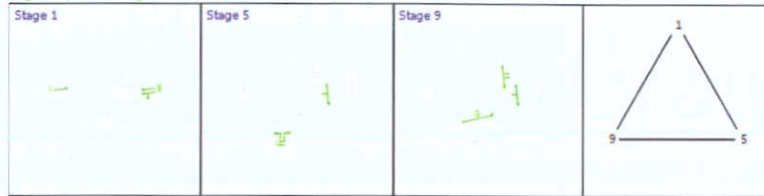
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Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	21	89	68
1A	2	1	1	B	16	89	73
1B	1	1	1	C	94	0	6
1B	2	1	1	D	94	0	6
1C	1	1	1	E	16	89	73

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Controller Stream 3

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
3			1	NetworkDefault	100	42

Controller Stream 3 - Properties

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

Controller Stream 3 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Offsets And Green Splits	<input checked="" type="checkbox"/>	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
3	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		3	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
3	1	A, C, G	1	1	100
	2	A, F, G	1	1	100
	3	B, C, E	1	1	100
	4	B, E, F	1	1	100
	5	C, D, E	1	1	100
	6	C, E, G	1	1	100
	7	D, E, F	1	1	100
	8	E, F, G	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
3	1	(untitled)	Single	1, 3, 7	78, 97, 5	42	
	2	(untitled)	Single	1, 4, 5	23, 60, 90	43	
	3	(untitled)	Single	1, 4, 7	24, 62, 90	39	
	4	(untitled)	Single	1, 5, 4	24, 62, 90	42	
	5	(untitled)	Single	1, 7, 3	23, 60, 90	43	
	6	(untitled)	Single	1, 7, 4	24, 62, 90	39	
	7	(untitled)	Single	2, 3, 5	24, 62, 90	39	
	8	(untitled)	Single	2, 3, 7	24, 62, 90	40	
	9	(untitled)	Single	2, 4, 5	23, 60, 90	47	
	10	(untitled)	Single	2, 5, 3	24, 62, 90	39	

Intergreen Matrix for Controller Stream 3

		To						
		A	B	C	D	E	F	G
From	A		5			5	5	
	B	5						5
	C						5	
	D	5						5
	E	10						
	F			8				
	G	14	14					

Banned Stage transitions for Controller Stream 3

--	--

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

Interstage Matrix for Controller Stream 3

		To							
		1	2	3	4	5	6	7	8
From	1	0	5	14	14	14	5	14	5
	2	8	0	14	14	14	8	14	5
	3	10	10	0	5	0	5	5	5
	4	10	10	8	0	8	8	0	5
	5	10	10	0	5	0	5	5	5
	6	10	10	14	14	14	0	14	5
	7	10	10	8	0	8	8	0	5
	8	10	10	14	14	14	8	14	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A,C,G	15	78	63	1	5
	2	✓	3	B,C,E	92	97	5	1	5
	3	✓	7	D,E,F	2	5	3	1	3

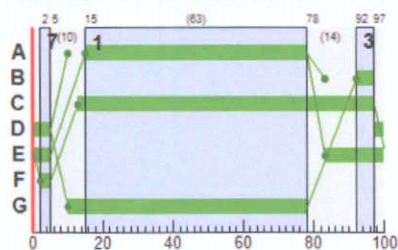
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
3	A	1	✓	15	78	63
	B	1	✓	92	97	5
	C	1	✓	13	97	84
	D	1	✓	97	5	8
	E	1	✓	83	5	22
	F	1	✓	2	5	3
	G	1	✓	10	78	68

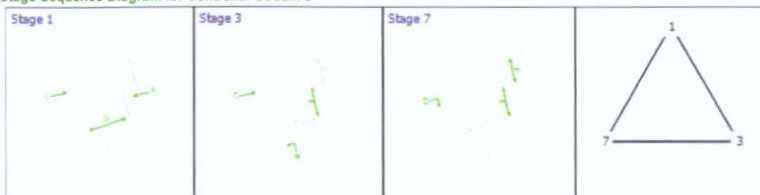
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
3B	1	3	3	B	92	97	5
3C	1	3	3	C	13	97	84
3C	2	3	3	D	97	5	8
3A1	1	3	3	A	15	78	63

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
07:30-08:30	(ALL)	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	SIGNALS		FLOWS				PERFORMANCE			PER PCU			QUEUES		WEIGHTS		PENALTIES	P.L.
						Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	Journey Time (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (£ per hr)				
1A	1	S/L	1	1	A	577	<	1800	68	0.00	46	94	11.79	8.33	44.45	7.41	5.17	100	100	0.00	22.17		
	2	S	1	1	B	469		1800	73	0.00	35	156	8.77	5.31	33.60	4.66	3.48	100	100	0.00	11.79		
1Ax	1					1394	Unrestricted	100	7.00	0	Unrestricted	8.67	0.00	0.00	0.00	0.00	100	100	0.00	0.00			
1B	1	L	1	1	C	75		1800	6	0.00	60	51	71.44	65.34	114.58	2.44	2.36	100	100	0.00	20.41		
	2	R	1	1	D	112		1800	6	0.00	89	1	130.01	123.88	162.01	5.50	5.31	100	100	0.00	57.00		
1Bx	1		8			108		1800	100	30.00	6	1400	7.35	0.06	0.00	0.00	0.00	100	100	0.00	0.03		

1C	1	S/R	1	1	E	1282 <	1800	73	0.00	96	-6	51.85	33.32	70.49	27.43 +	18.24	100	100	0.00	179.85
1Cx	1		7			1013	3600	100	8.00	28	220	9.60	0.20	0.00	0.06		100	100	0.00	0.78
2A	1	S/L	2			203	9999	100	0.00	2	4333	2.19	0.00	0.00	0.00		100	100	0.00	0.00
2Ax	1					112	Unrestricted	100	23.00	0	Unrestricted	3.83	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2			73	466	100	0.00	16	474	3.26	1.08	0.00	0.02		100	100	0.00	0.31
2Bx	1					85	Unrestricted	100	28.00	0	Unrestricted	3.08	0.00	0.00	0.00		100	100	0.00	0.00
2C	1	S	2			61	1800	100	33.00	3	2556	4.98	0.04	0.00	0.00		100	100	0.00	0.01
	2	R	2			48	635	100	80.00	8	1090	5.33	0.35	0.00	0.00		100	100	0.00	0.07
2Cx	1		8			188	1800	100	0.00	10	762	3.04	0.12	0.00	0.01		100	100	0.00	0.09
3Ax	1		7			1279	1800	100	5.00	71	27	13.35	2.44	0.00	0.87		100	100	0.00	12.31
3B	1	L	3	3	B	44	3600	5	4.00	20	342	49.43	46.91	95.93	1.19	1.17	100	100	0.00	8.67
3C	1	S	3	3	C	1279 <	1800	84	0.00	84	8	15.59	9.75	51.78	20.20 +	7.41	100	100	0.00	57.47
	2	R	3	3	D	96	1800	8	0.00	59	52	65.27	59.43	109.64	2.98	2.84	100	100	0.00	23.82
3Cx	1					1043	Unrestricted	100	18.00	0	Unrestricted	9.26	0.00	0.00	0.00		100	100	0.00	0.00
3A1	1	S	3	3	A	999 <	3600	63	0.00	43	108	10.65	8.78	42.27	12.23 +	9.55	100	100	0.00	39.90
3Bx1	1		4			96	1800	100	89.00	5	1588	4.69	0.06	0.00	0.00		100	100	0.00	0.02
	1		6			510	1800	100	30.00	28	218	18.71	0.39	0.00	0.06		100	100	0.00	0.79
3A2	2		6			499	1800	100	31.00	28	224	18.73	0.38	0.00	0.05		100	100	0.00	0.78
3Bx2	1					106	Unrestricted	100	87.00	0	Unrestricted	2.65	0.00	0.00	0.00		100	100	0.00	0.00
3A3	1	L	4			10	687	100	100.00	1	6072	1.11	0.04	0.00	0.00		100	100	0.00	0.00
3A4	1		5			10	1800	100	100.00	1	16084	2.33	0.01	0.00	0.00		100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	884.84	57.73	15.33	12.48	15.76	400.93	35.32	0.00	436.25
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	884.84	57.73	15.33	12.48	15.76	400.93	35.32	0.00	436.25

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

DCC PLAN NO: 4610/22
 RECEIVED: 04/08/2022

TRANSYT 16
Version: 16.0.1.8473 © Copyright TRL Limited, 2019
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Filename: H087 Commercial TRANSYT Model Existing Config 20220427.t16
 Path: J:\H_JOBS\Job-H087\B_Documents\C_Civil\A_CS Reports\Traffic\Modelling\H087 Commercial Modelling
 Report generation date: 27/04/2022 16:32:21

«A1 - : D8 - 2031 Do Nothing, PM :

- »Summary
- »T-Junctions
- »Local OD Matrix - Local Matrix: 2
- »Local OD Matrix - Local Matrix: 1
- »Local OD Matrix - Local Matrix: 3
- »Signal Timings
- »Final Prediction Table

Summary of network performance

PM					
Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated	
2031 Do Nothing					
Network	D8	514.75	33.12	86% (TS 1B/1)	0 (0%)

File summary

File description

File title	Heuston South Quarter Commercial
Location	Dublin 8
Site number	
UTCRegion	
Driving side	Left
Date	27/04/2022
Version	Existing Layout
Status	
Identifier	
Client	
Jobnumber	
Enumerator	GF
Description	

Model and Results

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

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	l/100km	l/h	kg	PCU	PCU	per-hour	s	-Hour	perHour

Sorting

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

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

A1 - D8 - 2031 Do Nothing, PM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	T-Junction Geometry	T-Junction 3a	T-Junction 3a: TRANSYT using double the user-specified Total Carriageway Width.

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	27/04/2022 16:32:13	27/04/2022 16:32:15	2.82	16:30	100	514.75	33.12	85.96	1B/1	0	0	1B/1	3A2/1	1B/1	✓

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
					✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2031 Do Nothing	PM				16:30		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C/1	2C/2	2Cx/1	✓
3a			✓	TrafficStream	Entry Only		3Bx1/1		Entry Only		3A3/1		Exit Only			3Bx2/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.60	8.60	0.00	2.50	150.00
3a	4.00	4.00	0.00	2.20	0.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	2.40	2.40	64.00	43.00
3a	4.00	2.20	20.00	35.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	612	0.08	0.21	488	0.08	0.20	0.13	0.28	682	0.23	0.23
3a	711	0.10	0.25	461	0.08	0.19	0.12	0.28	574	0.20	0.20

Local OD Matrix - Local Matrix: 2

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
2		✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	54	429
	2-2	38	0	33
	2-3	52	34	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
2	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C/1, 2C/2	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
2	2		2-3	2-1	2C/1, 2Ax/1	Normal	52
	3		2-1	2-2	2A/1, 2Bx/1	Normal	54
	4		2-1	2-3	2A/1, 2Cx/1	Normal	429
	5		2-2	2-3	2B/1, 2Cx/1	Normal	33
	6		2-2	2-1	2B/1, 2Ax/1	Normal	38
	7		2-3	2-2	2C/2, 2Bx/1	Normal	34

Local OD Matrix - Local Matrix: 1

Local Matrix Options

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

Normal Input Flows (PCU/hr)

		To		
		1-1	1-2	1-3
From	1-1	0	86	1580
	1-2	168	0	294
	1-3	800	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/2, 1A/1	1Ax/1	#FFFFFF00
	1-2		1B/1, 1B/2	1Bx/1	#00FFFF
	1-3		1C/1	1Cx/1	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-1	1C/1, 1Ax/1	Normal	800
	2		1-1	1-3	1A/2, 1Cx/1	Normal	790
	3		1-1	1-3	1A/1, 1Cx/1	Normal	790
	4		1-1	1-2	1A/1, 1Bx/1	Normal	86
	6		1-2	1-3	1B/1, 1Cx/1	Normal	294
	7		1-2	1-1	1B/2, 1Ax/1	Normal	168

Local OD Matrix - Local Matrix: 3

Local Matrix Options

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

Normal Input Flows (PCU/hr)

		To		
		3-1	3-2	3-3
From	3-1	0	19	1896
	3-2	0	0	126
	3-3	798	41	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
3	3-1		3A2/2, 3A2/1	3Ax/1	#008000
	3-2		3B/1	3Bx2/1	#FFA500
	3-3		3C/1, 3C/2	3Cx/1	#A52A2A

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		3-2	3-3	3B/1, 3Cx/1	Normal	126
	2		3-3	3-2	3C/2, 3Bx1/1, 3Bx2/1	Normal	41
	4		3-3	3-1	3C/1, 3Ax/1	Normal	798
	5		3-1	3-3	3A2/2, 3A1/1, 3Cx/1	Normal	948
	6		3-1	3-3	3A2/1, 3A1/1, 3Cx/1	Normal	948
	7		3-1	3-2	3A2/1, 3A4/1, 3A3/1, 3Bx2/1	Normal	19

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			3	NetworkDefault	100	36

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

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

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
1	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		5	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown
	H		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
1	1	A, B, E	1	1	100
	2	A, B, H	1	1	100
	3	B, E, G	1	1	100
	4	B, G, H	1	1	100
	5	C, D, F	1	1	100
	6	C, E, F	1	1	100
	7	C, F, H	1	1	100
	8	E, F, G	1	1	100
	9	F, G, H	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
1	1	(untitled)	Single	1, 4, 5	26, 54, 92	39	
	2	(untitled)	Single	1, 5, 4	26, 56, 87	37	
	3	(untitled)	Single	1, 5, 9	23, 46, 54	36	
	4	(untitled)	Single	1, 9, 5	26, 54, 92	39	
	5	(untitled)	Single	2, 3, 5	24, 56, 92	44	
	6	(untitled)	Single	2, 5, 3	24, 56, 87	41	
	7	(untitled)	Single	2, 5, 8	25, 58, 87	41	
	8	(untitled)	Single	2, 8, 5	24, 56, 92	44	
	9	(untitled)	Single	1, 2, 3, 5	17, 37, 62, 92	49	
	10	(untitled)	Single	1, 2, 4, 5	19, 39, 61, 92	42	

Intergreen Matrix for Controller Stream 1

		To							
		A	B	C	D	E	F	G	H
From	A			5	5		5	5	
	B			5	5		5		
	C	5	5					5	
	D	5	5			5		5	5
	E			5					5
	F	8	8						
	G	13	13	13					
	H				8	8			

Banned Stage transitions for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

Interstage Matrix for Controller Stream 1

		To								
		1	2	3	4	5	6	7	8	9
From	1	0	5	5	5	5	5	5	5	5
	2	8	0	8	5	8	8	5	8	5
	3	13	13	0	5	13	13	13	5	5
	4	13	13	8	0	13	13	13	8	5
	5	8	8	8	8	0	5	5	5	5
	6	8	8	8	8	5	0	5	5	5
	7	8	8	8	8	8	8	0	8	5
	8	13	13	8	8	13	13	13	0	5
	9	13	13	8	8	13	13	13	8	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A,B,E	67	23	56	1	5
	2	✓	5	C,D,F	28	46	18	1	5
	3	✓	9	F,G,H	51	54	3	1	3

Resultant Phase Green Periods

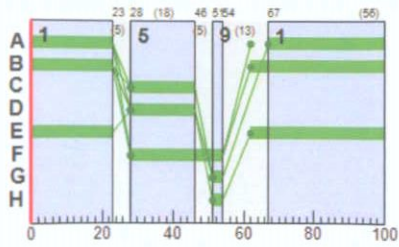
Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
1	A	1	✓	67	23	56
	B	1	✓	62	23	61
	C	1	✓	28	46	18
	D	1	✓	28	46	18
	E	1	✓	62	23	61
	F	1	✓	28	54	26
	G	1	✓	51	54	3
	H	1	✓	51	54	3

Traffic Stream Green Times

--	--	--	--	--	--

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
1A	1	1	1	A	67	23	56
1A	2	1	1	B	62	23	61
1B	1	1	1	C	28	46	18
1B	2	1	1	D	28	46	18
1C	1	1	1	E	62	23	61

Phase Timings Diagram for Controller Stream 1



Stage Sequence Diagram for Controller Stream 1



Controller Stream 3

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
3			1	NetworkDefault	100	42

Controller Stream 3 - Properties

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

Controller Stream 3 - Optimisation

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

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type
3	A		5	300	0	0	Unknown
	B		5	300	0	0	Unknown
	C		5	300	0	0	Unknown
	D		5	300	0	0	Unknown
	E		3	300	0	0	Unknown
	F		3	300	0	0	Unknown
	G		3	300	0	0	Unknown

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
3	1	A, C, G	1	1	100
	2	A, F, G	1	1	100
	3	B, C, E	1	1	100
	4	B, E, F	1	1	100
	5	C, D, E	1	1	100
	6	C, E, G	1	1	100
	7	D, E, F	1	1	100
	8	E, F, G	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
3	1	(untitled)	Single	1, 3, 7	33, 52, 60	42	
	2	(untitled)	Single	1, 4, 5	23, 60, 90	43	
	3	(untitled)	Single	1, 4, 7	24, 62, 90	39	
	4	(untitled)	Single	1, 5, 4	24, 62, 90	42	
	5	(untitled)	Single	1, 7, 3	23, 60, 90	43	
	6	(untitled)	Single	1, 7, 4	24, 62, 90	39	
	7	(untitled)	Single	2, 3, 5	24, 62, 90	39	
	8	(untitled)	Single	2, 3, 7	24, 62, 90	40	
	9	(untitled)	Single	2, 4, 5	23, 60, 90	47	
	10	(untitled)	Single	2, 5, 3	24, 62, 90	39	

Intergreen Matrix for Controller Stream 3

		To						
		A	B	C	D	E	F	G
From	A	5			5	5		
	B	5						5
	C						5	
	D	5						5
	E	10						
	F			8				
	G	14		14				

Banned Stage transitions for Controller Stream 3

From	To

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

Interstage Matrix for Controller Stream 3

		To							
		1	2	3	4	5	6	7	8
From	1	0	5	14	14	14	5	14	5
	2	8	0	14	14	14	8	14	5
	3	10	10	0	5	0	5	5	5
	4	10	10	8	0	8	8	0	5
	5	10	10	0	5	0	5	5	5
	6	10	10	14	14	14	0	14	5
	7	10	10	8	0	8	8	0	5
	8	10	10	14	14	14	8	14	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
3	1	✓	1	A,C,G	70	33	63	1	5
	2	✓	3	B,C,E	47	52	5	1	5
	3	✓	7	D,E,F	57	60	3	1	3

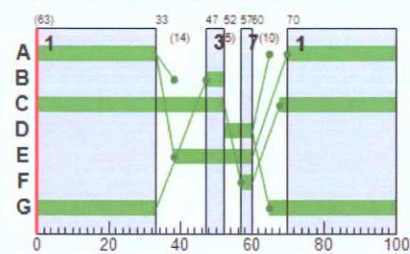
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
3	A	1	✓	70	33	63
	B	1	✓	47	52	5
	C	1	✓	68	52	84
	D	1	✓	52	60	8
	E	1	✓	38	60	22
	F	1	✓	57	60	3
	G	1	✓	65	33	68

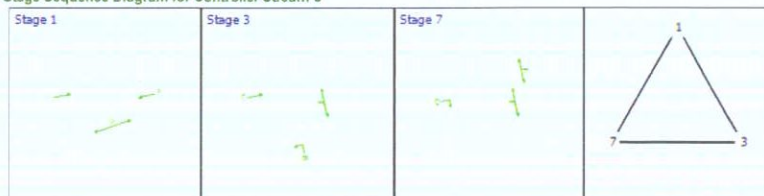
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1		
					Start	End	Duration
3B	1	3	3	B	47	52	5
3C	1	3	3	C	68	52	84
3C	2	3	3	D	52	60	8
3A1	1	3	3	A	70	33	63

Phase Timings Diagram for Controller Stream 3



Stage Sequence Diagram for Controller Stream 3



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (£ per hr)	Intergreen broken penalty (£ per hr)	Stage constraint broken penalty (£ per hr)	Cost of controller stream penalties (£ per hr)
16:30-17:30	(ALL)	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

Arm	Traffic Stream	Name	Traffic node	SIGNALS		FLOWS		PERFORMANCE			PER PCU		QUEUES		WEIGHTS		PENALTIES	P.I.		
				Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s per cycle)	Wasted time total (s per cycle)	Degree of saturation (%)	Practical reserve capacity (%)	Journey Time (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)			Delay weighting multiplier (%)	Stop weighting multiplier (%)
1A	1	S/L	1	1	A	876 <	1800	56	0.00	85	5	31.30	27.83	90.09	22.59 +	12.85	100	100	0.00	106.06
	2	S	1	1	B	790 <	1800	61	0.00	71	27	20.21	16.74	68.60	15.55 +	9.19	100	100	0.00	58.96
1Ax	1					968	Unrestricted	100	12.00	0	Unrestricted	8.67	0.00	0.00	0.00	100	100	0.00	0.00	
	1	L	1	1	C	294 <	1800	18	0.00	86	5	73.78	67.68	121.24	10.16 +	8.94	100	100	0.00	82.96

1B	2	R	1	1	D	168	1800	18	0.00	49	83	47.37	41.23	92.63	4.39	4.02	100	100	0.00	29.27
1Bx	1		8			86	1800	100	44.00	5	1784	7.33	0.05	0.00	0.00		100	100	0.00	0.02
1C	1	S/R	1	1	E	800	1800	61	0.00	72	26	35.60	17.07	64.57	14.51	9.44	100	100	0.00	60.35
1Cx	1		7			1874	3600	100	7.00	52	73	9.95	0.54	0.00	0.28		100	100	0.00	4.01
2A	1	S/L	2			483	9999	100	0.00	5	1763	2.19	0.01	0.00	0.00		100	100	0.00	0.02
2Ax	1					90	Unrestricted	100	40.00	0	Unrestricted	3.83	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2			71	435	100	0.00	16	451	3.39	1.21	0.00	0.02		100	100	0.00	0.34
2Bx	1					88	Unrestricted	100	37.00	0	Unrestricted	3.08	0.00	0.00	0.00		100	100	0.00	0.00
2C	1	S	2			52	1800	100	55.00	3	3015	4.97	0.03	0.00	0.00		100	100	0.00	0.01
	2	R	2			34	569	100	65.00	6	1407	5.28	0.30	0.00	0.00		100	100	0.00	0.04
2Cx	1		8			462	1800	100	0.00	26	251	3.27	0.35	0.00	0.04		100	100	0.00	0.63
3Ax	1		7			798	1800	100	6.00	44	103	11.71	0.80	0.00	0.18		100	100	0.00	2.50
3Bx	1	L	3	3	B	126	3600	5	0.00	58	54	59.76	57.23	106.92	3.79	3.69	100	100	0.00	30.13
3C	1	S	3	3	C	798	1800	84	0.00	52	73	9.14	3.30	25.17	6.05	3.61	100	100	0.00	12.91
	2	R	3	3	D	41	1800	8	6.00	25	256	51.98	46.14	95.46	1.10	1.08	100	100	0.00	7.95
3Cx	1					2022	Unrestricted	100	10.00	0	Unrestricted	9.26	0.00	0.00	0.00		100	100	0.00	0.00
3A1	1	S	3	3	A	1896 <	3600	63	0.00	82	9	15.23	13.36	42.44	22.46 +	18.65	100	100	0.00	110.01
3Bx1	1		4			41	1800	100	91.00	2	3851	4.65	0.02	0.00	0.00		100	100	0.00	0.00
3A2	1		6			967	1800	100	51.00	54	68	19.48	1.16	0.00	0.31		100	100	0.00	4.42
	2		6			948	1800	100	51.00	53	71	19.46	1.11	0.00	0.29		100	100	0.00	4.15
3Bx2	1					60	Unrestricted	100	90.00	0	Unrestricted	2.65	0.00	0.00	0.00		100	100	0.00	0.00
3A3	1	L	4			19	700	100	100.00	3	3217	1.14	0.07	0.00	0.00		100	100	0.00	0.01
3A4	1		5			19	1800	100	100.00	1	8426	2.34	0.01	0.00	0.00		100	100	0.00	0.00

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	1044.85	67.95	15.38	22.68	10.45	470.37	44.37	0.00	514.75
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	1044.85	67.95	15.38	22.68	10.45	470.37	44.37	0.00	514.75

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- * = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

TRANSYT 16
Version: 16.0.1.8473 © Copyright TRL Limited, 2019
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Filename: H087 Commercial TRANSYT Model Existing Config 20220427.116
 Path: J:\H_JOBS\Job-H087\B_Documents\C_Civil\A_CS Reports\TrafficModelling\H087 Commercial Modelling
 Report generation date: 27/04/2022 16:33:02

- «A1 - : D11 - 2041 Do Nothing, AM :
- »Summary
 - »T-Junctions
 - »Local OD Matrix - Local Matrix: 2
 - »Local OD Matrix - Local Matrix: 1
 - »Local OD Matrix - Local Matrix: 3
 - »Signal Timings
 - »Final Prediction Table

Summary of network performance

AM					
Set ID	PI (£ per hr)	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated	
2041 Do Nothing					
Network	D11	690.18	45.12	100% (TS 1B/2)	2 (5%)

File summary

File description	
File title	Heuston South Quarter Commercial
Location	Dublin 8
Site number	
UTCRegion	
Driving side	Left
Date	27/04/2022
Version	Existing Layout
Status	
Identifier	
Client	
Jobnumber	
Enumerator	GF
Description	

Model and Results

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

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	l/100km	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

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

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	3.00	999	200	-1	3	60	✓			0	0	0.00

A1 - D11 - 2041 Do Nothing, AM

Summary

Data Errors and Warnings

Severity	Area	Item	Description
Info	T-Junction Geometry	T-Junction 3a	T-Junction 3a: TRANSYT using double the user-specified Total Carriageway Width.

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	27/04/2022 16:32:55	27/04/2022 16:32:57	2.65	07:30	100	690.18	45.12	109.26	1B/2	2	5	1B/2	3Ax/1	1B/2	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Optimise specific Demand Set(s)	Include in report	Locked
					✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2041 Do Nothing	AM				07:30		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2Bx/1	2Bx/1	Two-Way	2C/1	2C/2	2Cx/1	✓
3a			✓	TrafficStream	Entry Only		3Bx1/1		Entry Only		3A3/1		Exit Only			3Bx2/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.60	8.60	0.00	2.50	150.00
3a	4.00	4.00	0.00	2.20	0.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	2.40	2.40	64.00	43.00
3a	4.00	2.20	20.00	35.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC-aBSlope	BC-aCSlope	BAIntercept (PCU/hr)	BA-aBSlope	BA-aCSlope	BA-cASlope	BA-cBSlope	CBIntercept (PCU/hr)	CB-aBSlope	CB-aCSlope
2	612	0.08	0.21	488	0.08	0.20	0.13	0.28	682	0.23	0.23
3a	711	0.10	0.25	461	0.08	0.19	0.12	0.28	574	0.20	0.20

Local OD Matrix - Local Matrix: 2

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
2		✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	38	174
	2-2	52	0	23
	2-3	64	50	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
2	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C/1, 2C/2	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
2	2		2-3	2-1	2C/1, 2Ax/1	Normal	64
	3		2-1	2-2	2A/1, 2Bx/1	Normal	38
	4		2-1	2-3	2A/1, 2Cx/1	Normal	174
	5		2-2	2-3	2B/1, 2Cx/1	Normal	23
	6		2-2	2-1	2B/1, 2Ax/1	Normal	52
	7		2-3	2-2	2C/2, 2Bx/1	Normal	50

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Path Equalisation			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	1.25				

Normal Input Flows (PCU/hr)

		To		
		1-1	1-2	1-3
From	1-1	0	113	985
	1-2	118	0	79
	1-3	1348	0	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	1-1		1A/2, 1A/1	1Ax/1	#FFFF00
	1-2		1B/1, 1B/2	1Bx/1	#00FFFF
	1-3		1C/1	1Cx/1	#FF00FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	1		1-3	1-1	1C/1, 1Ax/1	Normal	1348
	2		1-1	1-3	1A/2, 1Cx/1	Normal	493
	3		1-1	1-3	1A/1, 1Cx/1	Normal	493
	4		1-1	1-2	1A/1, 1Bx/1	Normal	113
	6		1-2	1-3	1B/1, 1Cx/1	Normal	79
	7		1-2	1-1	1B/2, 1Ax/1	Normal	118

Local OD Matrix - Local Matrix: 3

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
3		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Path Equalisation			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	1.25				

Normal Input Flows (PCU/hr)

		To		
		3-1	3-2	3-3
From	3-1	0	10	1050
	3-2	0	0	45
	3-3	1345	101	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
3	3-1		3A2/2, 3A2/1	3Ax/1	#008000
	3-2		3B/1	3Bx2/1	#FFA500
	3-3		3C/1, 3C/2	3Cx/1	#A52A2A

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
3	1		3-2	3-3	3B/1, 3Cx/1	Normal	45
	2		3-3	3-2	3C/2, 3Bx1/1, 3Bx2/1	Normal	101
	4		3-3	3-1	3C/1, 3Ax/1	Normal	1345
	5		3-1	3-3	3A2/2, 3A1/1, 3Cx/1	Normal	525
	6		3-1	3-3	3A2/1, 3A1/1, 3Cx/1	Normal	525
	7		3-1	3-2	3A2/1, 3A4/1, 3A3/1, 3Bx2/1	Normal	10

Signal Timings

Network Default: 100s cycle time; 100 steps

Controller Stream 1

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
1			3	NetworkDefault	100	36

Controller Stream 1 - Properties

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

Controller Stream 1 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Offsets And Green Splits	<input checked="" type="checkbox"/>	