
QBC MONITORING REPORT

NOVEMBER 2010

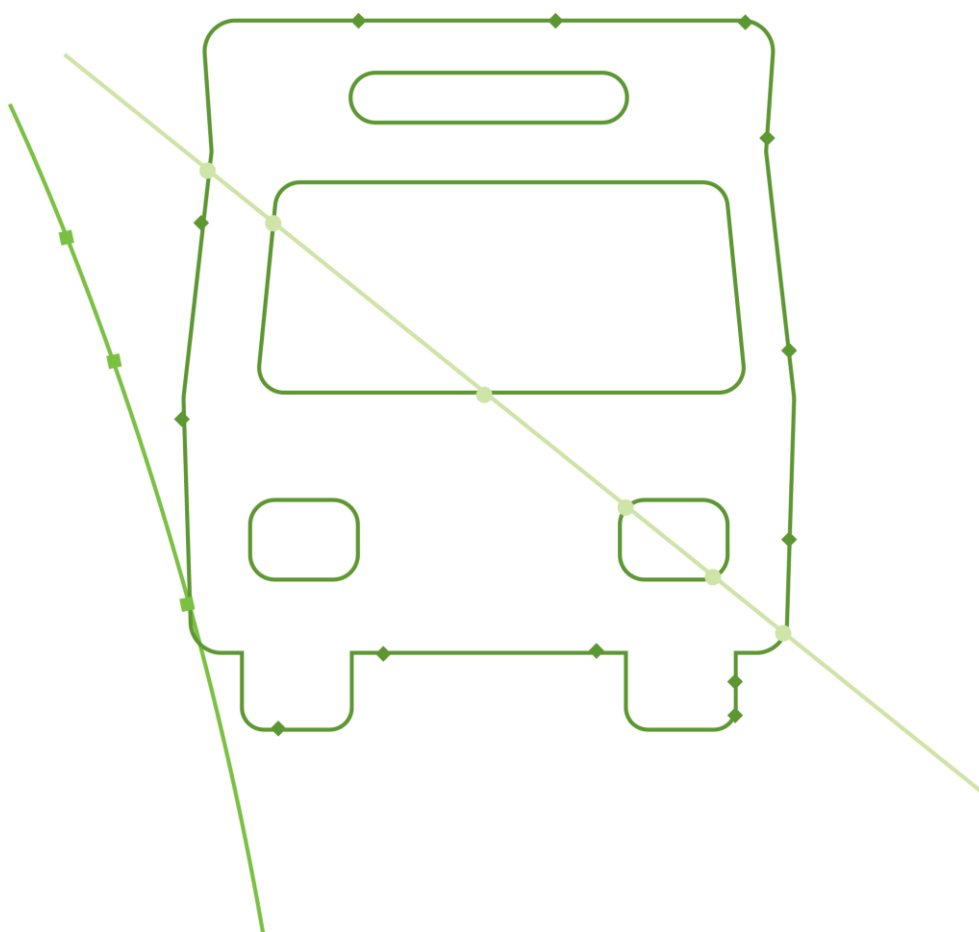


Table of Contents

1. Introduction & Structure of the Report	3
2. Main Findings	5
3. Purpose, Scope & Methodology.....	8
4. Individual QBC Reports.....	10
5. Trends in Bus Supply and Patronage.....	27
6. Comparative Bus & Car Journey Times in the Morning & Evening Peak	29
7. QBC Performance relative to 2009.....	31
8. Mode Share	34
9. Average Bus Speeds by Corridor	40
10. League Tables	57
Appendix 1.....	64
Appendix 2.....	66
Appendix 3.....	79
Appendix 4.....	81

1. Introduction & Structure of the Report

1.1 Background

The Dublin Transportation Office (DTO) assumed responsibility for Quality Bus Corridor (QBC) monitoring in November 2002. Monitoring had previously been undertaken on a bi-annual basis by Dublin City Council. The functions and responsibilities of the Dublin Transportation Office were transferred to the newly created National Transport Authority on 1 December 2009, and the Authority now monitors the performance of QBC's on an annual basis in November of each year.

QBC monitoring data has now been collected for every year since 2002 for the initial 9 radial QBC's – i.e. Blanchardstown, Finglas, Lucan, Malahide, North Clondalkin, Rathfarnham, Stillorgan, Swords and Tallaght. Since 2004 monitoring data has been collected for an additional 4 QBC's – i.e. Ballymun QBC, Bray QBC (incorporating the N11 extension from Foxrock to Loughlinstown), Clontarf QBC and Howth Road QBC. Since 2007 monitoring data has been collected for a further 3 QBC's as follows: Crumlin Road QBC, Rock Road QBC and South Clondalkin QBC. The data has been collected to measure QBC performance both at a point in time, and over time.

Although this report deals specifically with the results from November 2010, comparisons are made with the results from 2002 to 2009.

The development and enhancement of an expanded Quality Bus Network was a key element of the DTO transport strategy as outlined in *A Platform for Change* and remains central to the current GDA transport strategy. Monitoring the performance of the Quality Bus Corridors in operation helps to measure the efficiency and effectiveness of the bus mode in the delivery of the transport objectives set out in the transport strategy.

1.2 Structure of the Report

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|------------------|--|
| Section 2 | summarises the main findings from the November 2010 QBC monitoring exercise. |
| Section 3 | sets out the purpose, scope and methodology of the annual monitoring exercise. |
| Section 4 | is a detailed report for each of the 16 individual QBC's monitored and sets out their performance against key performance indicators. |
| Section 5 | is a summary of the trends between 1997 and 2010 in respect to bus supply and patronage and the number of cars crossing the Canal Cordon. |
| Section 6 | is a summary of the comparative bus and car average for morning and evening peak period journey times for each of the 16 QBCs monitored. |
| Section 7 | contains tables of Performance Indicators measured over the period 2009 to 2010 inclusive. |
| Section 8 | contains tables showing Mode Share expressed in terms of the percentage of total persons crossing the canal cordon points by mode of travel. |
| Section 9 | contains tables showing bus speeds for each QBC on a sectional basis for the morning and evening peaks and off peak periods. |

- Section 10** contains a “League Table” of results with comparisons for the years 2006 to 2010.
- Appendix 1** details the Specification against which the performance of each QBC is measured.
- Appendix 2** is a table showing the complete list of survey points for the November 2010 (weekday) monitoring exercise.
- Appendix 3** is a table showing a sample of Dublin Bus AVL data that which has been used where required to identify and resolve gaps in the survey data.
- Appendix 4** is a map of all canal cordon survey points and is reproduced here for reference.

2. Main Findings

2.1 Main Findings Overall

The number of bus passengers crossing the Canal Cordon on QBC corridors increased by 7,610 (25%) between November 1997 and November 2010 (See Table 2 for details). There was a decrease in passenger numbers of 11% however over the last 12 months (See Table 3 for details). The number of buses crossing the cordon has dropped by 18% in the last year while car mode share has increased by 10%. However, overall since 1997 car mode share crossing the canal cordon has dropped by 17%

In the case of 12 out of the 16 QBCs monitored, bus average journey times are faster than the corresponding car journey times in the morning peak. Out of these 12 QBCs, 7 of them reported average bus journey times in excess of 20% lower than the corresponding car journey times. Bus journey times were within 6 minutes of the equivalent car journey times in the case of the 4 remaining QBCs (where car journey times were faster). Detailed figures are given in Table 4 of this report.

In the case of the 9 initial radial QBCs, average bus speeds in the AM peak are down on average by just over 1km/h since 2009. The average bus speed on these QBCs is now 15.01 km/h and is below the QBC specification as set out in appendix 1. On the 7 other QBCs, average bus speeds are down by almost 3km/h since 2009 and at 16.02 km/h has now fallen below the QBC specification. Tables 6 and 7 provide more details.

For the initial 9 radial QBCs, bus mode share is down 6% since 2009, while passenger numbers on QBC designated routes are down 5% for the same period. Bus mode share on the 7 other QBCs is down by 6% and passenger numbers on designated QBC routes are down 8% for the same period. The highest bus mode share crossing the cordon is on the Malahide/Clontarf QBC at 57.47% with the lowest on the Bray/Rock Road QBC at 20.80%

The bus mode share crossing the canal cordon on QBC corridors is on average 37.92%, and this compares favourably to the mode share on non QBC corridors at 8.48%. The car mode share on QBC corridors is 36.17% and 41.76% on non QBC corridors. More details are available in tables 8a to 8c.

Overall since 2009 bus mode share crossing the canal in the morning peak is down 2%, rail is down 1%, LUAS is static at 5% while public transport overall is down 2.3%. Car mode share is up 2% over the same period. In total in 2010, 83,111 people crossed the canal cordon in the morning peak on public transport (of which 50,420 were on bus). Some 71,979 people crossed the canal by car in the same period. More details are available in table 8c.

2.2 Main Findings by Corridor

The bus mode share crossing the cordon on the **Blanchardstown QBC** designated routes fell by just under 3% between 2009 and 2010. However, car mode share for the same period increased by just 1% with increases in walk and cycle mode share for the same period. In the morning peak bus journey times on the Blanchardstown QBC were over 5 minutes less than car journey times.

Bus journey times on the **Finglas QBC** in the morning peak are almost half that of the corresponding car journey times. In spite of this, bus mode share at the canal cordon is down 7% from 2009 with car mode share up 7% in the same period.

Bus journey times in the morning peak are 7 minutes less than that of corresponding car journey times on the **Lucan QBC**. Bus and car mode share at the canal cordon have remained broadly static since 2009 with car mode share down by 1%. Bus passenger

numbers at the cordon remain static since 2009 on QBC designated routes in spite of a decline of 400 persons over all modes.

Morning peak bus journey times on the **Malahide QBC** were 3 minutes less than corresponding car journey times. The bus mode share crossing the canal is down 5% from 2009 with car mode share up 4% in the same period.

Bus journey times on the **North Clondalkin QBC** are 5 minutes less than corresponding car journey times in the morning peak. Bus mode share at the canal cordon is down 8% from 2009 with car mode share up 7% in the same period.

Car journey times in the morning peak were 2 minutes (6%) less than the corresponding bus journey times on the **Rathfarnham QBC**. Bus mode share at the canal cordon was down less than 1% with car mode share up less than 1% on 2009. Total person numbers crossing the canal were down 1% from 2009. However passenger numbers on QBC designated routes were down 8% over the same period.

Bus journey times on the **Stillorgan QBC** were on average 1 minute less than corresponding car journey times in the morning peak. Car mode share at the canal cordon was up 1% with bus mode share down just under 1% between 2009 and 2010. Overall person numbers crossing the canal were down 3%. However, passenger numbers on QBC designated bus routes were up slightly (0.6%) in the same period.

Bus journey times on the **Swords QBC** were on average over 1 minute less than corresponding car journey times in the morning peak. Bus mode share were down 6% while car mode share was up 6% at the canal between 2009 and 2010. Total persons crossing the canal were down 17% for the same period. However, passenger numbers on designated QBC routes were up 26%.

Average car journey times were over 3 minutes less than corresponding bus journey times (almost 10% less) on the **Tallaght QBC** in the morning peak. Bus mode share at the canal cordon was down 6% from 2009. However, car mode share was up less than 3% with increases in mode share for both walk and cycle in the same period.

Average car and bus journey times on the **Ballymun QBC** in the morning peak were very close with bus being on average 40 seconds faster than car. Bus mode share crossing the canal was down 5% on 2009 figures while car mode share was up 4% over the same period.

Average car and bus journey times on the **Bray QBC** in the morning peak were close with bus being on average 90 seconds faster. Bus mode share crossing the canal was down 6% on 2009 figures, while car mode share was up 7%. Total passenger journeys crossing the canal were up 6%. However, the passenger numbers on designated QBC routes were up by 9%.

Bus journey times on the **Clontarf QBC** were 7 minutes (65%) faster than that of the corresponding car journey times. The bus mode share crossing the canal was down 6% on 2009 with car mode share up by 4%.

Bus journey times on the **Howth Road QBC** were 5 minutes (50%) faster than that of the corresponding car journey times. Bus mode share crossing the canal was down 6% on 2009 with car mode share up by 4%.

Average car and bus journey times on the **Crumlin Road QBC** in the morning peak were close with bus being on average 1 minute faster than car. Bus mode share was up 2% crossing the canal at Dolphins Barn between 2009 and 2010, while car mode share was down 3% for the same period. Walking and cycling also showed marginal increased mode share. Total bus passengers on designated QBC routes were up slightly on 2009 figures (30 passengers).

Average car journey times on the **Rock Road QBC** were 6 minutes less than average bus journey times in the AM peak. Bus mode share was down 6% on 2009 figures, while car mode share was up 7% for the same period. Total persons crossing the canal cordon were marginally up on this corridor. However bus passengers on QBC routes were down 13% on 2009 figures.

Average bus journey times on the **South Clondalkin QBC** in the morning peak were 11 minutes less than average car journey times for the same period. Bus mode share was up 2% crossing the canal at Dolphins Barn between 2009 and 2010, while car mode share was down 3% for the same period. Walking and cycling also showed marginal increased mode share.

3. Purpose, Scope & Methodology

3.1 Purpose

The purpose of the monitoring exercise is to undertake a time series analysis of the operation of each QBC including journey times of buses within sections of each corridor, equivalent journey times by car, the pattern of flow of buses and the resultant passenger wait times. Additional data is collected and used to measure bus usage; mode share for city bound journeys, the level of bus priority, passenger waiting facilities, passenger information, the quality of buses and passenger satisfaction levels. The results are compared to the specification set out and agreed for the performance of Quality Bus Corridors.

3.2 Scope

16 QBCs were monitored over a 3 week period in November 2010. Please refer to figure 1 for a map of the geographical extent of the QBCs monitored.

3.3 Methodology

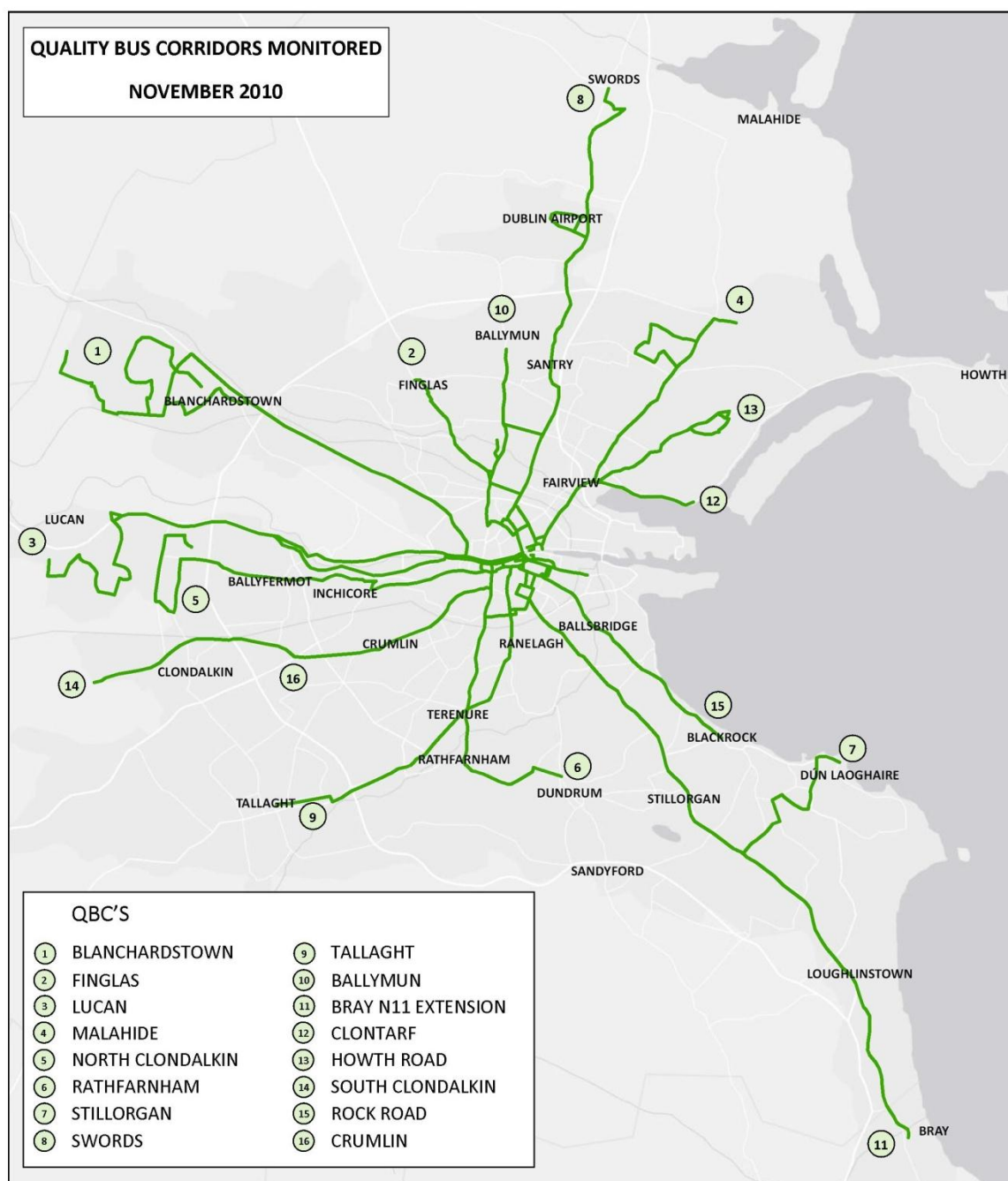
Roadside surveys were carried out at strategic locations (Appendix 2) on each QBC measuring sectional journey times by bus and car over the morning and evening peak periods and off peak inbound and outbound journeys. The 2010 surveys were undertaken by *Count On Us*, following a competitive tendering process. Where gaps existed in the data, Dublin Bus AVL data was used. The AVL system monitors in real time, the location, service pattern, speed and direction of buses. This data is then stored within a centralised database. By interrogation of this data it is possible to build up a very accurate picture of the performance of each QBC. A sample of the Dublin Bus AVL data is provided in Appendix 3.

Traffic Cordon Counts were undertaken by Dublin City Council measuring the volume of city bound traffic and persons crossing the canal cordon in the morning peak period with a view to reporting on modal share. Dublin Bus undertook bus passenger counts for all city bound passengers crossing the Canal Cordon (Appendix 4). The Railway Procurement Agency undertook an all-day passenger count on LUAS which included measuring the volume of city bound passengers during the morning peak period. A similar all day passenger count was undertaken by Irish Rail from which the data on the volume of city bound passengers was extracted.

An infrastructure audit, undertaken in May to June 2006 including the use of GPS tracked video footage, was used to report on QBC attributes including the levels of bus priority, passenger waiting facilities and passenger information.

Passenger satisfaction levels were recorded for each QBC using the data from a survey carried out by Dublin Bus in 2002.

Figure 1: Corridors Monitored in November 2010



4. Individual QBC Reports

This section includes individual reports (in the form of tables) on each of the 16 QBC's that were monitored. Each table gives the measured performance of the QBC against key performance indicators as follows:

- Bus journey times
- Bus speeds
- Comparative bus and car journey times
- Passenger waiting times
- Mode Share
- Passenger journeys

The codes in the left hand column of each table - headed "Spec Ref" - refer to the performance indicators set out in the QBC Specification (see Appendix I).

Table 1.1 Blanchardstown QBC

Quality Bus Corridor Monitoring Annual Summary Report Blanchardstown Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		New River Rd to Westmoreland St. / Hawkins St.
A5	Corridor Bus Journey Time (Average)		32:00		36:03		
A5	Corridor Bus Journey Time (Range)		22:30 to 41:27		32:03 to 38:37		
A5	Corridor Bus Speed		15.70 km/h		13.96 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		New River Rd / Navan to Manor Street
A5	Comparison of Bus v Car Journey Times (Average)		22:24		27:40		
A5	Comparison of Bus v Car Journey Times (Range)		14:42 to 29:59		24:03 to 31:25		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		River Road to Westmoreland Street/Hawkins Street - November
			9.37%		10.78%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Cordon Counts at Blackhorse Avenue Old Cabra Road & St Peters Church
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			46.40%	43.51%	44.17%	45.19%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			1.18%	1.29%	1.59%	1.96%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			4.95%	6.67%	14,525	14,101	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			4,424		3,658		

Notes

Bus Journey Time Derived From AVL Data

*Previously reported as Average Time to Westmoreland Street/Hawkins Street. This data was unavailable in 2010.

Table 1.2 Finglas QBC

Quality Bus Corridor Monitoring Annual Summary Report Finglas Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Finglas Main St. to City Centre (College Green)
A5	Corridor Bus Journey Time (Average)		28:34		27:17		
A5	Corridor Bus Journey Time (Range)		22:29 to 37:30		12:10 to 51:40		
A5	Corridor Bus Speed		14.25 km/h		14.92 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Finglas Main St. to Dorset St. Lwr. (Jnc. Whitworth Rd.)
A5	Comparison of Bus v Car Journey Times (Average)		16:07		31:23		
A5	Comparison of Bus v Car Journey Times (Range)		09:59 to 25:01		14:51 to 48:28		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Finglas to Parnell Square East/Parnell Street - November
			18.62%		8.44%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Binn's Bridge Includes Swords QBC
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			51.73%	44.50%	34.42%	41.28%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			3.04%	2.11%	2.21%	2.71%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			7.11%	7.72%	17,141	14,147	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			2,313		2,116		

Table 1.3 Lucan QBC

Quality Bus Corridor Monitoring Annual Summary Report Lucan Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Foxhunter Pub to Bachelors Wlk. / Wellington Quay (via Chapelizod Bypass)
A5	Corridor Bus Journey Time (Average)		33:55		47:03		
A5	Corridor Bus Journey Time (Range)		19:31 to 01:02:25		18:15 to 01:04:28		
A5	Corridor Bus Speed		20.45 km/h		18.16 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Foxhunter Pub to Arran Quay (via Chapelizod Bypass)
A5	Comparison of Bus v Car Journey Times (Average)		28:08		34:53		
A5	Comparison of Bus v Car Journey Times (Range)		17:54 to 52:20		19:33 to 47:16		
B2	Boarding & Alighting Time / % of total journeytime		AM Peak		PM Peak		Palmerstown to Bachelors Wlk. / Pearse St. - November 2007
			13.28%		9.72%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at St. John's Rd. & Conyngham Rd.
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			48.77%	48.58%	46.24%	45.23%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			1.14%	2.19%	0.81%	1.01%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			0.92%	0.99%	13902	13,523	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			4,685		4,680		

Notes

Analysis carried out using Roadside Survey Data & AVL

No Roadside Data Collected at Following Locations: Con Colbert Rd., St. Stephens Green, Conyngham Rd.

Table 1.4 Malahide QBC

Quality Bus Corridor Monitoring Annual Summary Report Malahide Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Greencastle Rd. to Amiens St. / Nrth. Strand
A5	Corridor Bus Journey Time (Average)		22:29		21:44		
A5	Corridor Bus Journey Time (Range)		12:58 to 38:14		07:02 to 47:33		
A5	Corridor Bus Speed		15.21 km/h		15.73 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Greencastle Rd. to Malahide Rd at Golf Club opposite Casino Park*
A5	Comparison of Bus v Car Journey Times (Average)		10:16		13:01		
A5	Comparison of Bus v Car Journey Times (Range)		05:07 to 16:56		11:50 to 15:01		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Greencastle R. to Amiens St. - November 2007
			22.02%		15.51%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Newcomen Bridge
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			63.77%	57.47%	21.23%	25.42%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			2.24%	3.01%	5.02%	6.03%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			6.55%	6.43%	14,793	13,810	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			4,687		4,471		

Table 1.5 North Clondalkin QBC

Quality Bus Corridor Monitoring Annual Summary Report North Clondalkin Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Coldcut Rd. to Westmoreland St. / Fleet St.
A5	Corridor Bus Journey Time (Average)		35:00		41:30		
A5	Corridor Bus Journey Time (Range)		20:08 to 1:00:45		26:59 to 58:45		
A5	Corridor Bus Speed		14.76 km/h**		12.60 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Coldcut Rd. to Cornmarket
A5	Comparison of Bus v Car Journey Times (Average)		17:41		22:57		
A5	Comparison of Bus v Car Journey Times (Range)		17:41 to 17:41***		22:16 to 23:38****		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Coldcut Rd. to Westmoreland St. / Aston Quay - November 2007
			11.12%		8.46%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Old Kilmainham Rd.
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			43.70%	35.56%	51.41%	58.44%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			0.73%	1.19%	0.71%	0.68%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			1.87%	2.27%	4497	3,965	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			1,462		1,280		

Notes

** 8.61 km

*** Based on 1 Observation

**** Based on 2 Observations

Table 1.6 Rathfarnham QBC

Quality Bus Corridor Monitoring Annual Summary Report Rathfarnham Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Rathfarnham to Westmoreland St. / College Green
A5	Corridor Bus Journey Time (Average)		34:41		37:17		
A5	Corridor Bus Journey Time (Range)		23:41 to 46:55		31:02 to 44:30		
A5	Corridor Bus Speed		10.55 km/h		9.81 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Rathfarnham to Aungier Street / Bishop Street*
A5	Comparison of Bus v Car Journey Times (Average)		31:51		29:57		
A5	Comparison of Bus v Car Journey Times (Range)		23:52 to 42:50		17:07 to 52:02		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Rathfarnham. to Westmoreland St. / College Green - November
			16.80%		9.97%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Harold's Cross Bridge
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			34.45%	33.66%	45.80%	46.56%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			1.61%	1.18%	6.87%	7.08%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			8.44%	9.20%	7,347	7,264	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			1,622		1,495		

Notes

*Previously reported to Camden St. but no data available at Camden St.

Table 1.7 Stillorgan QBC

Quality Bus Corridor Monitoring Annual Summary Report Stillorgan Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Foxrock Church to Leeson St.
A5	Corridor Bus Journey Time (Average)		32:02		29:07		
A5	Corridor Bus Journey Time (Range)		15:15 to 59:19		21:21 to 36:30		
A5	Corridor Bus Speed		17.01 km/h		18.70 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Stillorgan Rd / Mount Merrion Ave. to Leeson St.*
A5	Comparison of Bus v Car Journey Times (Average)		20:33		21:19**		
A5	Comparison of Bus v Car Journey Times (Range)		11:03 to 28:18		11:23 to 40:59		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Foxrock Church to Leeson St. - November 2007
			21.16%		15.22%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Leeson St. Bridge
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			41.22%	40.56%	40.67%	41.78%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			1.25%	1.96%	5.53%	5.67%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			9.27%	8.23%	11,286	10,975	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			3,271		3,285		

Notes

*No Car data available from Foxrock Church **Based on 4 Observations

Table 1.8 Swords QBC

Quality Bus Corridor Monitoring Annual Summary Report Swords Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Swords main St. to O'Connell St. / Nrth. Earl St.
A5	Corridor Bus Journey Time (Average)		52:21		57:34		
A5	Corridor Bus Journey Time (Range)		35:11 to 1:18:39		28:58 to 1:30:01		
A5	Corridor Bus Speed		15.18 km/h		13.80 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Airside Business Park to Dorset St. Lwr.
A5	Comparison of Bus v Car Journey Times (Average)		40:23		41:51		
A5	Comparison of Bus v Car Journey Times (Range)		29:48 to 51:21		19:07 to 1:17:19		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Cloghran Roundabout to O'Connell St. / Lwr. Abbey St. -
			11.34%		7.41%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Binns Bridge (includes Finglas QBC)
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			51.73%	44.50%	34.42%	41.28%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			3.04%	2.11%	2.21%	2.71%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			7.11%	7.72%	17141	14,147	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			2,193		2,767		

Table 1.9 Tallaght QBC

Quality Bus Corridor Monitoring Annual Summary Report Tallaght Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		West of M50 to Westmoreland St.
A5	Corridor Bus Journey Time (Average)		45:14		45:27		
A5	Corridor Bus Journey Time (Range)		23:26 to 1:12:42		34:21 to 54:29		
A5	Corridor Bus Speed		12.01 km/h		12.69 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		West of M50 to Camden St. Upper
A5	Comparison of Bus v Car Journey Times (Average)		36:25		32:57		
A5	Comparison of Bus v Car Journey Times (Range)		21:18 to 52:39		18:34 to 1:08:33		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Templeogue Rd. to Westmoreland St. / Eden Quay -
			11.87%		10.79%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Portobello Bridge.
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			52.00%	45.84%	22.95%	25.50%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			0.99%	1.49%	6.15%	7.48%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			16.96%	18.63%	9,268	8,142	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			3,233		2,629		

Table 1.10 Ballymun QBC

Quality Bus Corridor Monitoring Annual Summary Report Ballymun Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Ballymun to O'Connell St.
A5	Corridor Bus Journey Time (Average)		31:44		31:17		
A5	Corridor Bus Journey Time (Range)		17:08 to 50:11		19:27 to 39:37		
A5	Corridor Bus Speed		11.28 km/h		11.44 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Ballymun to Dorset St. Lwr.
A5	Comparison of Bus v Car Journey Times (Average)		22:23		23:02		
A5	Comparison of Bus v Car Journey Times (Range)		11:41 to 31:47		18:02 to 26:54		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Ballymun to O'Connell St. via Phibsborough - November 2007
			11.38%		22.08%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Phibsborough Rd.
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			40.64%	35.81%	43.81%	47.72%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			2.07%	2.22%	2.30%	2.54%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			9.41%	10.13%	7,820	7,255	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			1,684		1,544		

Table 1.11 Bray QBC

Quality Bus Corridor Monitoring Annual Summary Report Bray Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Bray to Foxrock Church
A5	Corridor Bus Journey Time (Average)		28:04		27:35		
A5	Corridor Bus Journey Time (Range)		18:29 to 40:44		22:09 to 32:57		
A5	Corridor Bus Speed		22.23 km/h		22.62 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Bray to Stillorgan Rd. / Mount Merrion Ave.*
A5	Comparison of Bus v Car Journey Times (Average)		39:15		40:51		
A5	Comparison of Bus v Car Journey Times (Range)		22:41 to 58:47		40:25 to 41:29		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Bray Main St. to Foxrock Church - November 2007
			18.12%		10.06%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Mount St. Bridge
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			26.63%	20.80%	52.37%	59.71%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			2.55%	2.34%	4.86%	4.85%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			11.42%	10.24%	4,037	4,269	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			1,565		1,711		

Notes

*No Car data available from Foxrock Church

Table 1.12 Clontarf QBC

Quality Bus Corridor Monitoring Annual Summary Report Clontarf Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Clontarf Garage to Junc. Clontarf Rd. / Malahide Rd.*
A5	Corridor Bus Journey Time (Average)		9:58		9:29		
A5	Corridor Bus Journey Time (Range)		4:15 to 15:19		5:38 to 12:18		
A5	Corridor Bus Speed		16.51 km/h		18.29 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Clontarf Garage to Junc. Clontarf Rd. / Malahide Rd.
A5	Comparison of Bus v Car Journey Times (Average)		9:58		16:25		
A5	Comparison of Bus v Car Journey Times (Range)		4:15 to 15:19		05:11 to 32:24		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Clontarf Garage to Fairview - November 2007
			23.36%		15.56%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Newcomen Bridge
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			63.52%	57.47%	21.23%	25.42%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			2.24%	3.01%	5.02%	6.03%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			6.55%	6.43%	14,793	13,810	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			1,668		1,474		

Notes

*No data available at Fairview

Table 1.13 Howth Rd. QBC

Quality Bus Corridor Monitoring Annual Summary Report Howth Rd. Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Raheny to Junc. Clontarf Rd. / Malahide Rd.*
A5	Corridor Bus Journey Time (Average)		15:44		16:28		
A5	Corridor Bus Journey Time (Range)		9:13 to 21:07		12:22 to 21:58		
A5	Corridor Bus Speed		15.84 km/h		15.16 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Raheny to Junc. Clontarf Rd. / Malahide Rd.
A5	Comparison of Bus v Car Journey Times (Average)		15:44		10:27		
A5	Comparison of Bus v Car Journey Times (Range)		9:13 to 21:07		07:23 to 12:33		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Raheny to Fairview - November 2007
			17.13%		14.26%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Newcomen Bridge
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			63.52%	57.47%	21.23%	25.42%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			2.24%	3.01%	5.02%	6.03%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			6.55%	6.43%	14,793	13,810	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			1,666		1,124		

Notes

*No data available at Fairview

Table 1.14 Crumlin Rd. QBC

Quality Bus Corridor Monitoring Annual Summary Report Crumlin Rd. Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Drimnagh Rd. to Westmoreland St. / College Green
A5	Corridor Bus Journey Time (Average)		29:49		31:30		
A5	Corridor Bus Journey Time (Range)		16:58 to 51:01		21:46 to 59:40		
A5	Corridor Bus Speed		14.85 km/h		13.66 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Crumlin Rd. / St. Mary's Rd.* to Dean St.
A5	Comparison of Bus v Car Journey Times (Average)		14:47		15:53		
A5	Comparison of Bus v Car Journey Times (Range)		8:38 to 25:07		7:00 to 24:55		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Drimnagh Rd. to Westmoreland St. / College Green - November
			17.04%		11.17%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Dolphins Barn
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			41.86%	43.81%	49.14%	46.30%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			1.61%	2.09%	1.53%	1.85%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			3.47%	3.63%	6,536	6,555	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			2,371		2,401		

Notes

*No Car data available at Drimnagh Rd.

Table 1.15 Rock Rd. QBC

Quality Bus Corridor Monitoring Annual Summary Report Rock Rd. Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Blackrock to Westmoreland St.
A5	Corridor Bus Journey Time (Average)		30:44		37:35		
A5	Corridor Bus Journey Time (Range)		22:07 to 41:21		12:23 to 50:57		
A5	Corridor Bus Speed		16.18 km/h		20.27 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Blackrock to Northumberland Ave / Merrion Rd. / Anglesea Rd.*
A5	Comparison of Bus v Car Journey Times (Average)		16:38		10:38		
A5	Comparison of Bus v Car Journey Times (Range)		8:15 to 29:53		6:46 to 17:40		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Blackrock to O'Connell St. - November 2007
			7.01%		15.09%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Mount St. Bridge.
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			26.63%	20.80%	52.37%	59.71%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			2.55%	2.34%	4.86%	4.85%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			11.42%	10.24%	4,137	4,269	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			880		764		

Notes

*No Car data available at Merrion Sq.

Table 1.16 South Clondalkin QBC

Quality Bus Corridor Monitoring Annual Summary Report South Clondalkin Nov. 2010							
Spec Ref	Key Objectives		Performance Indicators				Notes
A5	Corridor Bus Journey Times		AM Peak		PM Peak		Grange Castle to Bachelors Walk / College Green
A5	Corridor Bus Journey Time (Average)		50:06		54:46		
A5	Corridor Bus Journey Time (Range)		37:22 to 1:01:49		38:38 to 1:13:54		
A5	Corridor Bus Speed		15.72 km/h		15.75 km/h		
A5	Comparison of Corridor Journey Times Bus v Car		Bus AM Peak		Car AM Peak		Grange Castle to Bachelors Walk
A5	Comparison of Bus v Car Journey Times (Average)		50:06		01:01:08*		
A5	Comparison of Bus v Car Journey Times (Range)		37:22 to 1:01:49		01:01:08 to 01:01:08		
B2	Boarding & Alighting Time / % of total journey time		AM Peak		PM Peak		Grange Castle to Bachelors Walk November 2007
			14.92%		10.83%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)		% Mode Share at Canal Cordon				Survey at Dolphins Barn
			Bus		Car		
			Nov-09	Nov-10	Nov-09	Nov-10	
			41.86%	43.81%	49.14%	46.30%	
			Taxi		Cycle		
			Nov-09	Nov-10	Nov-09	Nov-10	
			1.61%	2.09%	1.53%	1.85%	
			Walking		Total Persons		
			Nov-09	Nov-10	Nov-09	Nov-10	
			3.47%	3.63%	6,536	6,555	
E1	Passenger Journeys (Total)		Nov-09		Nov-10		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
			563		522		

Notes

*Based on 1 Observation.

5. Trends in Bus Supply and Patronage

5.1 Trends in Bus Supply and Patronage 1997 to 2010

Table 2 gives a summary of the trends in bus supply and bus patronage between November 1997 and November 2010 in respect of the initial QBC radial routes, as measured at the point where each radial QBC crosses the Canal Cordon. The table also compares the bus figures with the number of cars crossing each Cordon point.

Table 2: Summary of Progress 1997 – 2010

QBC Monitoring Nov 1997 - Nov 2010 Cars Crossing Canal Cordon by Corridor BAC Buses Crossing Canal Cordon by Corridor BAC Bus Passengers Crossing Canal by Corridor 0700 - 1000				
Corridor	Mode	Nov. 1997	Nov. 2010	% Change
Stillorgan	Cars	5,794	4,159	-28%
	Buses	40	100	150%
	Bus PAX	1,787	4,375	145%
Blanchardstown	Cars	5,963	5,215	-13%
	Buses	83	113	36%
	Bus PAX	4,573	4,896	7%
Lucan	Cars	6,104	5,326	-13%
	Buses	71	106	49%
	Bus PAX	4,303	5,677	32%
Finglas / Swords	Cars	5,678	5,391	-5%
	Buses	112	172	54%
	Bus PAX	5,670	7,681	35%
North Clondalkin	Cars	1,555	1,980	27%
	Buses	46	37	-20%
	Bus PAX	2,079	1,410	-32%
Malahide	Cars	4,620	3,525	-24%
	Buses	133	157	18%
	Bus PAX	4,747	7,936	67%
Tallaght	Cars	3,314	1,983	-40%
	Buses	72	95	32%
	Bus PAX	4,098	3,732	-9%
Rathfarnham	Cars	3,605	2,921	-19%
	Buses	76	52	-32%
	Bus PAX	3,285	2,445	-26%
Total	Cars	36,633	30,500	-17%
	Buses	633	832	31%
	Bus PAX	30,542	38,152	25%

Table 2 shows that overall there has been a 31% increase in bus supply and a 25% increase in bus patronage on the QBC radials over the past 13 years, and a corresponding decrease of 17% in the number of cars crossing the Canal Cordon on these QBC routes.

5.2 Changes since 2009

Table 3 below shows the changes in bus supply and patronage on the radial QBC routes over the last 12 months.

Table 3: Summary of Progress 2009 – 2010

QBC Monitoring Nov 2009 - Nov 2010 Cars Crossing Canal Cordon by Corridor BAC Buses Crossing Canal Cordon by Corridor BAC Bus Passengers Crossing Canal by Corridor 0700 - 1000				
Corridor	Mode	Nov. 2009	Nov. 2010	% Change
Stillorgan	Cars	3,793	4,159	10%
	Buses	110	100	-9%
	Bus PAX	4,378	4,375	0%
Blanchardstown	Cars	4,924	5,215	6%
	Buses	125	71	-43%
	Bus PAX	5,636	3,658	-35%
Lucan	Cars	5,049	5,326	5%
	Buses	100	106	6%
	Bus PAX	5,776	5,677	-2%
Finglas / Swords	Cars	4,917	5,391	10%
	Buses	169	75	-56%
	Bus PAX	6,831	7,681	12%
North Clondalkin	Cars	1,895	1,980	4%
	Buses	37	37	0%
	Bus PAX	1,965	1,410	-28%
Malahide	Cars	2,512	3,525	40%
	Buses	163	157	-4%
	Bus PAX	9,314	7,936	-15%
Tallaght	Cars	1,818	1,983	9%
	Buses	93	95	2%
	Bus PAX	4,819	3,732	-23%
Rathfarnham	Cars	2,758	2,921	6%
	Buses	53	52	-2%
	Bus PAX	2,531	2,445	-3%
Total	Cars	27,666	30,500	10%
	Buses	850	693	-18%
	Bus PAX	41,250	36,914	-11%

Table 3 shows that in the last year, there has been a decrease in bus supply of 18% on the initial radial QBC routes and a resultant decrease in bus patronage of 11%. In the past year, there has been a 10% increase in the number of cars crossing the Canal Cordon on these QBC radial routes.

6. Comparative Bus & Car Journey Times in the Morning & Evening Peak

The performance of each of the 16 QBC's was measured in terms of bus journey times compared to car journey times for inbound journeys in the AM Peak on specific sections of each route. Table 4 summarises the results of this comparison of bus and car journey times and describes the section of each QBC where the journey times were measured.

Table 4: Comparative Bus and Car Journey Times in the AM Peak

Quality Bus Corridor Monitoring Nov. 2010 Summary of AM Peak Comparative Bus and Car Journey Times					
Corridor	Section Measured	Bus Ave. Journey Time	Car Ave. Journey Time	Time Diff.	% Diff.
Finglas	Finglas to Dorset St. Lwr.	00:16:07	00:31:23	00:15:16	94.7%
Clontarf	Clontarf Bus Garage to Malahide Rd.	00:09:58	00:16:25	00:06:27	64.7%
North Clondalkin	Coldcut Rd. to Cornmarket	00:17:41	00:22:57	00:05:16	29.8%
Malahide	Greencastle Rd. to Malahide Rd. at Golf Club	00:10:16	00:13:01	00:02:45	26.8%
Lucan	Foxhunter Pub to Arran Quay	00:28:08	00:34:53	00:06:45	24.0%
Blanchardstown	New River Rd. to Manor St.	00:22:24	00:27:40	00:05:16	23.5%
South Clondalkin	Grange Castle to Bachelors Walk	00:50:06	01:01:08	00:11:02	22.0%
Crumlin Road	Crumlin Rd. / St. Mary's Rd. to Dean St.	00:14:47	00:15:53	00:01:06	7.4%
Bray	Bray to Stillorgan Rd. / Mount Merrion Ave.	00:39:15	00:40:51	00:01:36	4.1%
Stillorgan	Stillorgan Rd. / Mount Merrion Ave. to Leeson St.	00:20:33	00:21:19	00:00:46	3.7%
Swords	Airside Business Park to Dorset St. Lwr.	00:40:23	00:41:51	00:01:28	3.6%
Ballymun	Ballymun to Dorset St. Lwr.	00:22:23	00:23:02	00:00:39	2.9%
Rathfarnham	Rathfarnham to Aungier St. / Bishop St.	00:31:51	00:29:57	(00:01:54)	-6.0%
Tallaght	West of M50 to Camden St. Upper	00:36:25	00:32:57	(00:03:28)	-9.5%
Howth Road	Raheny to Clontarf Rd. / Malahide Rd.	00:15:44	00:10:27	(00:05:17)	-33.6%
Rock Road	Blackrock to Merrion Rd.	00:16:38	00:10:38	(00:06:00)	-36.1%

Table 4 shows that average Bus journey times in the morning peak were less than the corresponding car average journey times in the case of 12 out of the 16 QBCs monitored. In the case of the 7 top performing QBC's, bus speeds were more than 20% faster than the equivalent car speeds on the sections of the route where the measurements were taken. Of the 4 QBCs where average car journey times were less than their corresponding bus journey times; 2 were within 10% and all were within 6 minutes of the equivalent car journey time.

Table 5: Comparative Bus and Car Journey Times in the PM Peak

Quality Bus Corridor Monitoring Nov. 2010 Summary of PM Peak Comparative Bus and Car Journey Times					
Corridor	Section Measured	Bus Ave. Journey Time	Car Ave. Journey Time	Time Diff.	% Diff.
Blanchardstown	Manor St. to New River Rd.	00:19:29	00:31:01	00:11:32	59.2%
Stillorgan	Leeson St. to Stillorgan Rd.	00:19:57	00:26:20	00:06:23	32.0%
Clontarf	Malahide Rd. to Clontarf Bus Garage	00:09:29	00:12:27	00:02:58	31.3%
Swords	Dorset St. Lwr. to Airside Business Park	00:38:45	00:48:52	00:10:07	26.1%
Howth Road	Fairview / Malahide Rd. to Raheny	00:16:28	00:19:32	00:03:04	18.6%
Rock Road	Merrion Rd. to Blackrock	00:21:33	00:25:02	00:03:29	16.2%
Lucan	Wellington Quay to Foxhunter Pub	00:47:03	00:49:56	00:02:53	6.1%
Finglas	Dorset St. Lwr. to Finglas	00:17:38	00:18:01	00:00:23	2.2%
South Clondalkin	Bachelors Walk to Grange Castle	00:54:46	00:55:25	00:00:39	1.2%
North Clondalkin	Cornmarket to Coldcut Rd.	00:31:57	00:31:13	(00:00:44)	-2.3%
Malahide	Malahide Rd. at Golf Club to Greencastle Rd.	00:14:23	00:13:03	(00:01:20)	-9.3%
Rathfarnham	Aungier St. / Bishop St. to Rathfarnham	00:29:56	00:26:40	(00:03:16)	-10.9%
Ballymun	Dorset St. Lwr. to Ballymun	00:23:11	00:19:34	(00:03:37)	-15.6%
Tallaght	Harcourt Rd. to West of M50	00:33:38	00:27:24	(00:06:14)	-18.5%
Bray	Stillorgan Rd. / Mount Merrion Ave. to Bray	00:36:16	00:29:00	(00:07:16)	-20.0%
Crumlin Road	Dean St. to Crumlin Rd. / St. Mary's Rd.	00:15:30	00:12:01	(00:03:29)	-22.5%

In the evening peak 9 out of the 16 QBC's monitored had lower average journey times than that for car. Out of the 7 QBC's that had greater average bus journey times than car; 5 were within 5 minutes of the equivalent car journey time. The worst performing QBC was the Crumlin Road QBC on which bus journey times were 22.5% (03:29 minutes) slower than corresponding car journey times. In general average bus and car journey times in the evening peak are closer than the morning peak. This could be as a result of the less spread out nature of the evening peak as opposed to the morning peak.

Section 9 below gives a detailed breakdown of average bus speeds on a sectional basis for AM Peak inbound, PM Peak outbound and Inter Peak inbound and outbound by corridor.

7. QBC Performance relative to 2009

7.1 QBC Performance relative to 2009

Table 6 compares the performance of the 9 initial radial QBC's relative to the results in 2009 for the key performance indicators as follows:

- Bus average journey times in the morning peak period inbound to the city.
- Bus average journey times in the evening peak period outbound from the city.
- Bus average speeds in the morning peak period inbound.
- Bus average speeds in the evening peak period outbound.
- Bus passengers on designated QBC routes in the morning peak period inbound.
- Cars crossing the canal cordon points in the morning peak period inbound.
- Bus mode share in the morning peak period inbound.

Table 7 gives the same comparison for the 7 remaining QBC's. The areas highlighted in yellow in each table indicate those areas where performance has improved since 2009.

Both tables give the relevant targets from the QBC specification (see Appendix 1) where appropriate.

Table 6: Performance Indicators 2009/2010

Quality Bus Corridor Monitoring Nov. 2010 QBC Performance Indicators Comparison 2009 - 2010																
Corridor	Bus Journey Times AM		Bus Speeds AM Peak		Bus Journey Times PM Peak		Bus Speeds PM Peak		BAC Bus PAX QBC Routes		Cars Crossing Canal Cordon		Bus Mode Share		Fleet Ave. Age	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Blanchardstown	28:30	32:00	17.60	15.70	35:52	36:03	14.55	13.96	4,424	3,658	4,924	4,902	46.40%	43.51%	4.2	4.8
Finglas	18:30	28:34	17.10	14.3	27:05	27:17	11.25	14.92	2,313	2,116	4,917	4,867	51.73%	44.50%	16	3.9
Lucan	28:28	33:55	24.02	20.5	21:03	47:03	31.82	18.16	4,685	4,680	5,049	4,816	48.77%	48.58%	5.1	6.0
Malahide	21:12	22:29	16.13	15.2	19:51	21:44	17.12	15.73	4,687	4,471	2,512	2,808	63.52%	57.47%	4.5	5.6
North Clondalkin	37:35	35:00	14.25	14.8	35:50	41:30	14.98	12.6	1,462	1,280	1,895	1,899	43.70%	35.56%	8.8	7.8
Rathfarnham	31:51	34:41	11.49	10.6	35:47	37:17	10.87	9.81	1,622	1,495	2,758	2,772	34.45%	33.66%	6.9	7.8
Stillorgan	32:04	32:02	17.19	17	28:13	29:07	19.47	18.7	3,271	3,285	3,793	3,789	41.22%	40.56%	5.5	5.4
Swords	49:30	52:21	17.16	15.2	59:35	57:34	14.17	13.8	2,193	2,767	4,917	4,867	51.73%	44.50%	5.4	6.2
Tallaght	43:48	45:14	12.40	12	47:09	45:24	12.53	12.69	3,233	2,629	1,818	1,774	52.00%	45.84%	7.7	8.5
Total for 9 QBCs	N/A	N/A	16.09	15.01	N/A	N/A	15.29	14.49	27,890	26,381	32,583	32,494	49.48%	43.59%	5.1	6.1
QBC Spec.	N/A	N/A	17.60	17.60	N/A	N/A	17.6	17.6	N/A	N/A	N/A	N/A	N/A	N/A	5	5

Notes

N/A = Not Applicable

ND = No Data

QBC Specification of Bus Journey Speed of 20 kph minimum excluding boarding and alighting time (ave. 12%)

BAC Bus Pax source: Cordon Counts 0700-1000

Swords & Finglas QBC both cross cordon at Binns Bridge

Items **Highlighted** Indicate an Improvement in last 12 Months

Table 7: Performance Indicators 2009/2010

Quality Bus Corridor Monitoring Nov. 2010 QBC Performance Indicators Comparison 2009 - 2010																
Corridor	Bus Journey Times AM		Bus Speeds AM Peak		Bus Journey Times PM Peak		Bus Speeds PM Peak		BAC Bus PAX QBC Routes		Cars Crossing Canal Cordon		Bus Mode Share		Fleet Ave. Age	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
Ballymun	25:08	31:44	15.52	11.28	29:54	31:17	13.13	11.4	1,684	1,544	2,465	2,491	40.64%	35.81%	6.8	6.9
Bray	23:47	28:04	24.03	22.23	22:36	27:35	25.16	22.6	1,565	1,711	1,705	1,711	26.63%	20.80%	2.8	4.3
Clontarf	07:34	09:58	21.75	16.51	09:29	09:29	18.28	18.3	1,668	1,474	2,512	2,808	63.52%	57.47%	7.5	8.7
Crumlin Rd.	23:06	29:49	14.39	14.85	23:09	31:30	14.01	13.7	2,371	2,401	2,433	2,401	41.86%	43.81%	7.2	8.8
Howth Rd.	12:37	15:44	19.75	15.84	13:52	16:28	18.81	15.2	1,666	1,124	2,512	2,808	63.52%	57.47%	4.8	8.8
Rock Rd.	28:46	30:44	17.24	16.18	34:25	37:35	13.44	13.20	880	764	1,705	1,711	26.63%	20.80%	5.6	6.6
South Clondalkin	49:45	50:06	15.73	15.72	45:30	54:46	17.02	15.8	563	522	2,433	2,401	41.86%	43.81%	3.0	4.2
Total for 7 QBCs	N/A	N/A	18.52	16.02	N/A	N/A	14.54	15.73	10,397	9,540	9,115	9,411	49.58%	43.59%	5.7	6.8
QBC Spec.	N/A	N/A	17.60	17.60	N/A	N/A	17.6	17.6	N/A	N/A	N/A	N/A	N/A	N/A	5	5

Notes

N/A = Not Applicable

ND = No Data

QBC Specification of Bus Journey Speed of 20 kph minimum excluding boarding and alighting time (ave. 12%)

BAC Bus Pax source: Cordon Counts 0700-1000

Canal Crossing point for Clontarf QBC & Howth Rd. QBC at Newcomen Bridge

Canal Crossing point for Crumlin Road QBC & South Clondalkin QBC at Dolphins Barn

Items **Highlighted** Indicate an Improvement in last 12 Months

8. Mode Share

8.1 Mode Share at the Canal Cordon

The performance of the QBC's can be measured in terms of their impact on the mode share of people travelling across the cordon formed by the Royal and Grand Canals by the different means of travel in the AM-Peak. The NTA has assembled data for the Canal Cordon from QBC monitoring and a number of other sources as follows:

- Dublin City Council has been undertaking surveys at 33 locations around the Canal Cordon (see Appendix 4 for a map of these locations) on a single day in November each year since 1980. This survey counts pedestrians, cyclists, cars, taxis, buses, goods vehicles and motorcycles crossing the cordon points in the inbound direction in the three hour period 07:00 to 10:00. The survey, however does not count the numbers of people travelling across the cordon in buses, trains or LUAS trams, and hence cannot give a full picture of mode share in terms of the movement of people into the city centre.
- To complement the Dublin City Council Canal Cordon annual surveys, Dublin Bus have undertaken their own surveys annually on a single day in November (not necessarily on the same day as the Dublin City Council cordon counts). This survey counts the number of passenger on all buses (including privately operated bus services) crossing inbound over the canal cordon points. This survey is undertaken at the 22 cordon points that are on bus routes into the city (shown in red on the map).
- Iarnrod Eireann have undertaken a Rail census on a single day in November at all rail stations on the DART and suburban rail network within the Greater Dublin Area (GDA). The census has been undertaken in most years (there are a number of gaps) since 1997. This census counts passenger boardings and alightings of all trains passing through all GDA rail stations on the specific day and enables a calculation of the numbers of rail passengers crossing the three Canal Cordon points (in the inbound direction) between 07:00 and 10:00 on the census day.
- The Railway Procurement Agency have annually undertaken a full census of boardings and alightings at all LUAS tram stops (Red and Green lines and extensions). This census is undertaken in a single day in November, and has been undertaken every year since both LUAS lines became operational in 2004. This data enables calculation of the numbers of LUAS passengers crossing the two Canal Cordon points inbound between 07:00 and 10:00 on the census day.

By combining these four data sources, the NTA has been able to compile a comprehensive picture of the modes of travel used by people travelling across the Canal Cordon into the city on a typical morning peak period. There are a number of gaps in some of the sources of data in some years, and some changes in survey methodology have been introduced in recent years in the case of the Dublin City Council cordon counts. In addition, the introduction of LUAS had a significant impact on the data trends. For these reasons, the analysis of trends in this section is restricted to the years 2006 to 2011. For these six years, the Authority has access to a consistent and continuous set of data that enables a direct comparison of mode share trends.

The impact of the QBC's on mode share at the Canal Cordon is shown in the data presented in the 4 tables below:

Table 8 shows the number of people entering the city at those crossing points that are served by Quality Bus Corridors.

- Table 8a** shows the same results for the other crossing points that are served by bus.
- Table 8b** shows the same results for the remaining crossing points that have no bus services and also provides the summary position for the whole cordon.
- Table 8c** is a summary of the mode share covering the years 2006 to 2010.

Table 8: QBC Cordon Points

Mode Share - November 2010																	
Corridor	All Bus Pax	Mode Share	Rail	Mode Share	Car Persons	Mode Share	Taxi Pax	Mode Share	CV	Mode Share	M/C	Mode Share	Cycle	Mode Share	Walk	Mode Share	Totals
Stillorgan 121	4,452	40.56%			4,585	41.78%	215	1.96%	30	0.27%	168	1.53%	622	5.67%	903	8.23%	10,975
Lucan 127	6,569	48.58%			6,116	45.23%	296	2.19%	125	0.92%	146	1.08%	137	1.01%	134	0.99%	13,523
Blanchardstown 13	6,136	43.51%			6,373	45.19%	182	1.29%	76	0.54%	120	0.85%	276	1.96%	941	6.67%	14,104
Malahide 125	7,936	27.02%	15,558	52.98%	3,510	11.95%	416	1.42%	33	0.11%	194	0.66%	833	2.84%	888	3.02%	29,368
Tallaght 117	3,732	45.84%			2,076	25.50%	121	1.49%	23	0.28%	64	0.79%	609	7.48%	1,517	18.63%	8,142
Swords/Finglas 120	6,296	44.50%			5,840	41.28%	299	2.11%	61	0.43%	175	1.24%	384	2.71%	1,092	7.72%	14,147
Rathfarnham 122	2,445	33.66%			3,382	46.56%	86	1.18%	32	0.44%	137	1.89%	514	7.08%	668	9.20%	7,264
North Clondalkin 122	1,410	35.56%			2,317	58.44%	47	1.19%	50	1.26%	24	0.61%	27	0.68%	90	2.27%	3,965
Crumlin Road 132	2,872	43.81%			3,035	46.30%	137	2.09%	102	1.56%	50	0.76%	121	1.85%	238	3.63%	6,555
Rock Road 124	888	20.80%			2,549	59.71%	100	2.34%	20	0.47%	68	1.59%	207	4.85%	437	10.24%	4,269
Phibsborough Rd 139	2,598	35.81%			3,462	47.72%	161	2.22%	47	0.65%	68	0.94%	184	2.54%	735	10.13%	7,255
QBC Totals	45,334	37.92%	15,558	13.01%	43,245	36.17%	2,060	1.72%	599	0.50%	1,214	1.02%	3,914	3.27%	7,643	6.39%	119,567

Table 8a: Non QBC Cordon Points

Mode Share - November 2010																			
Cordon	All Bus Pax	Mode Share	Rail	Mode Share	Luas Pax	Mode Share	Car Persons	Mode Share	Taxi Pax	Mode Share	CV	Mode Share	M/C	Mode Share	Cycle	Mode Share	Walk	Mode Share	Totals
Charlemount 111	133	1.48%			6,106	68.13%	1,412	15.76%	41	0.46%	17	0.19%	35	0.39%	283	3.16%	935	10.43%	8,962
South Circular Rd 112	511	5.85%	2,791	31.93%	3,005	34.38%	2,096	23.98%	48	0.55%	14	0.16%	28	0.32%	60	0.69%	187	2.14%	8,740
Charleville Road 134	662	41.74%					776	48.93%	17	107%	10	0.63%	6	0.38%	35	2.21%	80	5.04%	1,586
Baggot Street 115	276	7.63%					2,069	57.23%	92	2.54%	17	0.47%	67	1.85%	229	6.33%	865	23.93%	3,615
Ballybough Rd 120	781	13.27%					4,324	73.47%	46	0.78%	38	0.65%	31	0.53%	156	2.65%	509	8.65%	5,885
Barrow Street 113	489	11.65%					2,019	48.11%	191	4.55%	57	1.36%	27	0.64%	200	4.77%	1,214	28.93%	4,197
Clogher Road 119	166	6.74%					2,015	81.81%	28	1.14%	20	0.81%	24	0.97%	62	2.52%	148	6.01%	2,463
Non QBC Totals	3,018	8.48%	2,791	7.84%	9,111	25.59%	14,872	41.76%	463	1.30%	173	0.49%	218	0.61%	1,025	2.88%	3,938	11.06%	35,609
QBC Totals	45,334	37.92%	15,558	13.01%			43,245	36.17%	2,060	1.72%	599	0.50%	1,214	1.02%	3,914	3.27%	7,643	6.39%	119,567
All Bus Crossings	48,352	31.16%	18,349	11.82%	9,111	5.87%	58,117	37.45%	2,523	1.63%	772	0.50%	1,432	0.92%	4,939	3.18%	11,581	7.46%	155,176

Table 8b: Non Bus Cordon Points & Cordon Totals

Mode Share - November 2010																			
Cordon	All Bus Pax	Mode Share	Rail	Mode Share	Luas Pax	Mode Share	Car Persons	Mode Share	Taxi Pax	Mode Share	CV	Mode Share	M/C	Mode Share	Cycle	Mode Share	Walk	Mode Share	Totals
Grand Canal St 121	-		5,231	62.47%			1,765	21.08%	66	0.79%	15	0.18%	39	0.47%	18	1.41%	1,139	13.60%	8,373
Huband Bridge 128	-						458	48.78%	21	2.24%	6	0.64%	19	2.02%	136	14.48%	299	31.84%	939
Herberton Bridge 118	-						2,473	86.65%	52	1.82%	23	0.81%	22	0.77%	121	4.24%	163	5.71%	2,854
Kilmainham Lane 112	-						981	85.83%	6	0.52%	4	0.35%	21	1.84%	61	5.34%	70	6.12%	1,143
Phoenix Park Main 121	-						1,100	68.03%	4	0.25%	6	0.37%	68	4.21%	216	13.36%	223	13.79%	1,617
Phoenix Park Back 117	-						1,577	93.70%	8	0.48%	8	0.48%	4	0.24%	17	1.01%	69	4.10%	1,683
Annamore Road 119	-						614	69.07%	18	2.02%	11	1.24%	5	0.56%	33	3.71%	208	23.40%	889
Royal Canal Bank 137	-						33	12.69%	-	0.00%	1	0.38%	1	0.38%	51	19.62%	174	66.92%	260
Russell Street 123	-						1,536	80.76%	36	1.89%	16	0.84%	17	0.89%	87	4.57%	210	11.04%	1,902
Ossory Road 131	-						313	51.57%	7	1.15%	5	0.82%	7	1.15%	38	6.26%	237	39.04%	607
Sheriff St Lower 122	-						1,187	75.46%	20	1.27%	35	2.23%	13	0.83%	27	1.72%	291	18.50%	1,573
North Wall Quay 121	-						1,140	61.39%	33	1.78%	114	6.14%	17	0.92%	116	6.25%	437	23.53%	1,857
Non Bus Totals	-		5,231	22.07%			13,177	55.61%	271	1.14%	244	1.03%	233	0.98%	1,021	4.31%	3,520	14.85%	23,697
Non QBC Totals	3,018	8.48%	2,791	7.84%	9,111	25.59%	14,872	41.76%	463	1.30%	173	0.49%	218	0.61%	1,025	2.88%	3,938	11.06%	35,609
QBC Totals	45,334	37.92%	15,558	13.01%	-		43,245	36.17%	2,060	1.72%	599	0.50%	1,214	1.02%	3,914	3.27%	7,643	6.39%	119,567
All Bus Crossings	48,352	31.16%	18,349	11.82%	9,111	5.87%	58,117	37.45%	2,523	1.63%	772	0.50%	1,432	0.92%	4,939	3.18%	11,581	7.46%	155,176
All Crossings*	50,420	27.88%	23,580	13.04%	9,111	5.04%	71,979	39.80%	2,260	1.25%	993	0.55%	1,485	0.82%	5,952	3.29%	15,092	8.34%	180,871

*A cordon wide average occupancy has been applied to cars and taxi's also private bus pax have also been included.

Table 8c: Mode Share Summary 1997 to 2010

Mode Share Summary - Persons Crossing Canal Cordon 0700-1000																					
Year	Total	Bus	Bus %	Rail	Rail %	Luas	Luas %	All PT	PT %	Car	Car%	Taxi	Taxi %	Walk	Walk%	Cycle	Cycle%	CV	CV%	MC	MC%
2006	200,171	59,874	30%	33,534	17%	9,029	5%	102,437	51.2%	68,457	34%	2,638	1%	17,114	9%	4,839	2%	2,291	1%	2,395	1%
2007	203,959	57,201	28%	35,692	17%	9,171	4%	102,064	50.0%	71,596	35%	2,155	1%	18,594	9%	5,676	3%	1,445	1%	2,429	1%
2008	199,722	60,438	30%	32,324	16%	9,242	5%	102,004	51.1%	67,722	34%	1,927	1%	18,351	9%	6,140	3%	1,214	1%	2,364	1%
2009	187,827	56,168	30%	25,723	14%	8,776	5%	90,667	48.3%	71,185	38%	2,814	2%	14,636	8%	5,520	3%	1,073	1%	1,932	1%
2010	180,871	50,420	28%	23,580	13%	9,111	5%	83,111	46.0%	71,978	40%	2,260	1%	15,092	8%	5,952	3%	993	1%	1,485	1%

Notes

Taxi figures are passengers carried - taxi occupancy counted by DCC.

CV - Commercial vehicles.

MC – Motorcycles.

Luas services were introduced in 2004.

All data collected in November of each year.

9. Average Bus Speeds by Corridor

Tables 9.1 to 9.16 contain details on average bus speed for each of the QBC corridors (inbound and outbound) on a sectional basis. In 2010 the NTA contracted *Count on Us* to carry out a series of roadside surveys in order to capture data for each corridor. Detailed roadside survey data is not available for every section of all corridors. Where no survey data exists, Dublin Bus AVL data has been used replace / supplement road side data. Where AVL data has been used, this is indicated in the table title.

Table 9.1a Blanchardstown QBC Average Speeds Inbound

Blanchardstown QBC AVL Average Speed Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Hartstown Rd.	Clonsilla Rd./Coolmine Rd.	2,187	7.2	8.6	9.4	7.6	8.0	8.3
Clonsilla Rd./Coolmine Rd.	Blanchardstown Main St.	1,187	16.8	19.4	20.6	14.1	16.6	19.2
Blanchardstown Main St.	Morgan's Place	2,159	15.5	16.8	18.9	ND	ND	ND
Morgan's Place	Phoenix Park Station	515	19.1	23.9	26.9	4.5	4.6	4.8
Phoenix Park Station	Old Race Course	448	27.8	35.7	44.8	33.6	43.7	53.8
Old Race Course	Kempton Avenue	776	27.1	28.8	30.0	26.9	34.9	43.0
Kempton Avenue	Ashtown Grove	465	13.5	17.6	27.9	20.4	34.9	49.3
Ashtown Grove	Kinvara Avenue	471	14.2	21.2	26.9	22.6	35.5	48.4
Kinvara Avenue	Nephrin Road	608	8.8	11.5	15.0	11.0	18.7	26.4
Nephrin Road	Skreen Road	446	21.4	22.6	25.1	32.8	49.9	67.0
Skreen Road	Cabra Cross	489	13.6	18.2	23.8	11.5	23.7	35.9
Cabra Cross	Old Cabra Rd. Railway Brdg.	266	14.7	17.7	20.8	23.9	34.7	45.6
Old Cabra Rd. Railway Brdg.	Prussia St. / NCR	477	6.0	8.7	14.9	13.0	14.9	16.8
Prussia St. / NCR	Stanhope St. Convent	663	3.9	6.2	7.0	22.7	22.8	22.9
Stanhope St. Convent	Arran Quay	1,039	9.4	12.6	13.9	10.3	12.4	14.5
Arran Quay	Bachelors Wlk (Stop EP)	963	8.3	11.4	13.1	8.9	10.2	11.4

Table 9.1b Blanchardstown QBC Average Speeds Outbound

Blanchardstown QBC AVL Average Speed Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Essex Quay	Arbour Place	1,442	9.0	9.5	10.0	9.9	12.1	14.3
Arbour Place	Prussia Street	723	13.0	15.5	18.6	16.2	18.3	20.5
Prussia Street	Old Cabra Road	595	10.3	14.6	20.2	16.3	17.9	19.5
Old Cabra Road	Dunard Estate	212	19.6	30.0	38.2	18.6	25.9	33.2
Dunard Estate	Hampton Green	384	13.4	18.2	28.8	17.1	18.1	19.2
Hampton Green	Nephrin Road	521	7.0	10.0	15.2	5.4	11.1	16.7
Nephrin Road	Kinvara Estate	608	12.6	14.5	16.7	12.6	14.8	17.1
Kinvara Estate	Navan Rd./Darling Est.	756	19.6	21.1	22.7	22.1	22.1	22.1
Navan Rd./Darling Est.	Ashtown Roundabout	216	4.5	11.2	17.7	5.3	10.1	15.0
Ashtown Roundabout	Old Race Course	669	21.5	24.8	29.0	23.9	28.4	33.0
Old Race Course	Phoenix Prk Rail Station	396	28.0	29.8	34.8	11.7	34.4	57.0
Phoenix Prk Rail Station	St. Brigid's GAA Club	540	29.5	39.5	45.2	54.0	54.0	54.0
St. Brigid's GAA Club	Blanchardstown Main St.	1,856	10.5	15.7	22.7	26.1	26.5	26.9
Blanchardstown Main St.	Clonsilla Rd./Coolmine Rd.	1,579	16.1	18.2	22.1	14.4	16.9	19.5
Clonsilla Rd./Coolmine Rd.	Hartstown Rd.	2,252	5.8	7.3	8.5	5.4	6.6	7.7
Hartstown Rd.	Hansfield Road	4,001	9.8	9.8	9.8	ND	ND	ND

Table 9.2a Finglas QBC Average Speeds Inbound

Finglas QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Mellowes Rd. Brdg.	Finglas Rd.	547	6.0	10.5	15.4	7.8	8.4	9.0
Finglas Rd.	Prospect Rd.	3,222	13.7	19.8	34.2	12.4	22.9	34.0
Prospect Rd.	Dorset St. Lwr.	957	ND	ND	ND	ND	ND	ND
Dorset St. Lwr.	Frederick St. Nrth.	703	3.3	14.4	47.4	3.0	9.5	25.9
Frederick St. Nrth.	Parnell Sq. East	390	4.7	14.3	49.8	5.4	16.1	43.8
Parnell Sq. East	Lwr O'Connell St.	591	4.1	13.6	46.6	4.6	12.9	46.6
Lwr O'Connell St.	St Stephens Green	1,763	ND	ND	ND	ND	ND	ND
Finglas Rd.	Parnell Sq. East	5,856	12.9	15.3	19.8	14.8	15.4	16.0

Table 9.2b Finglas QBC Average Speeds Outbound

Finglas QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
St Stephens Green	Bank of Ireland	1,228	ND	ND	ND	ND	ND	ND
Bank of Ireland	O'Connell St. Lwr	501	ND	ND	ND	ND	ND	ND
Parnell St.	Dorset St. Lwr.	1,218	4.2	8.0	20.3	7.0	9.3	11.4
Dorset St. Lwr.	Prospect Rd.	952	ND	ND	ND	ND	ND	ND
Prospect Rd.	Finglas Rd.	2,907	17.1	22.4	33.0	20.5	24.4	27.7
Finglas Rd.	Mellowes Rd. Brdg.	761	10.3	14.4	19.1	7.7	15.3	28.8
O'Connell St.	Finglas Rd.	5,575	11.1	13.8	18.2	14.0	15.9	17.2

Table 9.3a Lucan QBC Average Speeds Inbound

Lucan QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Lucan Superquinn	Penny Hill Pub	4,675	8.9	16.5	28.2	9.7	12.7	15.7
Penny Hill Pub	Fox Hunter	1,920	7.5	17.3	48.1	9.2	14.8	17.6
Fox Hunter	West of M50	2,026	2.4	31.1	48.9	33.2	39.8	47.3
West of M50	Palmerston	1,595	12.2	24.1	44.4	35.1	38.9	45.4
Palmerston	Con Colbert Road	3,868	ND	ND	ND	ND	ND	ND
Palmerston	Conyngham Road	4,347	14.2	21.0	41.8	25.3	32.9	43.7
Conyngham Road	Parkgate Street	951	9.8	20.9	48.9	18.3	33.1	47.5
Con Colbert Road	Heuston Station	1,559	ND	ND	ND	ND	ND	ND
Heuston Station	Ellis Quay	785	ND	ND	ND	ND	ND	ND
Heuston Station	Bachelors Walk	2,349	ND	ND	ND	ND	ND	ND
Parkgate Street	Ellis Quay	595	6.6	18.5	44.1	9.6	28.8	48.0
Ellis Quay	Arran Quay	497	10.6	26.8	49.6	16.1	32.1	48.3
Arran Quay	Bachelors Walk	1,067	6.7	13.5	41.9	12.4	18.7	33.1
Fox Hunter (via bypass)	Bachelors Walk	11,397	13.8	21.4	29.3	N/A	N/A	N/A
Fox Hunter (Chapelizod)	Bachelors Walk	11,078	14.8	19.0	25.2	25.6	30.5	41.2

Table 9.3b Lucan QBC Average Speeds Outbound

Lucan QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Pearse Street	Wellington Quay	640	2.6	6.1	11.7	ND	ND	ND
Wellington Quay	Merchants Quay	824	3.8	10.1	21.6	3.5	13.8	30.8
Merchants Quay	Conyngham Road	2,222	12.6	18.5	26.9	13.6	20.0	27.1
Merchants Quay	Heuston Station	1,286	8.8	15.7	36.0	8.7	11.2	12.9
Heuston Station	Con Colbert Road	1,592	17.4	32.2	47.3	ND	ND	ND
Con Colbert Road	Palmerston	3,935	35.6	42.2	49.9	ND	ND	ND
Conyngham Road	Palmerston	4,801	17.6	26.1	44.3	34.3	37.6	44.5
Palmerston	West of M50	1,558	10.5	23.3	43.3	19.8	22.9	25.7
West of M50	Fox Hunter	1,967	16.6	22.8	36.4	22.6	30.1	44.3
Fox Hunter	Penny Hill Pub	1,581	16.3	32.1	48.5	21.0	28.5	39.7
Penny Hill Pub	Lucan Superquinn	4,726	6.0	10.1	16.0	15.0	15.0	15.0
Pearse St. (via bypass)	Fox Hunter	11,162	16.3	17.7	20.5	ND	ND	ND
Pearse St. (via Chapelizod)	Fox Hunter	11,372	12.8	14.8	16.6	ND	ND	ND

Table 9.4a Malahide QBC Average Speeds Inbound

Malahide QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Clare Hall Estate	Belcamp Lane	644	7.6	13.4	23.9	9.1	17.2	29.4
Belcamp Lane	Darndale Rdbt.	416	12.0	20.9	34.8	17.2	23.2	34.8
Darndale Rdbt.	Newton Cottages	510	24.5	32.3	52.5	20.9	34.6	61.2
Newton Cottages	Tonlegee Rd.	605	0.3	19.1	34.0	10.1	18.5	38.9
Tonlegee Rd.	Artane Rdbt.	909	9.1	18.3	30.3	15.7	24.5	39.9
Artane Rdbt.	Killester Ave.	603	11.0	17.5	21.7	16.8	24.9	41.0
Killester Ave.	Donnycarney Crch.	666	8.1	14.8	27.0	11.5	18.6	31.6
Donnycarney Crch.	Griffith Ave.	896	14.8	21.5	37.5	21.5	30.7	49.7
Griffith Ave.	Fairview Footbridge	718	10.3	16.1	20.8	11.3	17.1	34.5
Fairview Footbridge	Annesley Bridge	592	8.6	16.7	28.4	16.1	26.9	47.3
Annesley Bridge	Newcomen Bridge	557	10.3	17.0	29.1	15.2	23.3	34.0
Newcomen Bridge	Connolly Station	442	11.0	16.4	28.9	14.1	20.1	33.9
Connolly Station	Burgh Quay (Stop AB)	1,002	8.1	11.0	17.8	11.3	13.4	20.6

Table 9.4b Malahide QBC Average Speeds Outbound

Malahide QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Eden Quay (Stop EL)	Connolly Station	680	3.4	8.1	14.6	7.4	10.3	12.0
Connolly Station	Marino College	662	6.5	11.1	19.2	12.0	14.8	18.2
Marino College	Waterloo Ave.	477	9.3	12.0	15.3	11.4	13.0	14.8
Waterloo Ave.	Marino College	873	13.1	18.0	23.6	12.9	19.6	26.2
Marino College	Griffith Ave.	584	8.2	11.6	16.2	13.1	15.0	16.4
Griffith Ave.	Donnycarney Chrh	923	16.1	27.7	46.8	25.0	29.9	39.5
Donnycarney Chrh	Kilmore Rd.	705	14.5	20.1	30.2	21.0	26.4	36.2
Kilmore Rd.	Mornington Grove	482	9.5	14.9	24.8	14.1	25.2	40.4
Mornington Grove	Chanel College	669	9.6	19.0	29.0	23.6	24.0	24.8
Chanel College	Greencastle Road	798	10.8	16.1	22.8	20.4	22.5	24.5
Greencastle Road	Priorswood Rbt	629	18.3	32.7	47.2	37.1	44.9	51.5
Priorswood Rbt	Belcamp Ln.	443	13.0	18.2	23.4	16.1	22.5	26.1
Belcamp Ln.	Clare Hall Estate	642	8.6	12.8	17.6	10.1	15.7	25.1

Table 9.5a North Clondalkin QBC Average Speeds Inbound

North Clondalkin QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Liffey Valley Centre	Shancastle Prk.	1,601	0.1	24.4	38.2	19.2	25.5	31.2
Shancastle Prk.	Lucan Newlands Rd.	2,149	14.1	24.5	34.7	19.2	30.0	42.7
Lucan Newlands Rd.	Cherry Orchard Hosp.	2,947	16.8	21.7	30.8	18.5	22.8	28.1
Cherry Orchard Hosp.	Blackditch Drv.	906	9.4	25.0	42.9	21.5	25.0	27.9
Blackditch Drv.	Drumfinn Rd.	332	3.7	14.9	25.4	9.6	12.7	16.1
Drumfinn Rd.	Ballyfermot Parade	375	2.5	11.3	25.5	8.4	10.8	17.5
Ballyfermot Parade	O'Hogan Rd.	1,034	7.1	16.8	28.2	10.5	15.0	17.4
O'Hogan Rd.	St. Mary's Ave West	767	19.3	29.7	40.0	24.2	30.2	36.8
St. Mary's Ave West	Sarsfield Rd.	524	9.5	20.6	28.6	19.6	22.3	26.6
Sarsfield Rd.	Camac Clse.	482	9.9	15.2	25.5	13.4	17.0	24.1
Camac Clse.	Old Kilmainham	957	10.6	17.9	26.9	13.6	16.6	19.5
Old Kilmainham	James Street	808	8.7	22.2	40.4	22.9	27.8	35.0
James Street	Watling St	529	8.9	16.2	22.9	5.0	12.2	18.9
Watling St	St. Audeon's Church	801	5.2	9.4	15.8	8.5	11.0	15.1
St. Audeon's Church	Fishamble Street	320	3.2	9.1	18.6	6.9	8.4	9.4

Table 9.5b North Clondalkin QBC Average Speeds Outbound

North Clondalkin QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Aston Quay (Stop AE)	Essex Quay	624	0.5	8.9	12.7	14.7	18.6	22.9
Essex Quay	Thomas St.	758	6.5	9.6	13.0	8.4	10.0	14.5
Thomas St.	Bridgefoot St.	261	6.1	11.5	24.8	7.8	11.7	16.8
Bridgefoot St.	St. James Hosp.	959	9.8	14.9	20.0	11.2	14.1	18.8
St. James Hosp.	O'Reilly Ave.	265	7.7	20.6	43.3	14.2	16.7	19.1
O'Reilly Ave.	Emmet Rd.	1,328	9.4	14.4	20.3	17.7	20.5	22.3
Emmet Rd.	Sarsfield Rd.	550	4.1	6.8	10.9	6.6	8.6	11.4
Sarsfield Rd.	Sarsfield Medical Centre	503	3.4	28.7	44.1	22.6	29.6	38.5
Sarsfield Medical Centre	Ballyfermot Rd.	864	20.3	25.7	33.4	22.2	26.5	30.8
Ballyfermot Rd.	Ballyfermot Parade	933	9.1	16.8	21.1	13.5	16.7	19.9
Ballyfermot Parade	Le Fanu Rd.	392	4.9	8.0	14.4	5.9	8.8	11.2
Le Fanu Rd.	Community Centre	308	11.2	15.8	28.4	9.1	13.7	17.9
Community Centre	Cherry Orchard Hosp.	962	10.2	20.2	31.2	18.4	22.6	28.4
Cherry Orchard Hosp.	St. Mark's Ave.	1,550	11.4	21.3	30.0	14.8	21.0	26.6
St. Mark's Ave.	Coldcut Rd.	3,145	11.2	17.7	23.2	16.1	20.1	23.1
Coldcut Rd.	Liffey Valley Centre	1,430	1.9	22.4	33.6	33.4	36.6	42.2

Table 9.6a Rathfarnham QBC Average Speeds Inbound

Rathfarnham QBC AVL Average Speed Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Grange Road	Butterfield Ave.	1,729	13.4	21.7	28.3	ND	ND	ND
Butterfield Ave.	Rathfarnham Rd.	469	8.5	13.2	20.6	10.1	10.2	10.3
Rathfarnham Rd.	Dodder Bridge	258	8.5	15.9	33.1	13.3	15.8	19.3
Dodder Bridge	Terenure Rd. North	715	8.2	13.4	26.3	8.5	10.8	12.6
Terenure Rd. North	Kenilworth Prk.	956	3.8	15.0	35.1	12.7	16.8	19.0
Kenilworth Prk.	Greenmount Lane	905	7.0	13.6	25.5	13.7	18.7	22.0
Greenmount Lane	Upp. Clanbrassil St	475	7.1	14.8	28.0	9.9	19.1	23.8
Upp. Clanbrassil St	Harrington St.	635	5.8	11.5	15.3	6.2	14.5	21.2
Harrington St.	Aungier St.	893	5.1	8.7	15.4	4.1	4.5	5.4
Aungier St.	Exchequer St.	412	7.3	12.7	23.9	3.9	3.9	3.9

Table 9.6b Rathfarnham QBC Average Speeds Outbound

Rathfarnham QBC AVL Average Speed Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Exchequer St.	Aungier St.	284	4.3	8.2	14.2	4.4	6.0	7.7
Aungier St.	Synge St.	1,190	6.4	9.5	13.5	6.0	6.6	7.3
Synge St.	Upp. Clanbrassil St.	782	5.3	9.5	18.5	8.4	12.7	15.1
Upp. Clanbrassil St.	Harold's Cross Rd.	258	3.8	9.2	22.6	7.9	12.1	15.0
Harold's Cross Rd.	Rathgar Ave.	1,221	8.6	11.6	20.7	10.7	14.3	19.3
Rathgar Ave.	Terenure Rd. North	852	14.3	20.2	34.5	15.1	19.4	26.5
Terenure Rd. North	Rathfarnham Rd.	773	5.7	10.9	14.7	7.3	15.5	23.8
Rathfarnham Rd.	Crannagh Rd.	252	16.5	24.4	43.2	23.9	24.5	25.2
Crannagh Rd.	Rathfarnham Castle	259	9.6	19.6	34.6	20.3	27.4	34.6
Rathfarnham Castle	Grange Rd	386	8.3	16.9	27.8	8.4	12.0	13.9
Grange Rd	Nutgrove Ave.	1,874	11.0	14.7	17.4	ND	ND	ND

Table 9.7a Stillorgan QBC Average Speeds Inbound

Stillorgan QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Dun Laoghaire Station	Foxrock Crch.	5,539	1.1	29.7	46.6	27.3	30.8	33.3
Foxrock Crch.	Mount Merrion Ave.	3,393	6.3	19.5	48.1	N/A	N/A	N/A
Foxrock Crch. (via Stillorgan)	Mount Merrion Ave.	3,529	N/A	N/A	N/A	17.3	26.5	38.5
Mount Merrion Ave.	Donnybrook	3,267	11.7	17.6	46.6	15.0	17.7	23.2
Donnybrook	Morehampton Rd.	1,190	1.3	21.7	49.1	9.8	18.4	34.0
Morehampton Rd.	Leeson St.	1,335	3.5	20.3	48.0	3.5	19.7	28.8
Leeson St.	Westmoreland St.	1,551	1.7	11.4	20.4	1.2	9.3	17.3
Westmoreland St.	Parnell Sqr West	1,056	ND	ND	ND	ND	ND	ND
Foxrock Crch (via Stillorgan)	Leeson St.	9,321	N/A	N/A	N/A	17.3	20.8	23.1
Foxrock Crch	Leeson St.	9,185	10.2	17.2	34.0	N/A	N/A	N/A
Foxrock Crch (via Stillorgan)	Westmoreland St.	10,872	N/A	N/A	N/A	16.0	18.9	21.5
Foxrock Crch	Westmoreland St.	10,736	11.9	16.6	24.9	N/A	N/A	N/A

Table 9.7b Stillorgan QBC Average Speeds Outbound

Stillorgan QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Parnell Sqr East	D'Olier St.	838	ND	ND	ND	ND	ND	ND
D'Olier St.	Leeson St.	1,526	ND	ND	ND	ND	ND	ND
Leeson St.	Morehampton Rd.	1,304	ND	ND	ND	27.7	27.7	27.7
Morehampton Rd.	Donnybrook	1,202	7.4	13.1	49.9	14.1	22.9	34.0
Donnybrook	Mount Merrion Ave.	3,283	13.9	22.9	37.2	15.3	24.2	31.5
Mount Merrion Ave. (via Stillorgan)	Foxrock Crch	3,538	N/A	N/A	N/A	ND	ND	ND
Mount Merrion Ave.	Foxrock Crch	3,367	ND	ND	ND	N/A	N/A	N/A
Foxrock Crch	Dun Laoghaire	5,206	5.7	15.3	42.1	6.9	19.7	42.8
Leeson St. (via Stillorgan)	Foxrock Crch	9,327	N/A	N/A	N/A	ND	ND	ND
Leeson St.	Foxrock Crch	9,156	ND	ND	ND	N/A	N/A	N/A
D'Olier St. (via Stillorgan)	Foxrock Crch	10,853	N/A	N/A	N/A	ND	ND	ND
D'Olier St.	Foxrock Crch	10,682	ND	ND	ND	N/A	N/A	N/A

Table 9.8a Swords QBC Average Speeds Inbound

Swords QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
County Council Offices	Swords Main Street	282	3.5	8.0	15.7	4.8	8.6	12.1
Swords Main Street	Airside Business Park	2,040	8.7	16.5	33.4	9.3	18.4	27.1
Airside Business Park	Cloghran Roundabout	1,314	15.9	32.3	45.0	22.4	29.2	35.0
Cloghran Rbt (Direct)	Airport South	1,388	17.0	22.5	30.8	30.4	33.6	36.9
Cloghran Rbt (via Airport)	Airport South	3,886	4.7	19.5	34.4	6.8	20.2	38.1
Airport South	Omni Park	3,741	18.6	28.5	44.6	21.8	31.0	42.2
Omni Park	Collins Avenue	1,423	4.7	13.5	30.5	6.7	14.6	18.8
Collins Avenue	Richmond Road	1,532	6.9	14.5	34.5	11.6	16.1	23.3
Richmond Road	Dorset Street Lwr.	1,111	9.0	15.9	25.7	12.3	21.4	35.9
Dorset Street Lwr.	Frederick Street Nrth.	534	4.1	8.0	16.3	1.4	10.7	46.5
Frederick Street Nrth.	O'Connell Street	796	2.9	13.0	39.4	6.6	13.7	42.3
Richmond Road	O'Connell Street	2,441	5.5	10.5	17.6	17.1	12.2	7.8
Swords	O'Connell Street	12,831	13.5	15.7	17.5	23.3	23.3	23.3
Swords (via Airport)	O'Connell Street	15,329	16.1	18.7	21.0	15.2	15.2	15.2

Table 9.8b Swords QBC Average Speeds Outbound

Swords QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Lwr. Abbey Street	Dorset Street Lwr.	1,497	ND	ND	ND	ND	ND	ND
Dorset Street Lwr.	Botanic Ave.	909	4.3	8.0	18.4	6.1	11.5	19.2
Botanic Ave.	Collins Ave.	1,741	10.8	19.7	34.9	16.1	28.6	48.6
Collins Ave.	Omni Park	1,298	5.4	15.7	38.1	7.5	14.7	32.0
Omni Park	Airport South	3,746	15.7	22.4	31.1	20.3	25.0	37.0
Airport South	Cloghran Roundabout	1,360	15.7	20.7	24.7	ND	ND	ND
Airport South (via Airport)	Cloghran Roundabout	2,945	19.9	22.8	31.1	8.1	15.2	26.4
Cloghran Roundabout	Airside Business Park	1,346	14.1	27.0	45.4	31.1	40.5	47.1
Airside Business Park	Swords Main Street	1,898	7.4	13.9	26.0	13.7	15.8	19.2
Swords Main Street	Swords Co. Co. Offices	282	2.4	7.9	20.2	4.6	10.0	18.4
Lwr. Abbey St.	Swords	14,077	13.4	14.7	16.7	ND	ND	ND
Lwr. Abbey St. (via Airport)	Swords	15,662	13.0	15.4	16.8	17.7	17.7	17.7

Table 9.9a Tallaght QBC Average Speeds Inbound

Tallaght QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Blessington Rd. Church	Bancroft Rd.	507	22.2	27.1	32.0	22.2	28.6	31.4
Bancroft Rd.	Glenview Lawn	569	13.1	25.1	39.4	17.8	26.6	32.5
Glenview Lawn	M50 Roundabout	458	18.5	21.0	23.9	24.2	24.2	24.2
M50 Roundabout	Spawell Centre	1,102	14.2	26.5	35.7	19.2	26.9	40.9
Spawell Centre	Cheeverstown House	597	21.7	30.1	42.1	25.9	35.8	42.1
Cheeverstown House	Cypress Grove Road	428	8.5	12.0	14.8	12.8	17.3	21.7
Cypress Grove Road	Riverside Cottages	401	15.9	23.2	29.5	22.9	25.6	28.9
Riverside Cottages	Springfield Road	314	10.3	14.4	20.6	10.7	16.6	21.8
Springfield Road	Bushy Park	257	15.4	21.0	40.2	14.7	30.1	46.2
Bushy Park	Rathdown Park	823	8.1	17.3	30.6	39.0	42.0	47.0
Rathdown Park	Healthfield Road	514	3.3	7.9	19.9	9.0	11.1	13.1
Healthfield Road	Rathgar/Grosvenor Rd.	1,233	10.3	17.8	25.5	22.0	25.6	32.6
Rathgar/Grosvenor Rd.	Rathgar/Rathmines Rd.	467	4.2	12.0	26.7	14.9	20.9	27.6
Rathgar/Rathmines Rd.	Military Rd.	670	5.3	11.6	18.1	13.5	14.5	15.3
Military Rd.	Camden St.	979	8.8	11.3	18.1	13.8	15.3	17.7
Camden St.	Whitefriars St. Church	456	4.2	7.9	16.3	6.8	13.4	20.0
Whitefriars St. Church	Exchequer St.	296	9.4	16.8	31.4	11.0	12.1	13.8
Exchequer St.	Eden Quay (Stop EE)	1,330	2.4	9.4	14.1	9.1	9.5	9.9

Table 9.9b Tallaght QBC Average Speeds Outbound

Tallaght QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Eden Quay (Stop EC)	Fade St.	1,097	9.4	11.0	14.2	9.8	10.3	10.6
Fade St.	Cuffe Street	412	0.2	7.0	9.3	6.6	12.0	21.5
Cuffe Street	Grantham Street	427	6.6	10.2	12.7	9.6	10.6	11.8
Grantham Street	Richmond Hill	1,021	6.2	8.6	12.2	10.0	12.6	17.3
Richmond Hill	Rathmines Garda Stn.	699	8.0	10.9	19.1	7.3	11.6	18.8
Rathmines Garda Stn.	Frankfort Avenue	628	10.6	15.7	21.1	15.4	21.5	29.3
Frankfort Avenue	Rathfarnham Road	1,151	10.2	14.2	19.5	14.7	15.3	16.4
Rathfarnham Road	Rathdown Park	523	10.6	15.1	21.2	13.2	17.7	24.5
Rathdown Park	Rathdown Avenue	475	25.9	34.2	47.5	17.8	34.7	55.2
Rathdown Avenue	Bushy Park House	466	11.3	19.8	33.5	25.0	32.6	43.0
Bushy Park House	Riverside Cottages Est.	419	9.9	12.1	15.4	12.4	16.6	19.6
Riverside Cottages Est.	Templeogue Bridge	461	6.0	13.8	24.0	14.5	22.0	25.9
Templeogue Bridge	Cheeverstown House	489	12.1	24.7	42.9	16.9	26.6	44.0
Cheeverstown House	Wellington Lane	475	7.3	16.8	34.9	14.3	23.1	32.3
Wellington Lane	M50 Flyover	956	25.0	33.3	47.8	26.1	29.9	35.5
M50 Flyover	Tallaght Rd.	485	15.5	26.8	34.9	29.6	33.5	38.0
Tallaght Rd.	Bancroft Rd.	732	16.3	26.7	33.4	27.5	29.3	30.7
Bancroft Rd.	Old Bawn Rd.	959	13.0	17.1	21.6	12.3	14.1	17.8

Table 9.10a Ballymun QBC Average Speeds Inbound

Ballymun QBC AVL Average Speed Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
O'Connell St (Stop OF)	Parnell Sq. (Stop PK)	529	9.3	14.7	26.1	7.0	9.0	10.6
Parnell Sq. (Stop PK)	Great Western Way	367	6.1	11.7	22.4	9.5	11.8	15.4
Great Western Way	Broadstone Depot	550	12.1	19.4	27.5	13.4	20.2	30.5
Broadstone Depot	Phibsboro Rd.	532	10.0	17.3	26.6	10.9	18.6	33.6
Phibsboro Rd.	Prospect Ave.	732	8.5	17.3	28.0	7.7	13.7	23.1
Prospect Ave.	Botanic Rd.	198	11.3	24.1	44.6	14.9	18.0	22.3
Botanic Rd.	Glasnevin Tennis Club	1,647	12.1	21.8	32.6	14.7	20.7	27.1
Glasnevin Tennis Club	St. Pappin's Rd.	541	11.5	20.0	33.0	15.3	17.4	20.7
St. Pappin's Rd.	Santry Cross	1,793	15.3	18.4	30.7	12.8	14.8	17.3

Table 9.10b Ballymun QBC Average Speeds Outbound

Ballymun QBC AVL Average Speed Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Santry Ave.	Ballymun Rd.	366	0.2	13.6	37.7	9.3	13.7	23.1
Ballymun Rd.	Junc. The Rise	2,081	11.4	16.5	26.1	12.6	15.5	19.9
Junc. The Rise	Botanic Rd.	1,289	12.2	22.6	28.3	12.3	18.2	24.1
Botanic Rd.	Botanic Rd.	506	15.2	20.5	33.7	10.1	16.6	22.2
Botanic Rd.	Phibsboro Rd.	301	8.1	12.6	16.4	6.8	13.2	21.3
Phibsboro Rd.	Broadstone	619	9.1	12.2	14.7	10.8	15.1	23.9
Broadstone	Blessington St.	1,003	10.9	16.2	26.2	15.9	18.6	21.0
Blessington St.	Parnell Sq. East	319	11.5	20.3	38.2	5.2	13.9	31.0
Parnell Sq. East	O'Connell St (Stop OJ)	253	0.0	12.6	33.7	7.3	17.9	31.3

Table 9.11a Bray QBC Average Speeds Inbound

Bray QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Bray Main Street	Upper Dargle Road	516	5.7	11.6	31.9	8.7	19.8	35.4
Upper Dargle Road	Wilford Roundabout	630	ND	ND	ND	ND	ND	ND
Wilford Roundabout	Shanganagh Cemetery	1,238	ND	ND	ND	ND	ND	ND
Shanganagh Cemetery	Shankill Village	885	7.5	22.4	37.7	18.4	25.0	32.3
Shankill Village	Loughlinstown Rbt	1,486	5.2	23.2	38.1	19.0	22.2	25.5
Loughlinstown Rbt	Cabinteely South	2,653	15.5	30.0	46.2	29.0	35.0	41.3
Cabinteely South	Foxrock Church	2,117	14.8	26.3	44.0	20.5	26.9	33.2
Bray	Foxrock Church	9,525	14.0	20.4	30.9	21.3	25.3	29.4
Bray	Leeson Street	18,710	14.4	17.9	21.0	20.4	22.7	25.7

Table 9.11b Bray QBC Average Speeds Outbound

Bray QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Foxrock Church	Cabinteely South	2,243	3.7	4.6	6.3	10.7	24.0	37.9
Cabinteely South	Loughlinstown Rbt	2,552	18.5	29.7	49.3	17.5	31.3	45.4
Loughlinstown Rbt	Shankill Village	1,483	7.4	29.7	49.3	19.5	23.3	26.9
Shankill Village	Wilford Roundabout	2,120	17.3	27.6	41.3	22.2	30.0	39.4
Wilford Roundabout	Upper Dargle Road	628	7.1	14.7	45.4	10.0	12.1	15.6
Upper Dargle Road	Bray Main Street	450	8.1	19.4	44.2	10.8	28.3	39.7
Foxrock Church	Bray Main Street	9,476	17.3	20.6	25.7	21.3	28.0	45.9
Leeson Street	Bray Main Street	18,632	17.3	20.1	25.3	26.1	26.1	26.1

Table 9.12a Clontarf QBC Average Speeds Inbound

Clontarf QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Clontarf Garage	Vernon Avenue	453	1.8	18.9	41.5	1.1	8.9	13.9
Vernon Avenue	Castle Avenue	923	12.1	27.7	41.3	37.6	37.6	37.6
Castle Avenue	Alfie Byrne Road	812	7.6	19.4	43.0	16.7	23.4	36.0
Alfie Byrne Road	Fairview	555	5.2	9.3	14.9	8.7	10.9	13.9
Fairview	Amiens Street	1,897	8.1	18.4	41.6	18.0	21.8	27.2
Amiens Street	Talbot Street	435	ND	ND	ND	ND	ND	ND
Clontarf Garage	Amiens Street	4,640	7.3	12.4	21.5	19.0	22.8	29.2

Table 9.12b Clontarf QBC Average Speeds Outbound

Clontarf QBC Roadside Survey Results - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Lwr. Abbey Street	North Strand	763	2.5	6.5	24.0	3.6	8.3	23.6
Amiens Street / North	Fairview	1,706	5.0	15.2	47.2	9.9	17.9	48.3
Fairview	Alfie Byrne Road	734	8.5	17.1	35.0	15.2	16.4	17.9
Alfie Byrne Road	Castle Avenue	868	14.5	21.6	38.7	22.4	30.3	39.2
Castle Avenue	Vernon Avenue	868	11.4	28.1	41.8	21.2	24.2	27.2
Vernon Avenue	Clontarf Garage	419	7.7	20.1	45.3	15.1	18.0	20.8
Lwr. Abbey Street	Clontarf Garage	5,358	11.0	14.6	28.2	14.4	16.1	17.2

Table 9.13a Howth Rd. QBC Average Speeds Inbound

Howth Rd. QBC AVL Average Speed Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Raheny Train Stn.	All Saints Rd.	1,582	8.3	17.9	26.2	14.4	18.7	23.8
All Saints Rd.	Howth Rd.	577	0.1	23.2	34.1	26.0	28.5	35.8
Howth Rd.	Furry Park Rd.	687	20.1	36.1	56.2	31.3	41.1	55.0
Furry Park Rd.	Ashbrook Estate	828	8.5	12.6	29.5	17.4	20.2	24.8
Ashbrook Estate	Copeland Avenue	891	12.4	20.1	38.2	13.0	32.4	43.4
Copeland Avenue	Fairview Footbridge	709	12.6	17.8	27.7	15.2	17.3	23.0
Fairview Footbridge	Annesley Bridge	601	15.2	19.0	33.8	18.8	21.8	24.6
Annesley Bridge	Newcomen Bridge	547	11.7	18.9	41.1	21.7	30.0	41.1
Newcomen Bridge	Connolly Station	443	11.8	19.2	40.9	7.8	21.5	40.9
Connolly Station	Marlborough St.	852	7.1	10.7	13.8	6.3	10.1	11.9

Table 9.13b Howth Rd. QBC Average Speeds Outbound

Howth Rd. QBC AVL Average Speed Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Liberty Hall (Stop EJ)	Connolly Station	537	2.7	7.9	13.9	8.2	9.5	12.5
Connolly Station	North Strand Rd.	658	6.7	11.8	15.1	12.7	17.9	31.2
North Strand Rd.	Waterloo Avenue	483	11.8	14.5	24.2	12.0	15.5	24.2
Waterloo Avenue	Marino College Fairview	875	8.5	17.2	28.9	16.2	25.2	32.1
Marino College	Howth Rd.	392	8.3	13.4	23.9	9.5	23.6	37.1
Howth Rd.	St. Lawrence Rd.	992	8.3	17.0	24.1	21.0	27.0	40.6
St. Lawrence Rd.	Junc. Demesne	1,001	13.7	17.9	23.2	20.0	26.8	33.4
Junc. Demesne	St. Bridget's Church	356	18.5	29.7	45.7	21.7	31.0	42.7
St. Bridget's Church	Brookwood Avenue	220	6.9	16.9	39.6	4.7	10.7	15.5
Brookwood Avenue	All Saints Rd.	314	8.5	19.6	29.7	17.4	26.3	33.2
All Saints Rd.	Raheny Train Station	1,578	12.6	15.2	18.2	14.3	20.6	25.9

Table 9.14a Crumlin Rd. QBC Average Speeds Inbound

Crumlin Rd. QBC Roadside Survey Results Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Walkinstown Road	Drimnagh Road	882	12.2	24.1	39.8	28.8	39.3	48.0
Drimnagh Road	St. Marys Road	706	6.2	12.0	38.4	3.0	12.1	37.9
St. Marys Road	Dolphins Barn	1,934	6.9	14.4	29.8	11.7	15.0	19.0
Dolphins Barn	Dean Street	1,474	13.1	36.8	49.9	30.5	36.3	49.1
Dean Street	Westmoreland Street	1,425	2.7	12.5	38.1	5.3	21.3	33.9
Westmoreland Street	Ringsend Road	1,741	2.2	5.1	27.4	5.0	5.5	5.9
Drimnagh Road	Westmoreland Street	5,539	6.5	11.1	19.6	14.9	23.9	54.8

Table 9.14b Crumlin Rd. QBC Average Speeds Outbound

Crumlin Rd. QBC Roadside Survey Results Analysis - November 2010								
Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Ringsend Road	College Green	1,723	ND	ND	ND	ND	ND	ND
College Green	Dean Street	1,290	18.1	34.3	45.0	27.6	36.6	46.8
Dean Street	Dolphins Barn	1,475	7.7	12.2	20.5	11.3	14.8	18.8
Dolphins Barn	St. Marys Road	1,900	7.8	12.8	21.5	14.9	33.7	48.8
St. Marys Road	Drimnagh Road	739	2.3	12.7	18.8	6.9	7.7	8.5
Drimnagh Road	Walkinstown Road	913	ND	ND	ND	ND	ND	ND
College Green	Drimnagh Road	5,404	7.9	13.3	17.8	12.3	14.8	16.9

Table 9.15a Rock Rd. QBC Average Speeds Inbound

Rock Rd. QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Blackrock College	Boosterstown Avenue	286	14.1	30.5	54.1	22.8	35.4	54.1
Boosterstown Avenue	St Helen's Road	476	8.2	22.0	57.1	14.8	24.9	48.9
St Helen's Road	Merrion Gates	635	6.8	20.4	35.7	18.1	23.7	30.5
Merrion Gates	St. Vincent's Hospital	511	12.1	22.1	35.4	14.6	25.5	37.6
St. Vincent's Hospital	Shrewsbury Rd.	1,023	14.4	18.9	26.7	11.0	14.5	20.9
Shrewsbury Rd.	Simmonscourt Rd.	190	18.0	29.0	57.0	10.2	23.0	36.0
Simmonscourt Rd.	American Embassy	880	12.9	19.8	28.3	14.2	17.1	21.8
American Embassy	Northumberland Rd.	295	0.0	17.3	31.2	10.5	14.9	26.5
Northumberland Rd.	Holles Street	1,110	10.3	14.9	23.1	16.7	19.1	21.1
Holles Street	Clare Street	337	7.8	16.4	31.1	10.5	13.8	19.6

Table 9.15b Rock Rd. QBC Average Speeds Outbound

Rock Rd. QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Merrion Square	Holles Street	172	6.4	19.8	34.4	10.3	21.5	36.4
Holles Street	Haddington Road	715	4.9	9.0	14.1	8.4	11.1	14.5
Haddington Road	Lansdowne Road	629	13.2	22.1	33.3	20.2	23.7	26.3
Lansdowne Road	RDS Showgrounds	495	6.5	11.2	16.6	11.6	12.7	14.7
RDS Showgrounds	Shewsbury Park	800	7.1	14.5	18.7	13.5	21.6	37.4
Shewsbury Park	St. Vincent's Hospital	949	3.5	11.1	17.0	22.2	24.7	29.2
St. Vincent's	Merrion Gates	528	10.7	14.1	19.4	11.4	19.5	29.3
Merrion Gates	Rock Road	558	11.4	20.8	31.9	15.8	22.7	30.0
Rock Road	Boosterstown Hall	444	16.6	30.2	45.6	28.0	37.9	45.6
Boosterstown Hall	Blackrock Clinic	673	17.4	24.2	30.3	23.5	29.6	41.1

Table 9.16a South Clondalkin QBC Average Speeds Inbound

South Clondalkin QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	AM Peak Inbound			Off Peak Inbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Wyeth	Castlegrange Green	1,491	22.1	31.1	46.3	27.7	40.2	52.1
Castlegrange Green	New Nangor Rd.	1,498	17.4	40.4	78.1	43.8	50.3	61.3
New Nangor Rd.	Ninth Lock Rd.	1,037	10.3	16.0	21.3	14.5	16.5	22.5
Ninth Lock Rd.	Woodford Walk	551	8.8	13.9	23.6	9.6	13.0	20.5
Woodford Walk	Willow Rd.	1,322	13.6	26.5	45.8	26.1	31.6	44.1
Willow Rd.	Knockmitten Lane	367	16.3	24.0	40.0	24.0	30.9	36.7
Knockmitten Lane	Killeen Rd.	380	11.2	23.3	42.8	23.6	35.3	50.7
Killeen Rd.	Long Mile Rd.	427	6.5	12.7	23.6	15.8	16.9	18.1
Long Mile Rd.	Walkinstown Avenue	48	1.0	1.8	3.1	2.0	2.6	3.2
Walkinstown Avenue	Slievebloom Rd.	1,424	25.9	42.8	55.1	29.0	44.2	62.5
Slievebloom Rd.	Drimnagh Rd.	752	12.2	17.0	24.2	17.9	21.2	25.1
Drimnagh Rd.	Iveagh Grounds	684	8.7	16.6	34.7	10.1	16.5	27.7
Iveagh Grounds	Crumlin Rd.	788	6.7	17.3	45.0	11.0	15.0	21.7
Crumlin Rd.	Dolphins Barn	365	6.6	11.0	19.9	3.0	9.8	15.1
Dolphins Barn	Coombe Hospital	397	9.2	22.3	34.8	8.6	13.4	32.5
Coombe Hospital	Cork Street	374	9.2	19.1	32.8	10.5	15.6	24.0
Cork Street	Ardee Street	260	9.4	20.5	42.5	14.8	20.6	30.2
Ardee Street	St. Patrick's Cathedral	637	5.2	12.2	28.7	11.0	17.1	29.0

Table 9.16b South Clondalkin QBC Average Speeds Outbound

South Clondalkin QBC AVL Average Speed Analysis - November 2010 Sectional Results - Bus Journey Speeds								
Section		Dist. (m)	PM Peak Outbound			Off Peak Outbound		
From Stop	To Stop		Min.	Ave.	Max.	Min.	Ave.	Max.
Kevin St. Garda Stn.	St. Luke's Ave.	581	8.8	15.7	21.4	9.1	11.6	14.5
St. Luke's Ave.	Cork St.	472	12.9	24.9	50.0	15.3	25.1	30.3
Cork St.	Coombe Hospital	465	11.2	21.6	42.9	11.4	18.3	27.4
Coombe Hospital	Dolphin's Barn	212	6.7	13.2	31.9	5.3	12.0	21.9
Dolphin's Barn	Sundrive Rd.	493	11.3	14.5	22.2	8.8	14.3	21.4
Sundrive Rd.	Clonard Rd.	673	12.4	20.8	30.7	8.9	16.4	34.6
Clonard Rd.	Iveagh Gardens	210	12.0	22.5	37.8	6.2	15.3	26.1
Iveagh Gardens	Drimnagh Rd.	1,172	13.4	21.4	29.9	12.9	16.9	20.9
Drimnagh Rd.	Drimnagh Castle	378	9.0	19.6	32.4	7.6	13.5	24.3
Drimnagh Castle	Long Mile Road	1,136	15.9	24.7	37.2	23.8	29.9	35.6
Long Mile Road	Killeen Road	490	14.4	23.4	45.3	12.6	21.8	26.8
Killeen Road	Willow Road	750	22.3	30.3	42.2	23.7	38.5	46.5
Willow Road	Woodford Walk	1,319	18.5	24.0	36.2	27.1	30.0	34.4
Woodford Walk	Ninth Lock Road	552	7.3	16.9	37.5	11.9	15.6	21.2
Ninth Lock Road	New Nangor Road	990	26.6	41.4	60.4	26.2	37.3	46.9
New Nangor Road	Lealand Drive	557	14.5	24.8	37.1	16.7	19.7	26.4
Lealand Drive	Rath Gael Estate	800	21.7	35.2	62.6	19.3	26.1	32.0
Rath Gael Estate	Grange Castle	806	13.4	26.1	42.1	19.9	29.6	39.8

10. League Tables

The results from all sections of each QBC were collated into league tables of results. These results are expressed in terms of average bus speeds.

League tables are available for each of the time periods surveyed, ie: morning peak, off peak inbound, off peak outbound and the evening peak. A composite league table is also available showing the results for all of the time periods.

The league table for the morning peak period is shown in this section by way of an example.

In table 10 the results are shown for 2010 and are compared to the years 2006 to 2009. The results are colour coded as follows:

- **Yellow** denotes those sections where the average speed is less than 5km/h which is slightly above walking speed.
- **Blue** denotes those sections where average speed is greater than 5km/hr but less than 10km/h.
- **Green** denotes those sections where average speed is greater than 10 but less than the minimum QBC specification speed (ie: 20km/h less 12% boarding and alighting time).
- White denotes those sections that exceed the QBC specification.
- **Red text** denotes those QBCs where average bus speed was surveyed using AVL as described above. In these cases, the average speed reported may not be derived from precisely the same section of network but will overlap that section.

The composite league table, those in relation to the off peak and the evening peak periods and equivalent comparison data for years 2002 to 2005 can be obtained by contacting John Nott of the National Transport Authority at the following email address:
john.nott@nationaltransport.ie

Table 10 Morning Peak Period League Table

Speed					Section	Length	Lane	QBC	Time	2010	2009	2008	2007	2006
KM/H	2009	2008	2007	2006		m	m		Period	Position	Position	Position	Position	Position
32.3	40.4	31.8	43.4	23.0	Airside Business Park to Cloghran R't	1,314	1,165	Swords	AM Peak	1/133	4/133	5/136	3/138	22/130
31.1	35.4	30.0	18.8	23.8	Foxhunter to West of M50	2,026	2,026	Lucan	AM Peak	2/133	8/133	6/136	36/138	20/130
30.0	25.4	24.7	37.9	35.6	Loughlinstown R't to Cabinteely South	2,653	2,137	Bray	AM Peak	3/133	18/133	14/136	6/138	4/130
29.7	16.0	16.5	15.3	15.9	Dun Laoghaire to Foxrock Church	5,539	-	Stillorgan	AM Peak	4/133	65/133	61/136	67/138	N/A
28.5	25.8	21.7	21.62	19.16	Airport South to Omni Park	3,741	3,063	Swords	AM Peak	5/133	16/133	27/136	26/138	35/130
27.7	19.66	20.51	22.00	21.03	Vernon Avenue to Castle Avenue	923	923	Clontarf	AM Peak	6/133	39/133	31/136	23/138	28/130
27.1	29.91	18.63	26.34	12.05	West of M50 to East of M50	673	-	Tallaght	AM Peak	7/133	12/133	42/136	13/138	74/130
26.8	22.94	16.72	18.07	12.09	Ellis Quay to Arran Quay	497	497	Lucan	AM Peak	8/133	28/133	57/136	40/138	73/130
26.5	24.6	19.3	17.8	26.1	East of M50 to Oldbridge Road	1,412	1,162	Tallaght	AM Peak	9/133	22/133	38/136	44/138	10/130
26.3	38.9	38.7	25.3	26.4	Cabinteely South to Foxrock Church	2,117	2,017	Bray	AM Peak	10/133	6/133	4/136	17/138	9/130
25.1	23.9	22.8	17.4	22.6	Main Street Tallaght to West of M50	1850	1,106	Tallaght	AM Peak	11/133	24/133	20/136	49/138	24/130
24.4	24.6	N/A	16.1	N/A	Liffey Valley Centre to Coldcut Road	6327	1,808	North Clondalkin	AM Peak	12/133	21/133	N/A	62/138	N/A
24.1	13.77	17.82	10.7	12.8	Griffith Avenue to Botanic Avenue	792	754	Ballymun	AM Peak	13/133	83/133	46/136	99/138	69/130
24.1	18.4	21.0	35.0	19.3	West of M50 to Palmerston	1,595	390	Lucan	AM Peak	14/133	49/133	30/136	7/138	34/130
24	4.4	3.7	5.2	4.8	Bon Secours Hospital to Cliftonville Road	595	-	Ballymun	AM Peak	15/133	133/133	136/136	132/138	127/130
23.9	18.8	20.5	15.0	13.5	Shelerin Rd to B'chardstown Rd Sth via TC	5899	0	Blanchardstown n	AM Peak	16/133	44/133	32/136	68/138	63/130
23.9	30.7	39.8	37.9	41.2	New River Road to Ashtown Roundabout	1,958	1,958	Blanchardstown n	AM Peak	17/133	10/133	3/136	5/138	3/130
23.2	19.45	21.66	16.5	17.2	Shankill to Loughlinstown Roundabout	1,486	323	Bray	AM Peak	18/133	40/133	28/136	60/138	45/130
23.2	16.8	16.5	14.2	5.2	Sybil Hill Road to Collins Avenue	1,042	727	How th Road	AM Peak	19/133	58/133	60/136	73/138	124/130
23	14.02	17.35	18.54	N/A	Boooterstown to Ballsbridge	3,209	2,117	Rock Road	AM Peak	20/133	81/133	50/136	37/138	N/A
22.6	20.2	19.6	17.5	18.3	Ashtown Roundabout to Nephin Road	1760	1483	Blanchardstown n	AM Peak	21/133	36/133	37/136	47/138	39/130
22.6	43.9	27.9	26.6	28.2	Nephin Road to Ratoath Road	635	562	Blanchardstown n	AM Peak	22/133	2/133	10/136	12/138	8/130
22.5	18.6	28.2	19.7	33.5	Cloghran Rbt to Airport South Direct	1388	468	Sw ords	AM Peak	23/133	46/133	9/136	33/138	5/130
22.4	37.9	24.7	24.5	24.1	Shanganagh Cemetery to Shankill	885	-	Bray	AM Peak	24/133	7/133	15/136	20/138	18/130
22	13.4	15.7	8.4	10.6	Dolphins Barn to Dean Street	1,474	1,287	South Clondalkin	AM Peak	25/133	86/133	66/136	116/138	N/A
22	21.7	18.8	13.8	N/A	Naas Road to Drimnagh Road	1,641	1,376	South Clondalkin	AM Peak	26/133	32/133	40/136	76/138	N/A
22	22.7	17.6	16.9	N/A	Frascati Road to Booterstown	1268	1066	Rock Road	AM Peak	27/133	29/133	47/136	52/138	N/A

Table 10 Morning Peak Period League Table (continued)

Quality Bus Corridor Monitoring Nov. 2010 AM Peak Average Sectional Bus Speeds - League Table														
Ave Speed					Section	Section Length	Bus Lane		Time	2010	2009	2008	2007	2006
KM/H	2009	2008	2007	2006	Section	m	m	QBC	Period	Position	Position	Position	Position	Position
21.8	8.84	4.28	3.25	3.85	Botanic Avenue to Cliftonville Road	329	-	Ballymun	AM Peak	28/133	121/133	135/136	137/138	129/130
21.7	17.9	28.3	24.9	24.4	Nutgrove Avenue to Oakdown Road	298	-	Rathfarnham	AM Peak	29/133	54/133	8/136	18/138	17/130
21.7	20.0	10.1	9.3	8.1	Rathfarnham Road to Brookvale Road	277	-	Rathfarnham	AM Peak	30/133	37/133	110/136	108/138	105/130
21.7	16.41	15.63	16.4	16.5	Donnybrook to Morehampton Road	1,190	1,134	Stillorgan	AM Peak	31/133	64/133	67/136	61/138	48/130
21.2	14.7	16.6	30.1	25.5	Hansfield Road to Shelerin Road	820	-	Blanchardstown	AM Peak	32/133	74/133	59/136	8/138	15/130
21.2	18.2	18.6	13.7	11.3	B'town Rd South to Coolmine Road	1719	388	Blanchardstown	AM Peak	33/133	52/133	41/136	77/138	79/130
21.2	25.0	15.5	26.3	17.7	B'town Rd South to Rear of Town Centre	1074	302	Blanchardstown	AM Peak	34/133	19/133	70/136	15/138	40/130
21.0	18.9	21.8	21.4	25.7	Palmerston to Conyngham Road	4,347	540	Lucan	AM Peak	35/133	42/133	26/136	27/138	14/130
20.9	15.7	14.6	14.5	13.0	Conyngham Road to Parkgate Street	951	674	Lucan	AM Peak	36/133	69/133	75/136	70/138	67/130
21	26.7	25.2	23.8	25.9	Priorswood Rd to Greencastle Rd - Direct	992	671	Malahide	AM Peak	37/133	15/133	13/136	22/138	12/130
20.3	12.92	13.89	14.92	14.74	Morehampton Road to Leeson Street	1,335	653	Stillorgan	AM Peak	38/133	89/133	84/136	69/138	56/130
20.1	20.5	15.0	18.33	16.21	Collins Avenue East to Copeland Avenue	1,283	319	Howth Road	AM Peak	39/133	35/133	72/136	39/138	49/130
20	23.0	22.1	20.1	N/A	Ninth Lock Road to Naas Road	2,932	2,155	South Clondalkin	AM Peak	40/133	27/133	22/136	30/138	N/A
20.0	18.10	15.88	14.4	16.7	Ballymun Civic Centre to Griffith Avenue	1,976	1,650	Ballymun	AM Peak	41/133	53/133	64/136	71/138	47/130
19.8	21.4	21.3	17.6	32.0	Finglas Road to Prospect Road	3,222	2,978	Finglas	AM Peak	42/133	33/133	29/136	46/138	6/130
19.5	14.03	20.30	17.36	20.22	Cloghran Rbt to Airport South via Airport	3,886	1,162	Swords	AM Peak	43/133	80/133	33/136	50/138	31/130
19.4	16.5	14.1	5.4	13.3	Coolmine Road to Main Street	1110	-	Blanchardstown	AM Peak	44/133	63/133	80/136	131/138	64/130
19.4	24.7	24.6	21.9	22.3	Ongar to Hansfield Road	2717	1,448	Blanchardstown	AM Peak	45/133	20/133	16/136	24/138	25/130
19.4	43.0	27.3	26.3	22.1	Castle Avenue to Alfie Byrne Road	812	812	Clontarf	AM Peak	46/133	3/133	11/136	14/138	27/130
18.9	31.4	29.1	20.1	20.9	Clontarf Garage to Vernon Avenue	453	453	Clontarf	AM Peak	47/133	9/133	7/136	31/138	29/130
18.5	18.5	21.86	24.9	9.2	Parkgate Street to Ellis Quay	595	595	Lucan	AM Peak	48/133	48/133	25/136	19/138	94/130
18.3	14.21	14.36	16.51	6.41	Greencastle Road to North of Kilmore Road	1532	998	Malahide	AM Peak	49/133	78/133	79/136	58/138	119/130

Table 10 Morning Peak Period League Table (continued)

Quality Bus Corridor Monitoring Nov. 2010 AM Peak Average Sectional Bus Speeds - League Table														
Ave Speed					Section	Section Length	Bus Lane		Time	2010	2009	2008	2007	2006
KM/H	2009	2008	2007	2006	Section	m	m	QBC	Period	Position	Position	Position	Position	Position
17.9	28.4	19.8	27.4	26.0	Raheny to Sybil Hill Road	1386	964	How th Road	AM Peak	50/133	13/133	36/136	11/138	11/130
17.9	23.78	12.95	16.8	15.3	Kylemore Road to Emmet Rd	2292	109	North Clondalkin	AM Peak	51/133	25/133	89/136	56/138	53/130
17.8	10.16	10.56	12.55	14.63	Copeland Avenue to Fairview	443	329	How th Road	AM Peak	52/133	111/133	107/136	84/138	57/130
17.8	12.56	17.32	16.81	8.33	Terenure Road East to Rathgar Road	1256	1,082	Tallaght	AM Peak	53/133	92/133	52/136	54/138	103/130
17.6	20.8	22.1	19.0	20.1	Mount Merrion Avenue to Donnybrook	3267	2,908	Stillorgan	AM Peak	54/133	34/133	23/136	35/138	32/130
17.5	9.7	6.1	13.9	4.0	North of Kilmore Road to St Davids Wood	150	-	Malahide	AM Peak	55/133	120/133	133/136	75/138	128/130
17.3	6.0	7.0	6.4	6.7	Prospect Road to Phibsboro/NCR	460	157	Ballymun	AM Peak	56/133	130/133	128/136	127/138	114/130
17.3	11.25	11.69	10.7	13.2	Cliftonville Road to Prospect Road	578	457	Ballymun	AM Peak	57/133	103/133	102/136	98/138	65/130
17.3	15.95	15.85	9.04	12.40	Phibsboro Road/NCR to Frederick St North	1,471	-	Ballymun	AM Peak	58/133	66/133	65/136	110/138	71/130
17.3	21.81	16.38	13.71	7.34	Penny Hill Pub to Foxhunter	1920	1,471	Lucan	AM Peak	59/133	31/133	62/136	78/138	110/130
17.3	9.87	7.59	4.81	6.27	Rathdown Park to Terenure Road East	806	0	Tallaght	AM Peak	60/133	117/133	126/136	134/138	120/130
17.3	17.4	22.55	38.9	8.8	Fortfield Road to Rathdown Park	595	519	Tallaght	AM Peak	61/133	56/133	21/136	4/138	98/130
17.2	18.34	19.86	20.9	20.1	Foxrock Church to Mount Merrion Avenue	3393	3393	Stillorgan	AM Peak	62/133	51/133	35/136	28/138	33/130
17.0	30.6	14.4	17.9	16.8	Drimnagh Road to St Marys Road	706	706	South Clondalkin	AM Peak	63/133	11/133	76/136	42/138	N/A
16.8	14.4	19.2	15.9	17.7	River Road R'bt to New River Road	983	300	Blanchardstown	AM Peak	64/133	75/133	39/136	64/138	41/130
16.8	24.00	12.14	10.63	18.39	Rear of Town Centre to River Road R'bt	1,727	-	Blanchardstown	AM Peak	65/133	23/133	97/136	101/138	38/130
16.8	14.19	17.03	14.2	N/A	Coldcut Road to Ballyfermot/Kylemore Road	2,200	1,000	North Clondalkin	AM Peak	66/133	79/133	56/136	72/138	N/A
16.5	18.72	15.61	16.9	17.5	Lucan Superquinn to Penny Hill Pub	4675	N/A	Lucan	AM Peak	67/133	45/133	68/136	53/138	42/130
16.5	23.1	27.30	26.04	18.78	Swords Main St to Airside Business Park	2,040	851	Swords	AM Peak	68/133	26/133	12/136	16/138	37/130
16.4	15.85	17.33	17.3	15.5	Fairview to Amiens Street	1,897	1,529	Malahide	AM Peak	69/133	67/133	51/136	51/138	52/130
16.4	19.20	17.03	17.8	N/A	Merrion Square to O'Connell Street	2,124	906	Rock Road	AM Peak	70/133	41/133	55/136	43/138	N/A
16.1	27.0	21.4	28.9	25.8	Casino Park to Fairview	1133	1,054	Malahide	AM Peak	71/133	14/133	24/136	9/138	13/130
16.0	18.8	18.6	15.8	N/A	Grangecastle to Ninth Lock Road	2,818	2,218	South Clondalkin	AM Peak	72/133	43/133	43/136	65/138	N/A

Table 10 Morning Peak Period League Table (continued)

Quality Bus Corridor Monitoring Nov. 2010 AM Peak Average Sectional Bus Speeds - League Table														
Ave Speed					Section	Section Length	Bus Lane		Time	2010	2009	2008	2007	2006
KM/H	2009	2008	2007	2006	Section	m	m	QBC	Period	2010 Position	2009 Position	2008 Position	2007 Position	2006 Position
15.9	17.56	18.11	17.94	16.07	Oakdown Road to Rathfarnham Road	2098	1900	Rathfarnham	AM Peak	73/133	55/133	45/136	41/138	50/130
15.9	12.9	12.4	11.4	10.3	Richmond Road to Dorset Street Lower	1111	946	Swords	AM Peak	74/133	88/133	94/136	93/138	86/130
15.2	22.0	17.3	17.5	N/A	Emmet Road to Mount Brown	2001	612	North Clondalkin	AM Peak	75/133	30/133	53/136	48/138	N/A
15.0	12.2	12.5	11.2	8.0	Brookvale Road to Terenure Road East	759	525	Rathfarnham	AM Peak	76/133	93/133	93/136	96/138	107/130
15.0	16.69	14.84	11.34	9.79	Terenure Road East to Mount Tallant Ave	816	0	Rathfarnham	AM Peak	77/133	60/133	73/136	95/138	92/130
14.9	15.17	15.56	16.64	N/A	Ballsbridge to Merrion Square	1664	916	Rock Road	AM Peak	78/133	71/133	69/136	57/138	N/A
14.8	8.8	13.0	11.6	7.3	Clanbrassil Street to South Circular Road	478	-	Rathfarnham	AM Peak	79/133	122/133	88/136	91/138	111/130
14.8	16.7	15.1	13.0	12.1	Harolds Cross Road to Clanbrassil Street	1,043	845	Rathfarnham	AM Peak	80/133	59/133	71/136	82/138	72/130
14.8	14.29	9.18	27.44	6.53	St Davids Wood to Collins Avenue	671	601	Malahide	AM Peak	81/133	76/133	117/136	10/138	116/130
14.7	11.26	6.20	3.90	6.47	Parnell Square East to Lower O'Connell St	591	591	Ballymun	AM Peak	82/133	102/133	132/136	136/138	118/130
14.7	15.8	8.3	7.6	N/A	Lower O'Connell St to South Great Georges St	883	TBA	Ballymun	AM Peak	83/133	68/133	120/136	122/138	N/A
14.5	15.5	13.3	15.7	12.5	Collins Avenue to Richmond Road	1,532	1,183	Swords	AM Peak	84/133	70/133	86/136	66/138	70/130
14.4	8.67	10.91	10.68	11.99	Dorset St Lower to Frederick Street North	703	703	Finglas	AM Peak	85/133	123/133	104/136	100/138	75/130
14.3	10.03	12.65	10.97	11.80	Frederick St North to Parnell Sq East	390	390	Finglas	AM Peak	86/133	112/133	91/136	97/138	76/130
13.6	10.6	7.9	5.6	6.0	Leinster Road West to Harolds Cross Road	214	-	Rathfarnham	AM Peak	87/133	109/133	124/136	130/138	122/130
13.6	11.69	9.77	7.02	6.52	Mount Tallant Avenue to Leinster Rd West	513	417	Rathfarnham	AM Peak	88/133	99/133	112/136	124/138	117/130
13.5	9.65	10.30	11.6	8.7	Arran Quay to Bachelors Walk	1,067	936	Lucan	AM Peak	89/133	119/133	108/136	89/138	99/130
13.5	12.56	13.52	8.51	6.66	Omni Park to Collins Avenue	1,423	1,186	Swords	AM Peak	90/133	90/133	85/136	114/138	115/130
13.4	12.1	10.7	6.1	8.2	Collins Avenue to Casino Park	318	-	Malahide	AM Peak	91/133	95/133	106/136	128/138	104/130
13.4	16.5	17.1	16.8	22.9	Clare Hall to Priorswood Road	1185	1,017	Malahide	AM Peak	92/133	62/133	54/136	55/138	23/130
12.7	11.0	11.9	13.0	11.2	Bishop Street to Stephen Street	423	-	Rathfarnham	AM Peak	93/133	106/133	99/136	81/138	80/130
12.6	16.92	10.12	13.69	5.33	Manor Street to Blackhall Place	658	617	Blanchardstown	AM Peak	94/133	57/133	109/136	79/138	123/130

Table 10 Morning Peak Period League Table (continued)

Quality Bus Corridor Monitoring Nov. 2010 AM Peak Average Sectional Bus Speeds - League Table														
Ave Speed					Section	Section Length	Bus Lane		Time	2010	2009	2008	2007	2006
KM/H	2009	2008	2007	2006	Section	m	m	QBC	Period	Position	Position	Position	Position	Position
12.4	13.26	9.77	11.47	9.88	Camden St Uppr to W'moreland St via Earlsfort	2085	1235	Tallaght	AM Peak	95/133	87/133	111/136	92/138	89/130
12.0	11.7	8.4	7.8	4.9	Rathgar Road to Leinster Road	495	-	Tallaght	AM Peak	96/133	98/133	118/136	119/138	125/130
11.7	18.39	13.99	10.53	11.53	Griffith Avenue to Dorset St Lower	2840	1185	Ballymun	AM Peak	97/133	50/133	83/136	102/138	78/130
11.6	11.33	14.40	11.39	7.84	Bray Main Street to Upper Dargle Road	516	162	Bray	AM Peak	98/133	100/133	77/136	94/138	108/130
11.6	14.9	18.4	20.6	23.2	Oldbridge Road to Fortfield Road	1,212	245	Tallaght	AM Peak	99/133	73/133	44/136	29/138	21/130
11.6	9.90	11.94	13.26	9.86	Upper Dargle Road to Wilford Roundabout	630	-	Bray	AM Peak	100/133	114/133	98/136	80/138	90/130
11.5	5.4	7.8	7.9	8.4	Clanbrassil Street to Dean Street	818	-	Rathfarnham	AM Peak	101/133	131/133	125/136	118/138	102/130
11.4	8.30	7.48	8.44	7.10	Ormond Quay to Westmoreland Street	844	221	Blanchardstown n	AM Peak	102/133	124/133	127/136	115/138	113/130
11.4	10.63	17.49	11.59	8.79	Blackhall Place to Ormond Quay	1,001	445	Blanchardstown n	AM Peak	103/133	108/133	49/136	90/138	97/130
11.4	13.99	12.55	12.98	10.74	Leeson Street to Westmoreland Street	1551	570	Stillorgan	AM Peak	104/133	82/133	92/136	83/138	81/130
11.3	6.7	6.9	6.9	6.2	Canal to Camden Street Upper	430	-	Tallaght	AM Peak	105/133	128/133	130/136	123/138	121/130
11.3	13.5	12.8	14.0	10.4	Leinster Road to Canal	594	400	Tallaght	AM Peak	106/133	84/133	90/136	74/138	85/130
11.0	10.8	12.2	9.6	14.8	Amiens Street to Talbot Street	435	-	Malahide	AM Peak	107/133	107/133	95/136	107/138	55/130
11.0	12.1	9.8	12.2	10.8	St Marys Road to Dolphins Barn	1,934	882	South Clondalkin	AM Peak	108/133	94/133	113/136	86/138	N/A
10.5	9.94	13.04	8.95	10.48	Mellowes Road Bridge to Finglas Road	547	-	Finglas	AM Peak	109/133	113/133	87/136	112/138	83/130
10.5	11.29	11.89	7.00	9.83	Richmond Road to O'Connell Street	2441	2,134	Swords	AM Peak	110/133	101/133	100/136	125/138	91/130
9.4	9.88	12.17	11.9	8.5	Mount Brown to Cornmarket	1068	721	North Clondalkin	AM Peak	111/133	116/133	96/136	88/138	101/130
9.3	11.16	14.80	16.5	13.7	Alfie Byrne Road to Fairview	555	555	Clontarf	AM Peak	112/133	104/133	74/136	59/138	61/130
9.1	9.89	9.38	10.26	10.03	Cornmarket to Westmoreland Street	1,365	197	North Clondalkin	AM Peak	113/133	115/133	115/136	105/138	88/130
8.7	18.6	11.4	10.4	14.5	Ratoath Road to North Circular Road	841	-	Blanchardstown n	AM Peak	114/133	47/133	103/136	103/138	58/130
8.7	5.3	4.3	3.02	3.76	Camden Street to Bishop Street	142	-	Rathfarnham	AM Peak	115/133	132/133	134/136	138/138	130/130
8.7	8.04	8.25	9.0	8.9	South Circular Road to Camden Street	777	532	Rathfarnham	AM Peak	116/133	125/133	121/136	111/138	96/130
8.6	6.4	8.1	5.0	8.0	Main Street to River Road Roundabout	1098	460	Blanchardstown n	AM Peak	117/133	129/133	123/136	133/138	106/130

Table 10 Morning Peak Period League Table (continued)

Quality Bus Corridor Monitoring Nov. 2010 AM Peak Average Sectional Bus Speeds - League Table														
Ave Speed					Section	Section Length	Bus Lane		Time	2010	2009	2008	2007	2006
KM/H	2009	2008	2007	2006	Section	m	m	QBC	Period	Position	Position	Position	Position	Position
8.0	7.52	6.68	8.60	10.05	County Council Offices to Main Street	282	0	Swords	AM Peak	118/133	126/133	131/136	113/138	87/130
8.0	12.56	14.03	7.88	10.39	Dorset Street Lower to Frederick Street North	534	361	Sw ords	AM Peak	119/133	91/133	82/136	117/138	84/130
7.9	9.67	9.22	9.2	9.1	Camden St Upper to Westmoreland Street	1580	798	Tallaght	AM Peak	120/133	118/133	116/136	109/138	95/130
7.2	6.9	7.0	6.0	4.8	Shelerin Rd to B'chardstown Rd Sth Direct	1,836	341	Blanchardstown	AM Peak	121/133	127/133	129/136	129/138	126/130
6.2	12.0	22.8	7.7	24.0	North Circular Road to Manor Street	659	120	Blanchardstown	AM Peak	122/133	96/133	19/136	120/138	19/130
5.1	11.83	10.75	12.10	N/A	Westmoreland Street to Ringsend Road	1741	-	Crumlin Road	AM Peak	123/133	97/133	105/136	87/138	N/A
ND	39.8	43.7	48.5	49.0	Wilford Roundabout to Shanganagh Cemetery	1,238	259	Bray	AM Peak	N/A	5/133	2/136	2/138	2/130
ND	25.71	14.06	12.3	13.1	Prospect Road to Dorset Street Lower	957	17	Finglas	AM Peak	N/A	17/133	81/136	85/138	66/130
ND	15.11	17.55	17.66	7.28	Heuston Station to Ellis Quay	785	785	Lucan	AM Peak	N/A	72/133	48/136	45/138	112/130
ND	19.8	23.0	21.8	29.7	Con Colbert Road to Heuston Station	1,559	1,559	Lucan	AM Peak	N/A	38/133	18/136	25/138	7/130
ND	56.2	50.3	51.8	50.6	Palmerston to Con Colbert Road	3,868	3,868	Lucan	AM Peak	N/A	1/133	1/136	1/138	1/130
ND	16.63	15.98	15.98	14.28	Priorswood Rd to Greencastle Rd via D'dale	4,089	-	Malahide	AM Peak	N/A	61/133	63/136	63/138	59/130
ND	10.53	8.22	6.91	7.51	Stephen Street to Westmoreland Street	655	514	Rathfarnham	AM Peak	N/A	110/133	122/136	126/138	109/130
ND	13.39	11.80	10.3	N/A	Westmoreland Street to Parnell Square West	1,056	450	Rathfarnham	AM Peak	N/A	85/133	101/136	104/138	N/A
ND	14.25	8.49	7.7	9.3	Dean Street to Westmoreland Street	1425	197	Rathfarnham	AM Peak	N/A	77/133	119/136	121/138	93/130
ND	11.1	9.5	9.8	N/A	Dean Street to Bachelors Walk	1,534	767	South Clondalkin	AM Peak	N/A	105/133	114/136	106/138	N/A

Appendix 1

Specification for Quality Bus Corridors

Goal: to provide a clearly defined, high performance bus transportation system segregated from other road traffic.

A) Infrastructure Objectives

1. Start on the regional or higher classification road.
2. Prioritise the access from lower classification roads for the bus services entering the Quality Bus Corridor.
3. Deliver bus journey speeds on the corridor of at least 20kph average over the whole corridor with a minimum increase of 25% in bus journey speeds on all QBCs.
4. Operate on segregated lanes over the complete length of the corridor, except where the road width is too narrow to permit the provision of a segregated lane.
5. Monitor the performance of all QBC sections with particular emphasis on non-segregated sections.
6. Operate on non-segregated lengths to the highest possible performance levels by the use of sophisticated traffic management techniques.
7. Operate on a 12-hour basis with a specified period for loading if required.
 - 7(a) Have clearly defined bus lanes.
8. Have bus stops positioned to minimise total walk times for existing and potential passengers taking into account such issues security, traffic conditions, mobility impaired access.
9. Have high-quality waiting areas at all high usage bus stops, including shelters, level platforms that minimise the vertical and horizontal gap for boarding passengers, seating and additional facilities such as telephones, ticket vending machines and cycle parking.
10. Have real-time Passenger Information at high usage bus stops.
11. Have a network of pedestrian walkways to bus stops which are landscaped, well-lit, direct, with safe road crossings.

B) Service Objectives

The bus service on a Quality Bus Corridor shall

Provide the following profile of passenger waiting at all points on the corridor before boarding a bus

Average Wait Time (minutes)		Average Excess Wait Time (minutes)	
Peak	Off-Peak	Peak	Off-Peak
3	4	2	2

C) Fleet Objectives

1. Provide bus stop annunciation over a public address system, with explanations of all deviations from regular service
2. Have an average vehicle age not greater than five years, and a maximum age not greater than 8 years
3. Be operated only by uniformed staff

4. Be operated by low-floored vehicles
5. Maintain a distinct appearance compared with other bus services
6. Be operated by air conditioned buses

D) Network Performance

The impact of the QBC on the route, and on the adjacent network must be assessed.

- Assess and quantify the effects of the QBC on all modes.
- Use appropriate modelling and analytical methods to assess the before and after impacts of the QBC on all modes.
- Further measure the effectiveness of the QBC by reference to the following performance indicators:
 - Passenger journey totals.
 - Bus occupancy levels.
 - Cost effectiveness.
 - Service reliability.
 - Passenger satisfaction levels.
 - Bus lane infringement levels.
 - Accident levels on QBC.
 - Effects on property values & businesses.
 - Effectiveness of accessibility for mobility impaired persons.

Appendix 2

Blanchardstown QBC Survey Points November 2010							
Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
1	Ongar Terminus opposite Annaly Estate	304270	239009	Inbound	AM/OPI		B'tow n
2	Clonsilla Road east of junction with Hansfied Road	305026	238174	Inbound	AM/OPI		B'tow n
3	Clonsilla Road west of junction with Shelerin Road	305840	238142	Inbound	AM/OPI		B'tow n
4	Blanchardstown Centre	306983	239367	Inbound	AM/OPI	2 surveyors	B'tow n
5	East on Clonsilla Rd east of junction with Coolmine Rd	306978	238196	Inbound	AM/OPI		B'tow n
6	Main Street south of junction with Clonsilla Road at start of bus lane	307822	238835	Inbound	AM/OPI		B'tow n
7	South on Navan Rd south of junction with New River Rd at start of bus lane	309421	237920	Inbound	AM/OPI		B'tow n
8	Carpenterstown Road just north of junction with Diswellstown Road	307353	236825	Inbound	AM/OPI		B'tow n
9	Castleknock Road at bus stop south of junction with Park Lodge	308661	237844	Inbound	AM/OPI		B'tow n
10	South on Navan Rd south of junction with Castleknock Rd at start of bus lane	311147	237013	Inbound	AM/OPI		B'tow n
11	South on Navan Rd south of junction with Nephin Rd at start of bus lane	312730	236252	Inbound	AM/OPI		B'tow n
12	South on Navan Rd north of junction with Ratoath Road at end of bus lane	313211	236002	Inbound	AM/OPI		B'tow n
13	South on Old Cabra Rd north of junction with North Circular Rd	313968	235476	Inbound	AM/OPI		B'tow n
14	East on North Circular Road at bus stop east of junction with Old Cabra Road	314024	235477	Inbound	AM/OPI		B'tow n
15	East on North Circular Road at bus stop east of junction with Phibsborough Road	315086	235887	Inbound	AM/OPI		B'tow n
16	South on Manor Street adjacent to Kirwan Street	314326	234937	Inbound	AM/OPI		B'tow n
17	South on Blackhall Place north of jct with Ellis Quay at end of bus lane	314440	234325	Inbound	AM/OPI		B'tow n
18	East on Ormond Quay Upper just west of Capel Street	315405	234244	Inbound	AM/OPI		B'tow n
19	Parnell Square East prior to junction with Parnell Street	315803	235027	Inbound	AM/OPI	Count Buses Only	B'tow n
20	Westmoreland Street south of Fleet Street	315975	234216	Inbound	AM/OPI	Count Buses Only	B'tow n
21	St Stephens Green prior to junction with Leeson Street	316166	233210	Inbound	AM/OPI	Count Buses only	B'tow n
22	St Stephens Green East north of junction with Leeson Street	316166	233210	Outbound	PM/OPO	Count Buses only	B'tow n
23	Westmoreland Street south of Fleet Street	315975	234216	Outbound	PM/OPO	Count Buses only	B'tow n

Blanchardstown QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
24	Parnell Square West opposite bus stop outside No 41	315593	235019	Outbound	PM/OPO		B'tow n
25	West on North Circular Road at Royal Canal Bank east of junction w ith Phibsborough Road	315180	235851	Outbound	PM/OPO		B'tow n
26	West on North Circular Road at bus stop east of junction w ith Old Cabra Road	314031	235456	Outbound	PM/OPO		B'tow n
27	West on Merchants Quay adjacent to Winetavern St at start of bus lane	315090	234113	Outbound	PM/OPO		B'tow n
28	On James Joyce Bridge	314436	234283	Outbound	PM/OPO		B'tow n
29	North on Manor Street just north of Manor Place	314298	234937	Outbound	PM/OPO		B'tow n
30	North on Old Cabra Road just north of junction w ith North Circular Road	313960	235469	Outbound	PM/OPO		B'tow n
31	North on Navan Road just north of junction w ith Ratoath Road	313285	235935	Outbound	PM/OPO		B'tow n
32	North on Navan Road just north of junction w ith Nephin Road	312613	236299	Outbound	PM/OPO		B'tow n
33	North on Navan Road at end of bus lane south of junction w ith Castleknock Road	311005	237072	Outbound	PM/OPO		B'tow n
34	North on Castleknock Road opposite bus stop south of junction w ith Park Lodge	308644	237830	Outbound	PM/OPO		B'tow n
35	Carpenterstow n Road just north of junction w ith Disw ellstow n Road	307353	236825	Outbound	PM/OPO		B'tow n
36	North on Navan Road at end of bus lane south of junction w ith New River Rd	309398	237902	Outbound	PM/OPO		B'tow n
37	North on B'tow n Bypass south of roundabout to Main Street	308510	238511	Outbound	PM/OPO	2 surveyors	B'tow n
38	Main Street just south of junction w ith Clonsilla Road	307812	238830	Outbound	PM/OPO		B'tow n
39	West on Clonsilla Road east of junction w ith Coolmine Road	306982	238188	Outbound	PM/OPO		B'tow n
40	Blanchardstow n Centre	306983	239367	Outbound	PM/OPO	2 surveyors	B'tow n
41	Ongar Terminus near Annaly Estate	304270	239009	Outbound	PM/OPO		B'tow n

Finglas & Ballymun QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
1	Mellowes Road bridge over N2 east of junction with Main Street	313055	239082	Inbound	AM/OPI		Finglas
2	Finglas Road by Main Street	313337	238735	Inbound	AM/OPI		Finglas
3	Ballymun Rd north of Civic Centre at start of bus lane	315535	239866	Inbound	AM/OPI		Ballymun
4	St Mobhi Road at end of bus lane north of Griffith Avenue	315490	237908	Inbound	AM/OPI		Ballymun
5	St Mobhi Road at end of bus lane north of Botanic Avenue	315444	237134	Inbound	AM/OPI		Ballymun
6	Glasnevin Hill Bon Secours Hospital Main Entrance	315282	237423	Inbound	AM Peak		Ballymun
7	Botanic Road at bus stop north of Cliftonville Road	315266	236860	Inbound	AM/OPI		Ballymun
8	Prospect Road on island at Harts Corner	315115	236447	Inbound	AM/OPI		Finglas & Ballymun
9	South on Phibsborough Rd south of junction with North Circular Rd	315054	235857	Inbound	AM/OPI		Ballymun
10	Dorset Street Lower south of junction with Whitworth Road	315910	235937	Inbound	AM/OPI	2 surveyors	Finglas & Ballymun
11	Frederick Street North south of junction with Dorset St Lower	315571	235340	Inbound	AM/OPI	Count Buses Only	Finglas & Ballymun
12	40 Terminus Parnell Square East	315803	235027	Inbound	AM/OPI	Count Buses Only	Finglas & Ballymun
13	O'Connell St at Bank of Ireland south of junction with Abbey St Lower	315984	234470	Inbound	AM/OPI	Count Buses Only	Ballymun
14	College Green by taxi rank	315937	234087	Outbound	AM/OPI	2 surveyors	Finglas & Ballymun
15	St Stephen's Green East prior to junction with Leeson Street	316166	233210	Outbound	AM/OPI	Count Buses Only	Finglas
16	Merrion Square just east of north east corner	316821	233567	Outbound	AM/OPI	Count Buses Only	Ballymun
17	South Great Georges Street by Dame Lane	315648	234011	Outbound	AM/OPI	Count Buses Only	Ballymun
18	Camden Street Upper south of traffic lights by Bleeding Horse Pub	315624	232831	Inbound	PM/OPO	Count Buses Only	Ballymun
19	St Stephen's Green East north of junction with Leeson Street	316166	233210	Inbound	PM/OPO	Count Buses Only	Finglas
20	Merrion Square just west of north east corner	316871	233553	Inbound	PM/OPO	Count Buses Only	Ballymun
21	Bank of Ireland	315914	234080	Inbound	PM/OPO	2 surveyors	Finglas & Ballymun
22	O'Connell Street south of junction with Middle Abbey Street	315939	234470	Outbound	PM/OPO		Ballymun
23	Parnell Square West opposite bus stop outside No 41	315593	235019	Outbound	PM/OPO		Ballymun
24	Dorset St Upper just north of junction with Granby Row	315452	235173	Outbound	PM/OPO		Ballymun
25	Dorset St Lower north of junction with Blessington St at start of bus lane	315557	235379	Outbound	PM/OPO		Ballymun
26	Parnell Street Service 40 departure point	315856	235027	Outbound	PM/OPO		Finglas
27	Dorset Street Lower south of junction with Whitworth Road	315888	235949	Outbound	PM/OPO	2 surveyors	Finglas & Ballymun

Finglas & Ballymun QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
28	North on Phibsborough Road at bus stop north of junction with NCR	315038	235901	Outbound	PM/OPO		Ballymun
29	Prospect Road on island at Harts Corner	315115	236447	Outbound	PM/OPO		Finglas & Ballymun
30	Finglas Road by Finglas Place	313447	238561	Outbound	PM/OPO		Finglas
31	Mellowes Road bridge over N2 west of junction with Main Street	313060	239065	Outbound	PM/OPO		Finglas
32	Botanic Road bus stop south of junction with Glasnevin Hill	315269	236898	Outbound	PM/OPO		Ballymun
33	Ballymun Road at start of outbound bus lane opposite The Rise	315436	238105	Outbound	PM/OPO		Ballymun
34	Ballymun Road bus stop outside shopping centre	315504	239842	Outbound	PM/OPO		Ballymun

Lucan QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
1	Esler Road opposite Finnstown Abbey Bus Stop 3368	303336	233811	Inbound	AM/OPI	Count buses only	Lucan
2	Opposite Penny Hill pub north of junction of Castle Rd & Ballyowen Rd	304954	234169	Inbound	AM/OPI		Lucan
3	On Ballyowen slip road to N4 prior to Foxhunter pub	305192	235457	Inbound	AM/OPI		Lucan
4	Liffey Valley Bus Stop west of M50	307237	235194	Inbound	AM/OPI	2 surveyors	Lucan
5	Palmerston opposite The Oval	308751	234968	Inbound	AM/OPI	2 surveyors	Lucan
6	Con Colbert Road just east of junction with link road to Inchicore Road	312172	233836	Inbound	AM/OPI		Lucan
7	Heuston Station Taxi Rank on St Johns Road	313666	234201	Inbound	AM/OPI		Lucan
8	Conyngham Road east of junction with South Circular Road	312818	234439	Inbound	AM/OPI		Lucan
9	Parkgate Street at segregated bus stop	313770	234419	Inbound	AM/OPI		Lucan
10	Ellis Quay just east of junction with Ellis Street/Rory O' More Bridge	314352	234326	Inbound	AM/OPI		Lucan
11	Arran Quay just west of junction with Church Street/Fr. Mathew Bridge	314835	234219	Inbound	AM/OPI		Lucan
12	Bachelors Walk just west of O'Connell Street Bridge	315867	234219	Inbound	AM/OPI		Lucan
13	St Stephens Green prior to junction with Leeson Street	316166	233210	Inbound	AM/OPI		Lucan
14	St Stephens Green East north of junction with Leeson Street	316166	233210	Outbound	PM/OPO	Count buses only	Lucan
15	Westmoreland Street south of Fleet Street	315975	234216	Outbound	PM/OPO	Count buses only	Lucan
16	Wellington Quay Bus Stop	315728	234242	Outbound	PM/OPO		Lucan
17	Ushers Quay just west of junction with Bridge Street	314852	234138	Outbound	PM/OPO		Lucan
18	Conyngham Road at Bridgewater Quay east of South Circular Road	312817	234428	Outbound	PM/OPO		Lucan
19	Opposite Taxi Rank Heuston Station St Johns Road	313699	234185	Outbound	PM/OPO		Lucan
20	Con Colbert Road just east of junction with link road to Inchicore Road	312175	233806	Outbound	PM Peak		Lucan
21	Palmerston just past The Oval	308692	234967	Outbound	PM/OPO	2 surveyors	Lucan
22	Liffey Valley Bus Stop west of M50	307221	235153	Outbound	PM/OPO	2 surveyors	Lucan
23	On Ballyowen slip road from N4 just after Foxhunter pub	305215	235419	Outbound	PM/OPO		Lucan
24	Penny Hill pub north of junction of Castle Rd & Ballyowen Rd	304973	234164	Outbound	PM/OPO		Lucan
25	Esler Road Finnstown Abbey Estate Bus Stop 3370	303341	233789	Outbound	PM/OPO	Count buses only	Lucan

Malahide, Howth & Clontarf QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
1	Clare Hall Terminus	321604	240636	Inbound	AM/OPI		Malahide
2	Malahide Rd on northern arm of roundabout Priorswood Rd/Blunden Drive	320703	240139	Inbound	AM/OPI		Malahide
3	Malahide Rd on south arm of crossroads junction with Greencastle Road	320114	239372	Inbound	AM/OPI		Malahide
4	Malahide Road north of junction with Kilmore Road	319215	238181	Inbound	AM/OPI		Malahide
5	Malahide Rd at start of bus lane south of Kilmore Rd near St Davids Wood	319115	238067	Inbound	AM/OPI		Malahide
6	Malahide Road north of junction with Collins Avenue East	318622	237616	Inbound	AM/OPI		Malahide
7	Howth Road at bus shelter west of junction with Station Road Raheny	321453	238205	Inbound	AM/OPI		Howth
8	Howth Road east of junction with Sybil Hill Road	320209	237639	Inbound	AM/OPI		Howth
9	Howth Road west of junction with Collins Avenue East by shops	319398	237098	Inbound	AM/OPI		Howth
10	Howth Road west of junction with Copeland Avenue	318293	236532	Inbound	AM/OPI		Howth
11	Clontarf Road west of junction with Conquer Hill Road at start of bus lane	320533	235754	Inbound	AM/OPI		Clontarf
12	Clontarf Road at bus shelter west of junction with Vernon Avenue	320116	235812	Inbound	AM/OPI		Clontarf
13	Clontarf Road at bus shelter west of junction with Castle Avenue	319209	235922	Inbound	AM/OPI		Clontarf
14	Clontarf Road at bus shelter east of junction with Alfie Byrne Road	318462	236208	Inbound	AM/OPI		Clontarf
15	Clontarf Road/Fairview at traffic lights at junction with Malahide Road	317921	236329	Inbound	AM/OPI		Howth & Clontarf
16	Malahide Rd at start of bus lane at Golf Club opposite Casino Park	318446	237355	Inbound	AM/OPI		Malahide
17	Fairview Bus Stop	317922	236366	Inbound	AM/OPI		Malahide
18	Amiens Street at end of bus lane near Connolly Station	316673	235028	Inbound	AM/OPI		Howth Clontarf & Malahide
19	St Stephen's Green East prior to junction with Leeson Street	316166	233210	Outbound	AM/OPI	Count Buses Only	Malahide
20	Talbot Street Bus Terminus set down point	316351	234802	Inbound	AM/OPI	Count Buses only	Howth Clontarf & Malahide
21	Talbot Street Bus Terminus Departure Point	316318	234789	Outbound	PM/OPO	Count Buses only	Malahide
22	Eden Quay just after 29A/31 Series departure point	316213	234512	Outbound	PM/OPO	Count Buses only	Howth
23	Abbey Street Lower East of 42, 43, 51A departure Point	316181	234586	Outbound	PM/OPO	Count Buses only	Clontarf
24	St Stephen's Green East north of junction with Leeson Street	316166	233210	Inbound	PM/OPO	Count Buses Only	Malahide
25	Amiens Street/North Strand Road start of bus lane	316666	235050	Outbound	PM/OPO		Howth Clontarf & Malahide
26	Junction of Fairview Strand/Malahide Road at end of bus lane	317749	236320	Outbound	PM/OPO		Howth Clontarf & Malahide

Malahide, Howth & Clontarf QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
27	Clontarf Road at bus stop east of junction with Alfie Byrne Road	318464	236225	Outbound	PM/OPO		Clontarf
28	Clontarf Road at bus stop east of junction with Castle Avenue	319268	235932	Outbound	PM/OPO		Clontarf
29	Clontarf Road at bus stop west of junction with Vernon Avenue	320119	235824	Outbound	PM/OPO		Clontarf
30	Clontarf Road at bus stop by bus garage/Conquer Hill Road	320503	235758	Outbound	PM/OPO		Clontarf
31	Howth Road west of junction with Copeland Avenue	318287	236539	Outbound	PM/OPO		Howth
32	Howth Road at bus stop west of junction with Collins Avenue East	319359	237076	Outbound	PM/OPO		Howth
33	Howth Road west of junction with Sybil Hill Road	320153	237630	Outbound	PM/OPO		Howth
34	Howth Road on island by clock tower at junction with Station Rd Raheny	321474	238223	Outbound	PM/OPO		Howth
35	Malahide Road start of bus lane just north of Griffith Avenue	318112	236826	Outbound	PM/OPO		Malahide
36	Malahide Road just south of junction with Collins Avenue	318562	237584	Outbound	PM/OPO		Malahide
37	Malahide Road just north of junction with Kilmore Road start of bus lane	319245	238244	Outbound	PM/OPO		Malahide
38	Malahide Road south of junction with Greencastle Road at end of bus lane	320081	239369	Outbound	PM/OPO		Malahide
39	Malahide Rd north of r'bout P'sw ood Rd/Blunden Drive at start of bus lane	320670	240139	Outbound	PM/OPO		Malahide
40	Terminus in Clare Hall	321623	240644	Outbound	PM/OPO		Malahide

North & South Clondalkin & Crumlin QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
1	Liffey Valley Centre 78A Departure Stop	306874	234753	Inbound	AM/OPI		NC
2	Ballyfermot Rd east of junction with Coldcut Road at start of bus lane	307980	234008	Inbound	AM/OPI		NC
3	Ballyfermot Rd east of junction with Kylemore Road at schools bus stop	310103	233713	Inbound	AM/OPI		NC
4	Emmet Road east of junction with Tyrconnell Road/Grattan Crescent	311913	233431	Inbound	AM/OPI		NC
5	East on Old Kilmainham/Mount Brown west of Basin Street	313837	233864	Inbound	AM/OPI		NC
6	East on Cornmarket east of St Augustine Street	314862	233914	Inbound	AM/OPI		NC
7	Nangor Road on city side of Grangecastle roundabout	304517	230938	Inbound	AM/OPI		SC
8	Nangor Road after junction with Ninth Lock Road	306988	232041	Inbound	AM/OPI		SC
9	Nangor Road prior to junction with Naas Road	309794	231646	Inbound	AM/OPI		SC
10	Walkinstown Road at bus stop after Walkinstown Roundabout	311103	230865	Inbound	AM/OPI		Crumlin
11	Drimnagh Road east of junction with Walkinstown Road	311487	231722	Inbound	AM/OPI		SC & Crumlin
12	Crumlin Road east of junction with St Mary's Road	312219	231913	Inbound	AM/OPI		SC & Crumlin
13	Dolphins Barn at junction with South Circular Road	313888	232829	Inbound	AM/OPI		SC & Crumlin
14	Dean Street between Francis Street and Patrick Street	315071	233470	Inbound	AM/OPI		Crumlin
15	Bachelors Walk just west of O'Connell Street Bridge	315867	234384	Inbound	AM/OPI	(All traffic)	SC
16	Custom House Quay East of Memorial Road	316514	234521	Outbound	AM/PM		SC & Pre QBC
17	North Wall Quay at bus stop at The O2	317998	234402	Outbound	AM/PM		SC & Pre QBC
18	Westmoreland Street south of Fleet Street	315975	234216	Inbound	AM/OPI	Count Buses only	Crumlin
19	Ringsend Road east of Barrow Street	317565	233866	Outbound	AM/OPI	(All traffic)	Crumlin
19	Ringsend Road east of Barrow Street	317565	233866	Inbound	PM/OPO	(All traffic)	Crumlin
20	North Wall Quay opposite bus stop at The O2	317998	234402	Inbound	AM/PM		Pre QBC
21	Georges Quay at start of bus lane	316439	234426	Inbound	AM/PM		Pre QBC
22	Aston Quay west of 68 bus stop	315921	234331	Outbound	PM/OPO		NC
23	College Green by taxi rank	315914	234080	Outbound	PM/OPO		SC & Crumlin
24	Dean Street between Patrick Street and Francis Street	315068	233453	Outbound	PM/OPO		Crumlin
25	Dolphins Barn at junction with South Circular Road	313892	232810	Outbound	PM/OPO		SC & Crumlin

North & South Clondalkin & Crumlin QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
26	Crumlin Road east of junction with St Mary's Road	312249	231916	Outbound	PM/OPO		SC & Crumlin
27	Drimnagh Road east of junction with Walkinstown Road	311575	231712	Outbound	PM/OPO		SC & Crumlin
28	Walkinstown Road just prior to Walkinstown Roundabout at end of bus lane	311172	231003	Outbound	PM/OPO		Crumlin
29	Long Mile Road just prior to junction with Naas Road	309960	231584	Outbound	PM/OPO		SC
30	Nangor Road just prior to junction with Ninth Lock Road	306994	232029	Outbound	PM/OPO		SC
31	Nangor Road on city side of Grangecastle roundabout	304520	230927	Outbound	PM/OPO		SC
32	Bridge Street just south of junction with Merchants Quay	314875	234109	Outbound	PM/OPO		NC
33	West on Cornmarket east of Francis Street	314865	233905	Outbound	PM/OPO		NC
34	West on James Street east of Echlin Street	314100	233920	Outbound	PM/OPO		NC
35	West on Emmet Rd east of junction with Tyrconnell Rd/Grattan Crescent	311911	233421	Outbound	PM/OPO		NC
36	Ballyfermot Rd at end of bus lane east of junction with Kylemore Road	310069	233697	Outbound	PM/OPO		NC
37	Ballyfermot Road at end of bus lane east of junction with Coldcut Road	307980	233985	Outbound	PM/OPO		NC
38	Liffey Valley Centre 78A Arrival Stop	306874	234753	Outbound	PM/OPO		NC

Rathfarnham QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
1	Nutgrove Avenue Terminus opposite end of outbound bus lane	316206	228502	Inbound	AM/OPI		Rathfarnham
2	Nutgrove Avenue east of Oakdown Road at start of bus lane	315951	228348	Inbound	AM/OPI		Rathfarnham
3	Rathfarnham Rd south of junction with Main Street at end of bus lane	314462	229081	Inbound	AM/OPI		Rathfarnham
4	Rathfarnham Rd at junction with Brookvale Road at start of bus lane	314449	229356	Inbound	AM/OPI		Rathfarnham
5	Rathfarnham Rd south of junction with Terenure Rd E at end of bus lane	314435	230107	Inbound	AM/OPI		Rathfarnham
6	Harolds Cross Rd at Mount Tallant Avenue at start of bus lane	314594	230891	Inbound	AM/OPI		Rathfarnham
7	Harolds Cross Rd at junction with Leinster Rd West at end of bus lane	314738	231373	Inbound	AM/OPI		Rathfarnham
8	Harolds Cross Road north of Leinster Road at start of bus lane	314697	231581	Inbound	AM/OPI		Rathfarnham
9	Clanbrassil Street at end of bus lane	314949	232582	Inbound	AM/OPI		Rathfarnham
10	New Street South south of junction with Dean Street	315110	233366	Inbound	AM/OPI		Rathfarnham
11	South Circular Rd west of Curzon Street at start of bus lane	315310	232726	Inbound	AM/OPI		Rathfarnham
12	Camden Street north of Camden Row at end of bus lane	315582	233203	Inbound	AM/OPI		Rathfarnham
13	Aungier Street at junction with Bishop Street	315553	233343	Inbound	AM/OPI		Rathfarnham
14	Aungier Street junction with Stephen Street at start of bus lane	315588	233758	Inbound	AM/OPI		Rathfarnham
15	Westmoreland Street south of Fleet Street	315975	234216	Inbound	AM/OPI	Count buses only	Rathfarnham
16	Parnell Square West opposite bus stop outside No 41	315593	235019	Outbound	AM/OPI	Count buses only	Rathfarnham
17	40 Terminus Parnell Square East	315803	235027	Inbound	PM/OPO	Count buses only	Rathfarnham
18	College Green by taxi rank	315914	234080	Outbound	PM/OPO		Rathfarnham
19	Aungier Street at junction with Bishop Street	315564	233344	Outbound	PM/OPO		Rathfarnham
20	Camden Street south of junction with Camden Place at start of bus lane	315620	233060	Outbound	PM/OPO		Rathfarnham
21	South Circular Road at junction with Victoria St at start of bus lane	315281	232709	Outbound	PM/OPO		Rathfarnham
22	South Circular Rd at end of bus lane east of junction with Clanbrassil St	315037	232686	Outbound	PM/OPO		Rathfarnham
23	New Street South south of junction with Dean Street	315126	233367	Outbound	PM/OPO		Rathfarnham
24	Harolds Cross Rd south of junction with Grove Rd at start of bus lane	314923	232335	Outbound	PM/OPO		Rathfarnham
25	Harolds Cross Road north of Leinster Road	314723	231621	Outbound	PM/OPO		Rathfarnham
26	Harolds Cross Road south of Whitton Rd at start of bus lane	314524	230444	Outbound	PM/OPO		Rathfarnham

Rathfarnham QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
27	Terenure Road North at end of bus lane	314489	230272	Outbound	PM/OPO		Rathfarnham
28	Rathfarnham Road by castle entrance at start of bus lane	314474	229003	Outbound	PM/OPO		Rathfarnham
29	Rathfarnham Road at junction with Butterfield Avenue at end of bus lane	314414	228846	Outbound	PM/OPO		Rathfarnham
30	Nutgrove Avenue east of Oakdown Road at start of bus lane	315944	228357	Outbound	PM/OPO		Rathfarnham
31	Nutgrove Avenue terminus at end of bus lane	316200	228513	Outbound	PM/OPO		Rathfarnham

Swords QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
1	South on Main Street outside County Council Offices	318293	246896	Inbound	AM/OPI		Swords
2	South on Main Street north of junction with Malahide Road	318204	246629	Inbound	AM/OPI		Swords
3	Swords Road north of junction with Nevinstown Lane at end of bus lane	317776	245442	Inbound	AM/OPI		Swords
4	Dublin Road north of junction with Naul Road at end of bus lane	317799	244143	Inbound	AM/OPI		Swords
5	Swords Road south of south turn into Airport	317680	242832	Inbound	AM/OPI		Swords
6	Swords Road south of junction with Lorcan Road opposite Omni Park	316735	239422	Inbound	AM/OPI		Swords
7	Swords Road south of junction with Collins Avenue at start of bus lane	316830	238209	Inbound	AM/OPI		Swords
8	Swords Road north of junction with Richmond Road at end of bus lane	316219	236814	Inbound	AM/OPI		Swords
9	Dorset Street Lower north of jct with North Circular Rd at end of bus lane	315829	235791	Inbound	AM/OPI	2 surveyors	Swords
10	North Wall Quay at bus stop at The O2	317998	234402	Inbound	AM/OPI		Swords
11	Georges Quay at start of bus lane	316439	234426	Inbound	AM/OPI		Swords
12	Frederick Street North south of junction with Dorset St Lower	315570	235340	Inbound	AM/OPI	Count Buses only	Swords
13	O'Connell Street south of junction with Earl Street North	315929	234642	Inbound	AM/OPI	Count Buses only	Swords
14	Abbey Street Lower 41 departure point	316217	234606	Outbound	PM/OPO		Swords
15	Custom House Quay East of Memorial Road	316514	234521	Outbound	PM/OPO		Swords
16	North Wall Quay at bus stop at The O2	317998	234402	Outbound	PM/OPO		Swords
17	Dorset St Lower north of jct with North Circular Rd at start of bus lane	315806	235788	Outbound	PM/OPO	2 surveyors	Swords
18	North on Drumcondra Rd Lower south of junction with Botanic Avenue	316167	236613	Outbound	PM/OPO		Swords
19	North on Swords Road south of junction with Collins Avenue	316815	238214	Outbound	PM/OPO		Swords
20	North on Swords Road south of junction with Lorcan Road at Omni Park	316720	239423	Outbound	PM/OPO		Swords
21	North on Swords Road south of turn into Airport	317661	242839	Outbound	PM/OPO		Swords
22	North on Dublin Road north of junction with Naul Road	317781	244148	Outbound	PM/OPO		Swords
23	Swords Rd north of junction with Nevinstown Lane at start of bus lane	317761	245480	Outbound	PM/OPO		Swords
24	North on Main Street north of junction with Malahide Road	318194	246632	Outbound	PM/OPO		Swords
25	Main Street opposite County Council offices	318274	246901	Outbound	PM/OPO		Swords

Tallaght QBC Survey Points November 2010

Point	Location	X Coord	Y Coord	Direction	Periods	Notes	Corridor
1	East on Main Street Tallaght past the Dragon Inn	309386	227642	Inbound	AM/OPI		Tallaght
2	East on Tallaght Road west of M50	311097	227859	Inbound	AM/OPI		Tallaght
3	East on Tallaght Road east of M50	311624	228155	Inbound	AM/OPI		Tallaght
4	North on Templeogue Road east of junction with Oldbridge Road	312909	228690	Inbound	AM/OPI		Tallaght
5	North on Templeogue Road north of junction with Fortfield Road	313774	229505	Inbound	AM/OPI		Tallaght
6	North on Templeogue Road adjacent to junction with Rathdown Park	314180	229942	Inbound	AM/OPI		Tallaght
7	East on Terenure Road East adjacent to Brighton Road	314845	230373	Inbound	AM/OPI		Tallaght
8	North on Rathgar Road south of junction with Kenilworth Road	315449	231392	Inbound	AM/OPI		Tallaght
9	North on Rathmines Road Lower adjacent to junction with Leinster Road	315627	231813	Inbound	AM/OPI		Tallaght
10	North on Rathmines Road Lower adjacent to junction with Grove Park	315678	232404	Inbound	AM/OPI		Tallaght
11	Camden Street Upper south of traffic lights by Bleeding Horse Pub	315624	232831	Inbound	AM/OPI	2 surveyors	Tallaght
12	Westmoreland Street south of Fleet Street	315975	234216	Inbound	AM/OPI	Count Buses only	Tallaght
13	O'Connell Street Bridge central reservation south of Eden Quay	316000	234425	Outbound	PM/OPO	Count Buses only	Tallaght
14	South Great Georges Street by Dame Lane	315648	234011	Outbound	PM/OPO		Tallaght
15	Harcourt Road by junction with Charlemont Street	315774	232763	Outbound	PM/OPO		Tallaght
16	South on Rathmines Rd Lower adjacent to junction with Grove Park	315694	232404	Outbound	PM/OPO		Tallaght
17	South on Rathmines Rd Lower adjacent to junction with Leinster Rd	315638	231812	Outbound	PM/OPO		Tallaght
18	South on Rathgar Road east of junction with Kenilworth Road	315535	231508	Outbound	PM/OPO		Tallaght
19	West on Terenure Road East adjacent to Brighton Road	314847	230366	Outbound	PM/OPO		Tallaght
20	South on Templeogue Road adjacent to junction with Rathdown Park	314188	229935	Outbound	PM/OPO		Tallaght
21	South on Templeogue Road north of junction with Fortfield Road	313782	229498	Outbound	PM/OPO		Tallaght
22	South on Templeogue Road east of junction with Oldbridge Road	312843	228642	Outbound	PM/OPO		Tallaght
23	West on Tallaght Road east of M50	311634	228126	Outbound	PM/OPO		Tallaght
24	West on Tallaght Road west of M50	311116	227832	Outbound	PM/OPO		Tallaght
25	West on Main Street Tallaght past the Dragon Inn	309387	227632	Outbound	PM/OPO		Tallaght

Appendix 3

From_Node	To_Node	Link_Length	ID	Date	Route	Reg	Type	Stop	Lat	Long	Arrival Time
			610	18/11/2010	128	01D10222	Stop	Eden Quay outside Laughter Lounge (Stop EL)	53.34773	-6.25829	09:24:52
1280001	1280002	680	624	18/11/2010	128	01D10222	Stop	Amiens Street Opposite Connolly Rail Station	53.35058	-6.25079	09:28:46
1280002	1280003	662	638	18/11/2010	128	01D10222	Drive through	North Strand Road Opposite Marino College of Further Education	53.35572	-6.24569	09:30:52
1280003	1280004	477	645	18/11/2010	128	01D10222	Drive through	North Strand Road Junction Waterloo Avenue	53.35893	-6.24091	09:32:18
1280004	1280005	873	656	18/11/2010	128	01D10222	Drive through	Marino Mart Marino College Fairview	53.36427	-6.23176	09:35:21
1280005	1280006	584	663	18/11/2010	128	01D10222	Drive through	Malahide Road Junction Griffith Avenue	53.36802	-6.22701	09:36:42
1280006	1280007	923	669	18/11/2010	128	01D10222	Stop	Malahide Road Junction Elm Road (Donnycarney Church)	53.37496	-6.21966	09:38:21
1280007	1280008	705	679	18/11/2010	128	01D10222	Drive through	Malahide Road Junction Kilmore Road	53.37923	-6.21174	09:40:58
1280008	1280009	482	686	18/11/2010	128	01D10222	Stop	Malahide Road Junction Mornington Grove	53.38251	-6.20691	09:42:31
1280009	1280010	669	691	18/11/2010	128	01D10222	Stop	Malahide Road Chanel College	53.38698	-6.20106	09:44:10
1280010	1280011	798	702	18/11/2010	128	01D10222	Drive through	Malahide Road After junction Greencastle Road	53.3925	-6.19342	09:47:04
1280011	1280012	629	707	18/11/2010	128	01D10222	Drive through	Malahide Road Priorswood Roundabout	53.39672	-6.18752	09:48:12
1280012	1280013	443	712	18/11/2010	128	01D10222	Stop	Malahide Road Junction Belcamp Lane	53.40013	-6.1842	09:48:52
1280013	1280014	642	726	18/11/2010	128	01D10222	Drive through	Temple View Vale Rd Clare Hall Estate	53.4025	-6.17678	09:52:08
			1132	18/11/2010	128	01D10222	Stop	Eden Quay outside Laughter Lounge (Stop EL)	53.34773	-6.25829	11:33:00
1280001	1280002	680	1148	18/11/2010	128	01D10222	Stop	Amiens Street Opposite Connolly Rail Station	53.35058	-6.25079	11:37:54
1280002	1280003	662	1159	18/11/2010	128	01D10222	Drive through	North Strand Road Opposite Marino College of Further Education	53.35572	-6.24569	11:39:42
1280003	1280004	477	1168	18/11/2010	128	01D10222	Stop	North Strand Road Junction Waterloo Avenue	53.35893	-6.24091	11:41:38
1280004	1280005	873	1180	18/11/2010	128	01D10222	Drive through	Marino Mart Marino College Fairview	53.36427	-6.23176	11:44:55
1280005	1280006	584	1190	18/11/2010	128	01D10222	Stop	Malahide Road Junction Griffith Avenue	53.36802	-6.22701	11:47:24
1280006	1280007	923	1196	18/11/2010	128	01D10222	Stop	Malahide Road Junction Elm Road (Donnycarney Church)	53.37496	-6.21966	11:48:55
1280007	1280008	705	1206	18/11/2010	128	01D10222	Drive through	Malahide Road Junction Kilmore Road	53.37923	-6.21174	11:50:50
1280008	1280009	482	1211	18/11/2010	128	01D10222	Drive through	Malahide Road Junction Mornington Grove	53.38251	-6.20691	11:51:54

From_Node	To_Node	Link_Len gth	ID	Date	Route	Reg	Type	Stop	Lat	Long	Arrival Time
1280009	1280010	669	1217	18/11/2010	128	01D10222	Drive through	Malahide Road Chanel College	53.38698	-6.20106	11:53:22
1280010	1280011	798	1229	18/11/2010	128	01D10222	Drive through	Malahide Road After junction Greencastle Road	53.3925	-6.19342	11:56:22
1280011	1280012	629	1233	18/11/2010	128	01D10222	Drive through	Malahide Road Priorswood Roundabout	53.39672	-6.18752	11:57:27
1280012	1280013	443	1235	18/11/2010	128	01D10222	Stop	Malahide Road Junction Belcamp Lane	53.40013	-6.1842	11:58:03
1280013	1280014	642	1252	18/11/2010	128	01D10222	Drive through	Temple View Vale Rd Clare Hall Estate	53.4025	-6.17678	12:02:41
			1719	18/11/2010	128	01D10222	Stop	Eden Quay outside Laughter Lounge (Stop EL)	53.34773	-6.25829	13:54:53
1280001	1280002	680	1741	18/11/2010	128	01D10222	Stop	Amiens Street Opposite Connolly Rail Station	53.35058	-6.25079	13:59:53
1280002	1280003	662	1759	18/11/2010	128	01D10222	Stop	North Strand Road Opposite Marino College of Further Education	53.35572	-6.24569	14:03:31
1280003	1280004	477	1774	18/11/2010	128	01D10222	Stop	North Strand Road Junction Waterloo Avenue	53.35893	-6.24091	14:05:44
1280004	1280005	873	1781	18/11/2010	128	01D10222	Stop	Marino Mart Marino College Fairview	53.36427	-6.23176	14:07:44
1280005	1280006	584	1796	18/11/2010	128	01D10222	Drive through	Malahide Road Junction Griffith Avenue	53.36802	-6.22701	14:10:23
1280006	1280007	923	1801	18/11/2010	128	01D10222	Drive through	Malahide Road Junction Elm Road (Donnycarney Church)	53.37496	-6.21966	14:11:47
1280007	1280008	705	1807	18/11/2010	128	01D10222	Stop	Malahide Road Junction Kilmore Road	53.37923	-6.21174	14:13:21
1280008	1280009	482	1814	18/11/2010	128	01D10222	Drive through	Malahide Road Junction Mornington Grove	53.38251	-6.20691	14:14:30
1280009	1280010	669	1821	18/11/2010	128	01D10222	Drive through	Malahide Road Chanel College	53.38698	-6.20106	14:16:07
1280010	1280011	798	1838	18/11/2010	128	01D10222	Drive through	Malahide Road After junction Greencastle Road	53.3925	-6.19342	14:20:16
1280011	1280012	629	1846	18/11/2010	128	01D10222	Stop	Malahide Road Priorswood Roundabout	53.39672	-6.18752	14:21:17
1280012	1280013	443	1850	18/11/2010	128	01D10222	Stop	Malahide Road Junction Belcamp Lane	53.40013	-6.1842	14:22:56
1280013	1280014	642	1865	18/11/2010	128	01D10222	Stop	Temple View Vale Rd Clare Hall Estate	53.4025	-6.17678	14:26:45

Appendix 4

